Tackling the trade in illegal timber: a comparative study of legal frameworks

Melissa Blue Sky¹, Helena Lindemann²

Abstract

Illegal logging and trade in illegal timber is a major cause of deforestation, which contributes to the global impact of climate change, depletion of natural resources and decreasing biodiversity, thereby frustrating efforts towards sustainable forest management. It further negatively effects countries' socio-economic growth, food security, and poverty alleviation efforts, in particular local communities who depend on forests for their livelihood. Over the past years, major international markets have developed regulatory frameworks to combat illegal logging and associated trade. This comprehensive study provides an analytical framework for comparing requirements for timber legality and enforcement approaches and impacts of the laws in a range of timber-importing countries. Special emphasis is given to markets that have developed legal mechanisms and effective legislative options to combat the illegal introduction, import and trade of timber and other forest products. An in-depth analysis of case studies is undertaken to identify trends, emerging options or good examples, which could be used as reference or inspiration for developing effective legal frameworks and requirements on the legality of timber. This comprehensive overview and comparison of legislative approaches across regions intends to be a valuable information resource for researchers, policymakers, and timber trading companies, providing guidance on their compliance requirements.

Keywords: [timber legality frameworks, illegal logging]

Introduction, scope and main objectives

Timber legality frameworks are a form of regulatory instrument that has increasingly been used over the past decade to reduce illegal logging and trade, and by extension subsequent legal and illegal deforestation. The approaches taken by countries vary significantly, as do implementation and enforcement methods. Through comparative analysis of the United States of America, European Union (EU), Australia, Japan and Republic of Korea's legal frameworks this study can provide guidance and lessons learned to countries considering new similar laws or anti-deforestation laws that include both timber and agricultural commodities.

The case studies analysed in this paper make up a sizeable share of the global wood products import market, and have laws that were passed or amended in 2017 or earlier, enabling, at a minimum, preliminary assessment of implementation and enforcement. In 2018, the EU was the largest global wood products importer, the United States second, Japan fourth, the Republic of Korea seventh and Australia ninth (Momii and Saunders 2020).

Methodology/approach

The paper provides an overview of five existing demand-side laws, presented in chronological order from when each law entered into force. It provides a comparative analysis of timber legality frameworks based on key parameters, developed in consultation with experts and previous studies

¹Center for International Environmental Law, mbluesky@ciel.org, +1-518-420-8879

²Development Law Service (LEGN) of the FAO Legal Office, helena.lindemann@fao.org, +39-3519664635

(ClientEarth 2018a; Norman and Saunders 2017). The paper concludes with a review of demonstrated impacts of the laws and recommendations.

Results

1. Overview of legal frameworks related to imported illegal timber¹

a. United States of America

The Lacey Act, originally passed in 1900, was the first US federal wildlife protection law, and has been expanded throughout the century to include violations of federal or foreign law for fish, animals and plants (US Department of the Interior, 2013). With the 2008 amendments, the Lacey Act was expanded to include timber that violates laws in the countries of harvest (16 U.S.C. Section 3372).

The Act's provisions applicable to imported timber include three types of violations:

Trafficking violations consist of two offences: the initial take, possession, transportation, or sale of the timber in violation of a law related to the protection of plants in another country and the subsequent trade (16 U.S.C., Section 3372(a)).

Labelling violations occur when any record, account, label, or identification containing false information is made or submitted (United States v Allemand 1994), whether or not required by law (16 U.S.C. Section 3372(d)).

The Declaration requirement includes a specific Lacey Act import form that includes the scientific name and country of harvest of the timber (16 U.S.C. Section 3372(f)(1)(2); Animal and Plant Health Inspection Service (APHIS) 2021).

b. European Union

The 2010 European Union Timber Regulation entered into force in 2013. The EUTR prohibits the initial placing of illegal timber or timber products within the EU market, and requires that operators (those placing the timber on the market) (EUTR 2010, Article 2(c)) "exercise due diligence," according to a system described by the EUTR (Article 4) and guidance (Due Diligence Regulation 2012). Traders are required to collect and retain information for five years about their suppliers and customers (EUTR 2010, Article 5).

