



WORLD
RESOURCES
INSTITUTE

SOURCING LEGALLY PRODUCED WOOD

A Guide for Businesses—2018 Edition

EDITED BY RUTH NOGUERÓN, LORETTA CHEUNG, JONATHAN MASON, AND BO LI

**FOREST
LEGALITY
INITIATIVE**

WRI.ORG



TABLE OF CONTENTS

4	Executive Summary
5	Introduction
7	Developing Responses to Illegal Logging
7	Legality Requirements in the Global Marketplace
14	Meeting Legality Requirements
15	Conclusion
16	Appendix A: Selected Public Procurement Policies
20	Appendix B: Examples of Businesses' Sourcing Policies
21	Appendix C: Examples of Trade Associations' Legality Policies
22	Appendix D: Convention on International Trade in Endangered Species of Wild Fauna and Flora
27	Appendix E: Logging and Export Bans
31	Appendix F: Examples of Commercially Available Legality Verification Services and Systems
33	References

Suggested Citation: Noguerón, R., L. Cheung, J. Mason, and B. Li. 2018. "Sourcing Legally Produced Wood: A Guide for Businesses — 2018 Edition." Washington, DC: World Resources Institute. Available online at <http://www.wri.org/publication/2018-sourcing-legally-produced-wood-guide-businesses>

EXECUTIVE SUMMARY

Highlights

- Combating illegal logging is important for protecting and managing forests and biodiversity, reducing greenhouse gas emissions, promoting economic development, and improving governance.
- Major international markets have established regulatory frameworks and requirements on the legality of timber: the United States' 2008 Lacey Act Amendment; the 2012 Australia Illegal Logging Prohibition Act (AILPA); and the European Union Timber Regulation (EUTR), which came into effect in 2013. These laws require businesses to take steps to ensure their forest products are legal.
- This 2018 version of *Sourcing Legally Produced Wood* updates and expands information on the implementation of the U.S., EU, and Australian policies and laws; updates the logging and log export ban table; updates the timber species listed in the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); and offers expanded context and information on the issue of illegal logging and associated trade.
- Legality is not synonymous with sustainability: what is sustainable may not always be legal, and what is legal may not always be sustainable.

Context

Illegal logging is a direct cause of forest degradation and often contributes to deforestation. It also undermines global efforts to reduce greenhouse gas emissions, impedes economic development, and poses challenges to local governance (Barber and Canby 2018).

In response, countries have developed national laws and regulations to combat illegal logging and associated trade. In 2008, the U.S. Government enacted a law that prohibited the import or trade of illegal timber and required companies to assess and manage the risk of introducing illegal wood products into their supply chains. Similar

legislation in Australia came into effect in 2012, and analogous regulations entered into force in the European Union in 2013. In addition, the European Union has been negotiating bilateral Voluntary Partnership Agreements (VPAs) with timber producing countries since 2005 to improve forest governance and reduce illegal timber in supply chains.

About This Guide

World Resources Institute (WRI) partnered with the World Business Council for Sustainable Development (WBCSD) in response to the adoption of forest legality requirements and the market trends driving the wood products industry toward sustainable and legal sourcing. Together, we produced the *Sustainable Procurement of Wood and Paper-based Products* guide in 2009. Over the following five years, WRI and WBCSD released updated versions of the guide, including shifting the content to a web-based platform (WRI and WBCSD 2016). To support business compliance with the series of new wood products laws coming into force, in 2014, WRI released a stand-alone publication based on the *Sustainable Procurement of Wood and Paper-based Products* guide called *Sourcing Legally Produced Wood: A Guide for Businesses* (Noguerón and Cheung 2014).

This publication updates the 2014 version of *Sourcing Legally Produced Wood*, which provided information on illegal logging and associated trade, public and private procurement policies, export country logging and log export bans, and introductory guidance to the wood products legality legislation in the United States, the EU, and Australia. As implementation of these policies and laws has progressed, and as businesses have become more familiar with their compliance requirements, the private sector and other stakeholders have increasingly requested more in-depth guidance on the issues. This 2018 version of *Sourcing Legally Produced Wood* updates and expands information on the implementation of the U.S., EU, and Australian policies and laws, updates the logging and log export ban table, updates the timber species listed in the Appendices to the

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and offers expanded context and information on the issue of illegal logging and associated trade.

Responses to Illegal Logging

There is no universally accepted definition of “illegal logging and associated trade.” This guide adopts a broad definition of the term to include all practices related to the harvesting, processing, transport, sale, and purchase of timber, as defined in the country of origin, as well as any violations of a country’s legal framework that may occur throughout the supply chain.

The amended Lacey Act, EUTR, and AILPA are examples of how demand-side trade regulations can help combat illegal logging and associated trade. Businesses now need to be intimately familiar with the legal framework for timber harvesting, processing, and exporting for all countries throughout their supply chains. The guide provides a detailed overview of the requirements, product scope, compliance, and penalties of these three trade regulations.

Public and private procurement policies are alternative approaches to address the legality and sustainability of timber in supply chains. Public procurement policies send a signal to the private sector to meet the requirements on legality and sustainability in their production. Private procurement policies help to integrate responsible sourcing into a company’s overall sustainability program. Industry associations also play a role in requiring their members to remove illegal timber from their supply chains through their codes of conduct, industry statements, and association standards.

Resources for Businesses

Forest management certification and legality verification services can help mitigate the risk of illegality in the supply chain but cannot and do not guarantee that certified products are legal. Forest management certification bodies have incorporated the legality of forest operations and wood products

into their standards. Achieving certification often involves contracting an independent, third-party commercial actor that verifies the legality of the product against a set of criteria and relevant indicators. Many commercial legality verification services have emerged to focus solely on timber legality. Such systems often include chain-of-custody criteria to trace the flow of products through supply chains and to ensure that verified products are handled separately from nonverified products.

Many civil society organizations have developed materials on forest legality requirements and on the context of these requirements in producer countries. These materials include forest legality frameworks and legality checklists to help identify relevant laws that producers must comply with to meet requirements of legality-sensitive wood products markets.

INTRODUCTION

Around the world laws have established frameworks and requirements regarding the trade of timber. These laws, however, apply only to actors within their relevant jurisdictions. As such, there is no universally accepted definition of “illegal logging and associated trade.” This guide, therefore, adopts a broad definition of the term to include all practices related to the harvesting, processing, transport, sale, and purchase of timber, as defined in the country of origin, as well as any violations of a country’s legal framework that may occur throughout the supply chain (see Box 1).

What experts do widely acknowledge about illegal logging and associated trade is that it has devastating impacts:

- Illegal logging is often based on unsustainable harvesting practices and can target threatened species.
- Illegal logging often involves building roads into previously inaccessible areas (NASA 2018).
- Forests degraded by illegal logging are more easily cleared for agricultural use—currently the single biggest driver of deforestation globally (NASA 2018).

BOX 1 | EXAMPLES OF ILLEGAL LOGGING AND ASSOCIATED TRADE

Illegal origin (ownership, title, or origin):

- Logging trees in protected areas without proper permission (e.g., in national parks)
- Logging protected species
- Logging in prohibited areas such as steep slopes, riverbanks, and water catchments
- Logging in noncompliance with specifications of the concession permit or harvesting license (e.g., harvesting volumes below or above the specifications or before or after the period authorized for logging)
- Harvesting wood of a size or species not covered by the concession permit
- Unpermitted felling activities, such as widening corridors
- Trespass or theft
- Violations, bribes, and deception in acquiring the rights to a forest concession
- Illegal documentation (including trade documents)

Lack of compliance throughout the supply chain (harvesting, manufacturing, and trade):

- Violations of workers' rights (e.g., illegal labor, underpaying workers, etc.), labor laws, and international standards, and violation of traditional rights of local populations and indigenous groups
- Violation of international human rights treaties
- Use of bribery or intimidation to access a harvest site or during the transport, export, or import of products
- Wood transported or processed in defiance of local or national laws
- Violations of international agreements (e.g., CITES species [see Appendix D])
- Failure to pay legally prescribed taxes, fees, and royalties
- Logging and trading logs and forest products despite logging and trade bans (See Appendix E)
- Illegal transfer pricing (e.g., to avoid duties and taxes), timber theft, and smuggling
- Money laundering
- Processing of illegal wood
- Failure to fully report volumes harvested or to report different species for tax evasion purposes
- Failure to comply with import laws and regulations

Sources: Contreras-Hermosilla et al. 2007; WWF GFTN 2005; Miller et al. 2006; Nellemann et al. 2014.

- Organized crime syndicates launder an estimated US\$30 to US\$100 billion worth of illegal timber annually (Nellemann and INTERPOL 2012).
- Governments are estimated to lose approximately \$5 billion in revenues every year due to illegal logging (World Bank 2006).
- Loss of government revenues means there are fewer resources to invest in public programs.
- Proceeds from illegal logging may be used to support and fund conflict (Thomson and Kanaan 2004).
- Trade in illegal timber can distort the market and reduce the profitability of legal goods (Taconi et al. 2004; Seneca Creek Associates and Wood Resources International 2004).

Because of the severe consequences of illegal logging, a range of stakeholders—including consumers, local communities, retailers, investors, and governments—have increasingly demanded assurances that wood-based products are produced legally, sustainably, and using fair labor practices.

Perhaps the most consequential of these developments has been the spread of timber legality regulations by governments of some of the world's biggest importers of wood-based products, such as the United States and the European Union. These import and trade laws require certain actors to take steps to ensure that their wood products are legal. Complementing and reinforcing these laws, other legally binding agreements and policies developed by multilateral institutions and the private sector require businesses to take additional steps to prevent illegal timber wood products from entering supply chains.

Compliance with these laws and policies is complicated by increasingly complex supply chains. In today's global market, the inputs for a single wood-based product can be harvested in multiple tropical countries, pass through other countries in transshipment, and undergo processing in a third country before being exported to the final consumer country. Yet, even this overview obscures the more granular domestic permitting, transport, and manufacturing links within each of these countries. Considering these complexities and the legal and environmental consequences of noncompliance, many businesses need support to understand and

comply with timber legality requirements. To help them meet that challenge, WRI developed this guide to inform readers about (1) potential illegalities within wood-based products supply chains, (2) examples of timber legality regulations and policies put into place by governments around the world, and (3) practices implemented by businesses and trade associations to comply with these laws and to mitigate the risk of illegal timber entering their supply chains.

DEVELOPING RESPONSES TO ILLEGAL LOGGING

Development of Demand-Side Legality Requirements

In 2008, the United States enacted an amendment to the Lacey Act of 1900, which had originally prohibited trade in certain illegal animal and plant products, to also prohibit trade in imported illegal wood products. A few years later, Australia put into effect similar legislation (the 2012 Illegal Logging Prohibition Act [AILPA]), as did the European Union (the 2013 European Union Timber Regulation [EUTR]).

Although these three laws were passed within a short time period, the impact of illegal logging had been a global concern for decades. Since the 1980s, multiple global approaches arose to improve forest management and to respond to illegal logging and deforestation, including international negotiations and policy processes to incentivize good forest management, as well as sustainable forest certification schemes, such as the Forest Stewardship Council.

Despite these initiatives, illegal logging persisted as a global problem. Beginning at the turn of the millennium, however, two new developments brought about demand-side timber legality regulations. First, there was growing recognition that illegal timber traded in the international market unfairly undercut the legal timber industry (Seneca Creek Associates and Wood Resources International 2004; Australia, Department of Agriculture 2015b), thus framing the impact of illegal logging as affecting domestic forest industries. Second, policy priorities shifted away from the sustainability of forest products toward requirements concerning the legality of the products. After years of debate,

stakeholders had not been able to reach a consensus on what qualified as sustainable, given different interpretations of available data and the range of forest types and management approaches around the world. Thus, as a pragmatic approach to reduce illegal logging, import market policymakers established legality requirements largely centered on ensuring private sector compliance with producer country laws and regulations, instead of on sustainability requirements (European Commission 2004; Oliver 2011).

LEGALITY REQUIREMENTS IN THE GLOBAL MARKETPLACE

Trade Regulations

With the amended Lacey Act, EUTR, and AILPA now in effect, authorities in the United States, the European Union, and Australia can prosecute and penalize violators. Businesses need to be intimately familiar with the legal framework for timber harvesting, processing, and exporting for all the countries throughout their supply chains. While Box 1 above provides examples of illegal logging and associated trade, the scope of the Lacey Act, EUTR, and AILPA does not encompass all of the examples, so relevant violations would not necessarily entail legal liability under these three laws. Table 1 outlines the requirements, product scope, compliance measures, and penalties of these demand-side trade regulations.

