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THE IMPACT OF TIMBER PROCUREMENT POLICIES

An analysis of the economic effects of governmental procurement policies in tropical timber markets

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INTERNATIONAL TROPICAL TIMBER ORGANIZATION

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The impact of timber procurement policies: an analysis of the economic effects of governmental procurement policies in tropical timber markets

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The International Tropical Timber Organization (ITTO) is an intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources. Its members represent the bulk of the world's tropical forests and of the global tropical timber trade. ITTO develops internationally agreed policy documents to promote sustainable forest management and forest conservation and assists tropical member countries to adapt such policies to local circumstances and to implement them in the field through projects. In addition, ITTO collects, analyzes and disseminates data on the production and trade of tropical timber and funds projects and other actions aimed at developing industries at both the community and industrial scales. Since it became operational in 1987, ITTO has funded more than 1000 projects, pre-projects and activities valued at more than US$400 million. All projects are funded by voluntary contributions, the major donors being the governments of Japan, Switzerland, the United States of America, Norway and the European Union.

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Front-cover photo: Greenheart (*Chlorocardium rodiei*) timber used for beach stabilization in the United Kingdom. *Photo: Durable Wood Products/Guyana Forestry Commission*

Back-cover photo: Greenheart piles destined for the United Kingdom, which has a strong public timber procurement policy. *Photo: Durable Wood Products/Guyana Forestry Commission*

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FOREWORD

ITTO and its members have taken a keen interest in the development of timber procurement policies (TPPs) over the past two decades. An initial study (ITTO Technical Series No. 34, *The Pros and Cons of Procurement* by Markku Simula) was carried out in 2008 and 2009 and published in 2010. Since then, TPPs have continued to evolve as tools for addressing public and consumer concerns over the environmental credentials of timber products. Purchasers in many markets are increasingly demanding that these products are derived from sustainable or at least legal sources and are obtained through a credibly verifiable process. While the ultimate aim of TPPs is to promote the uptake of sustainable forest management in source countries (to date particularly in the tropics), the proliferating and varying market requirements for timber products in countries implementing TPPs are having significant impacts, both planned and inadvertent, on the trade, marketing and competitiveness of these products. These impacts have given rise among some tropical timber exporters to concerns regarding market access for their products. Such concerns, and the recognition that TPPs were rapidly evolving along with other legality and sustainability assurance measures, led to calls in the International Tropical Timber Council for an updated study of TPPs to be undertaken.

The study, approved as a small project under ITTO's Trade and Market Transparency thematic programme in 2012, was designed to update the 2010 Simula report, taking into account the rapid evolution of TPPs and related measures in the period from 2008 to 2012. This report provides an analysis of the impacts of TPPs on forest products markets and trade, attempting to discern their effects on timber demand, supply, costs and prices in relevant markets and the financial implications for timber exporting countries. It examines the challenges faced by ITTO producer and consumer countries in complying with and implementing timber procurement requirements and proposes valuable recommendations for further action by ITTO and others to promote trade in tropical timber in the context of TPPs and related measures.

The report was subjected to a comprehensive review process at the 49th session of the International Tropical Timber Council in 2013, following which ITTO members and other stakeholders were invited to submit additional information and comments during 2014. The report was finalized in mid-2014 and approved by Council at its 50th Session in November of that year. Its recommendations deserve to be seriously considered by all relevant stakeholders if the positive impacts of TPPs are to be enhanced to support the promotion of legality and sustainability in the tropical forest sector.

On behalf of ITTO, I express my gratitude to Michael Martin and Dato' Baharuddin Haji Ghazali for their excellent work on this study, which adds to ITTO's growing body of work to promote a sustainable tropical timber trade. This report will provide a firm basis for the Organization's ongoing work in this field and will no doubt be a valuable resource for the growing global community of researchers and policymakers dealing with the sustainable development of tropical forests.

Emmanuel Ze Meka
Executive Director, ITTO
Yokohama
March 2015

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R. Michael Martin and Baharuddin Haji Ghazali

ACRONYMS

ASEAN	Association of South East Asian Nations
CPET	Central Point of Expertise on Timber (UK)
CSA	Canadian Standards Association
DRC	Democratic Republic of the Congo
EU	European Union
EUTR	European Union Timber Regulation
FAO	Food and Agriculture Organization of the United Nations
FLEGT	Forest Law Enforcement, Governance and Trade (EU)
FSC	Forest Stewardship Council
GDP	gross domestic product
GFCF	gross fixed capital formation
HS	Harmonized System of the World Customs Organization
HS 44	Chapter 44 of the Harmonized System
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
Lao PDR	Lao People's Democratic Republic
LEED	Leadership in Energy and Environmental Design
MTCS	Malaysia Timber Certification Scheme
OECD	Organization for Economic Co-operation and Development
PEFC	Programme for the Endorsement of Forest Certification
SFI	Sustainable Forestry Initiative
SFM	sustainable forest management
TLAS	timber legality assurance system
TPAC	Timber Procurement Assessment Committee (the Netherlands)
TPP	timber procurement policy
VPA	voluntary partnership agreement
UK	United Kingdom of Great Britain and Northern Ireland
USGBC	United States Green Building Council
US$	United States dollar(s)

EXECUTIVE SUMMARY

Timber procurement policies are intended to address concerns among the public and in the private sector about the environmental credentials of forest products. Many purchasers demand that products should come from sustainable—or at least legal—sources and that claims of legality and sustainability are verifiable in order to maintain credibility with buyers in the marketplace. These requirements and policies have important implications for tropical timber suppliers.

Recognizing the importance of timber procurement policies, ITTO commissioned a review of the state of practice, which was published in April 2010 as ITTO Technical Series No. 34 (*The Pros and Cons of Procurement*, by Markku Simula). In its subsequent deliberations on the topic of timber procurement policies and legality measures, the International Tropical Timber Council has taken note of the rapidly evolving market requirements for tropical timber. At its 47th session in November 2011, the Council requested the ITTO Secretariat to commission follow-up work.

This study analyses the economic impacts of the timber procurement policies of national governments on tropical timber markets, updates developments on legality requirements, and assesses market implications and opportunities for ITTO producer and consumer member countries. The main outputs of the study are:

- an update of the information provided in *The Pros and Cons of Procurement*;
- an analysis of the impacts of timber procurement policies on markets and trade, taking into consideration their relevant effects on demand, supply, costs and prices, as well as the financial implications for exporting countries;
- an examination of the challenges faced by ITTO producer and consumer countries in complying with and implementing timber procurement requirements; and
- recommendations for further action by ITTO to promote trade in tropical timber in the context of timber procurement policies.

Trends in timber procurement policies and issues related to legality

The introduction of new public-sector timber procurement policies as a proactive tool to promote the consumption of forest products from sustainably managed forests has subsided measurably from the most active period of 1999–2005. This is due in part to a change in the focus of the international dialogue on forests resulting from the inclusion of forests and sustainable forest management in the climate-change debate at the 13th Conference of the Parties to the United Nations Framework Convention on Climate Change (Bali, Indonesia, December 2007). With a reduced focus on public timber procurement, private-sector efforts—including those of trade associations and the leading forest certification schemes—have sought to fill the gap. These efforts have greatly expanded the market share of timber products bearing some form of label to underpin consumer confidence in the social, institutional and environmental credentials of the timber products they are buying.

In a related development, a number of ITTO consumer member countries have adopted measures on timber legality as a necessary first step in ensuring sustainable forest management. Efforts to ensure the legal origins of timber and trade in timber products have spawned hundreds of initiatives. Legislative actions taken by a number of ITTO consumer member countries and country groups have been discussed extensively at sessions of the International Tropical Timber Council. The three that have received most attention are: 1) the European Union (EU) Timber Regulation; 2) amendment to the United States' Lacey Act; and 3) Australia's Illegal Logging Prohibition Act.

This report distinguishes between public timber procurement policies, private-sector timber procurement practices, and timber legality assurance requirements. Public timber procurement policies apply to government timber purchases, which comprise a very small proportion of the modern marketplace. The timber procurement practices of private companies are intended to be economically advantageous while maintaining social credibility. Only a small (but visible) number of direct retail

firms have policies related to timber procurement; the preponderance of policies on forest products relate to the use of paper with recycled content. Timber legality verification affects the entire timber market of a country and represents the greatest challenge to tropical producers that supply traditional markets.

Development and trade flows in major importing countries

Markets for tropical timber are dynamic, and ITTO members are interested in the evolution of the broader market for timber products. Therefore, in order to understand how timber procurement policies and legality requirements might affect market development, this study takes a broad view of relevant trade and market changes. Most countries classify imported and exported commodities in accordance with the World Customs Organization's harmonized commodity description and coding system, popularly known as the Harmonized System (HS), which came into effect in 1988 and is updated periodically. The category of imports and exports recorded in Chapter 44 of the HS ("HS 44") covers primary and secondary timber products consistent with the categories specified in the International Tropical Timber Agreement 2006 and those reported regularly in the *ITTO Review and Assessment of the World Timber Situation*. Importantly, HS 44 covers not only roundwood, sawnwood, veneer and plywood but also such value-added items as mouldings, millwork, builder's joinery and carpentry, parquet elements, wooden tools and kitchenware.

This report highlights a number of important developments concerning international trade in HS 44 products, including the following:

- Globally, the value of HS 44 imports almost doubled between 2001 and 2011.
- ITTO producer and consumer countries compete globally in almost every market that imports HS 44 products.
- Each ITTO member country is both a producer and consumer of HS 44 products.
- ITTO producer countries are important (and growing) markets for HS 44 products originating in other ITTO member countries.
- China has become the top importer of HS 44 products and is also a leading exporter of HS 44 products.
- India has become the 13th-largest importer of HS 44 products and is also a growing exporter.
- The EU27[1], the United States, Japan and Korea remain large and important markets for HS 44 products, but the market share of ITTO producer countries in these mature economies has declined. The share of China has increased significantly.
- ITTO producer countries are successfully supplying emerging-economy markets.

Market shares of public and private procurement in importing countries

The share of the market for any specific or even general line of timber products occupied by public procurement in a country is not obtainable directly from reliable public statistics; therefore, this study relies on estimates and a case-study approach. An analysis of Belgium shows that the direct impact of a public timber procurement policy on timber imports may be quite limited—equal to central-government procurement of building, furniture, landscaping or other uses of timber with an expected service life of more than one year. In Belgium, the share of government purchases in the timber market is likely to be less than 2%.

Market suppliers tend to have a "feel" for the role of public procurement in specific product lines. In the case of the United Kingdom, the effects of a central-government timber purchasing policy may be much wider than direct spending by the central government. The leadership and supplier consolidation effects of the policy in the United Kingdom led timber-product suppliers there to conclude that somewhere between 20% and 40% of sales are impacted (directly or indirectly) by the central government's timber procurement policy.

Commonalities and differences among procurement policies

Most public timber procurement policies have stabilized and passed through important phases

1 EU27 = the European Union member countries as of early 2013: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom. Croatia (a relatively minor timber trader) became the 28th EU member in mid-2013 and is not canvassed here.

of public consultations and rule-setting. Recently, policies have broadened to include paper and to emphasize recycling and waste reduction. In implementation, many public timber procurement policies have been absorbed into a broader set of "green" or environmental guidelines or requirements addressing energy efficiency, waste reduction and recovery, and water conservation. Similarly, the policies of most private-sector firms on timber procurement have been integrated into broader codes of ethics on the environment and forests.

There is considerable variation in the implementation of government timber procurement policies with respect to responsibility for record-keeping and audit management, with the differences tending to reflect past practices in the country or firm. Many procurement policies accept third-party systems of verification as sufficient assurance of legality or forest sustainability. There continues to be significant divergence in policy implementation in both the public and private sectors on the adequacy of various forest certification systems.

Most EU public timber procurement policies will require a round of adjustment to their implementation procedures to accommodate the entry into force of the EU Timber Regulation. Equally, adjustments in public procurement will be made in Australia as the rules for the Illegal Logging Prohibition Act 2012 are finalized.

Effect of procurement policies on demand, supply, market trade and prices—the cases of Belgium and Italy

Advocates and detractors of public timber procurement policies have taken strident positions on the potential impacts and effectiveness of such policies. Case studies in Belgium and Italy were used to study the impacts of public timber procurement policies on importing markets.

Belgium's federal policy, which has been articulated in an online guide on sustainable procurement, requires all federal agencies and authorities to only use timber derived from sustainable forest management. A review of relevant Italian ministry websites and documents, as well as personal communications, indicated no explicit public policy on timber procurement. A comparison of the two case studies can therefore help in understanding both how a policy goes from adoption to implementation and whether policy impacts are distinguishable from general trends in an economy.

The direct economic impact of Belgium's timber procurement policy is limited (as indicated above). The value of tropical timber imports has declined markedly due to weak economic growth and displacement by other products: the total value of tropical industrial roundwood imported into Belgium declined by 49% between 2001 and 2012. The value of tropical sawnwood imports increased by 45%, but the value of tropical plywood imports declined by 36%.

Italy has been home to a large and vibrant furniture and construction industry. Since 2008, however, it has seen significant reductions in furniture exports and a steady contraction in construction expenditure. Italy's import value of HS 44 products from the EU27 increased between 2001 and 2012, while imports from ITTO producer countries declined by 68% and imports from non-EU27 ITTO consumer countries declined by 17%. Effectively, therefore, the decline in HS 44 imports from ITTO producer countries to Italy (with no public timber procurement policy) was more pronounced than the decline in imports to Belgium (which has a public timber procurement policy).

Similar comparisons were made for a wide range of other European import markets. The general pattern of reduced imports from ITTO producer countries was apparent in all cases except Poland (an economy in transition that has grown strongly in the last decade) and was largest in those countries most deeply affected by the economic downturn, which began towards the end of 2008 and continued through 2012. Few of those countries have public timber procurement policies. This analysis suggests, therefore, that the market effect of public timber procurement policies is lost in the dominant tidal effects of economic expansion and contraction.

The analysis of Belgian imports shows that tropical timber imports experienced a "chill" during the period of vibrant debate that occurred before and just after the implementation of the federal timber procurement policy. Because federal procurement amounts to less than 2% of the total timber market in the country, this chill was not directly attributable to a change in federal purchases; rather, it reflected broader uncertainty

in society and the market. The subsequent expansion of forest certification and chain-of-custody certification appears to have helped some ITTO producer countries to meet the standards set and commitments made toward sustainability by both government and the private sector. Imports from a number of ITTO member countries (e.g. Cameroon, China and Gabon) have increased substantially in recent years.

Financial impacts

ITTO producer-country HS 44 export earnings were higher in 2011 than in any preceding year. At the global level, however, HS 44 export earnings have been more volatile and have not yet regained the level achieved in 2007. The EU27 has been importing progressively lower quantities of HS 44 products from ITTO producer countries, a trend that began before the introduction of public-sector timber procurement policies in a number of EU countries. The decline in HS 44 imports from ITTO producer countries is evident broadly across the EU but is greatest in Greece, Italy, Spain and a number of other countries without public timber procurement policies. These declines in imports are attributable largely to the broad-based economic recession, which deepened progressively between 2008 and 2012.

As a group, ITTO producer countries have sustained their market share in Australia and New Zealand, the economies of which have been relatively prosperous in the last decade or so compared with most of those in the EU. Exports from ITTO producer countries in Asia to Australia increased more than five-fold between 2001 and 2012.

In the United States, imports of HS 44 products more than halved between 2005 and 2011, from US$25.6 billion to just under US$12 billion; this trade is dominated by softwood lumber imports from Canada. ITTO producer countries maintained their share of total imports during this period of market contraction. The US market for HS 44 imports had contracted by more than US$10 billion by the end of 2008. Thus, the entry into force of the 2008 Lacey Act amendment occurred after this strong market correction, and implementation of the amendment occurred in a period of increasing United States imports from ITTO producer countries.

Challenges faced by tropical timber producers and consumers in meeting the requirements of timber procurement policies

In many cases, tropical timber suppliers and consumers have demonstrated an ability to comply with public and private procurement policies. However, complying with the necessary procedures, including certification, typically requires sustained commitment on the part of suppliers as well as significant financial, organizational and social resources. Government timber procurement is a niche segment in any national market, and not all producers find it profitable to obtain the required certification.

The proponents of the various forest certification systems are yet to achieve a reasonable degree of reciprocity, mutual recognition and respect. The subtle variations in certification requirements among national timber procurement policies and private-sector procurement practices increase cost and cause confusion among suppliers and consumers.

The Forest Law Enforcement and Governance and Trade initiative

The EU has conducted an extensive and broad-based outreach effort through voluntary partnership agreements (VPAs) within the context of its Forest Law Enforcement and Governance and Trade (FLEGT) initiative. The aim of FLEGT VPAs is to facilitate trade in legal timber through capacity building and civil-society involvement, and the EU has engaged in negotiations on VPAs with many tropical timber-producing countries. The EU's FLEGT initiative aims to assist trading partner countries in building the capacity to issue FLEGT licences for timber exports to the EU. The EU considers that timber accompanied by a FLEGT export licence meets the legality requirements described in the EU Timber Regulation.

Central to the success of the FLEGT timber export licensing system is a transparent system in the timber-producing country to verify the compliance of timber exports with the applicable national laws. This system of verification or validation of legal compliance is referred to broadly as a timber legality assurance system (TLAS), although the specific nomenclature varies from country to country.

Trade agreements are complex to negotiate and implement. Nevertheless, as of mid-2014, none of the countries engaged in the FLEGT VPA process had succeeded in issuing FLEGT licences for timber exports to the EU. Currently, many tropical timber-producing countries face a serious lack of capacity to cope with timber legality and other procurement policy requirements. Economically weaker countries see value in VPAs beyond the market benefits they offer. They see, for example, new opportunities for obtaining international assistance to strengthen law enforcement to reduce illegal felling and impose greater restraint on the over-exploitation of their forests.

Experience has shown that building the social and administrative infrastructure necessary to issue FLEGT licences is challenging—and perhaps more elaborate and time-consuming than any of the parties had expected. Nevertheless, there is general keenness among FLEGT practitioners and VPA stakeholders to strive to attain the goals of the EU's FLEGT initiative.

Ability of suppliers of tropical timber to meet the requirements and costs of timber procurement policies

The ability of tropical timber suppliers to meet the requirements and costs of timber procurement policies is a function of their ambitions and capacities. Well-organized and capitalized firms are meeting requirements by obtaining Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) certification. The public effort to provide legality assurance through a sector-wide approach (i.e. the FLEGT VPA approach) has proved to require considerable skill, capacity and technological resources. It is a laudable objective but represents costs that are not directly attributable to timber procurement policies.

Recommendations to ITTO and its members on further actions relating to procurement policies with a view to promoting trade in tropical timber and timber products from legal and sustainable sources

The analysis of recent market conditions shows that tropical timber suppliers are competing successfully in many emerging markets. In addition, south–south trade and domestic markets in producer countries account for a rapidly increasing share of tropical timber consumption. These markets should be an increasing focus of ITTO's efforts to develop and showcase producer-friendly policies that promote legal and sustainably produced timber. This report recommends, therefore, that ITTO and its members *seek to reinforce the presence and relevance of ITTO in expanding and emerging markets for tropical timber.*

Prior ITTO analyses and this study show that well-capitalized firms can fund product research and development and will invest in marketing to protect the reputations of their products and processes. Equally, these firms will undertake investments to assure their customers of the environmental credentials of their products. This report recommends that ITTO and its members *seek to understand why relatively few forest-product firms with market clout and global presence operate in the tropics*.

The policy dialogue in ITTO must move beyond old battles over access to traditional markets. Although these markets remain important, they nevertheless consume a declining share of the output of tropical forests. Patterns of economic growth, tropical timber consumption and trade have shifted dramatically in the last 30 years. Efforts by ITTO producers and consumers to promote fundamental concepts of sustainability, legality, lifecycle analysis and renewability should increasingly focus on emerging markets. These markets represent the future, and ITTO can play a central role in helping to develop and implement trade, procurement and other policies—such as green building codes—that are effective and which promote the consumption of legal and sustainable tropical timber as a building material of choice. This report recommends, therefore, that ITTO and its members *give up the old arguments and operate in today's markets*.