Products accompanied by FLEGT licences and CITES documents are considered to have been legally harvested for purposes of compliance with the Regulation (EUTR 2010, Article 3) and do not require companies to conduct due diligence.²

c. Australia

In late 2012, the Australian Parliament passed the Illegal Logging Prohibition Act (ILPA), which penalizes the importation of illegally logged timber and timber products, and imposes a due diligence obligation on importers (ILPA rev. 2018).

The Illegal Logging Prohibition Regulation (ILPR) outlines the due diligence process, which importers must have in place before importing (ILPR rev. 2020, Sections 8, 10, 11). The ILPA also makes it

¹ Although all laws have provisions related to both domestic and imported timber, so as not to run afoul of World Trade Organization rules, this paper focuses on the provisions related to imported timber and wood products.

² In 2018, however, the European Commission published a Guidance document on steps to be taken by EU Member States in the case of doubts as to the legality of timber from CITES-listed species imported into the EU. (European Commission 2018a).

mandatory for importers to declare to the Customs Minister whether they have complied with the due diligence requirements (ILPA rev. 2018, Section 13).

d. Japan

Japan's Clean Wood Act entered into force in May 2017 (MAFF 2017). The principal obligation is that all companies "must endeavour" to use legally harvested wood (CWA 2016, Article 5) and confirm that trees are harvested in compliance with country of harvest laws (Ordinance on Standards 2017, Article 2). A related ordinance instructs businesses to handle legally confirmed wood separately from unconfirmed wood (Ordinance on Standards 2017, Article 6). The CWA additionally outlines a voluntary registration system (CWA 2016, Article 8): companies can choose to sign up with a Registering Organization and adopt specific measures to confirm legality (Articles 8, 9 and 10).

e. Republic of Korea

The Government of the Republic of Korea amended the Act on the Sustainable Use of Timbers (ASUT) in 2017 to require importers of timber or timber products to file a declaration with the Korea Forest Service (ASUT rev. 2017, Article 19-2). The inspection agency verifies that the timber is of legal origin through documentation review (Detailed Standards 2018, Article 3(2); ASUT rev. 2017, Article 19-3(2)). There is no explicit due diligence requirement for companies (Hoare 2020).

Timber producers (those which process raw timber and timber products, as well as imported products) (ASUT rev. 2017, Article 2(3)) must "endeavour to import, distribute, produce and sell legally felled timber or timber products" (Article 4(3)) and keep records on types, quantity and proof of legality for five years (Article 27(1)).

2. Comparative analysis of demand-side timber legality frameworks

a. Scope of the regulations

1. Products

Many products are covered by the Lacey Act, EUTR, ILPA and CWA, with the Korean ASUT applying to a narrower range.

Table 1: Products covered by each of the legal frameworks

United States of America	All plants and plant parts except common food crops and cultivars, or plants to remain or be planted or used in scientific research. For the Declaration, only products included in APHIS' Schedule of Enforcement, such as fuel wood, wood charcoal, sawn wood, continuously shaped wood, plywood, wooden frames, barrels, tools, tool handles, and some seats.
European Union	Timber and wood products listed in the Annex to the EUTR (main categories include sawn wood; continuously shaped wood; fuel wood; particle board; sheets for veneer, plywood, or laminated wood; fibreboard; packing cases; pulp and paper; wooden frames and barrels; certain furniture; prefabricated buildings).
Australia	Timber and timber product imports listed in the ILPR, including logs, sawn wood, veneer, particle board, plywood, pulp, paper, barrels, certain furniture, prefabricated buildings, and paper packing materials.
Japan	Wood and wood products, including furniture, wood pulp and paper, flooring, wood cement boards, siding boards and paper.

Republic of Korea	Seven products: logs, sawn timber, anti-decay wood, fire-retardant-treated wood, laminated wood, plywood, and wood pellets.
-------------------	---

2. Actors

Table 2: Imported timber regulated actors

United States of America	Anyone in the supply chain.
European Union	Operators and traders.
Australia	Importers of regulated products.
Japan	Type I: businesses initially placing timber on the Japanese market. Type II: all other wood-related businesses.
Republic of Korea	Operators and traders.