Bilateral Cooperation

Bilateral cooperation and free trade agreements between consumer and producer markets have also been undertaken to address illegal logging through support, cooperation, and dialogue. Examples include the U.S.-China and U.S.-Indonesia Memorandums of Understanding on Combating Illegal Logging and Associated Trade; the Japan-Indonesia Cooperation Agreement in Combating Illegal Logging and the Trade in Illegally Logged Timber and Wood Products; and the U.S.-Peru Free Trade Agreement. These efforts often cover legal reform, technical support, and capacity-building regarding forest management and forest governance. While the results of bilateral cooperation have impacted a range of stakeholders, including governments, local communities, and the

CONTINUED ON PAGE 12

Table 1 | Overview of the U.S. Lacey Act, the EU Timber Regulation, and the Australian Illegal Logging Prohibition Act

	U.S. LACEY ACT	EU TIMBER REGULATION (EUTR)	AUSTRALIAN ILLEGAL LOGGING PROHIBITION ACT (AILPA)
APPLICABILITY AND REQUIREMENTS	<p>It is unlawful for any person to import, export, transport, sell, receive, acquire, or purchase, in interstate or foreign commerce, plants taken, possessed, transported, or sold (1) in violation of any federal U.S. law, treaty, or regulation or of any U.S. Indian tribal law; or (2) in violation of any foreign law or U.S. state law or regulation that protects plants or that regulates the theft of plants; the taking of plants from protected or officially designated areas; the taking of plants contrary to required authorization; the payment of appropriate royalties, taxes, or fees; or the export or transshipment of plants.</p> <p>The law also requires all persons importing plants and certain plant products to declare the scientific name of the plant being imported, the value of the import, the quantity of the plant, and the country of harvest. The declaration does not apply to the recycled content of plant products or to packaging material. The law also prohibits the submission of false records, accounts, labels, and identifications of plants that have been traded in interstate or foreign commerce.</p> <p>The law also requires that all persons trading plants and plant products in interstate or foreign commerce exercise due care to ensure the legality of the products. Due care is the "degree of care which a reasonably prudent person would exercise under the same or similar circumstances. As a result, it is applied differently to different categories of persons with varying degrees of knowledge and responsibility."</p> <p>The Lacey Act Amendment of 2008 went into force in May 2008. However, declaration requirements, which are regulated by the U.S. Animal and Plant Health Inspection Service (APHIS), have been phased in periodically, beginning in May 2009.</p>	<p>Timber placed on the EU market must have been harvested in accordance with applicable legislation in the country of harvest, including legislation and regulations concerning harvesting and related duties, harvest rights and related payments, forest management and biodiversity conservation, trade and customs concerning the forest sector, and third parties' legal rights of use and tenure that are affected by timber harvesting.</p> <p>The regulation applies to certain timber and timber products that are (1) for the first time; (2) physically supplied on the market in the EU, including both imported and domestically produced timber and timber products; (3) for processing or for distribution to commercial or noncommercial consumers, or for use in the business of the operator. All three of these elements must be present simultaneously for the timber or timber product to be considered placed on the market. The regulation entered into force on March 3, 2013.</p>	<p>Under the act, it is a criminal offense to import illegally logged timber and timber products into Australia and to process domestically grown raw logs that have been illegally logged. "Illegally logged" timber is defined as timber harvested in contravention of laws in force in the place—whether or not in Australia—where the timber was harvested. The law applies to timber product importers, whether businesses or individuals, and to persons and Australian-based businesses that process domestically grown logs.</p> <p>The law also requires that a documented due diligence system be established and maintained by importers of regulated timber products and by processors of domestically grown raw logs. Regulations set out key due diligence requirements.</p> <p>The prohibition on importing and processing illegally logged timber went into effect in November 2012.</p>

Table 1 | Overview of the U.S. Lacey Act, the EU Timber Regulation, and the Australian Illegal Logging Prohibition Act (Cont'd)

	U.S. LACEY ACT	EU TIMBER REGULATION (EUTR)	AUSTRALIAN ILLEGAL LOGGING PROHIBITION ACT (AILPA)
PRODUCT SCOPE	<p>The law covers all trees, both planted and natural, in addition to all other wild plants. The law excludes cultivated plants other than trees, scientific specimens for genetic material, and plants that are to remain planted or be planted or replanted, unless the plant is listed in a Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendix, identified as endangered or threatened under the Endangered Species Act of 1973, or listed as an indigenous and threatened species under state conservation laws. The schedule of products requiring import declarations can be found on the U.S. Department of Agriculture (USDA) APHIS website.</p> <p>In January 2018, APHIS proposed to establish new regulations that would exempt from declaration requirements products containing minimal plant material and products containing composite plant materials. If finalized, the new regulations will allow APHIS to introduce additional product categories into the declaration requirement. Any changes to the product scope for required declarations will be announced in the <i>Federal Register</i>.</p>	<p>The product scope of EUTR can be amended. As of April 2018, the regulation applies to solid wood products, particle board, fiberboard, plywood, pulp, and paper. The regulation does not apply to printed paper, such as books, magazines, and newspapers. The regulation also does not apply to recycled timber and timber products, or to timber products or components of timber products manufactured from timber products that have completed their lifecycle and would otherwise be disposed of as waste.^a</p>	<p>The prohibition on importing and processing illegally logged timber applies to all timber and timber products when being imported, and to all domestically grown logs when being processed.</p> <p>The due diligence requirements apply to importers of certain regulated timber products and to processors of domestically grown logs.</p> <p>The applicable regulated timber products are defined by their customs tariff codes. They currently include a wide range of wood and wood fiber-based products, including wood and wooden articles (Chapter 44), pulp (Chapter 47), paper (Chapter 48), and furniture (Chapter 94).</p> <p>There are two exemptions to the due diligence requirements:</p> <ul style="list-style-type: none"> ■ Regulated timber products made from 95% postconsumer recycled material ■ Any consignment where the total value of the regulated timber products does not exceed AUS\$1,000. <p>In addition, due diligence requirements do not apply to packaging material used to support, protect, or carry regulated timber products.</p>

Table 1 | **Overview of the U.S. Lacey Act, the EU Timber Regulation, and the Australian Illegal Logging Prohibition Act (Cont'd)**

	U.S. LACEY ACT	EU TIMBER REGULATION (EUTR)	AUSTRALIAN ILLEGAL LOGGING PROHIBITION ACT (AILPA)
COMPLIANCE	<p>The statute is fact-based and not process- or document-based, meaning the law does not specify what documentation must be collected or maintained or what actions must be taken to demonstrate due care. Rather, the law specifies what is prohibited from interstate and foreign commerce and the penalties for misdeclarations, mislabeling, failure to exercise due care, and knowingly violating the Lacey Act.</p> <p>The federal government, however, has outlined Lacey Act compliance programs in two separate, high-profile Lacey Act enforcement actions that resulted in both Gibson Guitar, an instrument manufacturer, and Lumber Liquidators, a wood flooring retailer, reaching agreements with the U.S. Department of Justice. Though distinct, these compliance programs both included requirements for annual compliance trainings, risk assessments, and supply chain audits, along with other expanded due care practices.</p>	<p>EUTR requires operators to exercise due diligence when placing timber or timber products on the market for the first time and requires that operators maintain and regularly evaluate their due diligence system, except when operators use a due diligence system established by a recognized monitoring organization. (See Appendix F for examples of recognized monitoring organizations.) Due diligence systems must include measures and procedures that provide access to information on the trader's suppliers, product trade name and scientific name, country of harvest, quantity, and documents required under applicable legislation. The due diligence system must also include risk assessment and risk mitigation procedures.</p> <p>Traders throughout the supply chain are required to maintain information for 5 years on the identities of their suppliers and the traders to whom they have supplied.</p> <p>Timber and timber products covered by valid Forest Law Enforcement, Governance and Trade (FLEGT), and CITES permits and licenses are considered to comply with the regulation.</p> <p>See Box 3 for more information on the implementation of EUTR.</p>	<p>All importers and processors must have a due diligence system, a copy of which must be provided to the Department of Agriculture and Water Resources upon request as part of a compliance assessment.</p> <p>There is no standard or government-approved due diligence system. Rather, regulations set out key steps that must be included within due diligence systems:</p> <ul style="list-style-type: none"> ■ Step 1: Establishing and maintaining a due diligence system, describing the procedures used to minimize the risk that the timber in question is illegal. ■ Step 2: Gathering information about the timber or timber product being imported or processed. ■ Step 3: Undertaking a risk assessment, including, where appropriate, the use of a Timber Legality Framework, country- or state-specific guideline, and/or regulated risk factors. The identification, assessment, and outcomes of the identification and assessment of the risk must be "reasonable." ■ Step 4: Mitigating the risk that the product includes illegally logged timber; if the risk cannot be adequately mitigated, the product should not be imported or processed. ■ Step 5: Maintaining records covering all steps that have been undertaken as part of the due diligence process. <p>See Box 3 for more information on the implementation of AILPA.</p>

Table 1 | Overview of the U.S. Lacey Act, the EU Timber Regulation, and the Australian Illegal Logging Prohibition Act (Cont'd)

	U.S. LACEY ACT	EU TIMBER REGULATION (EUTR)	AUSTRALIAN ILLEGAL LOGGING PROHIBITION ACT (AILPA)
PENALTIES	<p>Violations of the law can result in civil and/or criminal penalties and forfeitures. Penalties are assessed per violation and vary depending on the level of due care exercised or actual knowledge of the illegality of trading in the plant. Civil penalties up to \$10,000 may be imposed for failure to exercise due care, and civil penalties up to \$250 may be imposed for violating declaration requirements. Misdemeanor and felony criminal penalties may be imposed, with a maximum felony criminal penalty of up to \$250,000 for individuals and \$500,000 for corporations and/or imprisonment up to 5 years for defendants who knew or were generally aware of the illegal nature of the plant. Persons or corporations who trade in illegal products while failing to exercise due care may be prosecuted for a misdemeanor criminal violation, with penalties of up to one year in prison and fines of up to \$200,000 for corporations. Persons or corporations trading in illegal plants are subject to forfeiture on a strict liability basis, meaning that the government need not show the defendant's knowledge of illegality or failure to exercise due care.</p> <p>In 2016, the U.S. Department of Justice prosecuted Lumber Liquidators for criminal violations of the Lacey Act and U.S. customs law—the first case involving a felony conviction for trade in timber. Lumber Liquidators agreed to pay over \$13 million in fines, forfeiture of goods, and community service. Lumber Liquidators also agreed to a 5-year term of probation and mandatory implementation of the above-mentioned rigorous and public government-approved environmental compliance plan.</p>	<p>Member states define the penalties and are responsible for implementing them, including the designation of competent authorities to enforce the regulation. Penalties, required by the EUTR to be effective, proportionate, and dissuasive, may include, but are not limited to, fines, seizure of the concerned timber and timber products, and immediate suspension of trade authorization.</p> <p>Implementation of the EUTR has included authorities carrying out site visits of companies, as well as reviews of companies' due diligence systems. Enforcement actions have included the issuance of Corrective Action Requirements, warning letters, injunctions, and fines. Some of the most high-profile enforcement actions have been in Sweden and Denmark, whose enforcement authorities leveled injunctions against companies importing teak from Myanmar, since documentation provided by the Myanmar government was found to provide information insufficient for meeting EUTR requirements.^b</p>	<p>Penalties depend on the offense committed and are ultimately at the discretion of a court. Although implementation of the act began with a "soft start" compliance period, during which the Department of Agriculture and Water Resources did not issue due diligence noncompliance penalties, the "soft start" compliance period ended on December 31, 2017. As of January 1, 2018, businesses and individuals who fail to comply with due diligence requirements may be subject to penalties.</p> <p>Knowingly processing an illegally logged raw log or importing illegally logged timber or regulated timber products is a criminal offense and carries a maximum penalty of 5 years imprisonment and/or fine of up to 500 penalty units (AUS\$105,000 for an individual or AUS\$525,000 for a business.)</p> <p>A breach of the due diligence requirements may result in civil penalties with a maximum of 300 penalty units (AUS\$63,000 for an individual or AUS\$315,000 for a business).</p>

Notes: a For the full product scope, including relevant customs codes, see European Union (2010), European Union Timber Regulation, paragraph 11; Article 2, paragraph (b); and annex. See also European Commission 2017b. b For more information on EUTR implementation, including penalties and enforcement, see Glaser 2017.

Sources: USDA APHIS 2013, 2016, and 2017; Code of Federal Regulations (U.S. Government 2016); U.S. District Court 2015; U.S. DOJ 2012; U.S. Congress 1981; USDA 2018; Forest Trends 2016a, 2016b, and 2016c; European Commission 2017a and 2017b; NEPCon 2017a; European Union (2010) for European Union Timber Regulation; Glaser 2017; Australia, Department of Agriculture and Water Resources 2016 and 2017; Australian Government, Office of Parliamentary Counsel 2018.

BOX 2 | THE EUROPEAN UNION FOREST LAW ENFORCEMENT, GOVERNANCE AND TRADE (FLEGT) PROCESS AND VOLUNTARY PARTNERSHIP AGREEMENTS

The Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, completed in 2003, is the response of the European Union to concerns about illegal logging and associated trade.

The FLEGT Action Plan recognizes that consumer countries contribute to illegal logging through the demand for timber and wood-based products. The plan encompasses seven measures, including the establishment of bilateral partnerships known as Voluntary Partnership Agreements (VPAs) with producer countries to build producer country capacity and to support reforms in governance in the forest sector to reduce the production and trade of illegally harvested timber.

The VPAs also seek to establish and implement verification and licensing systems, called Legality Assurance Systems (LAS), to ensure that wood intended for export to the EU and other markets identified in the scope of the agreement is legal. All VPA-approved LAS address issues concerning (1) the definition of legality for wood products, (2) control of supply chains, (3) compliance verification, (4) FLEGT licensing, and (5) independent audits.

Once a country has signed a VPA and the EU and VPA partner country have evaluated and accepted the operational readiness of the LAS, the VPA partner country can then issue FLEGT licenses to indicate that wood products have been verified as legal. Shipments to the EU that have been issued a FLEGT license are no longer subject to the due diligence requirements of the EUTR. (More information on EUTR can be found in Table 1.) Wood products covered by the VPA product scope that are not accompanied by FLEGT licenses will be denied entry into the EU market.

As of July 2018, six countries have signed VPAs with the European Commission: Ghana, the Republic of Congo, Cameroon, Indonesia, the Central African Republic, and Liberia. However, Indonesia, which started issuing FLEGT licenses in November 2016, is the only country that has begun implementing its LAS with full acceptance of the system by the EU. Seven countries are currently negotiating VPAs (Côte d'Ivoire, the Democratic Republic of Congo, Gabon, Guyana, the Lao People's Democratic Republic, Malaysia, and Thailand). Negotiations with Vietnam and Honduras have concluded, but as of July 2018, they had not yet signed a VPA with the EU.

Sources: European Forest Institute 2017a, 2017b, 2017c, 2017d, and 2017e.