1 INTRODUCTION

1.1 Background

Timber procurement policies (TPPs) are intended to address concerns among the public and in the private sector about the environmental credentials of forest products. Many purchasers demand that products come from sustainable—or at least legal—sources and that this be verifiable in order to maintain credibility with buyers in the marketplace. These requirements and policies have important implications for tropical timber suppliers.[2]

Recognizing the importance of TPPs, ITTO commissioned a review of the state of practice, which was published in April 2010 as ITTO Technical Series No. 34 (Simula 2010). That study documented the evolution of TPPs affecting ITTO members, and some of its findings are summarized below.

- Parallel to the promulgation of TPPs in a number of ITTO countries, there had been a series of studies, policies and new legislation surrounding legality and legal verification.
- TPPs are "soft policy tools" developed to provide positive market incentives for sustainable forest management (SFM), and "hard regulatory instruments as the US Lacey Act amendment and the planned European Union [EU] due-diligence measure" had emerged, with a focus on the legal sourcing of timber and wood products.
- Most TPPs advocated the use of wood products sourced from sustainably managed forests and a system of third-party verification; forest certification had developed as a means of communicating the environmental credentials of wood products.
- The United States had amended the Lacey Act in 2008 such that timber and wood products now fell clearly within the scope of the law. Moreover, the EU Timber Regulation (EUTR), which was promulgated in 2010, would prohibit the placing on the EU market of illegally harvested timber and timber products and require operators to exercise due diligence in minimizing the risk of illegal timber being placed on the EU market. The EUTR also placed obligations on EU member states concerning its enforcement.
- Among other things, ITTO consumer members were encouraged to:
  - involve tropical timber producers in the development of TPPs;
  - reduce the proliferation of policy variants among consumer countries and groups and at various administrative levels (national, subregional and city); and
  - provide practical support to the efforts of ITTO producer countries through ITTO's thematic programmes.
- ITTO producer members were encouraged to:
  - build reliable timber legality assurance systems (TLASs);
  - review and, where necessary, streamline administrative and legal procedures to tighten control over wood supplies; and
  - simplify, where possible, systems and procedures to best integrate informal, small and community producers into national TLASs.
- ITTO should:
  - monitor the development of TPPs and the supply of and demand for legality-verified and SFM-certified timber and timber products, and the associated trade flows, with the aim of improving market transparency and enabling tropical-timber producers to plan their efforts based on adequate information;
  - help tropical-timber suppliers meet market requirements for their products, and promote the convergence and comparability of procurement policies related to tropical timber and timber products through the enhanced exchange of information and lessons learned at the international level;
  - explore the feasibility of developing a common generic standard or set of

2 The terms "timber" and "wood" are used interchangeably in this report and treated as synonymous.

guidelines for defining legality applicable in tropical timber-producing forests, drawing on accumulated experience;

– assist ITTO producer member countries to assess the implications of TPPs for their production, exports, employment, fiscal revenue and environment, and to develop appropriate sector-reform strategies;

– provide support for capacity-building, particularly in forest information systems and training, to enable the planning and implementation of national TLASs;

– support the development of community forestry through the analysis of the production chains of certified forest management units and their opportunities in international markets as well as the analysis of production and certification costs and ways in which these could be reduced and financed through market benefits;

– facilitate the exchange of information and experiences between member countries in building up information and verification systems, including benchmarking in production, and on the transaction costs of legal and sustainable timber to meet the requirements of TPPs; and

– develop tools for risk assessment and management to facilitate trade in legality-verified/SFM-certified tropical timber and timber products. Such tools should be based on clearly defined criteria, verifiable information and transparent processes, with the full participation of the countries involved.

1.2 Context of the current study

In its subsequent deliberations on the topic of TPPs and legality measures, the International Tropical Timber Council has taken note of the rapidly evolving market requirements for tropical timber.[3,4] At its 47th session, the Council requested the Secretariat to commission follow-up work[5] in order to:

- update the 2010 study (i.e. Simula 2010);
- analyse the impacts of TPPs on markets and trade, taking into consideration their relevant effects on demand, supply, costs and prices, as well as the financial implications for exporting countries;
- examine the challenges faced by producer and consumer members in complying with and implementing TPP requirements; and
- recommend further action by ITTO to promote trade in tropical timber in the context of TPPs.

Annex 1 presents the terms of reference of the consultancy to undertake this follow-up work.

1.3 Why the study is important

TPPs and their requirements have important implications for the trade in tropical timber. There is an urgent need for exporters of tropical timber products to monitor developments in TPPs, assess their ability to meet requirements, and explore the market implications of, and opportunities created by, policy developments.

Tropical timber suppliers face challenges in complying with procurement requirements, such as:

- inadequate information among tropical timber suppliers on the changing tropical timber market and trade;
- limited knowledge of recent developments in timber legality and procurement policies;
- a lack of understanding of the impacts and effects of TPPs on markets and trade;
- an insufficient exchange of information and experiences in building information and verification systems;
- limited ability to respond to the demand for forest and timber certification;
- weak capacity among producers to meet varying requirements for legality;
- inadequate capacity in the forest sector as well as in community forestry and among small and

3 Report of the International Tropical Timber Council at its 46th session [ITTC (XLVI)/24, 7 March 2011], December 2010, see paragraphs 28, 54, 188, 192 and Annex IV, paragraph 10.

4 Report of the International Tropical Timber Council at is 47th session [ITTC(XLVII)/19/Rev.1, 9 February 2012], November 2011, see paragraphs 194, 195, 210 and Annex IV (Annex A: report on the ITTO annual market discussion–2011).

5 ITTO Thematic Programme on Trade and Market Transparency. "Analysis of the economic impact of governmental procurement policies on tropical timber markets", TMT-SPD 013/12 Rev.1 (M).

medium-sized forest enterprises to deal with timber legality and procurement policies; and

- an inadequate legal framework and institutional set-up for complying with timber legality and procurement policies.

To address these challenges, this study analyses:

- the economic impact of national TPPs on tropical timber markets;
- developments in timber legality and procurement requirements; and
- the attendant challenges and opportunities for tropical timber markets.

This report is intended to facilitate dialogue among ITTO members on strengthening capacity and information-sharing to meet the objectives and priorities of the International Tropical Timber Agreement (ITTA) 2006.

1.4 The challenge ahead

Forest product markets have been shaken deeply since 2008 by a rolling global economic crisis. Prior to and during this prolonged period of economic turmoil, there have been fundamental shifts in the timber supply chain to the extent that, for some products, the direction of trade has changed. China, India and Viet Nam have become more visible in the trade of wood products. Trade between Africa and Europe has diminished, while trade between Africa and Asia has expanded. Overall economic growth in North America and Europe has been muted, while emerging economies continue to experience robust expansion.

Equally, these markets are adjusting to evolving requirements to affirm the credentials of forest products. A number of ITTO producer and consumer countries have embraced a mixture of policies related to legality and sustainability in wood-product production and consumption. In a number of cases, the concept of forest product legality has been defined and redefined. Sustainability has been debated. Forest certification standards have been reviewed, expanded and elaborated. In more than one national case, the policy dialogue has given precedence to legality standards as a necessary first step in ensuring SFM. Chain-of-custody certificates and standards have become visible and prominent components of legality and sustainability validation. Green building standards continue to proliferate and penetrate new market areas, although wood products continue to struggle to gain visibility in this realm.

Given the cloudy and evolving policy debates on forests and wood products, it is vital to differentiate demonstrable fact from frustration and emotion. Such debates are often riddled with allegations that the use of wood products is the major cause of a long list of economic, social and environmental grievances. When unfounded, these allegations are extremely frustrating to wood-product producers everywhere.

Policymakers in cities, countries and companies have sought to reassure their citizens or customers that they will only purchase, offer for sale, and use wood products meeting high standards of responsibility. Such standards have escalated over time. It is easy, therefore, for wood-product producers to conclude that the reason they have less market share today or a reduced level of turnover is the changing requirements of markets. In fact, it may be that the economic recession has reduced total market demand substantially and, at the same time, that the end-products for which their materials were used previously are now being manufactured or assembled elsewhere. The challenge of this study was to both inform readers about the changing standards and to sift fact from frustration about the economic impacts of the evolving market requirements for wood products.

2 UPDATE OF THE 2010 STUDY

2.1 Trends in timber procurement policies and issues related to legality

Simula (2010) identified trends in public and private-sector timber procurement, including on the issues of sustainability, certification, chains of custody, and legality, as of mid-2009.

The introduction of public-sector TPPs as a proactive tool for promoting the consumption of forest products from SFM has subsided measurably from the active period of 1999–2005.[6] This is due in part to a change in focus of the international dialogue on forests, which occurred with the inclusion of forests and SFM in the climate-change debate at the 13th Conference of the Parties to the United Nations Framework Convention on Climate Change (Bali, Indonesia, 2007). With a reduced focus on public timber procurement[7], private-sector efforts—including those of trade associations and the leading forest certification schemes—have sought to fill the gap. These efforts have greatly expanded the market share of wood products bearing some form of label designed to underpin consumer confidence in the social, institutional and environmental credentials of the wood products they are buying. It is worth noting that wood products are not the only primary-sector outputs that have undergone market scrutiny, with associated private-sector responses; other sectors include bananas[8], coffee[9], tuna[10] and cacao.[11]

Van Dam and Savenije (2011) identified hundreds of initiatives intended to promote SFM and enhance the trade of legally produced timber. They described governmental initiatives, private-sector initiatives, initiatives for knowledge and capacity building, and undertakings by non-governmental organizations, and they systematically documented the current status of each initiative. Public timber procurement initiatives have been documented in Australia[12], Belgium, Brazil, China, Denmark, the EU, France, Germany, Ghana, Japan, Mexico, the Netherlands, New Zealand, Norway, the United Kingdom and Viet Nam. Most of these initiatives were embedded in broader procurement guidelines applicable to government purchases, and little change in implementation was identified among these. The way in which Belgium's public TPP has been embodied in government procurement guidelines is described in a case study in Chapter 3.

Austria, Belgium, Denmark, France, Germany, the Netherlands, Norway and the United Kingdom have specific procurement policies on timber, whereas other policies encourage the purchase of timber from legally and/or sustainably certified sources within the larger context of "value for money" in government purchases.

Van Dam and Savenije (2011) specified four types of private-sector initiative to promote trade in legally produced timber: 1) certification schemes; 2) green building initiatives; 3) private-sector procurement initiatives; and 4) trade initiatives. Certification systems are important because most public and private policies related to timber procurement refer to one or more specific certification system in their implementation procedures. Equally, some green building initiatives make explicit reference to specific certification labels. Private-sector procurement initiatives include not only the actions of individual companies that buy forest products for retail resale or building practice but also the actions of trade associations in

6 There are at least two ongoing debates specifically on the use of tropical timber in public procurement. The State Legislature of New York is considering amending an existing law requiring that purchases of tropical timber are from sustainably managed forests. The proposed amendments would establish principles of sustainable management and require chain-of-custody verification. The governor of the State of New York would be required to establish a list of qualifying certifications (A2101-2013/S302-2013). The State Legislature of Massachusetts is considering a bill in which: "The state shall not purchase wood grown in a tropical forest or products made up substantially of wood grown in a tropical forest except where a public necessity exists and no other alternative is available or unless the wood originates from second growth forests and carries independent certification, accredited by the Forest Stewardship Council" (H.2871).

7 In 2007, Mexico published an executive decree requiring that public-sector purchases of wood products and office furniture are sourced from sustainably managed forests. Verification of SFM would be based on certificates open to third-party validation. Certification systems should register with the Ministry of Environment and Natural Resources. http://dof.gob.mx/nota_detalle.php?codigo=4999881&fecha=05/09/2007.

8 www.freshplaza.com/news_detail.asp?id=111232.

9 http://en.wikipedia.org/wiki/Fair_trade_coffee.

10 www.earthisland.org/dolphinSafeTuna/consumer.

11 www.fairtradeusa.org/products-partners/cocoa.

12 Australia recently updated its policy with the Sustainable Procurement Guide, 2013. www.environment.gov.au/resource/sustainable-procurement-guide. Australian Government agencies are legally required to observe the Government Procurement Rules, which dictate the efficient, effective, economic and ethical purchase of goods and services by the Australian Government. These rules are for all goods and services and do not specify individual products. These rules are available at: www.finance.gov.au/sites/default/files/2014%20Commonwealth%20Procurement%20Rules.pdf.

promoting the responsible sourcing of wood in the production of forest products.

In their guide to the sustainable procurement of wood and paper-based products, the World Business Council for Sustainable Development and the World Resources Institute (2012) articulated ten important aspects for the sustainable procurement of wood and paper-based products. This guide also incorporated the latest developments on the legality of forest products and advances in technological and data-management systems for tracing and controlling forest-product supply chains, and it featured an overview of the social implications of forest product production and consumption. The guide provides a practical and common-sense framework for public and private-sector entities concerned about the sustainable sourcing of wood products.

Legality considerations

A number of ITTO consumer countries have adopted measures related to timber legality as a necessary first step in ensuring SFM. IDH's Sustainable Trade Initiative articulated the case for legality considerations and sustainable tropical forest management in a position paper titled "Mainstreaming sustainability in tropical timber: legality, sustainability, and the business case for frontrunner collaboration".[13] Legislative actions by ITTO consumer countries and country groups have been discussed extensively in the International Tropical Timber Council. Three legislative actions have received particular attention: 1) the EUTR; 2) amendment to the United States' Lacey Act; and 3) Australia's Illegal Logging Prohibition Act. Each of these is discussed in the following subsections.

European Union Timber Regulation

The EUTR covers timber and timber products produced in the EU and also those imported from outside the EU. Timber imports accompanied by a FLEGT licence or a permit issued under the Convention on International Trade in Endangered Species of Wild Fauna and Flora are considered to comply with the EUTR.

The EUTR came into force on 3 March 2013.[14] It establishes three key requirements:

1) Placing illegally harvested timber and products derived from such timber on the EU market for the first time is prohibited.
2) EU operators—those who place timber products on the EU market for the first time—are required to exercise "due diligence".
3) Traders—those who buy or sell timber and timber products already on the market—are required to keep information about their suppliers and customers to make timber easily traceable.

The EUTR covers a wide range of timber products listed in its annex using EU Customs Code nomenclature. Generally, recycled wood and packaging for products in shipment are excluded.

The European Commission subsequently adopted "Commission Delegated Regulation of 23 February 2012 on the procedural rules for the recognition and withdrawal of recognition of monitoring organisations as provided for in Regulation (EU) 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".[15]

Additionally, the European Commission adopted Implementing Regulation (EU) No. 607/2012, which provides detailed rules concerning the due-diligence system and the frequency and nature of checks on monitoring organizations. The purpose of this regulation is to ensure the uniform implementation of the EUTR.[16]

The EUTR has been discussed for more than ten years as the logical complement to the EU FLEGT Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community.

13 www.idhsustainabletrade.com/timber.

14 Regulation (EU) No. 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market. Published 12.11.2010 in the Official Journal of the European Union, L295/23. The DG Environment website describes the Timber Regulation and includes a copy in all languages of the Commission: http://ec.europa.eu/environment/forests/timber_regulation.htm.

15 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32012R0363:EN:NOT.

16 http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0607&from=EN.

An argument for this legislation is presented in "Communication from the Commission to the Council and the European Parliament: forest law enforcement, governance and trade (FLEGT)—proposal for an EU action plan (21.5.2003)". The action plan advocates working positively through voluntary FLEGT partnerships to promote a supply of legally assured timber exports to the EU and the need for "community legislation prohibiting the import and marketing of timber or timber products produced in breach of the laws of the country of origin (section 4.2.4, page 15)". The Commission noted specifically that not all countries supplying timber or timber products to the market would necessarily engage in partnership agreements foreseen in the action plan.

Again, it should be emphasized that the EUTR applies to all timber and timber products produced within the EU, and also to imported products. Despite its long gestation, the application of the EUTR and its implementing regulations has required a strong communication component, given its significance to both internal and external timber market participants. Following consultations with stakeholders, experts from member states and members of the FLEGT Committee, a common view emerged that certain aspects of the EUTR needed clarification. It was agreed that a guidance document was necessary which seeks to translate the key elements of the regulation and implementing rules into more common language.[17]

EUTR provisions for due diligence. A rigorous requirement for operators "first placing timber on the European market" to exercise due diligence is central to the EUTR. It applies both to timber produced in the EU and to imported timber. The EUTR requires that operators exercise due diligence by undertaking a risk management assessment intended to minimize the risk of placing illegally harvested timber, or timber products containing illegally harvested timber, on the EU market.

The three key elements of the due-diligence system are:

1) *Information.* The operator must have access to information describing the timber and timber products, the country of harvest, species, quantity, details of the supplier, and information on compliance with national legislation.
2) *Risk assessment.* The operator should assess the risk of illegal timber in its supply chain, based on the information listed in 1) above and taking into account criteria set out in the regulation.
3) *Risk mitigation.* If the assessment shows that there is a risk of illegal timber in the supply chain, that risk should be mitigated by requiring additional information and verification from the supplier.

EUTR implementation procedures. While the EUTR is binding on all EU member states, the responsibility for enforcing it lies with each member state, which is obliged to appoint a competent authority to administer the implementation of the EUTR[18] and to undertake any steps required to make the regulation fully operational at the national level, in line with the provisions of the legislation and the delegated regulations of the European Commission. Specifically, each member state "should ensure that infringements of this Regulation, including by operators, traders and monitoring organisations, are sanctioned by effective, proportionate and dissuasive penalties".

The EUTR includes a provision for monitoring organizations. These are private-sector companies or organizations that assist operators in meeting the EUTR's due-diligence requirements. Operators may set up their own due-diligence system and exercise due diligence themselves, or they may use the system of a monitoring organization. Organizations offering to provide services as monitoring organizations may seek official recognition from the Commission, which will consult with the relevant member states. The work of monitoring organizations will be checked periodically by competent authorities in the EU member states. Their official recognition may be withdrawn if it is established that they have not exercised their functions in accordance with the law. If an operator chooses to develop its own due-diligence system, the system does not need to have been previously approved by the Commission.

The designated competent national authorities are required to perform periodic audits of the monitoring organizations and operators. They are also required to perform checks based on information provided by the Commission directly or, where relevant, information provided by third parties.

17 http://ec.europa.eu/environment/eutr2013/_static/files/guidance/guidance-document-5-feb-13_en.pdf.

18 For a list of nominated national competent authorities see: http://ec.europa.eu/environment/eutr2013/contacts/index_en.htm.

United States' Lacey Act (2008 amendment)

The Lacey Act was enacted in the United States in 1900 to prevent hunters from killing game in one state and escaping prosecution by crossing state lines. It has evolved into a law that prohibits the import, export, transport, purchase and sale of species when such actions would violate state, federal, tribal or foreign laws.[19]

In 2008, the Lacey Act was amended to include protections for foreign plants and to require adherence to foreign laws as they pertain to certain conservation and other activities involving plants. The 2008 amendment also makes it unlawful to submit falsified documents related to any plant or plant product covered by the act and to import certain plants and plant products without an import declaration.[20] Violations of the Lacey Act can result in civil penalties that may involve fines and the forfeiture of wildlife, plants and product and in criminal penalties that could involve fines, forfeiture and incarceration. The 2008 Lacey Act amendment puts imported timber on an equal basis with timber harvested on federal or tribal lands and with private-sector and state timber that has entered interstate commerce.

The 2008 Lacey Act amendment does not constitute a specific procurement policy. However, it establishes a set of legal requirements that must be taken into account in the policies and procurement decisions of US timber importers, as well as those of subsequent purchasers of imported timber.