3. Definitions of imported illegal timber

The frameworks in the US and EU consider not only harvest, but also legal violations further up or down the supply chain. The frameworks in Australia, Japan and the Republic of Korea focus on harvest-related laws.

Table 3: Definitions of imported illegal timber

United States of America	Obtained in breach of foreign laws that protect plants or regulate the theft, taking, or transhipment of plants, or without the required the payment of "royalties, taxes, or stumpage fees."
European Union	In violation of applicable legislation in the country of harvest, which covers harvesting rights and related duties, harvesting legislation, third parties' legal rights of use and tenure, and trade and customs.
Australia	Obtained in contravention of harvesting laws in the place of harvest.
Japan	No definition of illegal timber. Legal timber is "harvested in compliance" with laws of the country of harvest.
Republic of Korea	In violation of timber harvest-related statutes in the country of harvest.

b. Private actors' legal obligations - due diligence and declarations

Table 4: Private actors' legal obligations

Country	Due Diligence or similar obligation	Timber-specific declaration

United States of America	Due care, a standard which requires one to act as a similarly situated, reasonably prudent person would. In compliance plans for companies that violated the Act, requirements included examination of documents provided by suppliers, independent evaluations of their suppliers' risks and verification of the information provided.	Specific Lacey declaration upon import, containing species and country of harvest information, for a subset of products.
European Union	Three step obligation: access to information, risk assessment and risk mitigation. If the risk cannot be adequately mitigated so that the likelihood of purchasing illegal timber is negligible, then the wood product should not be purchased.	None
Australia	Importers must collect information about the timber or wood product, its supply chain, and evidence that its origins are legal; consider risk factors (can include consideration of country specific guidelines and private forest certification, when applicable); and obtain further information if needed. Risk mitigation can include acquiring more information, reassessing the risk, and, finally, abstaining from importing the product.	Importers declare whether they have fulfilled the due diligence requirements.
Japan	Type I companies are obligated to request documentation of origin and legal harvest and confirm the contents of the documents. If the legality of wood cannot be confirmed through these documents, companies must collect additional information (such as forest certification and chain of custody systems, verification methods of individual companies or authorized by industry associations) or refrain from handling the timber products if unable to do so. The Ordinance on Standards indicates that legal and unconfirmed wood should be handled separately.	None
Republic of Korea	Confirm that documents of legal harvest match the timber or timber products accompanied by the import declaration.	Specific declaration with documents to show that the timber has been legally felled.

c. Determination of legality: document-based vs. fact-based

Some laws set forth documentary requirements that will allow the timber to be deemed legal in the country of import, even if in reality the timber is illegal, while others allow the importing government to undertake its own independent determination.

Table 5: Document-based or fact-based legality determination

Country	Document-based	Fact-based
United States of America		х
European Union	Only FLEGT and CITES permits.	х
Australia		х

Japan	Forest certification and chain of custody systems. Potentially other unspecified documents provided by Type-I businesses.	
Republic of Korea	Felling permits; FSC, PEFC and ISO 17065-compliant certificates; documents accepted by the KFS following bilateral consultations; and FLEGT licences and export permit; other documents.	

d. Penalties

Table 6: Penalties by jurisdiction

United States of America	 Civil monetary penalties. Criminal penalties up to five years in prison and USD 20 000, per violation, for trafficking offences. Up to five years in prison and a maximum fine of USD 250 000 for individuals and 500 000 for businesses for false labelling and declaration violations. Forfeiture of illegal timber and timber products.
European Union	 Varies by Member State. Penalties include notices, seizure or destruction of timber, "suspension of authorizations to trade," fines and prison. Depending on Member State, civil administrative fines and/or criminal penalties.
Australia	 Criminal penalties only for import violations: five years in prison and up to AUD 111 000 in fines. Forfeiture of illegal timber. Civil fines of up to AUD 66 600 for due diligence offences. Civil fines up to AUD 22 200 for omission of the declaration requirement.
Japan	 For Wood-related Business Entities, fines of up to JPY 200 000 or withdrawal of registration for misuse of registration, evasion of inspections, or failure to submit report or submitting false reports. For Registering Organizations, fines of up to JPY 300 000 or withdrawal of registration for misuse of registration, evasion of inspections, or failure to submit report or submitting false reports. Imprisonment for Registering Organizations that disregard an order from to suspend their activities, in addition to fines of up to JPY 500 000. No forfeiture provisions.
Republic of Korea	 Withdrawal of a business' registration for failing to keep records. Three years in prison or a KRW 30 million fine for disregarding orders of sale suspension, return, or destruction of timber. Three years in prison or a KRW 30 million fine for selling timber which has not cleared customs or been inspected. Return or destruction of timber.