CONTINUED FROM PAGE 7

private sector, a specific outcome directly affecting businesses includes the development of the Forest Law Enforcement, Governance and Trade (FLEGT) licensing system (Box 2), which guarantees the legal import of specified timber products from certain countries with which the European Union has entered a Voluntary Partnership Agreement and which have completed all the requirements to issue FLEGT licenses.

Public Procurement Policies

Public procurement policies to address legality and/or sustainability began to emerge in the early 2000s; initially prominent in Europe, they have now expanded to other countries in Asia and Latin America. Most policies seek to ensure that products come from legal and sustainable sources. In some instances, processes are defined and/or entities are established to help inform and implement the policy itself. Many policies include stepwise implementation approaches. See Appendix A for a compilation of selected public procurement policies.

Private Procurement Policies

Since the late 1990s, private sector actors have been taking steps to ensure that they exclude unsustainable and illegal wood from their supply chains. Corporate procurement policies are now more prominent in the global North and among companies with global reach. With time, these purchasing practices are becoming more widely integrated in corporate business practices and contained within a larger sustainability and/or corporate responsibility policy covering several other aspects. See Appendix B for an overview of selected private procurement policies.

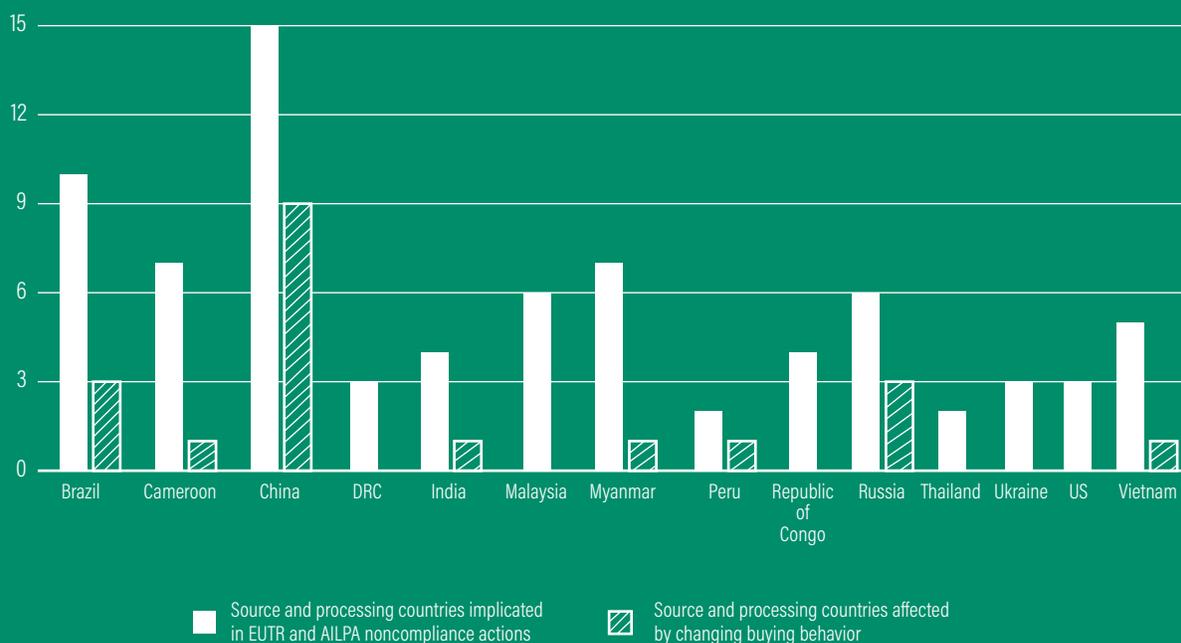
In addition, industry associations encourage, and sometimes require, their members to exclude unsustainable and/or illegal wood from their supply chains through members' codes of conduct, industry statements, or associations' purchasing policies. One drawback, however, is that trade association policies and guidelines are often voluntary. See Appendix C for examples of trade association policies.

BOX 3 | GOVERNMENT ENFORCEMENT OF LEGALITY REQUIREMENTS REVEALS GLOBAL SCOPE OF PROBLEMATIC TIMBER TRADE

Although 10 to 30 percent of the global timber trade is estimated to be illegal (Nellemann et al. 2014), these estimates are uncertain. Moreover, studies attempting to estimate the level of illegal logging within smaller geographic areas, such as within specific countries and regions, may produce different results. These variances occur for several reasons, including the use of different methodologies among studies; the use of different data sources; and the inherent nature of an illegal activity, which precludes an accurate calculation of its scope.

Though still an imperfect accounting of illegal logging and associated trade, an alternative approach to understanding its extent is surveying government actions concerning businesses' noncompliance with timber legality regulations. The graph below shows the results of compliance checks conducted by government enforcement officials, concerning businesses operating in the European Union and Australia. Although conducted against a relatively small sample size, these survey results reveal that business noncompliance with timber legality laws has been associated with tropical and nontropical countries, low- and high-income countries, and major producer and import countries. In short, trade in illegal timber is global and pervasive.

FIGURE B1 | FOREST TRENDS SURVEY RESULTS ON EUTR AND AILPA NONCOMPLIANCE ISSUES
OCTOBER 2015–SEPTEMBER 2016



The graphed data above are adapted from the results of Forest Trends' surveys of Australian and European Union member states' officials concerning European Union Timber Regulation (EUTR) and Australian Illegal Logging Prohibition Act (AILPA) enforcement from October 2015 through September 2016. (Analogous legislation in the United States, the Lacey Act, confronts trade in illegal timber through enforcement of the relevant federal criminal code, forfeitures, and civil proceedings and fines, and not through document-based compliance procedures. As such, Lacey Act enforcement cannot be comparably quantified.)

The white bar in the figure above indicates how many times the source or processing country was identified in association with Australian operators who failed to meet compliance requirements and/or EU operators that have been issued corrective action requirements, injunctions, and/or financial penalties. The hatched bar indicates EUTR enforcement officials' number of observed changes in operator purchasing behavior for each implicated source or processing country.

Source: Forest Trends 2016c.

MEETING LEGALITY REQUIREMENTS

There are a growing number of resources available to help businesses comply with voluntary and mandatory legality requirements in the global marketplace. Resources include certification and verification systems and supply chain management resources.

Forest Management Certification and Legality Verification Services

Forest management certification standards initially developed to determine whether timber products had originated from well-managed forests. These standards, available for forest managers and timber product companies to apply against their operations on a voluntary basis, have evolved to also consider the legality of forest operations and wood products. Achieving certification often involves contracting an independent, third-party commercial actor that verifies the legality of the product against a set of criteria and relevant indicators. These third parties can assess the legality of the timber against the certification standards in two areas: (1) whether the origin of the timber was legally designated for harvesting and (2) whether the harvesting operations were in compliance with laws and regulations.

In addition to forest management certification, many commercially available services and systems have emerged to focus solely on timber legality. Such systems often include chain-of-custody criteria to trace the flow of products through supply chains and to ensure that verified products are handled separately from nonverified products. (Appendix F contains a brief compilation of existing legality verification standards.)

However, forest management certification and timber legality verification services are not a “quick fix” for ensuring illegal timber does not enter supply chains or even for meeting timber legality requirements. The legality of forest products is determined solely by a country’s laws and regulations. Voluntary third-party certification

bodies cannot and do not guarantee that certified products are legal. Therefore, they do not assume legal liability under the U.S., EU, or Australian legal frameworks. Furthermore, certification schemes have certified timber products from companies that have been in violation of laws and regulations (EIA 2017; USTR 2017; FSC 2018).

While certificates from the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC), and similar schemes may be used to demonstrate that a party has attempted to exercise due care or due diligence in sourcing timber, the legal frameworks in the United States, European Union, and Australia do not recognize certificates as proof of legality or as proof that the party has carried out a requisite minimum level of due care or due diligence (APHIS 2016; European Commission 2017a; Australian Government, Office of Parliamentary Counsel 2018.) Still, European operators may use due diligence systems developed by recognized monitoring organizations. Reliance on these organizations and their due diligence systems does not in and of itself fulfill EUTR requirements, since operators must implement these systems in addition to maintaining information for at least five years on the identity of their suppliers and buyers.

Supply Chain Transparency and Management Resources

Understanding the origin of the products and their supply chains is critical for procurement managers to assess whether the products originate from operations in compliance with relevant laws and whether the wood comes from sustainably managed forests. Several scientific and technological approaches are emerging to help trace and verify the origin of the raw materials in products, including DNA analysis, fiber analysis, and near-infrared spectroscopy. There are also new technological applications that seek to help businesses exercise more control over their supply chains and increase supply chain transparency regarding the origin of the raw materials. Some of these applications include the Open Timber Portal, the BVRio Responsible Timber Exchange, and the Radix Tree Supply Chain Software, among others.

Other Resources

A number of organizations have developed materials on forest legality requirements and the context of these requirements in producer countries. These materials include forest legality frameworks and legality checklists to help identify relevant laws that producers must comply with to meet the requirements of legality-sensitive wood product markets. Some of these resources include:

Tropenbos International: The report “Enhancing the Trade of Legally Produced Timber: A Guide to Initiatives” provides a general overview of 127 government, private sector, nongovernmental organization (NGO), and knowledge and capacity-building initiatives related to illegal logging (van Dam and Savenije 2011).

Illegal Logging Portal: Provides information (news, documents, events, etc.) about illegal logging and illegal timber trade (Chatham House 2017).

World Wildlife Foundation’s (WWF) Global Forest and Trade Network (GFTN) and TRAFFIC: Provides tools and resources for a range of stakeholders, including a “Guide to Legal and Responsible Purchasing of Forest Products Sourcing,” “Common Legality Framework,” and National Legality Frameworks, which offer information about relevant laws, regulations, administrative circulars, and contractual obligations that affect forestry operations, timber processing, and trade (WWF GFTN 2010; WWF GFTN and TRAFFIC 2011).

European Timber Trade Federation (ETTF): The “Gateway to International Timber Trade” provides information on both the timber industry and legislation of producer countries (ETTF 2017).

NEPCon: The “Timber Risk Assessments” provide detailed information in 62 countries on whether there is a risk that timber is harvested, transported, or traded illegally (NEPCon 2017b).

CONCLUSION

Government, civil society, and private sector actions and policies are significantly impacting how companies source timber internationally. The 2015 Chatham House assessment of producer, processing, and consumer countries suggests that illegal logging has decreased significantly in a number of countries since the early 2000s (Hoare 2015). However, estimates of illegality are still wide-ranging, rendering it difficult to precisely determine change in trends, and the amount of illegal logging is still significant in many countries.

Legality requirements in the global marketplace are here to stay. Recognizing the detrimental effects of illegal logging and the illegal timber trade, governments are taking steps to promote the trade of legal wood. Companies must respond to the growing demand for legal forest products and take appropriate measures to ensure their forest products originate from legal sources, and there are a number of resources available to help them understand and meet legality requirements.

To be clear, legality is not synonymous with sustainability. What is sustainable may not always be legal, and what is legal may not always be sustainable. Some countries may not have laws in place to protect their forests from unsustainable rates of harvest. Therefore, additional considerations are necessary to ensure wood- and paper-based products originate from sustainable sources. For further guidance, refer to SustainableForestProducts.org.

APPENDIX A. SELECTED PUBLIC PROCUREMENT POLICIES

Table A1 | **Selected Public Procurement Policies (Chronological Order)**

COUNTRY	YEAR	DEFINITION OF LEGALITY	REQUIREMENTS AND APPLICABILITY	PRODUCT SCOPE	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: SFM CERTIFICATION SYSTEMS	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: ALTERNATIVE INSTRUMENTS
UNITED KINGDOM	2000 (reviewed 2009, 2010, 2013)	The UK Timber Procurement Policy's (TPP) legality definition is the same as in EUTR's Article 2. "Legal" sources are defined as, "Harvested in accordance with the applicable legislation in the country of harvest." Timber and wood-derived products that originate from forests that meet the following: (a) forest owner/ manager holds legal use rights to the forest; (b) compliance by both the forest management organization and any contractors with local and national legal requirements, including forest management; environment; labor; and welfare, health, and safety; other parties' tenure and use rights; (c) payment of all relevant royalties and taxes; and (d) compliance with CITES requirements. The UK policy requires legality and sustainability or FLEGT licensing.	Mandatory for all central government departments, executive agencies, and nondepartmental bodies. Universities, colleges, and other publicly funded autonomous organizations are encouraged to adopt sustainable timber procurement policies.	All virgin timber and wood-derived products used on the government estate, including temporary site works and material provided by suppliers.	FSC and PEFC. Acceptable schemes must ensure that at least 70% (by volume or weight) is from a sustainable source.	Requires legality and sustainability, or FLEGT-licensed timber. Category B evidence, suggested in the TPP, which provides all forms of credible information and evidence on the legality and sustainability of supply chain and forest source. Category B evidence refers to all forms of credible evidence other than certification schemes that indicate that the forest source meets the UK Government's criteria for sustainability and legality. Third-party, independent forest certification schemes, referred to as Category A evidence.
DENMARK	2003 (reviewed 2010, 2014)	Policy requires (a) forest owner/manager to hold legal use rights to the forests; (b) compliance with relevant laws, including forestry, environmental, and labor laws; (c) payment of taxes and royalties; and (d) compliance with CITES.	Mandatory for central government institutions, and voluntary for regions and municipalities.	Wood- and paper-based products.	FSC, PEFC	SGS's Timber Legality and Traceability Verification; SmartWood's Verification of Legal Compliance; FLEGT licenses where available.