Before the 2008 amendment, the Lacey Act applied to plants and animals that are indigenous to the United States, whether the item in question was sourced domestically or internationally. The 2008 amendment includes non-indigenous plants and violations of foreign laws pertaining to certain conservation actions and other activities involving plants and plant products. Under the Lacey Act it is now unlawful for any person to import, export, transport, sell, receive, acquire or purchase in interstate or foreign commerce any plant taken, possessed, transported or sold in violation of any law or regulation of any state, or any foreign law, that protects plants or that regulates the taking or exporting of plants and plant products in certain situations. This includes plants taken, possessed, transported or sold without the payment of appropriate royalties, taxes or stumpage fees; and plants exported in violation of state or foreign laws.[21]

US importers of timber and wood products have filed product customs declaration forms for decades. The 2008 Lacey Act amendment requires greater precision in the specification of plant genus and species and the country of harvest. Importers are encouraged to file their forms electronically.

Importers are expected to exercise "due care" in determining if the imported plants or plant products were legally harvested, processed and exported. The exercise of due care refers to the amount of attention and effort that a reasonable person would expend in a similar situation to address an issue or conduct an activity.

Australia's Illegal Logging Prohibition Act

Australia's Illegal Logging Prohibition Act 2012 prohibits the importation of illegally logged timber and the processing of illegally logged domestic timber. The act also requires importers of regulated timber products and processors of raw logs to conduct due diligence in order to reduce the risk that illegally logged timber is imported or processed. Importers of regulated timber products must, at the time of import, provide declarations to the customs minister about the due diligence they have undertaken. The act also provides inspectors with monitoring, investigation and enforcement powers for the purposes of the act.

Australian authorities issued Illegal Logging Prohibition Amendment Regulation 2013 (No. 1), which codifies the steps to be taken, including due-diligence requirements, to operationalize the 2012 act. The requirements set out in the regulation were due to come into effect on 30 November 2014. Australian authorities have held information sessions across the country and with key trading partners.

19 Alexander (2012).
20 Sheikh (2012).
21 Sheikh (2012).

2.2 Developments and trade flows in major importing countries

Import data for a number of ITTO consumer and producer countries, including the EU27[22] as a bloc, were analyzed to detect changes in trade flows in the decade to 2011. Markets for tropical timber are dynamic and ITTO members are interested in the evolution of the broader market for timber products. Therefore, to understand how TPPs and legality requirements may affect market development, this study took a broad view of relevant trade and market changes.

Most countries classify imported and exported commodities in accordance with the World Customs Organization's harmonized commodity description and coding system, popularly known as the Harmonized System (HS), which came into effect in 1988 and is updated periodically. The category of imports and exports recorded in Chapter 44 of the HS (i.e. HS 44) covers wood and primary wood manufacturing consistent with the categories included in the ITTA 2006 and those reported regularly in the *ITTO Review and Assessment of the World Timber Situation*. Importantly, HS 44 covers not only roundwood, sawnwood, veneer and plywood but also such valued-added items as mouldings, millwork, builder's joinery and carpentry, parquet elements, wooden tools and kitchenware.[23]

Significant shifts occurred in import markets in the period 2001–2011. The value[24] of China's HS 44 imports grew roughly fourfold as that country became the world's largest importer of HS 44 products (by value), with Japan the second-largest. EU27 members continued to figure prominently in the list of top 20 importers, and India, an ITTO producer member, also appeared in the list (Table 1).

Tables 2–20 examine the market evolution in ITTO consumer countries and other key markets, such as several ITTO producer countries that import significant quantities of HS 44 products. For each market, the top 20 suppliers (ITTO members as of 2013 in bold) are displayed for 2001 and 2011, along with the value of HS 44 imports.[25,26]

Albania[27]

The total value of HS 44 imports into Albania increased substantially between 2001 and 2011, from US$12 million to US$72 million. Table 2 shows the top 20 suppliers, by value, of HS 44 imports in 2001 and 2011.The only ITTO producer country that featured in the top 20 in 2011 was Gabon (19th). Turkey increased its ranking from eighth to second, and China became

22 EU27 = the European Union member countries as of early 2013: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom. Croatia (a relatively minor timber trader) became the 28th EU member in mid-2013 and is not canvassed here.

23 The ITTA 2006 provides a very narrow definition of tropical timber—logs, sawnwood, veneer sheets and plywood produced in countries between the Tropic of Cancer and the Tropic of Capricorn (Article 2). In practice, the ITTO Secretariat has, at the request of members, supplied data and analysis on a broader range of product categories to better understand the development of the market for tropical timber and the opportunities presented by secondary processing (see, for example, ITTO 2011). Generally, the categories reported under "secondary wood processing" are those found in HS 44. To understand the market's evolution since the adoption of TPPs, the consultants had to decide on the breadth of the market to be examined. This was a difficult decision, but boundaries had to be established to make the study feasible. The broader the market scope, the more difficult it would be to attribute market changes to TPPs, which were the focus of the study. On the other hand, if the boundaries were too narrow, the study would not help the membership to see the broader evolution of the market. In short, HS 44 was selected as a middle road—not as narrow as the ITTA 2006 but not too broad as to lose member agreement that it was relevant to the spirit of the agreement. HS 44 is broadly consistent with the products listed in the regular *ITTO Review and Assessment of the World Timber Situation*, which informs members on the evolution of the market for tropical timber. It is noted that members have never reported on paper and paper products in the context of ITTO statistical surveys.

24 All value data presented in this report are in nominal terms. While some might argue for adjusting the data to an index in "real" terms, this would create a debate on the choice of index, currency basis, purchasing power parity, etc. Since data are presented for many countries, it would be challenging to find a meaningful inflation index comparable across countries. The authors deemed it best to keep the analysis simple and comparable, using data that can be extracted at any time from EUROSTAT or other public sources.

25 All data in this section are taken from the International Trade Centre trade database. The International Trade Centre has made a uniform set of conversions to a common currency (United States dollars) and adjustments to national statistics reported to the United Nations Commodity Trade Statistics Database. As a result, individual ITTO member countries may find slightly different values when consulting their national databases. The purpose of the comparison is to show rankings among suppliers and their relative positions in trade.

26 The analysis presented here focuses on import value rather than volume. The *ITTO Review and Assessment of the World Timber Situation* provides detailed information on the volume of trade for the product categories covered by the ITTA—logs, sawnwood, veneer sheets and plywood. Volumes or weight measures are less meaningful when looking at a product group such as HS 44, which ranges from (for example) logs to broom handles. Note that volume data reported internationally are converted to and from metric tonnes using uniform conversion rates. These standardized conversion rates do not adequately accommodate the wide variation in timber types and species. Value estimates are based on standardized currency conversion rates. Because trade in the volume/weight of secondary wood products would be less meaningful, the value of trade obtained from major data sources is reported. The consultants believe that the evolution of the value of HS 44 imports and exports give a better overall picture of the market and it was decided not to overwhelm readers with volume data. The utility of volume/weight is further diminished by the fact that many ITTO producers have introduced policy measures such as log export bans to promote value-added processing. Where ITTO producers have reduced the volume/weight of their raw log exports while increasing the value of their sawnwood exports, the policy is considered a success.

27 ITTO consumer member.

Table 1: Top 20 importers of HS 44 products, by value (US$'000), 2001 and 2011

Importing country	2001	2011	Importing country
World	69 703 416	127 612 530	World
United States of America	15 949 770	15 857 712	China
Japan	9 851 811	12 554 538	Japan
Germany	4 041 802	11 981 921	United States of America
United Kingdom	3 770 232	9 059 729	Germany
China	3 467 759	5 633 165	Italy
Italy	3 241 874	5 123 832	United Kingdom
France	2 355 944	4 874 800	France
Canada	1 945 233	3 640 338	Netherlands
Spain	1 787 689	3 184 906	Austria
Netherlands	1 667 538	3 172 180	Belgium
Belgium	1 581 165	2 976 002	Canada
Republic of Korea	1 570 942	2 574 747	Republic of Korea
Austria	1 232 967	2 410 820	India
China, Hong Kong Special Administrative Region	1 204 416	2 189 480	Sweden
Denmark	1 030 119	2 052 288	Switzerland
Sweden	990 159	1 886 289	Denmark
Taiwan Province of China	837 533	1 702 816	Norway
Mexico	832 396	1 657 153	Poland
Norway	761 490	1 645 695	Spain
Switzerland	758 602	1 438 764	Australia

Table 2: Top 20 suppliers of HS 44 products to Albania, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	12 240	71 648	World
Greece	5 616	16 979	Greece
Italy	4 103	10 227	Turkey
Bulgaria	380	8 328	Italy
Serbia and Montenegro	351	7 014	Bosnia and Herzegovina
Germany	319	4 366	Bulgaria
The former Yugoslav Republic of Macedonia	275	3 407	Austria
Spain	205	2 813	Montenegro
Turkey	194	2 697	China
Finland	187	2 485	Hungary
Ukraine	156	2 363	Germany
Sweden	83	2 041	Finland
Romania	72	1 728	Romania
Slovenia	71	1 725	Serbia
United Kingdom	50	1 669	Sweden
Norway	48	629	Slovenia
Austria	25	421	Switzerland
Israel	25	347	United States of America
Russian Federation	22	314	Ukraine
Belarus	14	293	**Gabon**
Switzerland	13	247	Poland

Note: ITTO producer members (as of 2013) are in bold.

the eighth-largest supplier. Imports to Albania from Austria doubled over the period.

Australia[28]

The total value of HS 44 imports to Australia increased from US$441 million in 2001 to more than US$1.4 billion in 2011. Table 3 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. In 2011, China was Australia's second most important supplier of HS 44 products (after New Zealand), followed by Indonesia and Malaysia. Papua New Guinea figured prominently in the list in both 2001 and 2011. Fiji and the Philippines, both significant suppliers in 2001, had dropped from the top 20 by 2011, but HS 44 imports from Indonesia and Malaysia more than tripled during the period.

China[29]

The total value of HS 44 imports to China increased from just under US$3.5 billion in 2001 to almost US$16 billion in 2011. Table 4 shows the top 20 suppliers by value of HS 44 imports in 2001 and 2011. Indonesia and Malaysia were key suppliers to China in 2001, but the value of their HS 44 imports in 2011 was lower than in 2001. The Russian Federation, the United States, Canada, New Zealand and Thailand (in that order) were the top five suppliers of HS 44 products in 2011. ITTO producer countries Papua New Guinea, Republic of the Congo, Myanmar, Cameroon and Mozambique all featured in the top 20 suppliers in 2011.

EU27[30]

The total value of HS 44 imports into the EU27 increased from US$25.4 billion in 2001 to almost US$49.6 billion in 2011. Table 5 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Germany was the largest supplier of HS 44 products to the EU27 market in both years, and China was the third-largest supplier in 2011. Neither Indonesia nor Malaysia, both of which were among the top 20 suppliers in 2001, featured in the top 20 in 2011.

Table 3: Top 20 suppliers of HS 44 products to Australia, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	441 365	1 438 764	World
New Zealand	135 155	316 313	New Zealand
Malaysia	58 855	248 401	China
Indonesia	56 414	234 954	**Indonesia**
Canada	40 913	155 577	**Malaysia**
United States of America	32 257	91 234	United States of America
France	31 248	59 512	Chile
China	22 354	42 966	Canada
Thailand	6 955	41 671	France
Germany	6 407	39 750	Germany
Papua New Guinea	5 039	29 512	Czech Republic
Italy	4 069	22 200	Estonia
Belgium	3 734	18 532	South Africa
South Africa	3 452	13 703	**Papua New Guinea**
Finland	3 238	12 728	Thailand
Fiji	2 812	12 593	Sweden
Sweden	2 788	11 569	Italy
Taiwan Province of China	2 147	9 980	Austria
Philippines	1 919	9 377	Finland
Singapore	1 829	8 831	**Brazil**
Czech Republic	1 804	7 168	Viet Nam

Note: ITTO producer members (as of 2013) are in bold.

28 ITTO consumer member.
29 ITTO consumer member.

30 ITTO consumer member country group.

Table 4: Top 20 suppliers of HS 44 products to China, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	3 467 759	15 857 712	World
Indonesia	701 206	3 487 898	Russian Federation
Russian Federation	598 843	2 031 732	United States of America
Malaysia	397 046	1 855 277	Canada
Germany	258 996	1 312 420	New Zealand
Gabon	209 174	866 526	Thailand
United States of America	166 499	803 107	Viet Nam
Thailand	117 013	597 701	**Papua New Guinea**
New Zealand	104 847	484 709	**Indonesia**
Papua New Guinea	103 391	464 588	Australia
Myanmar	89 157	365 087	**Malaysia**
Equatorial Guinea	78 992	343 704	Solomon Islands
Brazil	51 411	288 309	**Congo**
Canada	51 319	281 446	**Myanmar**
France	50 762	230 392	Lao People's Democratic Republic
Republic of Korea	42 326	207 291	Germany
Australia	37 613	173 840	**Cameroon**
Romania	37 102	155 266	France
Cameroon	33 104	154 604	**Mozambique**
Italy	30 473	130 002	Chile
Liberia	28 786	123 889	Equatorial Guinea

Note: ITTO producer members (as of 2013) are in bold.

Table 5: Top 20 suppliers of HS 44 products to the EU27, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	25 404 788	49 577 948	World
Germany	2 640 617	6 391 402	Germany
Sweden	1 634 906	3 896 185	Austria
Finland	1 497 620	3 050 063	China
Austria	1 425 745	2 916 834	Poland
France	1 368 621	2 464 936	Sweden
Russian Federation	1 282 122	2 180 856	France
United States of America	1 199 941	2 124 000	Russian Federation
Poland	1 001 968	1 872 931	Belgium
Belgium	948 645	1 805 665	Czech Republic
Latvia	741 149	1 698 797	Finland
Indonesia	728 481	1 665 091	Latvia
Brazil	680 300	1 186 689	Netherlands
Italy	638 675	1 061 214	United States of America
Czech Republic	615 257	1 059 300	Spain
China	547 346	995 663	Italy
Netherlands	536 435	991 009	Estonia
Denmark	458 684	806 479	**Brazil**
Malaysia	444 125	793 318	Romania
Spain	441 615	748 550	Slovakia
Switzerland	418 923	737 529	Ukraine

Note: ITTO producer members (as of 2013) are in bold.

India[31]

The total value of HS 44 imports to India increased roughly fourfold over the period, from almost US$554 million in 2001 to more than US$2.4 billion in 2011. Table 6 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. The importance of India as a traditional and emerging market for ITTO producers is evident from this table. Myanmar, Malaysia and Papua New Guinea were all in the top five suppliers in 2011, and Ghana, Côte d'Ivoire, Indonesia, Ecuador, Benin, Panama and Cameroon also featured prominently.

Japan[32]

The total value of HS 44 imports to Japan increased from US$9.9 billion in 2001 to US$12.6 billion in 2011. Table 7 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Indonesia and Malaysia were both among the top five suppliers of HS 44 products to Japan during the period, although China—the fifth-largest supplier in 2001—had become the leading supplier by 2011. The Philippines climbed the ladder to become the eighth-largest supplier in 2011.

Republic of Korea[33]

The total value of HS 44 imports to the Republic of Korea increased from US$1.6 billion in 2001 to US$2.6 billion in 2011. Table 8 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Indonesia was the largest supplier in 2001 but had declined to sixth by 2011; imports from Malaysia increased only slightly. In contrast, imports from China more than tripled in the period, with China becoming the number-one supplier; imports from Brazil also increased substantially. New Zealand retained its rank as the second-largest supplier, and the United States maintained its position at number five. HS 44 imports to the Republic of Korea from Papua New Guinea and Myanmar declined between 2001 and 2011.

Table 6: Top 20 suppliers of HS 44 products to India, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	553 915	2 410 820	World
Malaysia	140 697	605 794	**Myanmar**
Myanmar	121 785	601 043	**Malaysia**
Indonesia	73 101	214 003	New Zealand
Nigeria	51 141	160 734	China
Côte d'Ivoire	39 031	67 512	**Papua New Guinea**
New Zealand	16 734	49 107	Costa Rica
Ghana	10 855	48 045	**Ghana**
Singapore	10 102	47 757	Germany
Gabon	9 213	46 802	Thailand
Togo	7 992	41 398	**Côte d'Ivoire**
South Africa	5 754	34 192	**Indonesia**
Solomon Islands	5 149	32 776	United States of America
China, Hong Kong Special Administrative Region	4 895	32 618	**Ecuador**
Australia	4 501	24 709	Nigeria
Bhutan	3 894	22 668	**Benin**
Italy	3 517	22 400	**Panama**
Thailand	3 367	21 363	Viet Nam
Nepal	3 349	18 120	**Cameroon**
France	3 213	17 803	Sri Lanka
Germany	3 101	16 441	**Brazil**

Note: ITTO producer members (as of 2013) are in bold.

31 ITTO producer member.
32 ITTO consumer member.
33 ITTO consumer member.

Table 7: Top 20 suppliers of HS 44 products to Japan, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	9 851 811	12 554 538	World
Canada	1 488 113	1 877 927	China
United States of America	1 434 721	1 477 090	**Malaysia**
Indonesia	1 256 476	1 314 366	Canada
Malaysia	1 075 523	1 037 609	**Indonesia**
China	951 555	848 419	United States of America
Russian Federation	610 917	816 272	Australia
Australia	514 436	726 164	Chile
New Zealand	391 910	628 729	**Philippines**
Chile	342 407	569 488	Russian Federation
Finland	251 986	468 413	New Zealand
South Africa	249 591	409 329	Finland
Sweden	221 735	378 044	Viet Nam
Austria	183 504	347 775	Sweden
Philippines	118 655	324 417	Austria
Thailand	115 448	301 204	South Africa
Brazil	97 541	198 977	Thailand
Germany	85 091	180 129	Romania
Taiwan Province of China	73 590	151 106	**Brazil**
Viet Nam	57 967	84 992	Germany
Papua New Guinea	57 218	53 188	Estonia

Note: ITTO producer members (as of 2013) are in bold.

Table 8: Top 20 suppliers of HS 44 products to the Republic of Korea, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	1 570 942	2 574 747	World
Indonesia	287 850	564 669	China
New Zealand	254 752	380 748	New Zealand
Malaysia	233 991	263 458	Canada
China	175 701	258 068	**Malaysia**
United States of America	157 541	206 831	United States of America
Russian Federation	103 122	167 429	**Indonesia**
Australia	70 019	147 175	Viet Nam
Thailand	39 232	105 417	Russian Federation
Canada	36 134	84 091	Thailand
Papua New Guinea	25 815	81 497	Chile
Belgium	19 812	49 911	Australia
Italy	17 625	38 230	Romania
Solomon Islands	16 280	22 613	**Brazil**
Chile	16 169	22 493	**Papua New Guinea**
Germany	15 839	20 055	Germany
Brazil	13 219	19 827	Latvia
South Africa	11 922	16 944	Finland
Japan	11 017	14 546	Japan
Myanmar	10 138	12 136	Solomon Islands
Finland	8 911	11 700	Italy

Note: ITTO producer members (as of 2013) are in bold.

Mexico[34]

The total value of HS 44 imports to Mexico increased from US$832 million in 2001 to almost US$1.3 billion in 2011. Table 9 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Peru and Malaysia were among the top six suppliers in 2011, and other prominent ITTO producers in that year were Brazil, Indonesia, Guatemala and Ecuador.

New Zealand[35]

The total value of HS 44 imports to New Zealand increased from US$56 million in 2001 to US$137 million in 2011. Table 10 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Australia maintained its position as the leading supplier of HS 44 products to the New Zealand market, just ahead of China, the imports of which grew roughly threefold over the period. The value of imports from Indonesia and Malaysia into New Zealand more than doubled. Other ITTO producer countries providing significant supplies to this market were Peru, Fiji and Guyana.