e. Status of implementation and enforcement

The Lacey Act has been enforced primarily by the United States Department of Justice. Notable seizures and prosecutions since 2008 include the Lumber Liquidators case with fines of over \$13 million (DOJ 2016), the Gibson Guitar Corp. case (DOJ 2012), and a series of cases related to 2015 illegal timber shipments from Peru (DOJ 2017a, DOJ 2021). APHIS publishes guidance (APHIS 2020), undertakes outreach and education, collects and reviews Lacey Act declaration forms and began sending notices of Lacey Act declaration non-compliance in October 2018 (APHIS 2018).

Under the EUTR, which is implemented and enforced by each EU member country, non-penalty approaches prevail (ClientEarth 2018b). However, recently, inspections, fines, prohibitions on placing

³ Another case with Lacey Act violations, *U.S. v. Young Living Essential Oils L.C.*, involved export of oil from 86 tons of rosewood from Peru without authorization or CITES permits from the Peruvian government. (DOJ, 2017b)

timber on the market and confiscation have increased significantly, although there are still discrepancies in enforcement actions and penalties between Member States (ClientEarth 2018b; Forest Trends 2016, European Commission n.d.-a). Timber imports from Myanmar into the EU were effectively banned as it is not possible to "mitigate to negligible the risk of illegal harvest" (European Commission 2018b). Regular briefing notes provide updates on implementation, enforcement, and other information related to illegal logging and trade (European Commission n.d.-b).

In Australia, the "soft start" of the ILPA was extended until January 2018; the full law was only enforced six years after it was passed (ILPA Statutory Review 2018). There have been a number of reviews of the Act and Regulation, including an ILPR sunsetting review in 2021 that considered a number of changes for future enactment. In 2018, a company was prosecuted for continued non-compliance with due diligence requirements (Colbeck 2019). The government has sought to educate businesses on their obligations with newsletters, a website containing guidance and webinars, and surveys regarding implementation (Department of Agriculture, Water and the Environment 2021).

The CWA is overseen primarily by Japan's Forestry Agency and registering organizations. Examples of registered businesses and their actions (MAFF n.d.) and the handling of wood in 2018 by registered businesses were recently released (MAFF 2019). In the latter, a high percentage of registered Type-I businesses reported confirming the contents of documents for most products, but certain subcategories of furniture, paper and flooring had low rates of confirmation of legality (MAFF 2019).

The Republic of Korea adopted a year-long trial period through 30 September 2019 for its revisions to the ASUT. The government has sought to educate businesses about their responsibilities and obligations under the ASUT (Hoare 2020), and produced more than 50 country specific guides.

Discussion

To date, most systems have chosen a compulsory approach, as "experiences to date suggest that non-legally binding mechanisms have limited impact and make it harder for responsible companies to justify the effort and costs associated with compliance" (Norman and Saunders 2017).

The concept of legality itself and whether legality is defined only based on harvest-related requirements or includes other steps along the supply chain is important. Some countries have adopted a fact-based approach, while others have chosen a document-based approach, with companies and governments looking beyond documentation to verify legality in the former.

Strict liability provisions in the Lacey Act, and forfeiture and seizure of illegal forest products in the Lacey Act, EUTR, ILPA and ASUT are important elements of. Seizure of illegal products removes them from the market and does not allow companies to profit from illegal goods.