Table A1 | Selected Public Procurement Policies (Chronological Order) (Cont'd)

COUNTRY	YEAR	DEFINITION OF LEGALITY	REQUIREMENTS AND APPLICABILITY	PRODUCT SCOPE	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: SFM CERTIFICATION SYSTEMS	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: ALTERNATIVE INSTRUMENTS
FRANCE	2005 (reviewed 2008, 2011)	Does not include specific definition of legality, but requires compliance with CITES. Procurement managers are required to refer to tools such as forest certification, ecolabels, or supplying countries to define which legislation is relevant.	Mandatory for central government. Recommended for subnational governments.	All wood- and paper-based products.	FSC, PEFC, CSA, SFI, MTCS, LEI, and Keurhout	Ecolabels, processes involving third-party verification. Other types of evidence include FLEGT licenses (or other legality licenses), independently verified suppliers' declarations, attestation of forest management plans, verification of compliance with a code of practice, and existing custom documents to qualify legal/ sustainable products when entering the EU market.
BELGIUM	2005	Sustainability is the minimum requirement. Definition of sustainability includes compliance with relevant international, national, and/or regional/ local legislation and regulations related to legal rights to use the forests; payment of taxes, fees, and royalties; compliance with forest management laws and regulations (including CITES); and, respect for indigenous and local tenure and use rights.	Mandatory for central government.	Solid wood products. No paper products.	FSC and some PEFC certificates have been determined to meet sustainability requirements.	Forest certified by an independent body, based on internationally recognized criteria. Legality, by itself, is not enough, as sustainability is the minimum requirement.
MEXICO	2007	Wood of verified legal origin and in compliance with environmental regulations.	Mandatory for central government.	Furniture and office supplies.	Third-party verification systems registered with the Ministry of Environment and Natural Resources.	Third-party verification systems registered with the Ministry of Environment and Natural Resources.

Table A1 | Selected Public Procurement Policies (Chronological Order) (Cont'd)

COUNTRY	YEAR	DEFINITION OF LEGALITY	REQUIREMENTS AND APPLICABILITY	PRODUCT SCOPE	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: SFM CERTIFICATION SYSTEMS	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: ALTERNATIVE INSTRUMENTS
NETHERLANDS	2004 (revised 2010, 2014)	<p>The timber is harvested in accordance with the applicable legislation in the country of harvest regarding:</p> <ul style="list-style-type: none"> ■ rights to harvest timber within the legally established boundaries; ■ payments for harvest and timber rights; ■ timber harvesting, including environmental and forest legislation, as well as forest management and biodiversity conservation, where directly related to timber harvesting; ■ third parties' resource and tenure rights affected by timber harvesting; and ■ trade and customs, relating to the forest sector. 	Mandatory for central government. Recommended for subnational governments.	Wood- and paper-based products.	FSC, PEFC International for the Dutch market, MTCS (PEFC Malaysia)	FLEGT-licensed timber. Credible, documentary evidence. Evidence is assessed on a case-by-case basis, based on the Timber Procurement Assessment Commitment guidelines.
CHINA	2006	Not defined. Wood sourcing compliance with CITES and relevant Chinese forestry and trade laws.	Preferred for central and subnational governments and public institutions.	Furniture, wood-based panels, and flooring products, wooden toys, wooden doors, and office paper.	China Environmental Labeling	CFCC, FSC, and CITES permits can be recognized toward China Environmental Labeling.
JAPAN	2006	Timber harvested in compliance with the laws of the producing countries.	Mandatory for central government. Recommended for subnational governments.	Solid wood and wood-based products.	FSC, PEFC, SFI, CSA, LEI, MTCC, Sustainable Green Ecosystem Council (local scheme)	Wood industry associations' code of conduct, and self-verification mechanisms.

Table A1 | Selected Public Procurement Policies (Chronological Order) (Cont'd)

COUNTRY	YEAR	DEFINITION OF LEGALITY	REQUIREMENTS AND APPLICABILITY	PRODUCT SCOPE	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: SFM CERTIFICATION SYSTEMS	ACCEPTED MEANS OF VERIFICATION OR COMPLIANCE: ALTERNATIVE INSTRUMENTS
NEW ZEALAND	2006 (reviewed 2011)	Timber or wood products from a forest that has been legally harvested; the entity that harvested the trees has legal right to use the forest.	Mandatory for central government.	Paper, solid wood, and wood-based products.	ATFS, CSA, FSC, MTCS, PEFC, and SFI	Stepwise programs toward certification, such as the Tropical Forest Trust (TFT) and legality verification from other accredited certification organizations, such as SGS. Third-party certified ecolabels for office papers that contain at least 70% of fiber content from recycled and/or certified sources, such as the Environmental Choice New Zealand.
GERMANY	2007 (revised 2010)	Sustainability, as defined by FSC and PEFC, is the minimum requirement.	Mandatory for central government. Recommended for subnational governments. Abroad missions of the federal armed forces are exempt. If serious deficiencies are found in the approved certification systems (e.g., products or parts of products come from illegal logging), the systems will be given up to 12 months, subject to certain conditions, to correct deficiencies. If deficiencies are not corrected, the certification system will be excluded from the federal government's procurement regime.	Wood in the rough, finished and semifinished products, products in which wood is the most significant component. No paper or biomass.	FSC, PEFC	Certificates comparable to FSC or PEFC, if demonstrated that FSC or PEFC criteria are met in the country or origin.
NORWAY	2007	Not defined. Ban of tropical timber in public sector construction.	Mandatory for central government.	Wood- and paper-based products.	None recognized	N/A

Notes: Abbreviation in Table A1: FSC = Forest Stewardship Council; PEFC = Programme for the Endorsement of Forest Certification; TFT = The Forest Trust; WWF = World Wildlife Fund; GFTN = Global Forest and Trade Network; EUTR = European Union Timber Regulation; SFI = Sustainable Forestry Initiative.

Sources: Kingfisher 2017; IKEA 2012, 2017a, and 2017b; Kimberly-Clark 2009; Staples 2010; 3M 2015.

APPENDIX B. EXAMPLES OF BUSINESSES' SOURCING POLICIES

Table B1 | **Examples of Businesses' Sourcing Policies**

COMPANY, POLICY YEAR	SCOPE	LEGALITY REQUIREMENTS AND COMPLIANCE
B&Q (home improvement and garden retailer, part of the Kingfisher Group Europe, 1991, updated 2017)	All goods and packaging containing timber, wood, wood fiber, or paper that are under the direct control of Kingfisher and its companies	All goods covered by the policy are required to meet certain criteria: FSC certification with full chain of custody; or PEFC certification with full chain of custody, when source materials originate outside of tropical countries; or independent verification as recycled or reused materials; or adherence to accepted schemes, including TFT, WWF's GFTN, and Rainforest Alliance, when there is demonstrable progress toward FSC certification. In addition to meeting EUTR requirements, Kingfisher will also perform annual and random audits of suppliers.
IKEA (furnishings, worldwide, 2006)	Solid wood, veneer, plywood, layer-glued, wood-based board materials and bamboo cane	All materials covered by the policy must come from known origins. IKEA's stated long-term goal is to source 100% of wood products from recycled materials or from a "preferred source" certification scheme, which to date includes only FSC forest management and chain of custody. IKEA requires suppliers to hold a valid FSC chain-of-custody certificate or to submit procurement plans and evidence of capacity to carry out those plans, which are evaluated by IKEA forestry specialists. Suppliers must also maintain a Wood Register to include delivery dates, material types, species, origin, and volume. IKEA's policy requires suppliers to regularly submit reports and to undertake regular and unannounced audits by IKEA or a third party.
Kimberly-Clark (personal care paper products, worldwide, 2007, revised 2009)	Wood fiber, including wood pulp, logs, whole log chips, and sawmill residuals	Kimberly-Clark's policy requires that the company and the company's suppliers of tissue hard rolls and finished tissue products not knowingly source wood fiber that was harvested in violation of relevant government forest management requirements or other applicable laws and regulations. The company aims to purchase 100% of its wood fiber from suppliers that have received certification under FSC (preferred scheme), SFI, CSA, CERFLOR, PEFC, and any other certification scheme meeting certain specified criteria.
Staples (office products, worldwide, revised 2010)	Paper products wholly composed of any grade of paper	Staples has a committed preference for sourcing from FSC-certified suppliers. Under certain conditions, Staples will recognize and accept products certified under PEFC, SFI, and CSA standards. The company also asks suppliers to confirm the sources of their fiber and to indicate whether their wood fiber has been legally harvested and traded. The policy also requires third parties to conduct audits on random samples of suppliers and requires Staples to periodically verify supplier progress and data reliability.
3M (consumer products, 2015)	Paper and packaging products	3M pulp, paper, and packaging suppliers must ensure that wood or plant-based fiber is legally harvested, sourced, transported, and exported from its country of origin. Fiber must be traceable back to the source of harvest. 3M suppliers need to maintain records, including genus, species, and country of origin of the wood or plant-based fiber, and third-party certification of materials and operations in the supply chain. 3M suppliers are required to have policies and due diligence systems for sourcing pulp and paper, and should require their suppliers to do the same. 3M will continue to work with suppliers through trainings and direct communication to help them understand requirements and concepts in the policy.

Notes: Abbreviation in Table B1: FSC = Forest Stewardship Council; PEFC = Programme for the Endorsement of Forest Certification; TFT = The Forest Trust; WWF = World Wildlife Fund; GFTN = Global Forest and Trade Network; EUTR = European Union Timber Regulation; SFI = Sustainable Forestry Initiative; CSA = Canadian Standards Association; CERFLOR = Brazilian Forest Certification Programme.

Sources: Kingfisher 2017; IKEA 2012, 2017a, and 2017b; Kimberly-Clark 2009; Staples 2010; 3M 2015.

APPENDIX C. EXAMPLES OF TRADE ASSOCIATIONS' LEGALITY POLICIES

Table C1 | **Examples of Trade Associations' Legality Policies**

TRADE ASSOCIATION	LEGALITY REQUIREMENTS AND/OR ACTIONS
<p>Cameroon: Wood Industry Group of Cameroon (Groupement de la Filière Bois du Cameroun; GFBC): Represents 19 businesses and organizations that produce, process, and export wood.</p>	<p>The GFBC code of ethics requires members to commit to operate legally, to fulfill supplier and client obligations, to provide proof of wood products' legality, to actively combat fraud and corruption related to illegal logging, and to ensure that business partners operate legally and reflect GFBC's code of ethics.</p>
<p>Canada: Quebec Wood Export Bureau (QWEB): Represents more than 200 wood products manufacturers and exporters in Quebec.</p>	<p>Through the association's code of conduct, members commit to source wood from companies that know their suppliers and can demonstrate that those suppliers are legal. The code also requires that suppliers provide evidence that the operations are law-compliant.</p>
<p>China: China Timber and Wood Product Distribution Association (CTWPDA). Represents 1,577 members nationally, mostly manufacturers that buy and export wood products.</p>	<p>CTWPDA requires the top 30 wooden door and top 30 hardwood flooring companies to commit to sourcing legal timber. CTWPDA has organized a series of training sessions on international forest legality regulations, including the Lacey Act, European Union Timber Regulation (EUTR), and Japan's Green Procurement Policy.</p>
<p>China: China National Forest Product Industry Association (CNFPPIA): Represents about 3,000 members nationally, including wood products manufacturers and exporters.</p>	<p>CNFPPIA has developed and published a voluntary timber legality verification standard in 2017 to promote legal timber trade among members.</p>
<p>United Kingdom: Timber Trade Federation (TTF): Represents more than 300 members and associates involving business with the UK timber industry, including sawmillers, manufacturers, importers, distributors, and merchants.</p>	<p>Through the association's code of conduct and procurement policy, members commit to purchase timber from legal sources, seek evidence of compliance from suppliers to ensure that the wood meets the legal requirements of the country of origin, and establish a due diligence system. The TTF operates a Responsible Purchasing Policy management system, which provides support to assess and implement legality and sustainability requirements.</p>
<p>United States: National Wood Flooring Association (NWFA): Represents more than 3,500 member companies in the hardwood flooring industry, including manufacturers, distributors, retailers/dealers, contractors, importers, exporters, inspectors, and consultants.</p>	<p>A voluntary program for members, the NWFA Responsible Procurement Program is a stepwise approach designed to help companies progress over time to Forest Stewardship Council (FSC) certification.</p>

Sources: GFBC 2016a and 2016b; NWFA 2017a and 2017b; Labbé 2017; Forbes 2017; CTWPDA 2017; CNFPPIA 2017.

APPENDIX D. CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement that entered into force in 1975 and is adhered to voluntarily by the member states. The purpose of CITES is to ensure that international trade in specimens of wild animals and plants does not threaten these species' survival. All import, export, and re-export of species covered by CITES must be authorized through a licensing system established by the member parties. Advised by one or more scientific authorities, each party designates one or more management authorities to administer the licensing system.

To restrict the trade of species, parties list species in one of three Appendices to the Convention. Parties may place species in Appendix I if the species is threatened with extinction. Appendix II species require controlled trade to ensure that exploitation of the species is compatible with their survival. Placing species in Appendix III protects the species in at least one country that has appealed to CITES for help in managing the trade of the species. Species may be placed in Appendix I or II following a vote of all the parties, whereas one party may unilaterally place a species in Appendix III.