Norway[36]

The total value of HS 44 imports to Norway increased from US$761 million in 2001 to US$1.7 billion in 2011. Table 11 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. Sweden retained its rank as the largest supplier of HS 44 products to Norway in 2011. Imports from China increased almost fourfold over the period, but imports from Indonesia and Malaysia declined.

Switzerland[37]

The total value of HS 44 imports to Switzerland increased from US$759 million in 2001 to almost US$2.1 billion in 2011. Table 12 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. With the exceptions of China and Thailand, Switzerland's imports originated from EU27 member countries in 2011.

Table 9: Top 20 suppliers of HS 44 products to Mexico, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	832 396	1 264 444	World
United States of America	498 439	569 629	United States of America
Chile	93 543	277 809	Chile
Indonesia	43 863	127 628	China
Canada	35 089	47 569	**Peru**
Brazil	28 979	42 486	Canada
Malaysia	28 930	40 571	**Malaysia**
Peru	24 726	22 792	Germany
China	15 512	17 491	**Brazil**
Ecuador	12 007	16 619	Austria
Bolivia	5 282	15 004	Uruguay
Spain	5 214	13 008	**Indonesia**
Italy	4 598	12 977	Spain
Germany	4 401	7 546	Italy
Japan	3 022	7 149	Viet Nam
Guatemala	3 010	4 350	**Guatemala**
France	2 660	4 007	**Ecuador**
Russian Federation	2 410	3 445	Bolivia
Belgium	2 008	3 333	Republic of Korea
Venezuela	1 974	2 619	Belgium
Czech Republic	1 480	2 240	Netherlands

Note: ITTO producer members (as of 2013) are in bold.

34 ITTO producer member.
35 ITTO consumer member.
36 ITTO consumer member.
37 ITTO consumer member.

Table 10: Top 20 suppliers of HS 44 products to New Zealand, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	56 000	137 810	World
Australia	12 860	22 221	Australia
Canada	8 360	22 117	China
France	6 993	15 492	France
Indonesia	5 111	15 091	Canada
United States of America	4 755	14 170	**Indonesia**
China	3 178	9 520	Chile
Fiji	2 355	8 722	United States of America
Papua New Guinea	2 255	4 622	**Malaysia**
Malaysia	2 014	2 428	Solomon Islands
Sweden	1 055	2 281	Italy
Denmark	976	1 953	**Peru**
Myanmar	598	1 748	**Fiji**
Italy	573	1 726	Germany
Germany	543	1 578	South Africa
Singapore	397	1 408	Denmark
Brazil	331	1 038	Thailand
India	276	1 022	**Guyana**
Thailand	257	916	**Brazil**
Taiwan Province of China	251	832	Finland
Viet Nam	219	805	Belgium

Note: ITTO producer members (as of 2013) are in bold.

Table 11: Top 20 suppliers of HS 44 products to Norway, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	761 490	1 702 816	World
Sweden	367 087	814 974	Sweden
Finland	72 845	98 393	Germany
Denmark	43 212	97 402	Estonia
Germany	37 966	89 645	Finland
Estonia	34 995	84 185	Poland
Indonesia	24 009	64 849	Lithuania
Russian Federation	22 845	64 577	Latvia
Poland	15 156	63 437	Denmark
United States of America	14 119	59 522	China
Uruguay	11 870	40 944	Uruguay
Latvia	10 870	33 733	United Kingdom
Chile	10 429	28 744	Russian Federation
Lithuania	9 348	22 124	Belgium
China	9 099	17 868	**Indonesia**
Canada	8 666	16 318	Netherlands
Belgium	7 404	14 550	Ireland
Malaysia	7 120	11 220	United States of America
United Kingdom	6 369	8 352	France
France	5 545	7 951	Slovakia
Viet Nam	219	805	Belgium

Note: ITTO producer members (as of 2013) are in bold.

Table 12: Top 20 suppliers of HS 44 products to Switzerland, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	758 602	2 052 288	World
Germany	272 626	930 838	Germany
Austria	160 555	401 675	Austria
France	80 392	148 235	France
Italy	75 496	143 864	Italy
Finland	26 559	60 755	China
Sweden	17 512	54 199	Poland
Belgium	13 619	35 363	Czech Republic
Denmark	13 033	32 885	Finland
Poland	10 536	30 975	Belgium
Canada	9 523	26 000	Thailand
Norway	8 340	21 437	Netherlands
China	7 529	21 143	Sweden
United States of America	7 160	16 497	Slovakia
Thailand	6 679	13 949	Denmark
Netherlands	5 923	12 582	Croatia
Slovenia	5 803	12 442	Slovenia
Czech Republic	4 489	7 833	Latvia
Croatia	4 223	7 185	Romania
Hungary	3 245	6 255	Hungary
Slovakia	2 571	5 334	Spain

Note: Table includes no ITTO producer members (as of 2013).

United States of America[38]

The total value of HS 44 imports to the United States declined from US$15.9 billion in 2001 to US$12 billion in 2011. Table 13 shows the top 20 suppliers of HS 44 imports by value in 2001 and 2011. The list was surprisingly stable over the period, although the value of HS 44 imports from Brazil, Indonesia, Mexico and Malaysia all declined, while they tripled from China.

Table 13: Top 20 suppliers of HS 44 products to the United States of America, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	15 949 770	11 981 921	World
Canada	10 541 259	5 488 982	Canada
China	941 247	3 087 174	China
Brazil	733 994	619 466	Chile
Chile	512 653	579 335	**Brazil**
Indonesia	425 635	261 663	**Indonesia**
Mexico	320 612	205 823	**Mexico**
Germany	279 163	193 539	France
Malaysia	239 407	170 807	**Malaysia**
New Zealand	226 860	157 993	New Zealand
Thailand	176 176	124 691	Germany
France	157 783	118 974	Russian Federation
Sweden	137 437	88 238	Italy
Russian Federation	135 260	85 319	Thailand
Italy	110 643	64 065	**Ecuador**
Taiwan Province of China	100 886	48 993	Sweden
Austria	80 859	48 314	Argentina
Belgium	51 942	42 339	Austria
Peru	46 932	41 373	Viet Nam
Finland	44 475	39 339	Taiwan Province of China
Spain	44 259	36 703	**India**

Note: ITTO producer members (as of 2013) are in bold.

38 ITTO consumer member.

2.3 Emerging economies as importers of tropical timber products

With many traditional markets flat or declining, the above analysis shows that ITTO producers may find opportunities in markets in emerging countries with robust growth. For example, the market for HS 44 imports in Albania grew fivefold in the decade to 2011, and Gabon has found a foothold there. China has emerged as the world's leading market for HS 44 products, with imports growing more than fourfold in the decade to 2011. ITTO producer countries Cameroon, the Republic of the Congo, Mozambique, Myanmar and Papua New Guinea have emerged as prominent suppliers.

India also quadrupled its HS 44 imports in the decade to 2011. ITTO producers Ghana, Malaysia and Myanmar all significantly increased sales to India, while Benin, Ecuador, Panama and Papua New Guinea made important inroads.

Mexico increased its imports of HS 44 products by 50%. Malaysia and Peru both boosted sales there, and other important suppliers were Ecuador, Guatemala and Indonesia.

Brazil[39]

Although Brazil is a significant producer of wood products, Table 14 shows that it also tripled its imports of HS 44 products, from US$54 million in 2001 to US$176 million in 2011. Ecuador and India joined Indonesia among the 20 largest suppliers.

Chile[40]

Chile is also a significant exporter of wood products, but Table 15 shows that HS 44 imports into the country more than tripled between 2001 and 2011, from US$67 million to more than US$220 million. HS 44 imports increased substantially from Ecuador, Indonesia and Malaysia.

Table 14: Top 20 suppliers of HS 44 products to Brazil, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	54 204	176 455	World
Argentina	19 031	55 546	Argentina
Paraguay	8 696	35 709	China
United States of America	4 575	16 122	United States of America
Germany	3 898	16 087	Paraguay
Italy	3 653	8 789	**Ecuador**
Uruguay	2 402	6 561	Germany
Chile	1 865	6 177	Italy
Sweden	1 572	6 167	Austria
Portugal	1 402	5 301	Bolivia
Spain	1 341	3 879	France
China	1 008	2 237	Uruguay
Bolivia	621	1 386	Portugal
China, Hong Kong Special Administrative Region	559	1 358	China, Hong Kong Special Administrative Region
Cape Verde	464	1 203	**India**
France	461	1 173	Spain
Costa Rica	416	1 070	**Indonesia**
Indonesia	364	1 065	Belgium
Austria	222	864	Chile
Australia	221	854	Switzerland
Taiwan Province of China	185	600	United Kingdom

Note: ITTO producer members (as of 2013) are in bold.

39 At the time this report was commissioned, Brazil was not on the list of ITTO members published by the Organization. Brazil acceded to the ITTA 2006 as a producer member in October 2013.

40 Non-ITTO member.

Table 15: Top 20 suppliers of HS 44 products to Chile, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	67 222	220 255	World
France	14 283	44 550	China
United States of America	13 230	29 384	France
Brazil	10 576	28 979	Germany
Germany	5 845	25 514	Argentina
China	3 297	17 284	Austria
Canada	2 907	15 480	United States of America
Paraguay	2 835	13 024	**Brazil**
Spain	2 282	6 683	Paraguay
Argentina	2 160	6 361	Spain
Bolivia	1 625	6 223	Uruguay
Uruguay	913	4 231	Canada
Sweden	784	3 143	United Kingdom
Netherlands	734	2 725	Bolivia
India	694	2 144	Switzerland
Thailand	560	1 891	Belgium
Belgium	490	1 453	**Malaysia**
Italy	471	1 153	Denmark
Poland	381	1 100	Poland
Denmark	351	1 058	**Indonesia**
Indonesia	292	877	**Ecuador**

Note: ITTO producer members (as of 2013) are in bold.

Dominican Republic[41]

The Dominican Republic is an emerging economy that has prospered from tourism. This has led to a significant expansion of housing and infrastructure, with HS 44 imports rising from US$109 million in 2001 to US$140 million in 2011. Table 16 shows that ITTO producers Fiji, Peru, Guatemala, Mexico, Côte d'Ivoire and Cameroon were among the top 20 suppliers to this market in 2011.

Philippines[42]

The Philippines experienced steady economic growth, with HS 44 imports growing from US$198 million in 2001 to US$279 million in 2011. Table 17 shows that ITTO producer members Malaysia, Papua New Guinea and Indonesia maintained their roles as important suppliers of HS 44 products in this market.

Senegal[43]

Senegal experienced steady economic growth over the decade, with the value of HS 44 imports almost doubling from US$28 million in 2001 to US$55 million in 2011. Table 18 shows that ITTO producers Côte d'Ivoire, Cameroon and Ghana were leading suppliers to this market. Both Côte d'Ivoire and Cameroon more than doubled their HS 44 product sales to Senegal over the period.

South Africa[44]

South Africa is the largest economy in Africa and a significant producer of wood products. Its HS 44 imports more than doubled between 2001 and 2011, with ITTO producers Gabon, Ghana, Indonesia and Malaysia all more than doubling their sales of HS 44 products to South Africa in the period. Table 19 shows that ITTO consumers Austria, China, France, Germany and New Zealand also boosted their sales of HS 44 products to South Africa, with China's sales, for example, growing from US$3.29 million in 2001 to US$58.5 million in 2011.

41 Non-ITTO member.
42 ITTO producer member.
43 Non-ITTO member.
44 Non-ITTO member.

Table 16: Top 20 suppliers of HS 44 products to the Dominican Republic, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	109 415	140 233	World
United States of America	58 161	63 862	United States of America
Brazil	29 570	12 676	**Fiji**
Chile	6 572	11 670	**Brazil**
Guatemala	2 904	11 573	China
Peru	2 313	6 927	Chile
Nicaragua	1 646	6 780	**Peru**
Spain	1 248	5 294	Spain
Uruguay	918	2 914	Nicaragua
Colombia	719	2 307	Bolivia
Argentina	592	2 258	Argentina
Russian Federation	529	1 256	**Guatemala**
Italy	493	1 230	South Africa
Canada	400	1 052	**Mexico**
China	358	805	Canada
Cape Verde	326	763	**Côte d'Ivoire**
Taiwan Province of China	289	726	Honduras
Honduras	284	660	Netherlands
Belgium	219	644	El Salvador
Costa Rica	213	643	Russian Federation
Panama	179	635	**Cameroon**

Note: ITTO producer members (as of 2013) are in bold.

Table 17: Top 20 suppliers of HS 44 products to the Philippines, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	198 904	279 095	World
Malaysia	61 824	93 901	**Malaysia**
United States of America	34 591	41 565	Canada
New Zealand	30 160	35 481	China
Canada	12 599	25 993	United States of America
Solomon Islands	9 753	23 236	Japan
Japan	8 831	9 783	**Papua New Guinea**
Indonesia	8 537	9 506	New Zealand
Australia	6 180	7 252	Germany
Singapore	3 510	6 974	Thailand
Thailand	3 307	6 223	Singapore
Brazil	3 100	5 022	Solomon Islands
Republic of Korea	2 870	4 705	Australia
Papua New Guinea	2 755	1 968	Taiwan Province of China
China	2 177	1 513	Viet Nam
Portugal	1 236	1 274	**Indonesia**
Germany	1 046	630	Romania
United Kingdom	778	568	Republic of Korea
China, Hong Kong Special Administrative Region	763	494	Sweden
France	703	315	China, Hong Kong Special Administrative Region
Taiwan Province of China	677	303	Austria

Note: ITTO producer members (as of 2013) are in bold.

Table 18: Top 20 suppliers of HS 44 products to Senegal, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	28 424	55 455	World
Côte d'Ivoire	12 898	30 449	**Côte d'Ivoire**
Ghana	4 991	9 609	**Cameroon**
Cameroon	4 735	3 217	**Ghana**
Liberia	3 027	2 876	France
France	1 217	1 244	China
Gabon	637	1 060	Spain
Italy	172	944	Switzerland
South Africa	109	887	Georgia
Spain	88	861	Belgium
Brazil	80	447	Equatorial Guinea
Equatorial Guinea	78	365	Germany
Morocco	66	365	Italy
China	56	356	Saudi Arabia
Belgium	53	352	Central African Republic
Romania	34	350	Morocco
Republic of Korea	25	307	Romania
United States of America	24	303	Turkey
Portugal	21	212	South Africa
Russian Federation	17	180	Iran (Islamic Republic of)
Sweden	13	133	**Gabon**

Note: ITTO producer members (as of 2013) are in bold.

Table 19: Top 20 suppliers of HS 44 products to South Africa, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	128 263	330 978	World
Malaysia	23 828	62 324	**Malaysia**
United States of America	19 604	58 518	China
France	11 885	36 617	**Brazil**
Zimbabwe	11 171	20 816	**Indonesia**
Germany	6 538	18 075	France
Brazil	5 967	16 717	Argentina
Singapore	4 471	15 328	Germany
Canada	4 270	15 313	**Gabon**
Gabon	3 997	13 126	United States of America
Indonesia	3 955	7 575	Zimbabwe
China	3 290	6 673	New Zealand
United Kingdom	2 429	5 535	Singapore
Italy	2 385	4 949	Thailand
Ghana	1 880	4 201	**Ghana**
Cameroon	1 632	3 948	Spain
Taiwan Province of China	1 512	3 570	Chile
Area nes*	1 352	3 184	Austria
Belgium	1 234	2 961	Malawi
Portugal	1 164	2 685	The Netherlands
Democratic Republic of the Congo	1 159	2 146	Belgium

*Area nes = "area not elsewhere specified".

Note: ITTO producer members (as of 2013) are in bold.

Thailand[45]

Thailand experienced steady economic growth over the decade, with the value of HS 44 imports growing from US$389 million in 2001 to US$652 million in 2011. Table 20 shows that ITTO producer members Cambodia, India, Malaysia and Papua New Guinea, and ITTO consumer members Australia, China, Germany, Japan and New Zealand, all increased their sales of HS 44 products in this growing market.

Importing markets—points for consideration

- Globally, the value of HS 44 imports almost doubled from 2001 to 2011.
- ITTO producers and consumers are competing globally in almost every market that imports HS 44 products.
- All ITTO member countries are both producers and consumers of HS 44 products.
- ITTO producer countries are important growing markets for HS 44 products from other ITTO member countries.
- China has become the top importer of HS 44 products and also a leading exporter of HS 44 products.
- India has become the 13th-largest importer of HS 44 products, and it is also a growing exporter.
- The EU27, Japan, the Republic of Korea and the United States remain large and important markets for HS 44 products, but the share of ITTO producers in these mature economies has declined while the share of China has increased significantly.
- ITTO producers are successfully supplying emerging economy markets.

Table 20: Top 20 suppliers of HS 44 products to Thailand, by value (US$'000)

Supplier country	2001	2011	Supplier country
World	388 896	651 941	World
Malaysia	139 638	248 570	**Malaysia**
Lao People's Democratic Republic	68 131	133 430	China
Myanmar	64 464	56 497	**Myanmar**
United States of America	30 187	50 682	Lao People's Democratic Republic
Indonesia	22 262	36 770	New Zealand
New Zealand	13 523	25 846	United States of America
Brazil	9 315	9 566	Canada
China	7 403	8 128	**India**
Germany	3 261	7 843	Australia
Canada	3 220	6 719	**Indonesia**
Australia	2 172	5 880	Germany
Sweden	1 974	5 857	**Cambodia**
Italy	1 961	5 763	Japan
Taiwan Province of China	1 920	5 532	Chile
Finland	1 597	3 955	Singapore
Solomon Islands	1 455	3 775	Solomon Islands
Poland	1 386	3 267	**Brazil**
Cambodia	1 379	2 942	Italy
Japan	1 339	2 822	Taiwan Province of China
Gabon	1 276	2 290	**Papua New Guinea**

Note: ITTO producer members (as of 2013) are in bold.

45 Non-ITTO member.

2.4 Market shares of public and private procurement in importing countries

To assess the economic and market effects of TPPs it is important to understand their areas of impact. Generally, there are two types of impact: the direct procurement effects; and the broader market effects, in which the requirements of government or other buyer shape supplier specifications.[46]

There has been a tendency in the dialogue on public TPPs to assert that the share of the timber market affected is equal to the government expenditure share of gross domestic product (GDP). This may be misleading, however, for a number of reasons.

The example of Belgium is reviewed in depth in this report; it serves as a case study of a public TPP under implementation. In Belgium, total government expenditure is close to 50% of GDP[47] (much higher than the overall average in member countries of the Organization for Economic Co-operation and Development—OECD—of 12%[48]). In Belgium, the expenditure category "government" includes the federal government, the autonomous regional governments, cities and municipalities, and the social security fund. A significant share of expenditure in this category comprises transfer payments to households, in cash or in kind. In these payments there is no associated consumption of goods or services by the government sector, or any procurement requirements.

The final consumption expenditure of a government as an element of GDP comprises the annual purchases made by the government in executing its functions and responsibilities. In the case of Belgium, this amount varied between 22% and 25% of GDP per year in the period 1999–2010. Final consumption expenditure by a government includes the payment of salaries and the use of electricity and other consumables. Paper and paper products would be included in this category, but not the solid wood products covered by the ITTA 2006. Wood products used in construction or other long-lasting uses, such as furniture, are considered part of an investment in capital stock because they have a useful practical life of more than one year. Gross fixed capital formation (GFCF) accounts for additions to the capital stock (productive items such as machinery and buildings in use for more than one year) and the replacement of used or exhausted capital stock.[49] In Belgium, government gross fixed capital investment (i.e. purchases by government of capital stock) averaged 1.7% of GDP in the period 1999–2012.