Requiring companies to perform due diligence, as a step in the verification process, can help to reduce illegal logging in producer countries by providing incentives for suppliers to source their products legally. When laws provide explicit procedures for due diligence, they may be easier to enforce and prosecute than illegal imports cases, as indicated by Australia's single publicly known case, and enforcement by EU CAs related to companies' due diligence systems.

Requiring a specific declaration upon importation of forest products, such as that required by the Lacey Act, can facilitate enforcement, as authorities can track high-risk imports, while also increasing industry awareness of the applicable legislation.

Awareness raising and enforcement actions are important, as is publicly sharing information on implementation and enforcement. Authorities can self-assess and refocus their enforcement efforts, industry actors can improve their practices, and civil society can monitor progress.

Conclusions

Although approaches differ in each country, companies are expected to know how they are sourcing their timber; they run the risk of violating the law and being held responsible if they do not conduct adequate due diligence or knowingly trade in illegal timber.

Following the 2008 amendments to the Lacey Act, there was an estimated 32–44 percent overall decline of illegal timber imports in the US (Union of Concerned Scientists 2015) and the US' trade balance in timber shifted, due to increased net exports and reduced imports (Zhang et al. 2016).

In the EU as of 2015, there had been a decline in imports of tropical hardwood (Jonsson et al. 2015) and an evaluation of the EU's FLEGT Action Plan found that it had generally contributed to an overall decrease in imports of illegal timber through 2014 (TEREA et al. 2016).

Australia's 2019 five-year statutory review concluded that there was not enough evidence to assess the impacts of the law, due in part to the delay in enforcement of the due diligence provisions until 2018. The review, however, did note that purchasing patterns had shifted to less "risky" supply lines and that with full implementation and enforcement it was anticipated that due diligence would continue to improve and reduce imports of illegal timber (ILPA Statutory Review 2018).

To the knowledge of the authors there are no public quantitative assessments of the impacts of the Republic of Korea or Japan's laws on illegal timber imports. All countries with timber legality frameworks should focus not only on implementation and enforcement, but also undertake and publicly release regular assessments on efficacy and impacts. To build upon initial advances from the existing legality frameworks in reducing illegal logging and associated trade, harmonization and robust enforcement of these and future laws will be key.

Acknowledgements

This paper is based on a longer unpublished study that was prepared under the overall supervision of Naomi Kenney and Eugenio Sartoretto of Development Law Service of the Food and Agriculture Organization of the United Nations (FAO) Legal Office (LEGN) and Daphne Hewitt of the Forestry Department at FAO, who provided valuable insights and comments from the conception to the finalization of the study. Blaise Kuemlangan, Margret Vidar and Eugenio D'Andrea of LEGN, and Daniele Lenci from FAO's Forestry Department also reviewed the study and provided valuable comments.

Magdalena Albar Díaz, while a legal intern at the Center for International Environmental Law (CIEL), conducted background research and drafted initial text for the study. Carla García Zendejas, People, Land and Resources Program Director at CIEL, reviewed the study in the final stages.

The views expressed in this paper are those of the authors and do not necessarily reflect the views or policies of FAO.

References

Animal and Plant Health Inspection Service (APHIS). 2018. APHIS Will Begin Issuing Letters of Non-Compliance for Lacey Act Declaration Errors. In: USDA Animal and Plant Health Inspection Service. Available at: https://content.govdelivery.com/accounts/USDAAPHIS/bulletins/20b98c3 [accessed 21.10.2021]

APHIS. 2020. Lacey Act. Available at:

https://www.aphis.usda.gov/aphis/ourfocus/planthealth/import-information/lacey-act/lacey-act [accessed 21.10.2021]

APHIS. 2021. Lacey Act Declaration Implementation Schedule. Available at: https://www.aphis.usda.gov/aphis/ourfocus/planthealth/import-information/lacey-act/implementation-schedule/hts [accessed 14.10.2021]

Australia. Illegal Logging Prohibition Act 2012 (ILPA), (No. 166 of 2012, revised 2018).

Australia. Illegal Logging Prohibition Regulation 2012 (ILPR), (No. 271 of 2012, revised 2020).