Table D1 | **Timber Species Listed in CITES Appendices, Alphabetized by Latin Name, as of October 2017**

NAME	CITES APPENDIX LISTING	DISTRIBUTION	LISTING APPLIES TO
<i>Abies guatemalensis</i> (Guatemalan fir, Mexican fir)	1	El Salvador, Guatemala, Honduras, Mexico	All parts and derivatives, including manufactured and finished products.
<i>Aniba roseaodora</i> (Brazilian rosewood, rosewood tree)	2	Brazil, Colombia, Ecuador, French Guiana, Guyana, Peru, Suriname, Venezuela	Logs, sawn wood, veneer sheets, plywood and extracts. Finished products containing such extracts as ingredients, including fragrances, are not considered to be covered by this annotation.
<i>Araucaria araucana</i> (Chilean pine, Paraná pine, monkey puzzle tree)	1	Argentina, Chile	All parts and derivatives, including manufactured and finished products.
<i>Bulnesia sarmientoi</i> (gaiacwood, holy wood)	2	Argentina, Bolivia, Brazil, Paraguay	Logs, sawn wood, veneer sheets, plywood, powder, and extracts. Finished products containing such extracts as ingredients, including fragrances, are not considered to be covered by this annotation.
<i>Caesalpinia echinata</i> (Brazil wood, pernambuco)	2	Brazil	Logs, sawn wood, veneer sheets, including unfinished wood articles used for the fabrication of bows for stringed musical instruments.
<i>Caryocar costaricense</i> (ajillo, ajo, costus)	2	Colombia, Costa Rica, Panama, Venezuela	All parts and derivatives, excluding specific exceptions.*
<i>Cedrela fissilis</i> (Argentine cedar)	3	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Panama, Paraguay, Peru, Venezuela	Logs, sawn wood, and veneer sheets.
<i>Cedrela lilloi</i> (cedro)	3	Argentina, Bolivia, Brazil, Paraguay, Peru	Logs, sawn wood, and veneer sheets.

Table D1 | Timber Species Listed in CITES Appendices, Alphabetized by Latin Name, as of October 2017 (Cont'd)

NAME	CITES APPENDIX LISTING	DISTRIBUTION	LISTING APPLIES TO
<i>Cedrela odorata</i> (cedar, cedarwood, cigar-box cedar, cigar-box wood, red cedar, Spanish cedar, stinking mahogany, West Indian cedar)	3	Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts and Nevis, St. Lucia, Suriname, Trinidad and Tobago, Venezuela, US Virgin Islands	Logs, sawn wood, and veneer sheets.
<i>Dalbergia nigra</i> (Brazilian rosewood, Bahia rosewood, jacaranda, pianowood, Rio rosewood, rosewood)	1	Brazil	All parts and derivatives, including manufactured and finished products.
<i>Dalbergia</i> spp., except for <i>dalbergia nigra</i>	2		All parts and derivatives are included, excluding specific exceptions.§
<i>Diospyros</i> spp. (Malagasy ebonies)	2	Madagascar	Logs, sawn wood, and veneer sheets.
<i>Dipteryx panamensis</i> (almendro)	3	Costa Rica, Nicaragua	All parts and derivatives, including manufactured and finished products.
<i>Fitzroya cupressoides</i> (alerce, Chilean false larch, Patagonian cypress)	1	Argentina, Chile	All parts and derivatives, including manufactured and finished products.
<i>Fraxinus mandshurica</i> (Manchurian ash)	3	China, Japan, Russian Federation	Logs, sawn wood, and veneer sheets.
<i>Gonystylus</i> spp. (ramin)	2		All parts and derivatives, excluding specific exceptions.*
<i>Guaiacum</i> spp. (lignum vitae)	2	Any country	All parts and derivatives except (a) seeds and pollen, and (b) finished products packaged and ready for retail trade.
<i>Guibourtia demeusei</i> (bubinga)	2	Cameroon, Central African Republic, Democratic Republic of Congo, Equatorial Guinea, Gabon, Republic of Congo	All parts and derivatives, excluding specific exceptions.§
<i>Guibourtia pellegriniana</i> (bubinga)	2	Angola, Republic of Congo, Gabon, Nigeria	All parts and derivatives, excluding specific exceptions.§

Table D1 | Timber Species Listed in CITES Appendices, Alphabetized by Latin Name, as of October 2017 (Cont'd)

NAME	CITES APPENDIX LISTING	DISTRIBUTION	LISTING APPLIES TO
<i>Guibourtia Tessmannii</i> (bubinga)	2	Cameroon, Equatorial Guinea, Gabon	All parts and derivatives, excluding specific exceptions.§
<i>Magnolia liliifera</i> var. <i>obovata</i> (magnolia)	3	China, India, Malaysia	All parts and derivatives, excluding specific exceptions.§
<i>Oreomunnea pterocarpa</i> (gavilan)	2	Costa Rica	All parts and derivatives, excluding specific exceptions.§
<i>Osyris lanceolata</i> (African sandalwood)	2	Burundi, Ethiopia, Kenya, Rwanda, Uganda, Tanzania	All parts and derivatives except (a) seeds and pollen, and (b) finished products packaged and ready for retail trade.
<i>Pericopsis elata</i> (afromosia, African teak, satinwood, yellow satinwood)	2	Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Nigeria, Republic of Congo	Logs, sawn wood, and veneer sheets.
<i>Pilgerodendron uviferum</i> (pilgerodendro, cedro, Chilean cypres)	1	Argentina, Chile	All parts and derivatives, including manufactured and finished products.
<i>Pinus koraiensis</i> (Korean pine)	3	China, Japan, Democratic People's Republic of Korea, Russian Federation, Republic of Korea	Logs, sawn wood, and veneer sheets.
<i>Platymiscium pleiostachym</i> (cristobal gradadillo)	2	Costa Rica, El Salvador, Honduras	All parts and derivatives, excluding specific exceptions.*
<i>Podocarpus nerifolius</i> (podocarp, black pine, brown pine, pine, yellow wood)	3	China, Fiji, India, Nepal, Solomon Islands	All parts and derivatives, excluding specific exceptions.†
<i>Podocarpus parlatorei</i> (Parlatore's podocarp)	1	Argentina, Bolivia, Peru	All parts and derivatives, including manufactured and finished products.

Table D1 | Timber Species Listed in CITES Appendices, Alphabetized by Latin Name, as of October 2017 (Cont'd)

NAME	CITES APPENDIX LISTING	DISTRIBUTION	LISTING APPLIES TO
<i>Prunus africana</i> (African cherry, stinkwood)	2	Angola, Burundi, Cameroon, Comoros, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Nigeria, Republic of Congo, Rwanda, São Tomé and Príncipe, South Africa, Sudan (prior to secession of South Sudan), Swaziland, Uganda, Tanzania, Zambia, Zimbabwe	All parts and derivatives, excluding specific exceptions.*
<i>Pterocarpus erinaceus</i> (African rosewood, kosso)	2	Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Gambia, Ghana	All parts and derivatives, including manufactured and finished products.
<i>Pterocarpus santalinus</i> (red sandalwood, redsanders)	2	India, Sri Lanka	Logs, woodchips, powder, and extracts.
<i>Quercus mongolica</i> (Mongolian oak)	3	China, Japan, Mongolia, Russian Federation	Logs, sawn wood, and veneer sheets.
<i>Senna meridionalis</i> (taraby)	2	Madagascar	All parts and derivatives, including manufactured and finished products.
<i>Swietenia humilis</i> (Pacific Coast mahogany, Honduras mahogany, Mexican mahogany, mahogany)	2	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama	All parts and derivatives, excluding specific exceptions.*
<i>Swietenia macrophylla</i> (bigleaf mahogany, American mahogany, Brazilian mahogany, Honduras mahogany, mahogany, New World mahogany)	2	Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominica, Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala, Guyana, Honduras, Martinique, Mexico, Montserrat, Panama, Peru, St. Lucia, St. Vincent and the Grenadines, Venezuela	Logs, sawn wood, veneer sheets, and plywood.

Table D1 | Timber Species Listed in CITES Appendices, Alphabetized by Latin Name, as of October 2017 (Cont'd)

NAME	CITES APPENDIX LISTING	DISTRIBUTION	LISTING APPLIES TO
<i>Swietenia mahogany</i> (Caribbean mahogany, American mahogany, Cuban mahogany, mahogany, West Indian mahogany)	2	Anguilla, Antigua and Barbuda, Bahamas, Barbados, Cayman Islands, Colombia, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Jamaica, Martinique, Montserrat, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, United States, Venezuela	Logs, sawn wood, and veneer sheets.
<i>Tetracentron sinense</i> (tetracentron)	3	Bhutan, China, India, Myanmar, Nepal	All parts and derivatives, excluding specific exceptions.†

Notes: The parts and derivatives of plants to which CITES Appendix listings apply are detailed in a set of numbered Annotations. The notes below detail the applicable annotation for the relevant listings.

* This listing is covered by Annotation #4, which covers all parts and derivatives except (a) seeds (including seedpods of Orchidaceae), spores, and pollen (including pollinia). The exemption does not apply to seeds from Cactaceae spp., exported from Mexico, or to seeds from *Beccariophoenix madagascariensis* and *Dypsis decaryi* exported from Madagascar; (b) seedling or tissue cultures obtained in vitro, in solid or liquid media, or transported in sterile containers; (c) cut flowers of artificially propagated plants; (d) fruits, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genus *Vanilla* (Orchidaceae) and of the family Cactaceae; (e) stems, flowers, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genus *Opuntia*, subgenus *Opuntia* and *Selenicereus* (Cactaceae); and (f) finished products of *Euphorbia antisyphilitica*, packaged and ready for retail trade.

§ This listing is covered by Annotation #15, which covers all parts and derivatives except (a) leaves, flowers, pollen, fruits, and seeds; (b) noncommercial exports of a maximum total weight of 10 kg per shipment; (c) parts and derivatives of *Dalbergia cochinchinensis*, which are covered by Annotation #4, detailed above; (d) parts and derivatives of *Dalbergia* spp. originating and exported from Mexico, which are covered by Annotation #6, which applies to logs, sawn wood, veneer sheets, and plywood.

† This listing is covered by Annotation #1, which covers all parts and derivatives except (a) seeds, spores, and pollen (including pollinia); (b) seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers; (c) cut flowers of artificially propagated plants; and (d) fruits, and parts and derivatives thereof, of artificially propagated plants of the genus *Vanilla*.

Sources: CITES 2017a, 2017b, and 2017d; USDA 2016.

APPENDIX E. LOGGING AND EXPORT BANS

Many countries have enacted log export ban policies to protect forests and/or to bolster their domestic timber industry. Below is a nonexhaustive list of logging and export bans, the product scope that the bans cover, the current status of the bans, when the information was last updated by the authors and editors of this publication, and the sources of the information.

Table E1 | **Country and Scope of Logging and/or Export Bans, Alphabetized by Country Name**

COUNTRY	PRODUCT SCOPE	STATUS	LAST UPDATED BY WRI	SOURCE
Albania	Ban of logging in all forests and of the export of timber.	2016–Present	May 2016	The Balkan Investigative Reporting Network 2015.
Belarus	Exports of saw-logs are banned unless otherwise stated by the president of Belarus.	2016–Present	December 2017	The European Organisation of the Sawmill Industry 2016.
Belize	All raw rosewood exports in 1992, but the ban was lifted in 1996. A new ban was instituted on the harvest and export of rosewood in 2012.	1992–96; 2012–Present	August 2017	CITES 2016b.
Brazil	Exports of logs from natural forests are banned, but plantation logs are allowed for export.	1996–Present	August 2017	Illegal Logging Portal 2013.
Bolivia	Exports of unprocessed forestry products are subject to restrictions and highly regulated (mainly through forest certification).	1996–Present	May 2016	WWF 2015.
Cambodia	Complete ban on exports of logs and rough timber since 1996, followed by a logging ban within the Permanent Forest Estate in 2002. January 2016 embargo on all timber exports to Vietnam.	1996–Present	August 2016	USITC 2010; CDC 2002; Channel News Asia 2016.
Cameroon	A partial log export ban scheduled in 1999 on more than 20 species of raw logs, excluding ayous. Tax of 20% on exports of logs since 2017.	Export ban first enacted in 1999, but lifted now	May 2018	Cameroon Government 1999; GWMI 2018.
Canada	Restrictions on log exports from British Columbia. There are a variety of federal and provincial regulations regarding log exports.	1906–Present	May 2016	Shinn 1993.
China	Complete ban on commercial logging in all natural forests.	2017–Present	April 2017	State Forestry Administration 2017.
Colombia	Restrictions on log exports from natural forests. Only roundwood from planted forests can be exported. Restrictions have not been well enforced, and large number of logs are still exported.	1997–Present	May 2016	WWF 2015.

Table E1 | Country and Scope of Logging and/or Export Bans, Alphabetized by Country Name (Cont'd)

COUNTRY	PRODUCT SCOPE	STATUS	LAST UPDATED BY WRI	SOURCE
Costa Rica	Log export ban, and export ban on roughly squared wood from specific species.	Undetermined (first enacted in 1986)	May 2016	Kishor et al. 2001.
Côte d'Ivoire	Export ban on logs from natural forests. A ban on harvesting, transporting, and trading of <i>Pterocarpus</i> spp.	Ban on natural log exports: Undetermined–Present Ban on <i>Pterocarpus</i> spp.: 2013–Present	March 2018	ETTF 2016; CITES 2017c.
Croatia	A two-year export ban on oak logs and oak timber with a moisture content of more than 20%. The regulation applies to both trimmed and untrimmed products.	2017–Present	August 2017	EUWID Wood Products and Panels 2017.
Ecuador	Roundwood export ban, except in limited quantities for scientific and experimental purposes. Semifinished forest product exports are allowed only when “domestic needs and the minimum levels of industrialization have been met.”	2005–Present	May 2016	TRAFFIC 2014a.
Fiji	Log export ban in place since 1997. Certain wood and wood products are prohibited for export unless specified requirements are met.	1997–Present	August 2016	Fiji Government 2010; Whiteman 2005.
Gabon	A full ban on exporting logs.	2010–Present	August 2017	Karsenty 2016.
Ghana	A ban on felling, harvesting, and exporting of rosewood in 2014. A national ban on rosewood export was announced in early 2017, but is lifted now.	First enacted in 2014; reactive in early 2017; currently lifted	March 2018	GhanaWeb 2017; GWWI 2017.
Guatemala	Exports of logs of more than 11 cm in diameter are banned unless they originate from plantations. Ban does not apply to furniture and processed products made from wood. In 2006, Guatemala established a national red list of trees to protect. The 81 species in Category One are banned from export and commercial uses.	2006–Present	May 2016	Vivero et al. 2006.
Honduras	Export ban on hardwood and sawn wood.	1998–Present	August 2017	Tacconi 2012.
Indonesia	Log export ban first issued in 1985 and continued until 1992. Raw log export ban reactivated in 2001, expanded to sawn wood in 2004. Plantation log exports have been allowed since 2017.	First enacted in 1985; reactive 2001–17; currently lifted for plantation log exports	December 2017	USITC 2010; Sudoyo 2015; ITTO 2017.