A significant share of government expenditure in Belgium comprises debt servicing and transfer payments, which have no direct timber market impact. A large share of the final expenditure of government is also spent on consumables and salaries; the consumables category includes paper and paper products but excludes solid wood products. Actual government expenditure on fixed capital assets—the category in which wood products might play a role—is generally under 2% of GDP in Belgium and averaged less than 2.6% in the EU as a whole in the period 1999–2012.

Advocates of public TPPs tend to argue three aspects in favour of adoption:

1) The large share of government expenditure in GDP will create a market for sustainable goods (advocates cite figures for gross government expenditure or government expenditure as a share of GDP). This might be referred to as a direct market effect, and it is much smaller than the figures often cited (e.g. the case of Belgium).
2) Government should play a leadership role in inspiring consumers and responsible players in the private sector. This might be referred to as a leadership effect.

46 Construction firms, architects and other suppliers may choose to carry and apply a single line of a given input (e.g. certified timber) that meets all customer standards rather than supply different inputs to government and non-governmental customers. The analysis of the impacts of the policy in the United Kingdom claims an expansion in the use of certified timber across the United Kingdom market to be an effect of the public TPP.

47 OECD (2011a). Revenue and expenditure were just less than 50% of GDP in most years in the period 2000–2008, although expenditure jumped to 54% of GDP in 2009 as GDP fell and the government implemented fiscal stimulus in response to the global financial crisis. While the central government collects over 50% of revenues, it represents less than 25% of all expenditures, indicating that regional and local governments have limited power to raise their own revenues via taxes. Regional and local governments represent a much larger share of expenditure, reflecting Belgium's devolved status.

48 OECD countries average 12%. See OECD (2011b) for an overview of the general size of public procurement in OECD countries.

49 EUROSTAT definition. Category P.51, where P.51, "gross fixed capital formation", consists of acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realized by the productive activity of producer or institutional units (fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly, or continuously, in processes of production for more than one year).

3) The actions of government have knock-on effects, causing suppliers to simplify their supply chains around sustainable products. This might be referred to as a supplier consolidation effect.

In assessing the impacts of the TPP of the Government of the United Kingdom (UK), Fripp et al. (2010) identified the leadership role as significant:

> "It can be concluded that the impact of the Government's TPP on the UK timber market over the past 10 years has been to under-deliver in terms of direct spend (due to lack of full implementation by all mandated public sector organizations) but to over-deliver on wider market impacts. It is clear from the consultation exercise that the Government's TPP has had a positive influence on timber traders and suppliers in terms of boosting the development of their own timber procurement policies. All trade respondents consulted for this study said that the Government's TPP policy had an impact on the way that they do business."

Equally, Fripp et.al. (2010) identified a supplier consolidation effect:

> "A clear outcome from the stakeholder consultation exercise was that increasingly contractors are implementing responsible policies for purchasing timber which state a preference for PEFC [Programme for the Endorsement of Forest Certification] or FSC [Forest Stewardship Council] only. This is done for two reasons, firstly it is simple and cost effective, it saves time and provides a clear message to timber suppliers. Secondly, some contractor reported that there is a risk that other certificates or Category B will not be accepted on site, at point of delivery.
>
> "For those that are now importing verified legal products, although the UK Government's policy does not explicitly accept it (accepted only in certain circumstances), the traders are meeting their UK TTF [Timber Trade Federation] RPP [Responsible Purchasing Policy] requirements, reducing risk in their supply chain and positioning themselves for when the EU Timber Regulation comes into effect, likely in 2013."

Fripp et.al. (2010) noted the difficulty in obtaining reliable estimates of the market share of public procurement. Their efforts included consultations with wood traders and supplier groups, who believed that the public sector in the UK accounted for 20–40% of all sales.

The OECD noted that most of its members have decentralized governments with delegated responsibilities for procurement; in most cases, only procurement actions exceeding a certain threshold are centralized. Generally, procurement actions are taken to obtain a stream of services, such as office space that meets certain standards. The volume of wood content is not specified, and there is no direct connection, therefore, between procurement and wood market share. In the case of TPPs, buyers will specify that if wood is used it must meet certain requirements, but rarely is there a requirement pertaining to wood volume or species.

Public TPP market share—points for consideration

In summary, the market share of a government's procurement for any specific or even general line of wood products is not directly obtainable from publicly available data. Market suppliers tend to have a "feel" for the role of public procurement in specific product lines. As the case of Belgium shows, the direct impact of a public TPP on timber imports may be quite limited—equal to central government procurement of timber for buildings, furniture, landscaping and other uses with an expected service life of more than one year. For Belgium, the total expenditure is less than 2% of GDP.

As the case of the UK shows, the effects of a central government TPP may be much wider than the direct spend of the central government. The leadership and supplier consolidation effects caused suppliers of wood products in the UK to conclude that 20–40% of sales are affected (directly or indirectly) by the central government's policy.

2.5 Common and varying elements among procurement policies

National government timber procurement policies

As noted above, public TPPs have changed little since the publication of ITTO Technical Series No. 34 (Simula 2010), which documented common and varying elements among the TPPs in effect in ITTO member countries. Most private-sector initiatives have also stabilized. Implementation

procedures for many public TPPs in EU countries are undergoing or will require adjustment to be aligned fully with the EUTR. The role of timber licences under voluntary partnership agreements (VPAs) (made between the EU and timber-producing countries as part of the EU's FLEGT Action Plan) must also be accommodated.

For market participants, the standards for acceptable products adopted in the rulemaking processes of public TPPs are crucial. Most public TPPs have been in place since the mid-2000s, and rulemaking processes have been established. Market participants are more concerned about the commonalities and differences among product standards than about the underlying policy documents.

An important part of the implementation of many public TPPs is a mechanism (established in the policy or administratively by the government) to determine which certification schemes, mechanisms and standards meet the requirements of the TPP. The Netherlands, for example, has established the Timber Procurement Assessment Committee (TPAC) with the explicit purpose of assessing timber certification systems and advising the Dutch Ministry of Infrastructure and Environment on the outcomes. The objective is to facilitate the government's commitment to procure 100% sustainable timber against a set of "procurement criteria for timber" developed with Dutch stakeholders.[50]

The Government of Mexico requires that certifiers are registered with its Ministry of Environment and Natural Resources[51], and the National Forest Commission maintains a list of certifiers and a list of private forest management units that have obtained certification.[52] The ministerial decree implementing Mexico's 2007 law on public procurement requires specific documentation to demonstrate that timber has been sourced legally.

France does not have an explicit process or formal group for periodically examining forest certification processes for compliance with the objectives of government directives on the procurement of timber products from legal or sustainable sources.[53] A document to support the implementation of the circular was published[54]; this included a non-exhaustive list of forest certification systems—national and international—that broadly met the test.[55] A subsequent circular published in 2008 asserted that office furnishings and paper supplies must also be sourced from legal or sustainable sources; the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) were noted as meeting the required standard.[56]

The French government relies on the verification of legality and sustainability by an independent third party. This approach has been defined as including certification schemes and a range of other types of evidence, such as a legality licence (anticipating future FLEGT licences); the independent verification of a supplier's declaration; attestation of a forest management plan or verification of compliance with a code of practice; and existing customs documents to qualify legal/sustainable products when entering the EU market. The government does not undertake an assessment of the evidence.

Denmark's Nature Agency has been assigned responsibility for communicating the Denmark Government's requirements and for providing guidance on the evidence to be requested by procurement agents to ensure compliance with the public TPP. Procurement agents are strongly encouraged to acquire timber products with legal assurance and produced from sustainably managed forests. The guidance indicates that products appropriately labelled by the FSC, the PEFC, SGS Timber Legality and Traceability Verification, Smartwood's Verification of Legal

50 In August 2013, the TPAC website indicated that "FSC International and PEFC International" conformed to the Dutch Procurement Criteria, "excluding MTCS [Malaysia Timber Certification System]".

51 *Diario Oficial, Miércoles 31 de octubre de 2007, Secretaria de Medio Ambiente y Recursos Naturales. Circular que contiene los Lineamientos generales relativos a los aspectos de sustentabilidad ambiental para las adquisiciones, arrendamientos, y servicios públicos.*

52 www.conafor.gob.mx/web/temas-forestales/certificacion-forestal.

53 *Circulaire du 5 avril 2005 portant sur les moyens à mettre en œuvre dans les marchés publics de bois et produits dérivés pour promouvoir la gestion durable des forêts. JORF n°82 du 8 avril 2005 page 6336, texte n° 1.*

54 *Groupe Permanent d'Etude des Marchés « Développement Durable, Environnement » (GPEM/DDEN) placé auprès du Ministère de l'Economie, des Finances et de l'Industrie. Notice d'information sur les outils permettant de promouvoir la gestion durable des forêts dans les marchés publics de bois et produits dérivés. le 31 mars 2005.*

55 For Australia: Australian Forestry Standard; for Brazil: Certificação Florestal; for Canada: Canadian Standards Association; for Chile: Sistema de Certificación de Manejo Forestal Sustentable; for the USA: American Tree Farm System and Sustainable Forestry Initiative; for Finland: Finnish Forest Certification System; for Indonesia: Lembaga Ekolabel Indonesia; for Malaysia: Malaysia Timber Certification Scheme; for the Netherlands: Keurhout.

56 *Circulaire du 3 décembre 2008 relative à l'exemplarité de l'Etat au regard du développement durable dans le fonctionnement de ses services et de ses établissements publics, JORF n°0036 du 12 février 2009 page 2489, texte n° 4.*

Compliance, and Origine et Légalité des Bois meet the Nature Agency's standards for legality assurance. Appropriately labelled products from the FSC and the PEFC meet the Agency's requirements for legality assurance and forest sustainability.

The Nature Agency's governing board has established four principles for its recognition of certification systems:

1) The standards should conform to those of the Nature Agency's established standards for legal and sustainable timber.
2) Traceability and labelling must provide that the timber can be tracked from the forest to the end-user and provide precise rules for credible labelling of the product.
3) The certification must be undertaken by an independent, competent and accredited third party and with relevant international guidelines for certification (International Organization for Standardization [ISO] guides 62, 65, 66 or equivalent).
4) A national or international body must make the accreditation, the systems and procedures of which are in accordance with relevant international guidelines for accreditation bodies (ISO Guide 17011, or equivalent).

The UK's public TPP is founded on the dual application of legality assurance and sustainability principles. In June 2013, the UK Government's Central Point of Expertise on Timber (CPET)—the UK Department of Environment, Food and Rural Affairs—issued its fifth advice note to central government departments on how to adhere to the policy. CPET advice notes are designed to keep government and the public informed of key adjustments in implementation procedures. In its 5th advice note, the CPET advised of changes being implemented to ensure that the UK public TPP conformed with the EUTR. These changes included a revision in the definition of legal and sustainable timber.

The revised UK definition of legal and sustainable timber is representative of what has emerged in the implementation of public TPPs in other EU countries as their rules have been amended to conform with the EUTR and to accommodate FLEGT VPA timber. The UK definition is reproduced in Box 1.

The CEPT reported (on its website) that, according to a 2010 review, FSC and PEFC certifications meet its Category A level of compliance for the UK TPP.[57] Specifically, the CEPT indicated that: If you purchase a product that has one of these labels, it is Category A Evidence and is considered to be both legal and sustainable by the UK Government's definition, provided that a minimum of 70% of the material is from a certified source. However, if you purchase it from a non-certified supplier, the product's form or packaging cannot have changed from the time that it left the certified supplier". The CPET noted that the PEFC is an "umbrella scheme" that endorses national schemes; for example, it has endorsed the Canadian Standards Association (CSA) and the Sustainable Forestry Initiative (SFI).

The CEPT further reports that the UK TPP accommodates Category B evidence. This is defined as documentary evidence (other than Category A evidence) that provides assurance that a source is TPP-compliant. Category B evidence includes requirements parallel to those listed in Box 1 ensuring compliance with UK TPP definitions of legal and sustainable. Criteria, checklists and practical guides are provided. The CEPT identifies two or more pathways by which small woodland owners in the UK can meet Category B standards for compliance.

The UK case is representative of the evolution of public TPP implementation across Europe to adjust to the entry into force of the EUTR. Typically, such evolution includes adjustments to:

- reconcile the list of covered products;
- introduce or align the definition of legal timber with that found in the EUTR; and
- make provisions for timber licensed through FLEGT VPAs.

While the Government of France relies on third-party verification through forest certification, the implementation of the UK TPP has rigorous documentation requirements. The CPET's fifth advice note provides a model contract to facilitate compliance with the TPP (Box 2). The model contract indicates the longevity requirements for document-holding (sections 2.2 and 2.3 of the model contract) and a right to request independent verification (section 3).

57 www.cpet.org.uk/uk-government-timber-procurement-policy/evidence-of-compliance/category-a-evidence/approved-schemes.

Box 1: UK definition of legal and sustainable

The relevant text of the UK Government's Central Point of Expertise on Timber is reproduced below.

3. Definition of legal within the UK Government's TPP

Within the UK Government's TPP, 'legal' sources are defined to mean:
"Harvested in accordance with the applicable legislation in the country of harvest." This definition is the same as in Article 2 of the EUTR. "Applicable legislation" is defined in the EUTR (and applies in the context of the TPP) to mean "the legislation in force in the country of harvest covering the following matters:

L1. rights to harvest timber within legally gazetted boundaries;
L2. payments for harvest rights and timber including duties related to timber harvesting;
L3. timber harvesting, including environmental and forest legislation including forest management and biodiversity conservation, where directly related to timber harvesting;
L4. third parties' legal rights concerning use and tenure that are affected by timber harvesting; and
L5. trade and customs, in so far as the forest sector is concerned."

In some countries, laws may be unclear or conflicting making it difficult to clearly define "harvested in accordance with the applicable legislation in the country of harvest". The European Commission's FLEGT Action Plan has proposed that in such countries it will be necessary to have or develop a practical working definition of 'legal' or a set of core laws which must be met which has support from major stakeholder groups. This can be done through a national standard-setting process or other appropriate means.

4. Definition of sustainable within the UK Government's TPP

To meet the UK TPP definition of 'sustainable' sources, timber and wood products must:

(1) meet the legality requirements listed above, and
(2) come from a forest which is managed in accordance with a definition of sustainable that meets the requirements set out below:

S1. The definition must be consistent with a widely accepted set of international principles and criteria defining sustainable or responsible forest management at the forest management unit level.
S2. The definition must be performance-based, meaning that measurable outputs must be included and cover all the issues set out in S5 to S9.
S3. The process of defining sustainable must seek to ensure balanced representation and input from the economic, environmental and social interest categories.
S4. The process of defining sustainable must seek to ensure:
  a. no single interest can dominate the process; and
  b. no decision can be made in the absence of agreement from the majority of an interest category.
S5. Management of the forest must ensure that harm to ecosystems is minimised. In order to do this the definition of sustainable must include requirements for:
  a. appropriate assessment of impacts and planning to minimise impacts;
  b. protection of soil, water and biodiversity;
  c. controlled and appropriate use of chemicals and use of Integrated Pest Management wherever possible; and

d. proper disposal of wastes to minimise any negative impacts.

S6. Management of the forest must ensure that productivity of the forest is maintained. In order to achieve this, the definition of sustainable must include requirements for:
   a. management planning and implementation of management activities to avoid significant negative impacts on forest productivity;
   b. monitoring which is adequate to check compliance with all requirements, together with review and feedback into planning;
   c. operations and operational procedures which minimise impacts on the range of forest resources and services; and
   d. adequate training of all personnel, both employees and contractors; and
   e. harvest levels that do not exceed the long-term production capacity of the forest, based on adequate inventory and growth and yield data.

S7. Management of the forest must ensure that forest ecosystem health and vitality is maintained. In order to achieve this, the definition of sustainable must include requirements for:
   a. management planning which aims to maintain or increase the health and vitality of forest ecosystems
   b. management of natural processes, fires, pests and diseases; and
   c. adequate protection of the forest from unauthorised activities such as illegal logging, mining and encroachment.

S8. Management of the forest must ensure that biodiversity is maintained. In order to achieve this, the definition of sustainable must include requirements for:
   a. implementation of safeguards to protect rare, threatened and endangered species;
   b. the conservation/set-aside of key ecosystems or habitats in their natural state; and
   c. the protection of features and species of outstanding or exceptional value.

S9. The forest management organisation and any contractors must comply with local and national legal requirements relevant to:
   a. labour and welfare; and
   b. health and safety.

5. Social criteria

Application of the TPP includes certain social criteria within the contract conditions. The social criteria must not be included in technical specifications for procurement of timber and wood-derived products, but only in recommended contract conditions. The social criteria that are included in model contract conditions are noted below for information purposes, as contractors may be required by contract conditions to provide evidence of compliance, for example through certification schemes.

Social criteria
Management of the forest must have full regard for:

SC1. identification, documentation and respect of legal, customary and traditional tenure and use rights related to the forest;
SC2. mechanisms for resolving grievances and disputes including those relating to tenure and use rights, to forest management practices and to work conditions; and
SC3. safeguarding the basic labour rights and health and safety of forest workers."

Box 2: Model contract to facilitate compliance with the UK's public timber procurement policy

The model contract set out in the UK Government's Central Point of Expertise on Timber fifth advice note as Annex D is reproduced below.

Annex D Model Contract Condition - Timber and wood-derived products

Please note that terms in square brackets will need to be defined according to the relevant contract in which the model contract condition is used.

1. Requirements for Timber

1.1 All Timber and wood-derived products supplied or used by [the Contractor] in performance of [the Contract] (including all Timber and wood-derived products supplied or used by sub-contractors) shall comply with [the Contract Specification].

1.2 In addition to the requirements of clause 1.1 above, all Timber and wood-derived products supplied or used by [the Contractor] in performance of [the Contract] (including all Timber and wood-derived products supplied or used by sub-contractors) shall originate from a forest source where management of the forest has full regard for:

Identification, documentation and respect of legal, customary and traditional tenure and use rights related to the forest;

Mechanisms for resolving grievances and disputes including those relating to tenure and use rights, to forest management practices and to work conditions; and

Safeguarding the basic labour rights and health and safety of forest workers.

2. Requirements for Proof of Timber Origin

2.1 If requested by [the Contracting Authority], and not already provided at the tender evaluation stage, [the Contractor] shall provide to [the Contracting Authority] evidence that the Timber and wood-derived products supplied or used in the performance of [the Contract] complies with the requirements of [the Contract Specification]. If requested by [the Contracting Authority] [the Contractor] shall provide to [the Contracting Authority] evidence that the Timber and wood-derived products supplied or used in the performance of [the Contract] complies with the requirements of the social criteria defined in section 1.2 above.

2.2 [The Contracting Authority] reserves the right at any time during the execution of [the Contract] and for a period of 6 years from final delivery under [the Contract] to require [the Contractor] to produce the evidence required for [the Contracting Authority's] inspection within 14 days of [the Contracting Authority's] written request.

2.3 [The Contractor] shall maintain records of all Timber and wood-derived products delivered to and accepted by [the Contracting Authority]. Such information shall be made available to [the Contracting Authority] if requested, for a period of 6 years from final delivery under [the Contract].

3. Independent Verification

3.1 [The Contracting Authority] reserves the right to decide whether the evidence submitted to it demonstrates that the Timber and wood-derived products comply with [the Contract Specification]. [The Contracting Authority] reserves the right to decide whether the evidence submitted to it is adequate to satisfy [the Contracting Authority] that the Timber and wood-derived products comply with the requirements of the social criteria defined in section 1.2 above.

In the event that [the Contracting Authority] is not satisfied, [the Contractor] shall commission and meet the costs of an 'independent verification' and resulting report that will (a) verify the forest source of the Timber and wood-derived products and (b) assess whether the source meets the relevant criteria.

3.2 In [this Contract], 'Independent Verification' means that an evaluation is undertaken and reported by an individual or body whose organisation, systems and procedures conform to ISO Guide 65:1996 (EN 45011:1998) General requirements for bodies operating product certification systems or equivalent, and who is accredited to audit against forest management standards by a body whose organisation, systems and procedures conform to ISO 17011: 2004 General Requirements for Providing Assessment and Accreditation of Conformity Assessment Bodies or equivalent.