Australian Government, Department of Agriculture and Water Resources. 2018. Statutory review of the Illegal Logging Prohibition Act 2012 – Review report (ILPA Statutory Review). Available at https://www.awe.gov.au/sites/default/files/sitecollectiondocuments/forestry/illegal-logging-statutory-review-report.pdf [accessed 25.10.21]

Australian Government, Department of Agriculture, Water and the Environment. 2021. Illegal logging. Available at: https://www.awe.gov.au/agriculture-land/forestry/policies/illegal-logging [accessed 25.10.21]

ClientEarth. 2018a. Comparison of illegal logging laws in the European Union, the United States, Australia and Japan. Available at: https://www.documents.clientearth.org/wp-content/uploads/library/2018-03-01-eu-us-australian-japanese-illegal-logging-laws-comparison-table-ce-en.pdf [accessed 25.10.21]

ClientEarth. 2018b. National EUTR Penalties: Are They Sufficiently Effective, Proportionate and Dissuasive? Available at: https://www.documents.clientearth.org/wp-content/uploads/library/2018-03-02-national-eutr-penalties-are-they-sufficiently-effective-proportionate-and-dissuasive-ce-en.pdf [accessed 25.10.21]

Colbeck R. (Senator). 2019. First prosecution for importing illegally logged timber. Media release. Available at: https://inbox.news/newsroom/press-releases/4654/first-prosecution-for-importing-illegally-logged-timber [accessed 25.10.21]

DOJ. 2012. Gibson Guitar Corp. Agrees to Resolve Investigation into Lacey Act Violations. Press release. Available at: https://www.justice.gov/opa/pr/gibson-guitar-corp-agrees-resolve-investigation-lacey-act-violations [accessed 25.10.21]

DOJ. 2016. Lumber Liquidators Inc. Sentenced for Illegal Importation of Hardwood and Related Environmental Crimes. Press release. Available at: https://www.justice.gov/opa/pr/lumber-liquidators-inc-sentenced-illegal-importation-hardwood-and-related-environmental [accessed 25.10.21]

DOJ. 2017a. Justice Department Reaches Agreement to Ensure Destruction of Timber Believed to Have Been Harvested in Violation of Peruvian Law. Available at:

https://www.justice.gov/opa/pr/justice-department-reaches-agreement-ensure-destruction-timber-believed-have-been-harvested [accessed 25.10.21]

DOJ. 2017b. Essential Oils Company Sentenced for Lacey Act and Endangered Species Act Violations to Pay \$760,000 in Fines, Forfeiture, and Community Service, and to Implement a Comprehensive Compliance Plan. Available at: https://www.justice.gov/opa/pr/essential-oils-company-sentenced-lacey-act-and-endangered-species-act-violations-pay-760000 [accessed 25.10.21]

DOJ. 2021. U.S. Corporation Sentenced for Importing Illegally-Sourced Wood from the Amazon. Available at: https://www.justice.gov/opa/pr/us-corporation-sentenced-importing-illegally-sourced-wood-amazon [accessed 25.10.21]

European Commission. 2010. Regulation (No. 995/2010) of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market Text with EEA relevance (EUTR).

European Commission. 2018a. Guidance document on steps to be taken by EU Member States in the case of doubts as to the legality of timber from CITES-listed species imported into the EU. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2018:376:FULL&from=EN [accessed 25.10.21]

European Commission. 2018b. Summary Record of the FLEGT/EUTR Expert Group Meeting 19 April 2018. Available at https://ec.europa.eu/transparency/expert-groups-register/core/api/front/document/32788/download [accessed 25.10.21]

European Commission. n.d.-a. EUTR Reports and Reviews. Available at: https://ec.europa.eu/environment/forests/eutr_report.htm [accessed 25.10.21]

European Commission. n.d.-b. Illegal logging. Available at: https://ec.europa.eu/environment/forests/timber_regulation.htm [accessed 25.10.21]

Forest Trends. 2016. Timber Regulation Enforcement Exchange Newsletter Spring 2016. Available at https://www.forest-trends.org/wp-content/uploads/imported/newsbrief.pdf [accessed 25.10.21]

Hoare A (ed). 2020. Chatham House Forest Policy Assessment – South Korea. Chatham House: The Royal Institute of International Affairs.