Table E1 | Country and Scope of Logging and/or Export Bans, Alphabetized by Country Name (Cont'd)

COUNTRY	PRODUCT SCOPE	STATUS	LAST UPDATED BY WRI	SOURCE
Lao PDR	A total logging ban in natural forest areas, a harvesting ban for protected species (see citation below for a list), and a ban on exporting roundwood from natural forests, but plantation-grown timber can be harvested and exported with the proper paperwork.	First enacted in 1989; Reactive 2015–Present	August 2016	Lao PDR Government 2015; Lao PDR Government 2016.
Madagascar	Prohibition on logging, transport, and export of rosewood and ebony (Decree 2010-141) and on the export of logs and unworked palisander (Decree 2007-10885).	First enacted 1975, followed by multiple fluctuations. Most recent bans in place since 2007 and 2010	September 2017	CITES 2016a; CITES 2016c.
Malaysia	In Peninsular Malaysia, a ban was imposed on the export of 10 species in 1972, and expanded to a complete ban in 1985. In Sabah, a temporary log export ban 1993–96 has been reactive since May 2018. Malaysia banned the export of rubberwood in 2017.	Peninsular Malaysia: 1972–Present Sabah: 1993–96; 2018–Present Rubberwood: 2017–Present	June 2018	USITC 2010; Tachibana 2000; ITTO 2018; the <i>Star</i> online 2017.
Mozambique	An export ban on raw logs. Logging and collection of <i>Pterocarpus tinctorius</i> species (nkula), <i>Swartzia madagascariensis</i> (ironwood), and <i>Combretum imberbe</i> (mondzo) are banned. An export ban on three species: chanfuta, umbila, and jambire.	Export ban on raw logs: 2007–Present Other bans: March 2018–Present	April 2018	Hubert 2014; Club of Mozambique 2018.
Myanmar	An export ban on raw logs of all species since 2014. Raw timber from private forest plantations can be exported since July 2018.	2014–Present	July 2018	UNODC 2015; Moe Aung 2018.
New Zealand	Export ban on indigenous timber (native species from natural forests) logs and woodchips, with certain exceptions outlined in the 1949 Forestry Act and its 1993 and 2004 amendments.	1993–Present	August 2016	New Zealand Government 1949, as amended.
Nicaragua	Precious hardwoods export ban (mahogany, royal cedar, and pochote). Mahogany exports are allowed only in the form of sawn wood, plywood, or veneered wood. Sawn wood exports require a license.	1997–Present	August 2017	World Rainforest Movement 1999.
Nigeria	Log export ban.	1976–Present	May 2016	FAO 2001b.
Panama	Export ban of logs, stumps, roundwood, or sawn wood of any species from natural forests, as well as from wood submerged in water.	2002–Present	May 2016	WWF 2015.

Table E1 | Country and Scope of Logging and/or Export Bans, Alphabetized by Country Name (Cont'd)

COUNTRY	PRODUCT SCOPE	STATUS	LAST UPDATED BY WRI	SOURCE
Papua New Guinea	Export ban on round logs for selected species since 1990. Logs can be exported from concessions given before 2010. There is a ban on the export of logs from concessions given after 2010.	First enacted in 1990; reactive 2010–Present	August 2016	Australia, Department of Agriculture and Water Resources 2015a; Guyana Forestry Commission 2016.
Peru	Log export ban. Export of forest products “in their natural state” is prohibited except when they originate from nurseries or forest plantations, and if they do not require processing for final consumption.	1972–Present	May 2016	TRAFFIC 2014b.
Philippines	A ban on cutting and harvesting in natural and residual forests throughout the country.	2011–Present	August 2017	Philippines, the President’s Executive Order No. 23 2011.
Sri Lanka	Logging ban in all natural forests.	1990–Present	August 2017	FAO 2002.
Thailand	Ban on timber harvesting and raw log exports from natural forests.	1989–Present	August 2017	USITC 2010.
Ukraine	10-year ban on the exports of all types of raw logs.	2015–Present (applying to pine exports since 2017)	April 2017	FORDAQ 2015. ENPI FLEG II Program 2017.
United States	Ban on export of spruce and hemlock logs from federal lands in Alaska since 1926; an export ban on unprocessed timber from federal lands west of the 100th meridian, except where there is timber surplus from domestic needs, since 1990.	1926–Present	July 2018	Hines 1987; U.S. Congress 1990.
Vietnam	Log export ban; export ban on sawn timber from natural forests.	1992–Present	August 2016	USITC 2010; FAO 2001a.

Source: Forest Legality Initiative 2018.

APPENDIX F. EXAMPLES OF COMMERCIALY AVAILABLE LEGALITY VERIFICATION SERVICES AND SYSTEMS

Table F1 | **Examples of Commercially Available Legality Verification Services and Systems**

ORGANIZATION	SYSTEM AND YEAR	OVERVIEW	SCOPE							
			GEOGRAPHIC COVERAGE	THEMATIC						
				LEGAL RIGHT TO HARVEST ^b OR MORE INFORMATION INCLUDING:	LEGALITY ASSURANCE COMPLIANCE ^a	TAXES/FEES ^b	TENURE/USE RIGHTS OF RESOURCES ^c	TRADE REGULATION ^d	RECOGNIZED AS EU MONITORING ORGANIZATION ^e	OTHER CRITERIA ^f
Bureau Veritas	Timber Origin and Legality (OLB from its initials in French) (2004, updated in 2005)	Verifies the geographic origin of the forest products and the legal compliance of the forest company.	Global	✓	✓	✓	✓	✓	✓	✓
SGS	Legal Trace™ (2015)	Formerly "Timber Legality & Traceability Verification Program (TLTV)," Legal Trace is a generic system that can be used to comply with national regulations and international initiatives, such as FLEGT.	Global	✓	✓	✓	✓	✓	✓	✓
NEPCon	Legal Source Version 2.0 (2017)	Comprises conformity assessments of due diligence systems for forest-based supply chains and legal compliance of forest operations and industries.	Global	✓	✓	✓	✓	✓	✓	✓
CertiSource	CertiSource Legality Standard for Indonesia V4.04 (2017)	Tailored to the requirements of the Indonesian TLAS. The system has a batch-based approach, and each certified consignment is traceable to its origins.	Indonesia	✓	✓	✓	✓	✓	N/A	✓
Rainforest Alliance	Generic Standard for Verified Legal Compliance (VLC) (2007, updated in 2013)	Verifies that the harvesting operation complies with applicable and relevant forestry laws and regulation. VLC is considered a first step toward achieving FSC certification.	Global	✓	✓	✓	✓	✓	N/A	✓

Table F1 | Examples of Commercially Available Legality Verification Services and Systems (Cont'd)

ORGANIZATION	SYSTEM AND YEAR	OVERVIEW	SCOPE							
			GEOGRAPHIC COVERAGE	THEMATIC						
				LEGAL RIGHT TO HARVEST ^b OR MORE INFORMATION INCLUDING:	LEGALITY ASSURANCE COMPLIANCE ^a	TAXES/FEEES ^b	TENURE/USE RIGHTS OF RESOURCES ^c	TRADE REGULATION ^d	RECOGNIZED AS EU MONITORING ORGANIZATION ^e	OTHER CRITERIA ^f
SCS Global Services	Legal Harvest™ Verification (LHV) (2010)	Verifies the legality of the source of forest products, focusing on the organization's legal right to harvest and the chain-of-custody system.	Global	✓	✓	✓	✓	✓	N/A	N/A
The Soil Association's Woodmark	Verification of Legal Compliance (VLC) (2015)	VLC is based on two generic standards, one for FM, and the other for chain of custody. The system supports companies in achieving FSC certification.	Global	✓	✓	✓	✓	✓	✓	✓

Notes: Abbreviation in Table F1: FLEGT = Forest Law Enforcement, Governance and Trade; TLAS = Timber Legality Assurance System; FSC = Forest Stewardship Council; FM = Forest management; ✓ = The theme or issue is assessed by or applies to the legality verification service or system; N/A = The theme or issue is not assessed by and/or does not apply to the legality verification service or system.

a. Compliance with laws, regulations, and administrative requirements related to forest management, labor, transportation, and health and safety.

b. Compliance with tax/royalties laws and regulations.

c. Respect for tenure or use rights of land and resources that might be affected by timber harvesting rights.

d. Compliance with trade and export laws and regulations.

e. The EUTR requires businesses to develop due diligence systems or use systems already developed by monitoring organizations recognized by the European Commission. (See European Commission 2017b for more information.)

f. Compliance with international laws and agreements, including CITES, International Labour Organization, the Convention of Biological Diversity, et al.

Sources: Bureau Veritas 2017; SGS 2017; NEPCon 2017b; CertiSource 2017; Rainforest Alliance 2017; SCS Global Services 2017; Soil Association 2017.

REFERENCES

- 3M. 2015. "Pulp and Paper Sourcing Policy." <http://multimedia.3m.com/mws/media/10335860/pulp-and-paper-sourcing-policy.pdf?fn=Pulp%20and%20Paper%20Sourcing%20Policy%20M>.
- Australia, Department of Agriculture and Water Resources. 2015a. "Country Specific Guideline for Papua New Guinea." <http://www.agriculture.gov.au/SiteCollectionDocuments/forestry/australias-forest-policies/illegal-logging/png-csg.pdf>.
- Australia, Department of Agriculture and Water Resources. 2015b. "Independent Review of the Impacts of the Illegal Logging Regulations on Small Business." <http://www.agriculture.gov.au/SiteCollectionDocuments/forestry/australias-forest-policies/illegal-logging/independent-review-impact-illegal-logging-regulations.pdf>.
- Australia, Department of Agriculture and Water Resources. 2016. "Reforming Australian Illegal Logging Regulations: Consultation Regulation Impact Statement." <http://www.agriculture.gov.au/SiteCollectionDocuments/forestry/illegal-logging-consult-ris.pdf>.
- Australia, Department of Agriculture and Water Resources. 2017. "Illegal logging." <http://www.agriculture.gov.au/forestry/policies/illegal-logging>.
- Australia, MAWR (Ministry for Agriculture and Water Resources). 2017. "Media Release: Striking a Balance with Illegal Logging Laws," October 5. <http://minister.agriculture.gov.au/ruston/Pages/Media-Releases/Striking-a-balance-with-illegal-logging-laws.aspx>.
- Australian Government, Office of Parliamentary Counsel. 2018. "Illegal Logging Prohibition Regulation 2012." <https://www.legislation.gov.au/Series/F2012L02404>.
- The Balkan Investigative Reporting Network. 2015. "Albania Bans Logging to Save Forests." <http://www.balkaninsight.com/en/article/albania-bans-logging-to-protect-the-forests-11-30-2015>.
- Barber, C. V., and K. Canby. 2018. "Assessing the Timber Legality Strategy in Tackling Deforestation." Working Paper. Washington, DC: World Resources Institute. <http://www.wri.org/publication/ending-tropical-deforestation-assessing-timber-legality-strategy-tackling-deforestation>.
- Bureau Veritas. 2004. "OLB Certification." <http://www.bureauveritas.com/home/about-us/our-business/certification/sector-specific-solutions/forest-wood-products/olb/default-content-olb>.
- Cameroon Government. 1999. "Décret no. 99/781 PM du 13 Octobre 1999." <http://gfbcam.com/download/decret-99781pm-du-13-octobre-1999-regime-des-forets-de-la-faune-et-de-la-peche/>.
- CDC (Council for the Development of Cambodia). 2002. "Law on Forestry." http://www.cambodiainvestment.gov.kh/law-on-forestry_020930.html.
- CertiSource. 2017. "CertiSource." <https://www.certisource.org/>.
- Channel News Asia. 2016. "Illegal Logging Still Threatens Cambodia's Forests despite Ban: Special Report." <http://www.channelnewsasia.com/news/asiapacific/illegal-logging-still-threatens-cambodia-s-forests-despite-ban-s-7910618>.
- CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). 2016a. Seventeenth Meeting of the Conference of the Parties Information Document 25. <https://cites.org/sites/default/files/eng/cop/17/InfDocs/E-CoP17-Inf-25.pdf>.
- CITES 2016b. Seventeenth Meeting of the Conference of the Parties Proposal 55. <https://cites.org/sites/default/files/eng/cop/17/prop/060216/E-CoP17-Prop-55.pdf>.
- CITES. 2016c. "Interpretation and Implementation of the Convention Species Trade and Conservation Ebonies (*Diospyros* spp.) and Rosewoods (*Dalbergia* spp.) from Madagascar." <https://cites.org/sites/default/files/eng/com/sc/66/E-SC66-46-02.pdf>.
- CITES. 2017a. *Checklist of CITES Species*. <http://checklist.cites.org/#/en>.
- CITES. 2017b. "How CITES Works." <https://cites.org/eng/disc/how.php>.
- CITES. 2017c. "Regional Reports-Africa." Twenty-third meeting of the Plants Committee, July 22 and 24–27, 2017. <https://www.cites.org/sites/default/files/eng/com/pc/23/E-PC23-34-01.pdf>.
- CITES. 2017d. "What Is CITES?" <https://cites.org/eng/disc/what.php>.
- Club of Mozambique. 2018. "Mozambique Bans Logging and Export of Six Species of Wood." <http://clubofmozambique.com/news/mozambique-bans-logging-and-export-of-six-species-of-wood/>.
- CNFPIA (China National Forest Products Industry Association). 2017. "Timber Legality Verification in China." <http://www.cnfpia.org/plus/list.php?tid=21>.
- Contreras-Hermosilla, A., R. Doornbosch, and M. Lodge. 2007. "The Economics of Illegal Logging and Associated Trade." Paper prepared for Organisation for Economic Co-operation and Development and the Conference, Round Table on Sustainable Development, Paris, January 8–9. www.illegallogging.info/uploads/OECD_background_paper_on_illegal_logging.pdf.
- CEPT (The Central Point of Expertise on Timber). 2014. "Government Procurement of Timber in France." <http://webarchive.nationalarchives.gov.uk/20140528133715/http://www.cpet.org.uk/uk-government-timber-procurement-policy/international-context/international-policies-1/france>.
- CTWPDA (China Timber & Wood Products Distribution Association). 2017. "Summary of CTWPDA's Efforts on Combatting Illegal Logging and Associated Trade."
- EIA (Environmental Investigation Agency). 2017. "Forest Stewardship Council Cuts Ties with Austrian Giant over Illegal Wood." <https://eia-global.org/press-releases/FSC-cuts-ties-with-Holzindustrie-Schweighofer>.
- ENPI FLEG II Program (European Neighborhood and Partnership Instrument Forest Law Enforcement and Governance II Program). 2017. "Ukrainian Timber Export Ban: To Be or Not to Be?" <http://www.enpi-fleg.org/news/ukrainian-timber-export-ban-to-be-or-not-to-be/>.