New Zealand provides an example of a public TPP that straddles the French and UK models described above. The key features of the policy are as follows:

- Government departments are required to seek legally sourced timber and wood products.
- Government departments are strongly encouraged to buy timber and timber products from sustainably managed sources. The government expects its agencies to take all reasonable steps to ensure that products are from sustainably managed sources.
- Paper is now included in the public TPP.
- Government departments are required to document, for audit, their verification of the legality of the timber and timber products they purchase.

New Zealand's TPP identifies timber and wood products as rough, sawn and dressed timber; plywood and veneers; fabricated wood; wooden structural components, fittings and joinery; wooden furniture; and paper products.

The policy applies equally to domestic and imported wood products and to all tender contracts and term-supply contracts. Similar to the UK system, government agencies in New Zealand have been provided with model clauses for tender offers that address requirements for legality and sustainability. Similar to France's TPP, the New Zealand TPP identifies forest certification as a means for meeting legality and sustainability requirements. The FSC and the PEFC are identified as meeting New Zealand's requirements. Also explicitly identified are the American Tree Farm System, the CSA, the SFI and the Malaysian Timber Certification System. The policy states that: "New Zealand also reserves the right to recognise any other systems that can, to New Zealand's satisfaction and verification, prove they meet New Zealand's requirements for legality and/or sustainability".

As noted earlier, public TPPs tend to have different approaches to holding the documentation for audit purposes. In the UK, the supplier retains the documentation subject to audit on demand. Under France's TPP, the government agencies retain the documentation to meet oversight requirements. These differences tend to reflect only the ways in which governments treat audit requirements for agencies and contractors. In New Zealand, government agencies are required to document for audit their verification of the legality of the timber and timber products they purchase. Tender specifications require verifiable documentary evidence of supplier claims related to sustainability, chain-of-custody certification, or other proof of origin from sustainably managed sources.

Government agencies should have systems in place for recording timber and timber-product procurements on a contract-by-contract basis, noting the steps taken to ensure legality, any supplier claims and documentation of certification or equivalence, and the reasons for sourcing decisions.

Private-sector timber procurement policies

Private-sector TPPs tend to follow slightly different paths depending on the role of the firm in the market chain—that is, whether it is a manufacturer of wood products or a wholesaler or retailer of wooden furniture, building supplies or other wood-based products.

Manufacturers. Most modern multinational forest product companies have policies that speak directly to timber procurement with a focus on SFM. Most companies also address affirmatively the issue of legality in timber sourcing.

Boise Cascade is an integrated forest products company that owns forestland, harvests and procures wood supplies externally, and produces and trades products from other suppliers under its name products. Boise Cascade's TPP is presented in Box 3.

Retail. IKEA is a retailer that acknowledges that it sources wood widely and economically. It has established core principles for wood suppliers and the personnel charged with enforcing its corporate concepts.[58] IKEA recognizes FSC-certified wood as a preferred source:

> "Wood certified according to Forest Stewardship Council (FSC) Forest Management (FM) and Chain of Custody (CoC) standards meets the IKEA requirements for preferred sources."

58 www.ikea.com/ms/en_US/pdf/sustainability_report/group_approach_sustainability_fy11.pdf.

Box 3: Boise Cascade's timber procurement policy

Boise Cascade's TPP is reproduced below.

> Boise Cascade, L.L.C. (Boise Cascade) is an international wood products company that is committed to implementing and achieving sustainable forestry where it procures round wood, oriented strand board, and veneer from other forest landowners, wood suppliers, and manufacturers. To practice sustainable forestry is to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation, and the managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air, and water quality, biological diversity, wildlife and aquatic habitat, recreation, and aesthetics.
>
> Boise Cascade is committed to implementing internationally recognized forestry certification programs, including the Sustainable Forestry Initiative® (SFI®), Forest Stewardship Council™ (FSC®), and the Programme for Endorsement of Forest Certification (PEFC) Standards and the requirements addressing responsible wood procurement from sustainably managed forests. Boise Cascade seeks to continually increase its procurement from certified sources.
>
> Boise Cascade is committed to compliance with all national and international environmental, forestry, worker protection, and other relevant laws and regulations. Boise Cascade expects all of its wood suppliers to comply with laws and regulations pertaining to their forestry operations and provide information regarding fiber source and certification percentage.
>
> Boise Cascade implements best efforts to avoid purchase wood that originates from illegal sources, fiber harvested in violation of traditional and civil rights, wood harvested in forests where high conservation values are threatened by management activities, wood harvested in forests being converted to plantations or non-forest use, wood from forests in which genetically modified trees are planted, or wood from old growth forests. When conducting harvesting operations in forests that contain threatened and endangered species and communities, Boise Cascade complies with all laws and regulations to protect these species and communities. Our procurement personnel are responsible for tracking the geographic origin, legality, and certification status of fiber purchased for our production facilities.
>
> Approved: March 1, 2011
>
> *Tom Carlile, CEO*

Equally, IKEA alerts wood suppliers that it intends to audit compliance with its principles:

> "Suppliers must have procedures in place to secure this throughout their supply chain. They must know the origin of their wood and accept audits at every link in the chain. They regularly report the wood origin, volume and species used in IKEA products via the IKEA Forest Tracing System."

2.6 Commonalities and differences in procurement policies—points for consideration

Most public TPPs have stabilized and passed through important phases of public consultation and rule-setting. Most of the more recent policy additions have been to include paper within broader policies on wood products, with an emphasis on recycling and waste reduction. In implementation, many public TPPs have been folded into broader sets of "green" or environmental guidelines or requirements addressing issues such as energy efficiency, waste reduction and recovery, and water conservation.

Similarly, the TPPs of most private-sector firms have been integrated into broader codes of ethics on the environment and forests. There is considerable variation in the implementation of TPPs with respect to responsibility for record-keeping and audit management. These differences tend simply to reflect past practice in the government or firm. Many TPPs accept third-party systems of verification as sufficient for legality assurance or forest sustainability. There continues to be significant divergence in policy implementation in both the public and private sectors on the forest certification systems deemed to be adequate.

The implementation procedures of most EU public TPPs require a round of adjustment to accommodate the recent entry into force of the EUTR. Equally, Australia's federal public TPP will require adjustment as the rules for the Illegal Logging Prohibition Act 2012 are finalized.

3 ECONOMIC IMPACT OF PROCUREMENT POLICIES ON THE TROPICAL TIMBER MARKET AND TRADE

3.1 Effects of procurement policies on demand, supply, trade and prices

To understand the economic and market impacts of TPPs, it is vital to understand their evolution, adoption and implementation. National policies are conceived, adopted and eventually implemented over a period of usually five to seven years in accordance with national rules on transparency and public involvement in rule-making processes. For market participants, the length of the rule-making process causes considerable consternation, anxiety and uncertainty.

Discussions on public TPPs have been characterized by the strident positions taken by advocates and detractors about potential impacts. To explore the effects of public TPPs on importing markets, a case-study approach was adopted in which the import histories and patterns of Belgium and Italy were examined. These two EU importing markets import roughly similar quantities of HS 44 products. Belgium has established a policy governing the procurement of timber for federal requirements, and Italy does not have an explicit policy. A detailed economic assessment of the Belgian case illustrates the challenge in measuring the direct and secondary effects of a public TPP and in separating facts and outcomes from fear and apprehension. A comparison of the two case studies can help in understanding how a policy goes from adoption to implementation and whether the policy impacts are distinguishable from general trends in the economy.

3.2 Belgium: an illustration of the evolution of a public timber procurement policy

The policy context

A federal circular was issued on 18 November 2005[59] requiring that all federal agencies and authorities in Belgium use only wood derived from SFM. The adoption of the policy followed a number of years of national debate in which forceful allegations were made by various interest groups about the use of wood in general, and the use of tropical wood in particular, as a cause of forest loss, associated declines in biodiversity, and the disruption of the lives of indigenous peoples. The design of the federal circular was assisted by a communication from the Federal Council on Sustainable Development (Conseil Fédéral du Développement Durable), a public advisory group that is convened to assist the government in addressing issues related to sustainable development.[60]

The circular defines the basis for demonstrating that wood has been produced using SFM. A certification of SFM should be accompanied by an associated certificate of chain of custody. The circular identifies the FSC and PEFC Belgium as meeting the specified criteria. PEFC-endorsed certification systems in other countries and other systems are required to meet equivalent standards, and their approval is subject to the consideration of a committee established by the circular.

Wood products carrying the relevant FSC or PEFC labels currently meet the sustainability requirements of Belgium's federal TPP. Legality issues were widely discussed during the inception of the policy but not explicitly enshrined as a separate measure. The criteria for assessing certification systems indicate that candidate systems must respect national laws and international conventions.[61] It is not clear how this procurement standard will be adjusted to respond to FLEGT-licensed imports from VPA countries.

The Government of Belgium commissioned Proforest to review the effectiveness and implementation of the federal circular in 2008 as a basis for a possible policy update. The review noted incompatibilities between the criteria listed in the circular and the two endorsed certification systems. It also noted the challenges that federal sources would have in meeting their requirements because the supply of certified products was still limited,

59 *Belgisch Staatsblad–09.02.2006–Moniteur Belge.*

60 see www.frdo-cfdd.be/DOC/pub/ad_av/2005/2005a06f.pdf. The communication illustrates the range of debate, stakeholder groups and underlying issues being articulated.

61 *"Le système de certification des forêts doit garantir que la gestion forestière respecte les lois nationales et les conventions internationales".*

especially for tropical timber. Further, the review highlighted the difficulty of meeting the traceability and certification requirements for products containing medium-density fibreboard and chipboard. The review noted that a policy review and update could help implementing agencies, which were seeking clarity on a number of issues.

On 1 March 2011, relevant ministers, heads of government departments, private-sector wood-product associations and building trades signed an accord to use only legally sourced timber.[62] The agreement applies to all timber placed on the Belgium market and not just that used in publicly funded activities. The accord, which covers the period to 2018, establishes goals for wood products from sustainably managed forests and applies to both coniferous and non-coniferous sawnwood and panels. Under the accord, the share of timber from sustainably managed forests placed on the Belgian market by signatories was to be at least 23.5% by the end of 2012, at least 29.25% by the end of 2015, and at least 35% by the end of 2018. The accord indicates that its intent is to promote public awareness about, and the use of, timber from sustainably managed forests. Timber meeting sustainability requirements may be accompanied by certification standards acknowledged by the relevant Belgium federal authority (currently the FSC or the PEFC) or an equivalent based on the criteria established by the Ministerial Conference on the Protection of Forests in Europe or ITTO. The principles applied must be published publicly and undergo a periodic independent audit. The system of certification must be communicated to the Ministry of Environment for confirmation.

At the federal level, the federal circular has been enshrined in an online guide on sustainable procurement. Products certified by the FSC or the PEFC are identified as meeting the standard for interior and exterior construction and wooden floors.[63] In all circumstances, wood sourcing should be in conformance with Circular P&O/DD/2 of 18 November 2005, which continues to define the federal policy.

62 *Belgisch Staatsblad–07.04.2007–Moniteur Belge.*
63 www.gidsvoorduurzameaankopen.be/fr/node/18.

The market effects in Belgium

Discussions on the TPP and the associated reporting in the news media caused consternation among timber exporters and the timber trade. Many market participants feared that negative media would suppress demand for their products. The policy changes and implementation caused near-term market uncertainty as exporters and importers sought clarity on the rules to be applied. Generally, in most countries, the approval of TPPs has been followed by a long and important period of rule-setting, which often requires an extended period of public input. The rule-setting period is important because the rules establish the actual implementation standards and procedures, but it also tends to gives rise to speculation on possible outcomes, increasing anxiety among market participants. New rules take time to understand, and investments may be required to meet import/export requirements.

Timber-producing and exporting firms invest continuously to match their products with changing market requirements. For example, there may be changes in fire-safety standards in target countries, the use of adhesives, or phytosanitary requirements for imports. In examining the market effects of public TPPs, it is important to measure the change in market performance rather than the anxiety levels of market participants.

Given the vibrant public debate on promoting wood products from legal and sustainable sources, it might be hypothesized that the introduction of a public TPP underscoring SFM and requiring legality assurance would have significant measurable effects.

As described in section 2.4 of this report, advocates of public TPPs underline three aspects in favour of adoption: 1) the direct market effect; 2) the leadership effect; and 3) the supplier consolidation effect.

Belgium's public TPP and the ongoing national dialogue had a considerable leadership effect with the adoption of the general accord in 2011, enshrining legality and sustainability across the economy throughout the building and trades sector. Further, the Belgium and European timber trade associations underscored the need for their members to only supply timber meeting rigorous standards. This supplier consolidation effect covers essentially the entire import market in Belgium.

In reviewing the utility and impact of the Belgian public TPP, it is important to examine what actually happened in the Belgium market, both for wood-product imports in general and for tropical wood-product imports specifically. Did tropical wood products disappear from the Belgium market? Did non-tropical products replace tropical species in the market? How has the mix of wood products imported into Belgium changed over time, and how has the tropical wood-product supply chain changed?

The European Timber Trade Federation (2012) provided a complete overall picture of trends in the Belgium market as part of its efforts to understand the market effects of the implementation of the EUTR. The data on Belgium used in this study are taken from EUROSTAT and cross-checked against data from FAO, the United Nations Commodity Trade Statistics Database, ITTO and the European Timber Trade Federation.

Table 21 presents economic data for Belgium for 1999–2012. This period was chosen because it bridges two economic recessions (2002–03 and 2009–10) and two periods of greater economic prosperity (1999–2001 and 2004–2008). The purpose of presenting these data is to assist in detecting actual economic change in the market as a result of the public TPP.

Table 22 shows trends in the value of Belgium's imports of industrial roundwood, sawnwood and plywood from 1999 to 2011. The non-coniferous total is subdivided below each product into tropical and non-tropical. As will be demonstrated later, wood imports tend to mimic trends in the general economy because much of the wood imported from all sources is used in construction or the production of other long-lasting goods, such as furniture (paper and paper products are excluded from this analysis).

Table 22 shows that imports of industrial roundwood increased by 28% between 1999 and 2011, from €157 million to €202 million.

Table 21: Gross domestic product and gross fixed capital formation, Belgium, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP	238 877	252 543	259 803	268 620	276 157	291 287	303 435	318 829	335 815	346 375	340 739	356 069	369 981	376 229
GFCF	49 710	53 469	54 241	51 368	52 185	57 849	62 685	66 710	72 881	77 286	70 895	71 233	76 575	77 995
Private sector	44 823	48 290	49 584	46 674	47 377	53 027	57 712	61 454	67 511	71 860	66 475	65 775	70 491	72 138
Public sector	4 887	5 179	4 657	4 694	4 808	4 822	4 973	5 256	5 371	5 426	4 420	5 458	6 084	5 857

Source: EUROSTAT data, obtained 15 July 2013. GDP = gross domestic product. GFCF = gross fixed capital formation. "GFCF private sector" is series P51_S14_S15. "GFCF public sector" is calculated as the difference between total GFCF and GFCF private sector.

Table 22: Imports of primary wood products, 1999–2011 (€ million)

Product	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Industrial roundwood	157	168	141	102	100	113	115	137	202	169	139	192	202
Coniferous	58	73	57	42	43	48	45	56	104	79	60	100	95
Non-coniferous	99	95	84	60	56	65	70	80	98	90	79	92	107
Non-tropical	65	65	51	51	48	53	57	70	81	72	67	77	90
Tropical	34	30	33	8	8	12	13	10	17	18	12	15	17
Total sawnwood	486	617	510	490	502	513	540	544	728	594	459	533	599
Coniferous	235	286	228	243	248	260	268	305	423	340	286	338	351
Non-coniferous	251	331	283	247	254	253	271	238	305	254	172	195	248
Non-tropical	129	144	143	126	124	122	125	35	117	106	76	71	72
Tropical	121	187	140	121	130	131	147	203	188	149	97	123	177
Total plywood	198	217	205	179	183	216	224	265	232	223	165	181	196
Coniferous	51	58	46	46	49	69	66	70	62	63	53	64	62
Non-coniferous	147	159	159	132	134	147	158	195	170	160	112	117	134
Non-tropical	18	21	28	28	33	49	67	51	108	91	5	39	52
Tropical	129	138	131	104	101	98	91	144	62	69	106	78	82

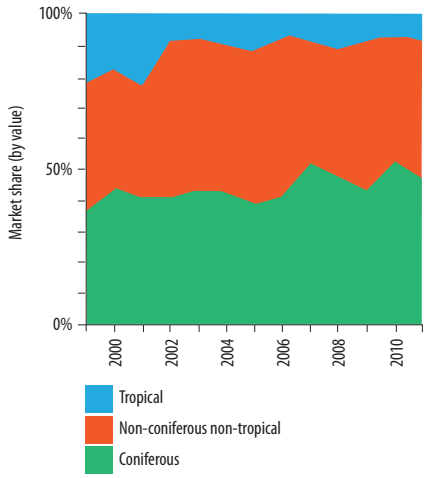
Note: Totals may not tally due to rounding. Source: EUROSTAT data, obtained 15 July 2013.

Sawnwood imports increased by 23%, from €486 million in 1999 to €599 million in 2011. Plywood imports declined marginally, from €198 million in 1999 to €196 million in 2011.

The total value of tropical industrial roundwood imported into Belgium declined by 49% between 1999 and 2011. The value of tropical sawnwood imports increased by 45% over the period and the value of tropical plywood imports declined by 36%.

Figure 1 shows the change in the market share of tropical, non-coniferous non-tropical, and coniferous industrial roundwood imports over the period 1999–2011. The share of industrial tropical roundwood imports declined markedly, from around 20% in 1999–2001 to less than 10% after 2002. This was due largely to a reduction in imports of industrial roundwood from Indonesia as a result of a policy change there favouring domestic production and restricting the export of unprocessed logs.

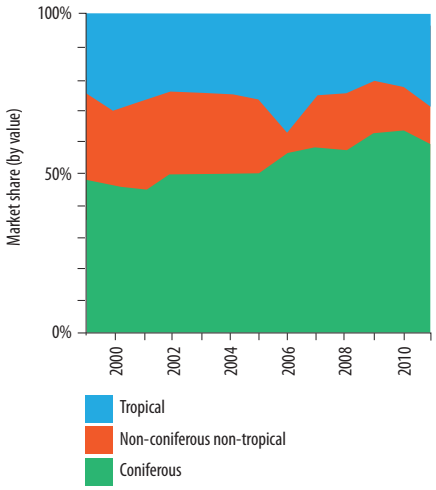
Figure 1: Market share (by value) of imports of industrial roundwood, Belgium, 1999–2011



Source: EUROSTAT data, obtained 15 July 2013.

Figure 2 shows the shift in market share in tropical, non-tropical non-coniferous, and coniferous sawnwood imports into Belgium between 1999 and 2011. The share of tropical sawnwood imports began and ended the period at roughly 30%. The share of coniferous sawnwood imports grew and the share of non-coniferous non-tropical species declined over the period.

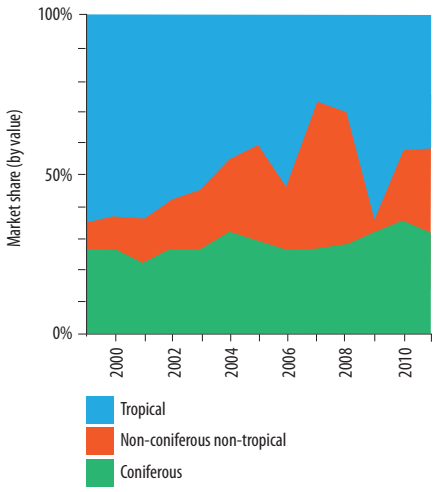
Figure 2: Market share (by value) of sawnwood imports, Belgium, 1999–2011



Source: EUROSTAT data, obtained 15 July 2013.