Japan. Ministry of Agriculture, Forestry and Fisheries. 2016. Act on Promotion of Use and Distribution of Legally-Harvested Wood and Wood Products (CWA). (Provisional Translation).

Japan. Ministry of Agriculture, Forestry and Fisheries. 2017. Ordinance on Specifying the Standards of Judgment for the Wood-related Business Entities to Ensure the Use of Legally-harvested Wood and Wood Products (Ordinance on Standards). (Provisional Translation).

Jonsson R, Giurca A, Masiero M, Pepke E, Pettenella D, Prestemon J, Winkel G. 2015. Assessment of the EU Timber Regulation and FLEGT Action Plan. From Science to Policy 1. European Forest Institute. Available at: https://www.efi.int/sites/default/files/files/publication-bank/2019/efi_fstp_1_2015.pdf [accessed 25.10.21]

Korea (Republic of). Act on the Sustainable Use of Timbers (ASUT) (Act. No. 11 429 of 2012, revised by Act No. 14 657 of 2017).

Korea (Republic of). 2018. Detailed Standards for Determining the Legality of Imported Timber and Timber Products (Detailed Standards).

Ministry of Agriculture, Forestry and Fisheries (MAFF). 2017. About the Clean Wood Act. In: Provision of information on legally harvested timber. Available at: http://www.rinya.maff.go.jp/j/riyou/goho/english/english-index.html [accessed 25.10.21]

MAFF. 2019. Annual report of registered timber-related businesses for FY2018 (In Japanese). https://www.rinya.maff.go.jp/j/riyou/goho/case/pdf/H30-nendohoukoku-torimatome.pdf [accessed 25.10.21]

MAFF. n.d. Advanced examples of timber-related businesses registered in FY2018. (In Japanese). https://www.rinya.maff.go.jp/j/riyou/goho/case/pdf/H30-senshinjirei.pdf [accessed 25.10.21]

Momii M, Saunders J. 2020. The Japanese Clean Wood Act: Effectively Cleaning Up?. Forest Trends. Available at: https://www.forest-trends.org/wp-content/uploads/2020/06/Japan-CWA-Revised.pdf [accessed 25.10.21]

Norman M, Saunders J. 2017. Regulating the Trade in Illegal Timber – Asian Approaches Compared – State of Play June 2017. Forest Trends Report Series, Forest Trade and Finance. Available at: https://www.forest-trends.org/wp-content/uploads/2017/08/doc 5634.pdf [accessed 25.10.21]

Norman M, Saunders J. 2019. Regulating the Trade in Illegal Timber: Republic of Korea Update – State of Play October 2018. Forest Trends Information Brief. Available at https://www.forest-trends.org/wp-content/uploads/2019/01/Forest-Trends-Korea-Brief-Final-2019.pdf [accessed 25.10.21]

TEREA, S-FOR-S, Topperspective. 2016. Final Report, Volume 1 (Main Report), Evaluation of the EU FLEGT Action Plan (Forest Law Enforcement Governance and Trade) 2004–2014. Available at https://ec.europa.eu/environment/forests/pdf/FLEGT%20Eval%20Consultant%20Report%20EN.pdf [accessed 25.10.21]

Union of Concerned Scientists. 2015. The Lacey Act's Effectiveness in Reducing Illegal Wood Imports. Available at: https://www.ucsusa.org/sites/default/files/attach/2015/10/ucs-lacey-report-2015.pdf [accessed 25.10.21]

United States v Allemand, 34 F.3d 923, (10th Cir. 1994).

United States of America. 2008. Lacey Act, Plant Amendments, 16 U.S.C §§3371–78.

US Department of the Interior. 2013. 2008 Lacey Act – 5.16.13: Testimony of Stephen Guertin. Available at https://www.doi.gov/ocl/hearings/113/2008laceyact_051613 [accessed 25.10.21]

Zhang D, Ying L, Prestemon J. 2016. Deficit to Surplus: An Econometric Analysis of US Trade Balance in Forest Products. Forest Science, 63(2): 209–217. Available at: https://doi.org/10.5849/FS-2016-018 [accessed 25.10.21]