ETTF (European Timber Trade Federation). 2016. "Ivory Coast: Industry Profile." <http://www.timbertradeportal.com/countries/ivory-coast/#industry-profile>.

ETTF. 2017. "Gateway to International Timber Trade." <http://www.timbertradeportal.com/>.

European Commission. 2004. "FLEGT Briefing Notes: Why the Focus on Legality, Not Sustainability?" Briefing Note No. 04. https://ec.europa.eu/europeaid/sites/devco/files/publication-flegt-briefing-note-4-200404_en.pdf.

European Commission. 2017a. "EUTR Guidance." http://ec.europa.eu/environment/forests/pdf/eutr_guidance.zip.

European Commission. 2017b. "Timber Regulation." http://ec.europa.eu/environment/forests/timber_regulation.htm.

European Forest Institute. 2017a. "FLEGT Licensing." <http://www.vpaunpacked.org/en/web/vpa-unpacked-multilang/flegt-licensing>.

European Forest Institute. 2017b. "Timber Legality Assurance Systems." <http://www.vpaunpacked.org/en/web/vpa-unpacked-multilang/timber-legality-assurance-system>.

European Forest Institute. 2017c. "Voluntary Partnership Agreements." <http://www.euflegt.efi.int/es/vpa>.

European Forest Institute. 2017d. "What Is the EU FLEGT Action Plan?" <http://www.euflegt.efi.int/es/web/guest/flegt-action-plan>.

European Forest Institute. 2017e. "What Is FLEGT?" <http://www.euflegt.efi.int/es/web/guest/what-is-flegt>.

The European Organisation of the Sawmill Industry. 2016. "Export Ban from Belarus." <https://www.eos-oes.eu/en/news.php?id=925>.

European Union, Parliament and the Council of the European Union. 2010. "European Union Timber Regulation, EU Regulation No 995/2010." *Official Journal of the European Union* 53 (November 12, 2010): 23–34. <https://eur-lex.europa.eu/eli/reg/2010/995/oj>.

EUWID Wood Products and Panels. 2017. "Croatia Restricting Oak Exports with Immediate Effect." <https://www.euwid-wood-products.com/news/roundwoodsawnwood/single/Artikel/croatia-restricting-oak-exports-with-immediate-effect.html>.

FAO (Food and Agriculture Organization of the United Nations). 2001a. "Impacts and Effectiveness of Logging Bans in Natural Forests: Viet Nam—Vu Huu Tuynh and Pham Xuan Phuong." <http://www.fao.org/docrep/003/x6967e/x6967e0a.htm>.

FAO. 2001b. "Present Status of the Forestry Sector of Nigeria." <http://www.fao.org/docrep/004/ab592e/ab592e03.htm>.

FAO. 2002. "Forest Policies in Sri Lanka." <http://www.fao.org/docrep/003/ab576e/AB576E20.htm>.

Fiji Government. 2010. The Customs Act: "Customs (Prohibited Imports and Exports) Regulations: Legal Notice No. 109 of 1986." <http://www.frco.fj/wp-content/uploads/2012/10/CUSTOMS-PROHIBITED-IMPORTS-AND-EXPORTS-REGULATIONS-1986-REVISED-29.01.pdf>.

Forbes, John. 2017. Correspondence between WRI and John Forbes, Manufacturer Services, National Wood Flooring Association (NWFA), September 29.

FORDAQ. 2015. "Ukraine: Log Export Ban Entered into Force This Month." http://www.ihb.de/wood/news/Ukraine_log_ban_species_pine_2015_44685.html.

Forest Legality Initiative. 2018. "Logging and Export Bans." <https://forestlegality.org/content/logging-and-export-bans>.

Forest Trends. 2016a. "Swedish Court Rules Myanmar Timber Documentation Inadequate for EU Importers." FLEGT.org, November 15. <http://www.flegt.org/news/content/viewitem/swedish-court-rules-myanmar-timber-documentation-inadequate-for-eu-importers/15-11-2016/57>.

Forest Trends. 2016b. "Timber Regulation Enforcement Exchange." Newsletter, Spring. http://www.forest-trends.org/documents/files/doc_5245.pdf.

Forest Trends. 2016c. "Timber Regulation Enforcement Exchange." Newsletter, Fall. http://www.forest-trends.org/documents/files/doc_5494.pdf.

FSC (Forest Stewardship Council). 2018. "Certificate—Inversiones La Oroza S.R.L." <https://info.fsc.org/details.php?id=a024000000ZYSAA5&type=certificate&return=certificate.php>.

GFBC (Groupement de la Filière Bois du Cameroun). 2016a. "Adhérents." <http://gfbcam.com/adherents/>.

GFBC (Groupement de la Filière Bois du Cameroun. 2016b. "Notre Charter." <http://gfbcam.com/notre-charte/>.

GhanaWeb. 2017. "Stop Issuing Felling Permits—Minister Directs Forestry Commission." <https://www.ghanaweb.com/GhanaHomePage/business/Stop-issuing-felling-permits-Minister-directs-forestry-commission-513196>.

Glaser, S. 2017. "Overview of 2017 EUTR and FLEGT Analyses." United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC). <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=33264&no=13>.

Guyana Forestry Commission. 2016. "Proposed National Log Export Policy (2016–2020)," 10. <http://www.forestry.gov.gy/wp-content/uploads/2016/04/National-Log-Export-Policy-2016-to-2018-Rev-for-Board.pdf>.

GWMI (Global Wood Markets Info). 2017. "Ghana: Rosewood Trade Ban Lifted." <https://www.globalwoodmarketsinfo.com/ghana-rosewood-trade-ban-lifted/>.

- Hines, Judith A. 1987. "Log Export Restrictions of the Western States and British Columbia." U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. https://www.fs.fed.us/pnw/pubs/pnw_gtr208.pdf.
- Hoare, Alison. 2015. "Tackling Illegal Logging and the Related Trade: What Progress and Where Next?" *Chatham House Report 12*. <https://www.illegal-logging.info/sites/files/chlogging/Tackling%20Illegal%20Logging%20and%20Related%20Trade.pdf>.
- Hu, Yanjie. 2016. "Government's Procurement Policy for Timber and Wood Products in New Zealand." *Asia Pacific Forest Week*. http://www.fao.org/fileadmin/user_upload/rap/Asia-Pacific_Forestry_Week/doc/Stream_1/ST1_26Feb_Hu_Yanjie_Procurement_policies.pdf.
- Hubert, Thomas. 2014. "Surge in Chinese Demand Exposes Cracks in Mozambique Forest Policy." *Forest News*. April 9.
- IKEA. 2012. "IWAY Standard: Minimum Requirements for Environment and Social and Working Conditions When Purchasing Products, Materials and Services." http://supplierportal.ikea.com/_layouts/download.aspx?SourceUrl=/doingbusinesswithIKEA/sustainability/betterlifeformeandcommunities/Documents/IWAY%20Standard%20Forestry%20Section%20Ed6.pdf.
- IKEA. 2017a. "The IKEA Group Approach to Sustainability: How We Manage Sustainability in Our Business." http://www.ikea.com/ms/en_JP/pdf/sustainability_report/group_approach_sustainability_fy11.pdf.
- IKEA. 2017b. "People and Planet Positive: IKEA Group Sustainability Strategy for 2020." http://www.ikea.com/ms/en_JP/pdf/people_planet_positive/People_planet_positive.pdf.
- Illegal Logging Portal. 2013. "Brazil Briefing Document." <https://www.illegal-logging.info/sites/files/chlogging/Brazil%20timber%20November2013.pdf>.
- ITTO (International Tropical Timber Organization). 2017. "Forestry Ministry to Allow Log Exports." *Tropical Timber Market Report 21* (22). https://www.itto.int/files/user/mis/MIS_16-30Nov_2017.pdf.
- ITTO. 2018. "Sabah Bans Log Exports." *Tropical Timber Market Report 22* (10). https://www.itto.int/files/user/mis/MIS_16-31_May2018.pdf.
- Karsenty, Alain. 2016. "The Contemporary Forest Concessions in West and Central Africa: Chronicle of a Foretold Decline?" Forestry Policy and Institutions Working Paper No. 34. Rome, Italy: FAO. <http://www.fao.org/forestry/45021-04023cd52f4619cd28fe747b7e42c167f.pdf>.
- Kimberly-Clark. 2009. "Fiber Procurement." http://www.cms.kimberly-clark.com/UmbracoImages/UmbracoFileMedia/Fiber%20Procurement%20Policy_umbracoFile.pdf.
- Kingfisher. 2017. "Wood and Paper Policy." http://files.the-group.net/library/kgf/sustainability_policies/2017/pdfs/cr_02.pdf.
- Kishor, Nalin. Muthukumara Mani, and Luis Constantino. "Economic and Environmental Benefits of Eliminating Log Export Bans—the Case of Costa Rica." 2001. *World Economy 27* (4): 609–24.
- Labbé, Sylvain. 2017. Correspondence between WRI and Sylvain Labbé, President–Director General, Quebec Wood Export Bureau (QWEB), Canada. April 3.
- Lao PDR (Lao People's Democratic Republic) Government. 2015. Notice No. 1360. <http://www.laogov.gov.la/legaldoc/pages/document.aspx?ItemID=358>.
- Lao PDR Government. 2016. Decree No. 15. <http://www.laogov.gov.la/legaldoc/pages/document.aspx?ItemID=385>.
- Miller, F., R. Taylor, and G. White. 2006. *Keep It Legal: Best Practices for Keeping Illegally Harvested Timber Out of Your Supply Chain*. Gland, Switzerland: World Wildlife Fund International, Global Forest and Trade Network. www.wwf.panda.org/forests/keepitlegal/.
- Moe Aung, Mat. 2018. "Government Allows Exports of Raw Timber Produced in Private Plantations." *Myanmar Times*, July 9. <https://www.mmtimes.com/news/govt-allows-exports-raw-timber-produced-private-plantations.html>.
- Mozambique News Agency. 2017. AIM Reports No. 544. <http://www.poptel.org.uk/mozambique-news/newsletter/aim544.html#story4>.
- NASA (National Aeronautics and Space Administration). "Causes of Deforestation: Direct Causes." 2018. https://earthobservatory.nasa.gov/Features/Deforestation/deforestation_update3.php. Accessed March 26.
- Nellemann, C., R. Henricksen, P. Raxter, N. Ash, E. Mrema, eds. 2014. *The Environmental Crime Crisis: Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources; A UNEP Rapid Response Assessment*. Nairobi, Kenya and Arendal, Norway: United Nations Environment Programme and GRID-Arendal.
- Nellemann, C., and INTERPOL Environmental Crime Programme, eds. 2012. "Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the World's Tropical Forests." Nairobi, Kenya: United Nations Environment Programme.
- NEPCon (Nature, Economy, and People Connected). 2017a. "Danish Regulator Questions Sale of Myanmar Teak." FLEGT.org. March 23. <http://www.flegt.org/news/content/viewItem/danish-regulator-questions-sale-of-myanmar-teak/23-03-2017/86>.
- NEPCon. 2017b. "Timber Risk Assessments." <http://beta.nepcon.org/sourcinghub/timber>.
- New Zealand Government. 1949. Forests Act 1949. <http://www.legislation.govt.nz/act/public/1949/0019/latest/whole.html>.
- Noguerón, R., and Loretta Cheung. 2014. *Sourcing Legally Produced Wood: A Guide for Businesses*. Washington, DC: World Resources Institute. <http://forestlegality.org/document/sourcing-legally-produced-wood-guide-businesses>.

NWFA (National Wood Flooring Association). 2017a. "About NWFA." <http://www.nwfa.org/about-nwfa.aspx>.

NWFA. 2017b. "Responsible Procurement Program." <https://www.nwfa.org/rpp.aspx>.

Oliver, Rupert. 2011. "Why Rule Out Illegal Wood? Why and How Has Legislation Developed in Europe and the USA?" Paper presented at a Joint Workshop, the European Economic and Social Committee, Brussels, April 13. <https://www.unece.org/fileadmin/DAM/timber/meetings/20120209/01-oliver.pdf>.

The Philippines, the President's Executive Order No. 23. 2011. http://server2.denr.gov.ph/files/executive_order_no._23_692.pdf.