Figure 3 reveals profound shifts in plywood imports during the period. Non-coniferous non-tropical plywood began the period with a 9% share of the import market and ended it with a 26% share. The value of plywood imports from Indonesia declined substantially between 1999 and 2004 (not shown in figure).

Figure 3: Market share (by value) of plywood imports, Belgium, 1999–2011



Source: EUROSTAT data, obtained 15 July 2013.

Important shifts have occurred worldwide in the trade of primary wood products. There is an underlying trend in producer and developing consumer countries to add value to their timber

resources before shipment. A number of consumer and producer countries limit exports of unprocessed logs and insist on some level of primary processing. Table 23 shows total HS 44 imports into Belgium from a range of non-EU countries. Many countries have been included in Table 23 to address questions about market shifts among competing coniferous, non-coniferous non-tropical, and non-coniferous tropical suppliers. Notable are countries that have shifted from supplying primary products to supplying value-added products. For example, China and Viet Nam have emerged as major suppliers of furniture and wood components.

Table 23 shows that Belgian imports of HS 44 products from Indonesia and Malaysia peaked in 2000 and declined substantially thereafter. HS 44 imports from Brazil, Cameroon, China, the Democratic Republic of the Congo and Gabon all increased substantially.

Table 24 shows the total imports to Belgium from ITTO member countries in the period 1999–2012. Imports from ITTO producer countries declined from €306 million in 1999 to €266 million in 2012. Imports from ITTO consumer countries, on the other hand, increased from €1.113 billion in 1999 to €1.768 billion in 2012, the majority from EU27 countries.

A series of simple regressions was conducted to examine correlations between HS 44 import values and key economic indicators to serve as a basis for determining the effect, if any, of the implementation of the public TPP on imports. Theory suggests that wood consumption tends to follow broader economic trends. Since this analysis concerns solid wood products used most often in construction and longer-lasting uses such as furniture, there should be a correlation with the formation of fixed assets. GFCF is the total value of assets put into production in a given year, including the replacement of used buildings and equipment and the expansion of the capital base.

As shown in Table 21, GFCF responds more quickly than GDP to changes in economic outlook; this is because GDP is dominated by household and government final consumption expenditures, which are relatively stable. The private sector dominates GFCF and also tends to react more quickly to changes in economic outlook. The proportion of GFCF contributed by government often moves against the economic cycle to buffer economic contraction (these are the "infrastructure, roads and bridges" programmes that governments tend to fund in the face of rising unemployment in the larger economy).

Given this theory, it might be expected that wood imports would be best correlated with GFCF by the private sector, perhaps followed by a weaker correlation with GFCF as a whole, a still weaker correlation with GDP and a very weak correlation with GFCF by government (which, as was shown earlier, constitutes less than 2% of the whole economy).

Table 25 shows the outcome of the regression analysis. As anticipated, the value of imports from all ITTO members including the EU27 tended to track the general economy and was closely correlated with GFCF. According to the hypothesis stated above, the best fit would be with private-sector GFCF, but the data do not support this. Imports from ITTO producer members were correlated negatively with both GDP and the various measures of GFCF and yielded a poor fit.

The simple estimation process shows that solid wood imports tend to track changes in the general economy reasonably consistently. This implies that solid wood maintained a somewhat constant share of building activity in Belgium over the period. The decline in the value of tropical wood imports even when the economy was growing suggests that end-users weakened in their preference for tropical wood.

An analysis of the relationship between market trends and the introduction of the public TPP produced statistically insignificant results. Figure 4 shows why this might be so. HS 44 imports from ITTO producers were relatively constant between 2002 and 2006, although the Belgian economy grew in that period. Imports declined markedly from 2006 to 2008, which might be attributable to the market confusion caused by the introduction of the TPP. Imports from ITTO producers shrank by 27.9% as the economy contracted in 2009 and then expanded by 26.0% in 2010 and by another 3.9% in 2011 as the economy rebounded. Thus, the pattern after 2009 was more consistent with the performance of wood imports aligned with general economic performance, suggesting that producers and importers had found the means and methods to re-integrate tropical wood into the mainstream.

Table 23: Imports of HS 44 products to Belgium, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Albania		0		0		0	0	0	0	0	0			0
Australia	1	1	1	1	0	1	1	1	1	1	1	1	1	0
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazil	50	75	77	75	86	114	109	105	133	115	87	90	107	82
Cambodia	0			0	0	0	0	0	0	0	0	0	0	0
Cameroon	24	29	31	30	29	34	44	42	50	46	31	43	88	98
Canada	51	68	39	38	30	39	45	62	71	61	48	50	58	71
Chile	4	1	0	1	0	1	8	3	3	2	3	6	6	6
China	28	37	33	33	48	65	118	133	180	196	159	190	207	199
Colombia	0				0	0		0	0	0	0	0	0	0
Democratic Republic of the Congo	2	2	5	7	7	11	17	22	27	26	11	16	20	16
Congo	2	1	1	1	1	1	1	2	6	5	1	3	6	7
Côte d'Ivoire	8	9	9	5	6	7	7	9	11	9	7	8	10	17
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Fiji		0			0		0				0			0
Gabon	3	3	6	6	5	5	7	8	8	9	8	17	21	25
Ghana	7	10	13	14	11	11	11	9	9	9	5	5	7	6
Guatemala		0				0	0	0	0		0	0	0	0
Guyana	0	0	0		0	0	0		0	0		0	0	0
Honduras	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Indonesia	162	211	168	125	123	122	127	108	71	56	47	53	48	43
India	2	2	1	2	1	2	2	3	3	3	2	3	3	3
Japan	0	0	0	0	0	0	0	0	1	1	1	2	2	1
Republic of Korea	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Liberia		0	0	0	1	0					0		0	1
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	90	139	87	67	71	66	60	79	74	52	41	44	47	47
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0		0	0
Myanmar	1	3	5	5	3	3	3	2	2	0	0			0
New Zealand	0	0		0		0	0		0	0	0	0	0	0
Nigeria	1	2	2	1	3	5	4	6	7	10	11	9	13	6
Norway	7	6	6	7	6	6	6	6	4	3	4	5	4	4
Panama					0	0	0		0	0	0	0	0	0
Peru		0	0	0	0	0	0	0	0	0	0	0	0	2
Papua New Guinea	1	1	1	1	0	0	0	0	0	0	0	0	1	0
Philippines	2	2	2	3	5	6	6	7	4	3	3	4	3	1
Russian Federation	51	60	38	46	50	41	42	65	73	35	38	47	58	46
South Africa	2	2	1	1	2	3	3	2	2	2	2	2	1	1
Switzerland	3	3	4	3	2	2	2	2	2	2	1	1	1	1
Trinidad and Tobago											0			0
Thailand	3	4	4	4	4	8	8	8	8	6	3	2	1	2
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United States of America	82	78	67	51	41	31	30	31	30	29	43	34	48	111
Uruguay	0	0	0	0	1	1	0	1	3	2	2	3	5	7
Viet Nam	1	2	1	1	2	3	4	5	6	6	4	6	7	7

Source: EUROSTAT data, obtained 15 July 2013. Values are rounded to the nearest million euros. Note that a value of less than €500 000 is displayed as zero. A blank indicates no data reported by EUROSTAT.

Table 24: HS 44 imports to Belgium, ITTO producers and consumers, 1999–2012 (€ million)

		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries		306	415	331	267	265	269	287	293	267	218	157	198	256	266
ITTO consumer countries		1 113	1 246	1 242	1 220	1 233	1 292	1 361	1 528	1 881	1 735	1 501	1 633	1 714	1 768
Of which	EU27	991	1 119	1 132	1 125	1 136	1 188	1 205	1 356	1 664	1 503	1 293	1 399	1 451	1 451
	Non-EU27	123	127	110	96	97	104	156	173	217	232	208	234	264	317

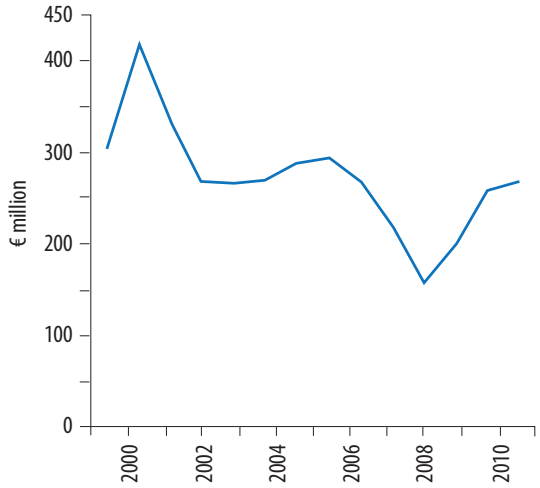
Source: EUROSTAT data, obtained 15 July 2013.

Table 25: Simple regression analysis of wood imports, gross domestic product and gross fixed capital formation, Belgium, 1999–2012

Dependent variable	Independent variable	Estimated R squared	Estimated equation
Annual value of HS 44 imports for **all** ITTO members	GDP	$R^2 = 0.688$	y = 0.0041x + 457.43
Annual value of HS 44 imports for **all** ITTO members	GFCF	$R^2 = 0.801$	y = 0.0192x + 507.62
Annual value of HS 44 imports for **all** ITTO members	Private-sector GFCF	$R^2 = 0.786$	y = 0.0196x + 581.87
Annual value of HS 44 imports for **all** ITTO members	Public-sector GFCF	$R^2 = 0.6235$	y = 0.3795x - 215.4
Annual value of HS 44 imports for **producer** ITTO members	GDP	$R^2 = 0.4205$	y = -0.0009x + 537.11
Annual value of HS 44 imports for **producer** ITTO members	Private-sector GFCF	$R^2 = 0.3409$	y = -0.0034x + 473.32

Note: GFCF = gross fixed capital formation; GDP = gross domestic product.

Figure 4: Value of Belgian HS 44 imports from ITTO producers, 1999–2012



Source: EUROSTAT data, obtained 15 July 2013.

Tables 26, 27 and 28 show the changing situation of Belgian imports of HS 44 products from Indonesia, China and Gabon. The purpose of presenting these data is to examine whether ITTO producer imports are trending towards value-added production as a consequence of changing market requirements and to better understand the nature of supply shifts. Indonesia, an ITTO producer, experienced a marked decline of exports to Belgium in the period 1999–2012. China, an ITTO consumer, considerably expanded its exports to Belgium over the period and Gabon, another ITTO producer, also expanded its exports. Table 26 shows that Belgium's HS 44 imports from Indonesia declined from €162 million in 1999 to €43 million in 2012. There was a downward trend or absolute decline in almost all HS 44 categories.

Table 27 shows that the value of Belgian HS 44 imports from China increased from €28 million in 1999 to €200 million in 2012. The value of sawnwood and veneer imports expanded greatly and then contracted during the period. Imports of plywood and other processed products grew appreciably.

Table 28 shows that the value of Belgian HS 44 imports from Gabon increased from just under €3 million in 1999 to more than €25 million in 2012. The most notable increase was in sawnwood after 2009, possibly as a result of Gabon's ban on log exports and emphasis on value addition.

Table 26: Value of Belgian HS 44 imports from Indonesia, 1999–2012 (€'000)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total imports	*162 053*	*210 921*	*168 282*	*125 337*	*122 788*	*121 607*	*127 118*	*108 283*	*70 746*	*55 953*	*47 216*	*52 759*	*47 786*	*43 131*
Fuelwood chips and sawdust	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charcoal, incl. from bamboo	638	551	518	491	788	485	450	461	756	641	1 109	875	463	1 695
Wood in the rough	0	12	24	0	23	142	0	0	44	1	0	55	0	3
Splits poles, etc.	37	0	0	0	3	14	7	14	3	7	6	0	0	0
Wood wool flour	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Railway sleepers	0	0	0	0	0	0	0	0	0	0	0	1	3	0
Sawn wood	7 470	13 941	10 157	5 178	7 524	5 788	7 223	6 727	2 194	2 618	1 384	1 112	803	796
Veneer sheets	0	0	36	23	25	151	0	50	58	135	0	108	1	0
Moulding parquet elements	26 291	55 419	35 020	24 750	34 608	30 555	38 941	42 998	28 705	15 581	11 751	12 428	12 122	10 008
Particleboard, oriented strandboard	0	0	0	0	0	0	15	0	0	0	0	0	0	0
Medium density fiibreboard	126	0	0	0	0	0	0	12	0	0	0	0	80	0
Plywood	105 346	111 805	103 492	79 047	69 162	70 348	65 671	43 085	24 585	26 904	23 257	26 980	24 920	21 137
Densified wood in blocks shapes	18	0	35	0	0	62	0	26	0	23	59	393	0	32
Wooden frames for mirrors pictures, etc.	310	234	51	54	89	132	72	57	37	94	102	92	50	21
Packing cases, boxes, etc.	48	9	6	13	0	0	0	3	1	1	4	2	1	5
Casks, vats, barrels, tubs	3	2	0	0	1	19	29	9	0	2	0	0	1	0
Tool broom handles	900	936	406	79	54	68	175	64	0	10	0	0	0	0
Builders' joinery and carpentry of wood including assembled flooring panels	15 338	20 432	11 954	11 254	6 292	7 931	8 106	8 673	6 929	5 057	4 344	4 735	5 895	7 110
Wooden tableware and kitchenware	1 082	435	558	130	86	191	216	173	78	88	199	92	54	87
Wood marquetry and inlaid wood; cases for jewellery or cutlery and similar articles of wood; statuettes and other ornaments of wood	1 465	1 655	1 484	1 793	1 618	2 262	2 314	2 322	3 483	2 826	2 616	2 717	1 900	1 562
Other articles of wood, such as clothes hangers	2 982	5 490	4 540	2 527	2 515	3 460	3 900	3 607	3 874	1 966	2 384	3 171	1 494	675

Note: Totals may not tally due to rounding. Source: EUROSTAT data, obtained 15 July 2013.

Table 27: Value of Belgian HS 44 imports from China, 1999–2012 (€'000)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total imports	*27 808*	*37 191*	*32 745*	*32 773*	*47 845*	*64 812*	*118 308*	*133 019*	*180 207*	*195 732*	*158 677*	*190 314*	*207 392*	*199 696*
Fuelwood, chips, sawdust	0	0	0	0	0	5	8	23	4	9	13	10	6	89
Charcoal, incl. from bamboo	1	1	6	10	15	13	302	239	294	471	528	458	632	498
Wood in the rough	0	0	0	0	0	0	0	1	1	90	69	7	130	23
Splits, poles, etc.	74	76	160	110	104	73	112	113	46	71	51	26	83	62
Wood wool, flour	0	0	0	0	0	0	0	0	0	3	0	0	0	1
Railway sleepers	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sawnwood	870	594	447	439	1 196	597	1 102	2 661	2 454	2 399	3 022	2 290	926	843
Veneer sheets	655	605	523	761	482	1 168	1 881	1 927	2 869	2 129	497	818	730	473
Moulding, parquet elements	361	853	1 547	1 803	1 800	6 622	13 842	15 536	20 181	22 877	19 455	19 276	16 806	14 004
Particle board, oriented strandboard	0	0	0	0	45	140	65	94	163	473	1 209	730	589	134
Medium density fibreboard	0	0	0	0	0	39	202	1 440	1 308	1 091	1 010	663	625	1 032
Plywood	110	86	2 388	5 194	11 030	16 218	34 975	40 097	63 886	54 842	32 683	38 409	57 669	59 038
Densified wood in blocks, shapes	0	0	0	0	0	12	3	3	4	312	1 188	3 384	5 356	2 483
Wooden frames for mirrors, pictures, etc.	4 354	4 387	2 877	2 944	5 295	3 825	4 522	5 821	6 173	7 217	8 159	11 172	12 827	14 298
Packing cases, boxes, etc.	56	587	99	253	150	363	251	405	654	1 125	958	1 166	885	634
Casks, vats, barrels, tubs	8	0	0	13	19	3	23	108	96	26	16	3	16	2
Tool, broom handles	105	11	6	86	131	67	195	180	96	220	345	170	773	465
Builders' joinery and carpentry of wood, including assembled flooring panels	4 542	7 756	7 125	3 061	4 564	12 783	32 799	34 162	41 487	61 849	53 615	70 155	67 157	65 544
Wooden tableware and kitchenware	1 942	2 837	1 944	2 061	1 901	2 496	3 041	3 127	4 245	4 460	4 897	5 247	5 382	5 242
Wood marquetry and inlaid wood; cases for jewellery or cutlery, and similar articles, of wood; statuettes and other ornaments of wood	7 059	8 541	7 971	8 949	11 424	8 880	8 767	12 257	15 304	14 075	9 907	11 318	9 603	11 563
Other articles of wood, such as clothes hangers	7 670	10 858	7 652	7 090	9 688	11 507	16 218	14 826	20 942	21 995	21 055	25 012	27 197	23 268

Source: EUROSTAT data, obtained 15 July 2013.

Table 28: Belgian HS 44 imports from Gabon, 1999–2012 (€'000)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total imports	*2 883*	*3 002*	*6 193*	*5 952*	*5 016*	*5 332*	*7 319*	*8 363*	*8 438*	*8 673*	*7 528*	*17 196*	*21 231*	*25 213*
Fuelwood, chips, sawdust	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Charcoal (including from bamboo)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood in the rough	1 080	1 415	3 737	2 323	1 645	2 159	4 002	2 989	2 338	3 694	3 967	979	509	137
Splits, poles, etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood wool, flour	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Railway sleepers	0	0	0	0	1	0	0	0	0	146	0	47	390	449
Sawnwood	1 377	1 248	861	1 692	1 552	1 552	2 075	3 194	2 998	2 826	2 347	13 490	18 496	21 995
Veneer sheets	25	33	1 013	1 937	1 599	1 509	995	1 315	1 956	1 721	833	1 647	1 436	1 567
Moulding, parquet elements	0	0	0	0	0	75	160	214	86	101	126	193	89	187
Particle board, oriented strand board	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium-density fibreboard	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plywood	401	305	582	0	213	36	86	624	871	110	254	830	262	777
Densified wood in blocks, shapes	0	0	0	0	5	0	0	0	0	0	0	0	0	0
Wooden frames for mirrors, pictures, etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Packing cases, boxes, etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Casks, vats, barrels, tubs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tool, broom handles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Builders' joinery and carpentry, including assembled flooring panels	0	0	0	0	0	0	0	26	39	74	0	10	48	100
Wooden tableware and kitchenware	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood marquetry and inlaid wood; cases for jewellery or cutlery, and similar articles, of wood; statuettes and other ornaments of wood	0	0	0	0	0	1	0	0	150	0	1	0	0	0
Other articles of wood, such as clothes hangers	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Note: Totals may not tally due to rounding. Source: EUROSTAT data, obtained 15 July 2013.

3.3 Italy: EU27 country not implementing a public timber procurement policy

To understand whether the implementation of Belgium's public TPP has had a material impact in the marketplace, it is helpful to compare trends with a roughly comparable country where there is no public TPP. This can shed light on whether the variation in imports in Belgium is likely related to the existence of a public TPP or might be better explained by broader market changes. Italy has been home to a large and vibrant furniture and construction industry, but a review of relevant Italian ministry websites, documents and personal communications did not indicate an explicit public policy on timber procurement.

The European Timber Trade Federation (2012) prepared a detailed analysis of Italy's wood imports and wood-supply situation, which is drawn on here. Table 29 shows the value of HS 44 imports to Italy in the period 1999–2012. The pattern closely resembles that for Belgium: the total value of imports from the EU27 climbed from €2.057 billion in 1999 to €2.488 billion in 2012, an increase of 21% over the period. Imports from ITTO producer countries declined by 68% over the period, from €419 million in 1999 to €174 million in 2012. Imports from non-EU27 ITTO consumers declined by 17%, from €386 million in 1999 to €320 million in 2012.