Rainforest Alliance. 2017. "Timber Legality Verification." <https://www.rainforest-alliance.org/business/forestry/verification/legal>.

SCS Global Services. 2017. "Timber Legality Verification." <https://www.scsglobalservices.com/timber-legality-verification>.

Seneca Creek Associates and Wood Resources International. 2004. "Illegal Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry." Assessment prepared for the American Forest and Paper Association. Poolesville, MD: Seneca Creek Associates. <http://www.illegal-logging.info/uploads/afandpa.pdf>.

SGS. 2017. "Timber Traceability and Legality." <http://www.sgs.com/en/public-sector/monitoring-services/timber-traceability-and-legality>.

Shinn, Craig W. 1993. "British Columbia Log Export Policy: Historical Review and Analysis." Research Paper PNW-RP-457. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. https://www.fs.fed.us/pnw/pubs/pnw_rp457.pdf.

Soil Association. 2017. "Is Your Timber Legal?" <https://www.soilassociation.org/certification/forestry/about-our-certification-services/is-your-timber-legal/>.

Staples. 2010. "Staples Inc. Sustainable Procurement Policy." https://www.staples.com/sbd/cre/marketing/staples_soul/documents/staples-sustainable-paper-procurement-policy-1.pdf.

The Star Online. 2017. "Government to Ban Export of Rubberwood from July 1." <https://www.thestar.com.my/news/nation/2017/06/29/government-to-ban-export-of-rubber-wood-from-july-1/>.

State Forestry Administration (China). 2017. "Full Protection Coverage Achieved on State-Owned Natural Forests." <http://www.forestry.gov.cn/main/424/content-937359.html>.

Sudoyo, Wahyu. 2015. "Indonesia Won't Budge on Timber Ban: Trade Ministry." *Jakarta Globe*. October 7. <http://jakartaglobe.id/business/indonesia-wont-budge-timber-ban-trade-ministry/>.

Tacconi, Luca, ed. 2007. *Illegal Logging: Law Enforcement, Livelihoods and the Timber Trade*. London: Earthscan.

Tacconi, Luca, Krystof Obidzinski, and Ferdinandus Agung. 2004. "Learning Lessons to Promote Forest Certification and Control Illegal Logging in Indonesia." Jakarta, Indonesia: Center for International Forestry Research (CIFOR). http://www.cifor.org/publications/pdf_files/Books/BTacconi0401.pdf.

Tachibana, Satoshi. 2000. "Forest-Related Industries and Timber Exports of Malaysia: Policy and Structure." Research Paper, University of Tokyo, Japan. https://enviroscope.iges.or.jp/system/files/publication_documents/pub/conferenceproceedings/739/3ws-12-tachibana.pdf.

Thomson, J., and R. Kanaan. 2004. "Conflict Timber: Dimensions of the Problem in Asia and Africa." <http://agris.fao.org/agris-search/search.do?recordID=GB2013202658>.

Timber Procurement Assessment Committee (TPAC). 2014. "Dutch Procurement Criteria for Timber." <http://www.tpac.smk.nl/Public/TPAC%20documents/DutchProcurementCriteriaMAR2014.pdf>.

TRAFFIC. 2014a. "Forest Law Enforcement, Governance and Trade (FLEGT)." Action Plan Briefing Papers on Timber Trade in Various Countries in Latin America: Ecuador Briefing Document. http://www.traffic.org/forestry-reports/traffic_pub_forestry36.pdf.

TRAFFIC. 2014b. "Forest Law Enforcement, Governance and Trade (FLEGT)." Action Plan Briefing Papers on Timber Trade in Various Countries in Latin America: Peru Briefing Document. http://www.traffic.org/forestry-reports/traffic_pub_forestry37.pdf.

UK Government, Defra (Department for Environment, Food and Rural Affairs). 2013. Timber Procurement Policy (TPP), "Timber Procurement Advice Note." 6th. ed. London, UK. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/511030/CPET_TPAN_6th_ed_-_Final.pdf.

UNODC (United Nations Office on Drugs and Crime). 2015. "Criminal Justice Response to Wildlife and Forest Crime in Myanmar: A Rapid Assessment." http://www.unodc.org/documents/southeastasiaandpacific/Publications/wildlife/Myanmar_Illicit_Timber_Trade_Report_15.pdf.

USDA (U.S. Department of Agriculture). 2016. "CITES I-II-III Timber Species Manual." https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/cites.pdf.

USDA. 2018. "Regulatory Plan: Establish de Minimis Levels for Enforcing Lacey Act Requirements." *Federal Register* 83 (9), January 12, 1677. https://www.ftc.gov/system/files/documents/federal_register_notices/2018/01/unified_agenda.pdf.

USDA APHIS (U.S. Department of Agriculture, Animal and Plant Health Inspection Service). 2013. "Lacey Act Primer and Updates." https://www.aphis.usda.gov/plant_health/lacey_act/downloads/LaceyActPrimer.pdf.

USDA APHIS. 2016. "Lacey Act: Frequently Asked Questions." https://www.aphis.usda.gov/plant_health/lacey_act/downloads/LaceyAct-Program-faq-11-23-2016.pdf.

USDA APHIS. 2017. "Amendments to the Lacey Act from H.R.2419, Sec. 8204." https://www.aphis.usda.gov/plant_health/lacey_act/downloads/background--redlinedLaceyamndmnt--forests--may08.pdf.

U.S. Congress, Senate, Committee on Environment and Public Works. 1981. *Lacey Act Amendments of 1981: Report (to Accompany S. 736)*. 97th Cong., 1st sess., 1981. S. Rep. 97-123.

U.S. Congress, Senate. 1990. The Forest Resources Conservation and Shortage Relief Act of 1990. Public Law 101-382. <https://www.agriculture.senate.gov/imo/media/doc/frc90.pdf>.

U.S. District Court for the Eastern District of Virginia, Norfolk Division. 2015. "*United States of America v. Lumber Liquidators, Inc.*, Plea Agreement." https://www.sec.gov/Archives/edgar/data/1396033/000114420415058462/v421764_ex10-1.htm.

U.S. DOJ (Department of Justice), United States Attorney, Middle District of Tennessee. 2012. "*Re: Gibson Guitar Corporation*." http://www.gibsondunn.com/publications/Documents/GibsonGuitarCorp_NPA.pdf.

U.S. Government. 2016. *Code of Federal Regulations. Title 7 — Agriculture § 357.2 Definitions*. 1-1-16 ed. <https://www.gpo.gov/fdsys/pkg/CFR-2016-title7-vol5/pdf/CFR-2016-title7-vol5-sec357-2.pdf>.

USITC (United States International Trade Commission). 2010. *ASEAN: Regional Trends in Economic Integration, Export Competitiveness, and Inbound Investment for Selected Industries*. USITC Publication 4176. <https://www.usitc.gov/publications/332/pub4176.pdf>.

USTR (Office of the United States Trade Representative). 2017. "USTR Announces Unprecedented Action to Block Illegal Timber Imports from Peru." <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/october/ustr-announces-unprecedented-action>.

van Dam, Jinke, and Herman Savenije. 2011. "Enhancing the Trade of Legally Produced Timber: A Guide to Initiatives." Wageningen, the Netherlands: Tropenbos International. <http://www.euflegt.efi.int/documents/10180/23029/Enhancing+the+trade+of+legally+produced+timber+-+A+guide+to+initiatives/27ec5d94-3c5e-467b-8164-c688ed54bbcb>.

Vivero, Jose Luis, Michelle Szejner, James Gordon, and Georgina Magin. 2006. *The Red List of Trees of Guatemala*. No. 582.16097281 R312. Geneva: United Nations Environment Programme (UNEP); Gland, Switzerland: International Union for Conservation of Nature (IUCN); Cambridge, UK: Fauna and Flora International (FFI); Surrey, UK: Botanic Gardens Conservation International (BGCI); Guatemala City: Consejo Nacional de Areas Protegidas (CONAP); Miami, FL: Fairchild Tropical Botanic Garden; London: Department for Environment, Food and Rural Affairs (Defra), EUA. <http://www2.ecolex.org/server2.php/libcat/docs/LI/MON-080203.pdf>.

Whiteman, Adrian. 2005. "A Review of the Forest Revenue System and Taxation of the Forestry Sector in Fiji." Rome, Italy: Food and Agriculture Organization of the United Nations (FAO). <http://www.fao.org/3/a-af168e.pdf>.

World Bank. 2006. "Strengthening Forest Law Enforcement and Governance: Addressing a Systemic Constraint to Sustainable Development." Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/330441468161667685/Strengthening-forest-law-enforcement-and-governance-addressing-a-systemic-constraint-to-sustainable-development>.

World Rainforest Movement. 1999. "WRM Action Alerts." <http://wrm.org.uy/oldsite/alerts/september99.html>.

WRI (World Resources Institute) and WBCSD (World Business Council for Sustainable Development). 2016. "Sustainable Procurement of Forest Products." http://sustainableforestproducts.org/foreword_acknowledgments.

WWF (World Wildlife Fund). 2015. "Country Profiles—2015: Bolivia, Cameroon, China, Colombia, Indonesia, Lao PDR, Malaysia, Myanmar, Panama, Peru, Russian Far East, Vietnam." http://assets.worldwildlife.org/publications/677/files/original/March_2015_Country_Risk_Profile_NA_Booklet.pdf?1429535765.

WWF GFTN (World Wildlife Fund, Global Forest & Trade Network). 2005. *Building a Better Business through Responsible Purchasing: Developing and Implementing a Wood and Paper Purchasing Policy*. Washington, DC: World Wildlife Fund, GFTN-North America.

WWF GFTN. 2010. "The GFTN Guide to Legal and Responsible Sourcing." <http://sourcing.gftn.panda.org/>.

WWF GFTN and TRAFFIC. 2011. "The Common Framework for Assessing Legality of Forestry Operations, Timber Processing and Trade." <http://gftn.panda.org/?202483/Framework-for-Assessing-Legality-of-Forestry-Operations-Timber-Processing-and-Trade>.

ABOUT THE EDITORS

2014 EDITION:

Ruth Nogueron is an Associate at the World Resources Institute.
Contact: Ruth.Noguero@wri.org

Loretta Cheung is a former Research Analyst and Project Coordinator at the World Resources Institute.

2018 EDITION:

Jonathan Mason is a Research Analyst at the World Resources Institute.
Contact: Jonathan.Mason@wri.org

Bo Li is a Research Analyst at the World Resources Institute.
Contact: Bo.Li@wri.org

ACKNOWLEDGMENTS

We are pleased to acknowledge our institutional strategic partners, who provide core funding to WRI: the Netherlands Ministry of Foreign Affairs, the Royal Danish Ministry of Foreign Affairs, and the Swedish International Development Cooperation Agency.

The 2018 edition of Legality Guide was made possible by the generous financial support of The Tilia Fund. The previous edition was supported by the WBCSD Forest Solutions Group and by the generous support of the American people through the United States Agency for International Development (USAID).

The editors would like to thank the following people for their support reviewing materials and providing input that substantially improved this second edition of the guide: Alexandra Banks, Melissa Blue Sky, Kerstin Canby, Tim Dawson, Neil Garbutt, Sylvain Labbé, Jamie Lawrence, Erica Pohnan, Brian Schaap, Tina Schneider, Wei Shen, Tobias Stäuble, and Tom Swegle.

DISCLAIMER

The contents are the responsibility of the World Resources Institute. This document is for information purposes only. It does not constitute legal advice. The views expressed here do not necessarily represent the views, decisions, or stated policy of The Tilia Fund, the United States Government, USAID, WBCSD, WBCSD members, or WRI. Citing of trade names or commercial processes does not constitute endorsement.

PHOTO CREDIT

Table of contents Scott Wylie/Flickr.

ABOUT WRI

World Resources Institute is a global research organization that turns big ideas into action at the nexus of environment, economic opportunity and human well-being.

Our Challenge

Natural resources are at the foundation of economic opportunity and human well-being. But today, we are depleting Earth's resources at rates that are not sustainable, endangering economies and people's lives. People depend on clean water, fertile land, healthy forests, and a stable climate. Livable cities and clean energy are essential for a sustainable planet. We must address these urgent, global challenges this decade.

Our Vision

We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.

Our Approach

COUNT IT

We start with data. We conduct independent research and draw on the latest technology to develop new insights and recommendations. Our rigorous analysis identifies risks, unveils opportunities, and informs smart strategies. We focus our efforts on influential and emerging economies where the future of sustainability will be determined.

CHANGE IT

We use our research to influence government policies, business strategies, and civil society action. We test projects with communities, companies, and government agencies to build a strong evidence base. Then, we work with partners to deliver change on the ground that alleviates poverty and strengthens society. We hold ourselves accountable to ensure our outcomes will be bold and enduring.

SCALE IT

We don't think small. Once tested, we work with partners to adopt and expand our efforts regionally and globally. We engage with decision-makers to carry out our ideas and elevate our impact. We measure success through government and business actions that improve people's lives and sustain a healthy environment.

WITH SUPPORT FROM



Each World Resources Institute report represents a timely, scholarly treatment of a subject of public concern. WRI takes responsibility for choosing the study topics and guaranteeing its authors and researchers freedom of inquiry. It also solicits and responds to the guidance of advisory panels and expert reviewers. Unless otherwise stated, however, all the interpretation and findings set forth in WRI publications are those of the authors.



Copyright 2018 World Resources Institute. This work is licensed under the Creative Commons Attribution 4.0 International License.
To view a copy of the license, visit <http://creativecommons.org/licenses/by/4.0/>



WORLD
RESOURCES
INSTITUTE

10 G STREET NE
SUITE 800
WASHINGTON, DC 20002, USA
+1 (202) 729-7600
WWW.WRI.ORG

ISBN 56973-941-2