Since there was no public TPP in the period, there must have been other drivers of change in imports. The European Timber Trade Federation analysis noted that:

> "Over the last five years, Italy's large wood product manufacturing sector has struggled against declining construction activity and falling furniture consumption. Italian construction activity plunged in 2008 and 2009 and has remained low ever since. Although still host to one of the world's largest furniture industries, production value in the sector fell by around 20% between 2009 and 2011 to €20.27 billion. The decline is to due to falling furniture consumption in Italy (which plunged 13% in 2011) and increasing competition from other manufacturers, both within and outside the EU. These trends are reflected in a 21% fall in total solid timber supply to Italy between 2007 and 2011, from 28.4 million m^3 to 22.5 million m^3. Italy's wood manufacturers are heavily dependent on imports which accounted for 98% of all solid wood supply in 2011."[64]

The European Timber Trade Federation analysis highlighted the importance of imports to the construction and furniture sector in Italy. It found that:

> "In 2011, Italy imported 16.8 million m^3 (RWE) of solid timber products from inside the EU, 13% less than in 2007. Italy imported 5.2 million m^3 from outside the EU in 2011, 34% down compared to 2007. Imports from inside the EU consist primarily of softwood sawnwood from Austria and Germany. There has also been a significant rise in imports of glulam from Austria in recent years. Imports from outside the EU are dominated by hardwood logs and sawn from Croatia, softwood sawn from Ukraine, hardwood sawn from the USA, softwood logs and sawn from Switzerland, and softwood sawn and hardwood plywood from Russia. In terms of product groups, there has been very little change in the overall profile of Italian timber imports from outside the EU during the last 5 years."

Table 30 compares market outcomes between a country with a public TPP (Belgium) and a country without an explicit policy (Italy). The decline in imports from ITTO producers was much steeper in Italy (-58%) than in Belgium (-13%). Imports from non-EU ITTO consumer countries also suffered a decline in Italy (-17%).

Table 30 shows that the market outcome for ITTO members in Belgium, where a federal public TPP is in place, was not distinguishable from the market outcome in Italy, which has a similar economy but no such TPP.

Annex 2 provides data on HS 44 imports over the period 1999–2012 for a number of EU countries with and without public TPPs. The pattern is fairly consistent across the group. The value of timber imports tends to move with the economic cycle. The greatest value of imports from ITTO producers in Africa and Asia was commonly in the period 1999–2001. A significant decline began in the 2002–2003 recession—with total values already 20–30% below the peak—before most public TPPs were established. The period of economic expansion

64 European Timber Trade Federation (2012).

Table 29: HS 44 imports to Italy, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries														
Benin	1	2	3	2	2	2	2	2	2	1	1	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	107	137	128	116	112	121	117	118	113	103	61	66	65	56
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	15	17	24	20	21	20	23	26	22	21	7	7	8	5
Côte d'Ivoire	99	105	109	100	84	86	86	78	81	77	42	44	33	28
Democratic Republic of the Congo	5	4	3	4	6	8	9	14	18	7	4	2	4	2
Ecuador	1	1	0	0	0	0	1	0	1	0	0	0	0	0
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	20	28	37	39	46	64	72	65	64	56	32	43	34	28
Ghana	30	35	41	36	33	32	36	31	25	22	12	13	12	7
Guatemala	4	3	2	2	2	3	2	3	2	3	3	2	2	3
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	4	5	4	4	4	5	4	4	4	5	4	4	3	4
Indonesia	85	83	67	56	60	59	62	56	58	49	26	31	27	22
Liberia	8	17	21	19	10	0	0	0	0	0	2	0	0	2
Malaysia	25	29	29	32	39	33	32	36	31	34	25	24	20	15
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	1	1	2	1	1	1	1	0	0	0	0	0	0
Myanmar	11	15	15	15	18	21	19	18	25	2	0	0	0	1
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	2	2	1	1	2	2	2	1	1	1	0	1	0	0
Philippines	1	1	1	1	1	2	2	2	1	1	1	1	0	0
Togo	0	0	1	1	2	2	2	1	2	1	0	1	1	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (ITTO producer countries)	*419*	*484*	*489*	*453*	*445*	*459*	*472*	*456*	*451*	*386*	*222*	*242*	*210*	*174*
ITTO consumer countries														
Albania	7	9	8	9	7	7	7	7	8	8	7	8	8	8
Australia	0	1	0	1	2	1	1	1	1	0	0	0	0	0
China	34	46	51	47	52	73	103	148	213	218	150	193	190	158
European Union 27	2 057	2 330	2 234	2 360	2 340	2 817	2 789	3 270	3 357	2 863	2 342	2 835	2 915	2 488
Japan	1	1	0	1	0	0	0	0	0	0	0	0	0	0
New Zealand	1	1	0	0	0	0	0	0	0	0	0	1	3	2
Norway	4	2	1	0	0	0	0	0	0	0	0	0	0	0
Republic of Korea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	121	127	120	103	99	101	98	112	105	96	81	86	75	66
United States of America	218	244	201	181	166	168	156	158	177	137	97	124	117	86
Subtotal (non EU27 ITTO consumer countries)	386	430	383	342	327	351	364	427	504	459	335	412	394	320
Total (ITTO consumer countries)	*2 443*	*2 760*	*2 616*	*2 702*	*2 667*	*3 168*	*3 153*	*3 697*	*3 861*	*3 322*	*2 676*	*3 248*	*3 309*	*2 808*

Note: Totals may not tally due to rounding. Source: European Timber Trade Federation (2012).

Table 30: HS 44 import values in Belgium and Italy, 1999 and 2012

Country/ITTO group		HS 44 import value, 1999 (€ million)	HS 44 import value, 2012 (€ million)	Percentage change
Belgium				
ITTO consumers		1 113	1 768	59
Of which	EU27	991	1 451	46
	Non-EU27	123	317	158
ITTO producers		306	266	-13
Italy				
ITTO consumers		2 443	2 808	15
Of which	EU27	2057	2 488	21
	Non-EU27	386	320	-17
ITTO producers		419	174	-58

Note: Totals may not tally due to rounding. Source: European Timber Trade Federation (2012).

in 2005–2008 was advantageous for many ITTO members, but a reorientation of trade in Asia was evident.

There was a general economic contraction across Europe in 2009–2012, which slowed the pace of construction and imports. The contraction was particularly profound in Ireland, Italy, Greece, Portugal and Spain. A country-by-country examination of HS 44 import data suggests that, as a bloc, EU27 countries gained market share in HS 44 imports in this period. The share of ITTO non-EU27 consumers varied, growing in some cases and declining in others. ITTO producer countries experienced declines in import value to the EU of up to 60%.

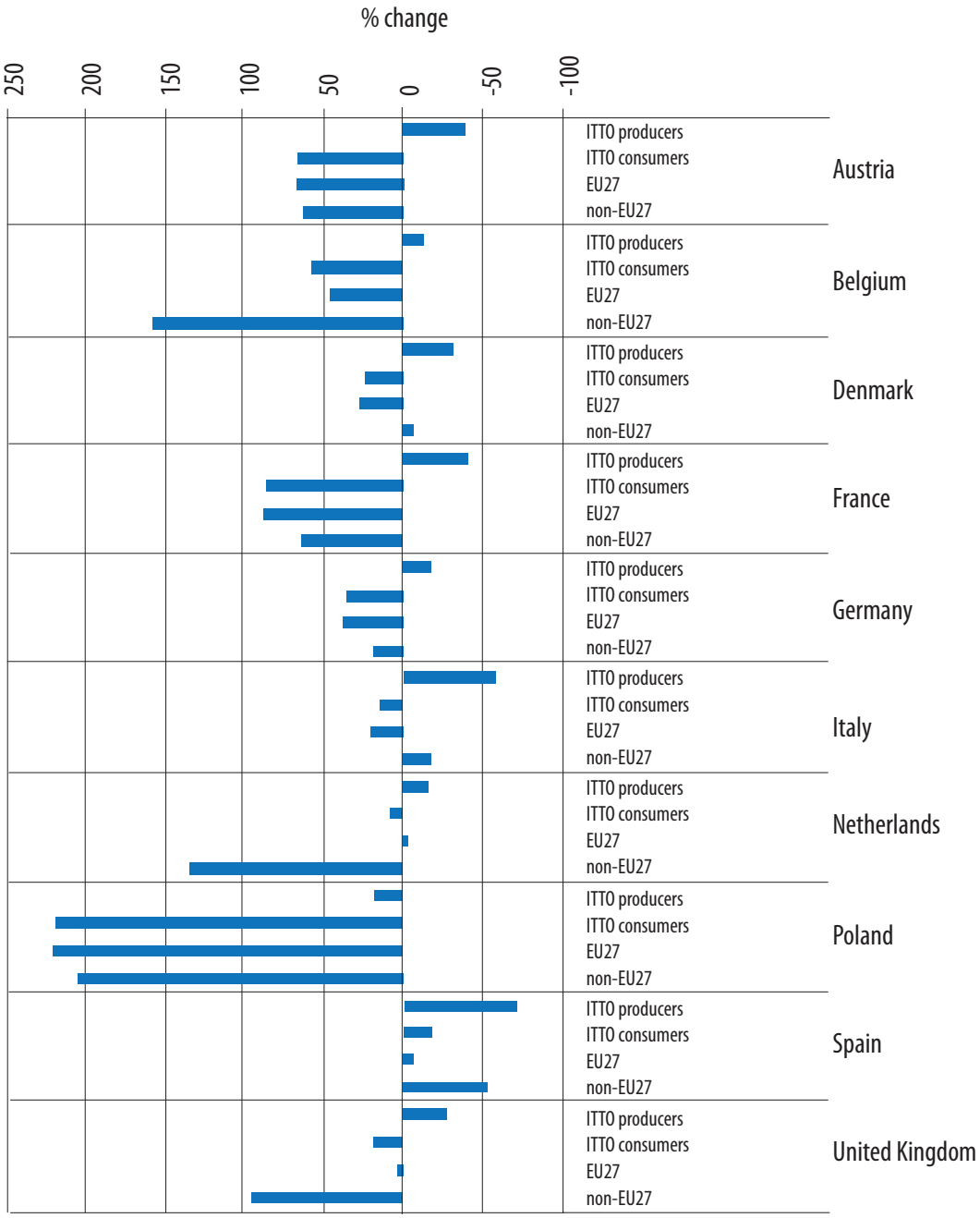
The value of HS 44 imports from China has expanded enormously in almost every EU country in recent years. This reorientation of trade complicates the analysis of TPPs; many ITTO producers have increased their exports of primary timber products to China, and ultimately some of those products are exported to Europe as HS 44 products.

Figure 5 (which is based on the final table in Annex 2) shows the change in HS 44 import values in Austria, Belgium, Denmark, France, Germany, Italy, the Netherlands, Poland, Spain and the UK in the period 1999–2012. Austria, Belgium, Denmark, France, Germany, the Netherlands and the UK have institutionalized public TPPs requiring standards related to sustainability or legality, or both. Italy, Poland and Spain do not appear to have formal TPPs. Italy and Spain were included in the figure for comparison because they have been robust importers from ITTO producer countries in the past. Poland was included as a way of increasing understanding of market changes in northern European countries, many of which sustained moderate to strong growth during the EU's economic crisis.

Poland was the only country in which both ITTO consumer and producer countries experienced growth in import values over the period under review; in every other case, HS 44 import values declined for all ITTO producers. The value of imports from ITTO producers contracted more severely in Spain and Italy (without public TPPs) than in the six EU countries with such policies. It is not possible to conclude, therefore, that public TPPs have had a material negative impact on markets. Imports from ITTO producers declined across the board in EU countries, largely but not wholly as a consequence of the EU's economic recession. Where the economy has been more resilient or there has been an uptick in construction, imports from ITTO producers have expanded rapidly.

A much more profound change in the market has been a general decline in tropical timber imports to Europe and the growth of imports from all other regions, including China. This may be due to changing preferences among end-use consumers, changes in the cost of production of tropical timber products, or changes in the technologies of end-use applications. Chapter 4 of this report examines some of the economic issues that challenge tropical timber and their ability to meet the requirements of TPPs.

Figure 5: Percentage change in HS 44 imports to selected European Union countries with and without public timber procurement policies, 1999–2012



3.4 Wood supplies meeting the requirements of public timber procurement policies

The supply of timber products offering assurances of legality and sustainability has increased over time. The implementation standards of all national-level public TPPs accept a combination of FSC and PEFC certificates. While there appeared to be supply limitations when the TPPs first came into effect, ITTO has noted (in reports of its Committee on Economic Information and Market Intelligence) a rapid expansion in the area of forest certified by the FSC and the PEFC. The PEFC (2012) also reported that:

> "... the global certified area has grown by 40% over the past five years and Chain of Custody certification has increased four-fold."

The FSC and the PEFC both assert that there is a good supply of their labelled products. For example, in its 2012 global market survey, the FSC (2012) reported that:

> "There is sufficient supply of FSC Mix, FSC Controlled Wood and FSC recycled materials and products in the market. Also for FSC 100% a majority of 53% believes there is enough supply in the market."

Table 31 presents FSC and PEFC data on the area of forest certified, by country, and the number of chain-of-custody certificates issued. Neither system reports data on the volume of products sold. It can be inferred from the data, however, that there is sufficient labelled product to meet the demands originating from activities guided by public TPPs. The data also show that few timber suppliers in ITTO producer countries have achieved the certification required to meet the conditions of public TPPs.

3.5 Impacts of TPPs on costs

TPPs imply that a timber purchaser sets a standard that must be met by suppliers. A more rigorous standard (i.e. legality and sustainability) presents new challenges to suppliers and implies higher delivered costs, and some suppliers may be unable or unwilling to meet it. They need to weigh the profit that can be obtained by serving this procurer (and meeting the higher standards) against serving other markets or other buyers for whom the standards are lower.

The cost to timber suppliers of serving Home Depot, Boise Cascade and the New Zealand market, for example, is the cost of obtaining certification using one or more of the nationally or internationally recognized forest certification schemes, as well as an associated chain-of-custody certificate. Home Depot recognizes only FSC certification; Boise Cascade accepts the FSC and a number of others, such as the SFI and the PEFC; the New Zealand TPP recognizes these and other international certification schemes as well as national-level schemes. The New Zealand TPP underscores that it does not endorse one scheme over another.

In the United States, the legality standard established by the 2008 Lacey Act amendment applies equally to all suppliers—domestic or international. All suppliers must exercise "due care" in ensuring that all relevant laws of the supplying country have been met.

The integration of the EUTR in national TPPs presents particular challenges that are still being resolved. Many of the existing national TPPs in the EU were adopted 5–10 years before the EUTR and its implementing regulations were finalized. These national policies put sustainability foremost and some make little mention of legality; the FLEGT VPA, for example, was not mentioned in any of the original TPPs. Countries are trying to retrofit their national policies and procedures to accommodate the EUTR and FLEGT VPA provisions.

For example, most of the national TPPs accept FSC and PEFC certification as sufficient for meeting their requirements, and yet the due-diligence rules of the EUTR indicate that FSC and PEFC certification is useful information that could assist operators but is not wholly sufficient to meet requirements. The uncertainty caused by discrepancies such as this make production planning and marketing extremely difficult for operators in tropical countries. It is not possible to estimate the financial costs associated with the prolonged uncertainty about how the EU markets will shape their rules, but it is also unrealistic to say that the effects are negligible.

The EUTR and the FLEGT regulation consider that FLEGT-licensed timber meets the legality standard without any additional documentation, and such timber can be placed freely on the EU market. Establishing and validating TLASs in

Table 31: Area certified and number of chain-of-custody certificates issued by the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification, ITTO producer countries, 2013

Country	Forest Stewardship Council		Programme for the Endorsement of Forest Certification		Total	
	Area certified (ha)	No. of chain-of-custody certificates	Area certified (ha)	No. of chain-of-custody certificates	Area certified (ha)	No. of chain-of-custody certificates
ITTO producers						
Benin					0	0
Cambodia	12 746	1			12 746	1
Cameroon	1 013 374	12			1 013 374	12
Colombia	113 520	31	0	1	113 520	32
Congo	1 574 310	2			1 574 310	2
Côte d'Ivoire		1			0	1
Democratic Republic of the Congo					0	0
Ecuador	53 765	5			53 765	5
Fiji					0	0
Gabon	1 873 505	9			1 873 505	9
Ghana	1 675	6			1,675	6
Guatemala	433 596	14			433 596	14
Guyana					0	0
Honduras	107 343	3			107 343	3
India	418 018	245	0	13	418 018	258
Indonesia	1 679 117	191	0	17	1 679 117	208
Liberia		1			0	1
Malaysia	464 568	158	4 649 912	253	5 114 480	411
Mali					0	0
Mexico	742 669	70	0	1	742 669	71
Mozambique	51 550	1			51 550	1
Myanmar					0	0
Panama	51 216	2			51 216	2
Papua New Guinea					0	0
Peru	915 365	31	0	7	915 365	38
Philippines		6	0	2	0	8
Togo					0	0
Trinidad and Tobago					0	0
ITTO consumers						
Albania					0	0
Australia	841 693	306	10 452 055	243	11 293 748	549
Austria	575	224	2 698 433	439	2 699 008	663
Belgium	21 016	304	289 050	244	310 066	548
Bulgaria	194 268	42	0	2	194 268	44
China	2 881 609	3 143	0	195	2 881 609	3 338
Cyprus					0	0
Czech Republic	50 185	146	1 845 321	156	1 895 506	302
Denmark	198 664	243	250 986	68	449 650	311
Estonia	1 141 098	171	897 688	26	2 038 786	197
Finland	431 813	97	21 068 333	186	21 500 146	283
France	19 463	801	4 577 972	2 065	4 597 435	2 866
Germany	570 791	1 997	7 387 074	1 511	7 957 865	3 508
Greece		11	0	0	0	11
Hungary	321 561	104	0	14	321 561	118
Ireland	446 591	88	0	32	446 591	120
Italy	33 723	1 675	766 171	642	799 894	2 317
Japan	400 692	1 104	0	213	400 692	1 317

Table 31 (continued)

Country	Forest Stewardship Council		Programme for the Endorsement of Forest Certification		Total	
	Area certified (ha)	No. of chain-of-custody certificates	Area certified (ha)	No. of chain-of-custody certificates	Area certified (ha)	No. of chain-of-custody certificates
Republic of Korea	375 175	192	0	6	375 175	198
Latvia	1 740 297	203	1 683 641	26	3 423 938	229
Lithuania	1 058 750	157	0	8	1 058 750	165
Luxembourg	20 404	19	30 438	20	50 842	39
Malta		9			0	9
Netherlands	169 684	1 362	0	485	169 684	1 847
New Zealand	1 487 489	150	0	18	1 487 489	168
Norway	266 336	37	9 125 902	41	9 392 238	78
Poland	6 998 775	956	7 304 356	75	14 303 131	1 031
Portugal	327 763	123	233 918	58	561 681	181
Romania	2 413 319	155	0	18	2 413 319	173
Slovakia	144 541	101	1 233 364	47	1 377 905	148
Slovenia	256 096	162	0	10	256 096	172
Spain	149 464	576	1 589 319	645	1 738 783	1 221
Sweden	11 676 119	280	9 275 801	127	20 951 920	407
Switzerland	610 868	517	205 974	65	816 842	582
United Kingdom	1 567 623	2 352	1 298 047	1 156	2 865 670	3 508
United States of America	14 308 009	3 350	32 961 753	317	47 269 762	3 667
ITTO producer countries	*9 506 337*	*789*	*4 649 912*	*294*	*14 156 249*	*1 083*
ITTO consumer countries	*51 124 454*	*21 157*	*115 175 596*	*9 158*	*166 300 050*	*30 315*
ITTO members	**60 630 791**	**21 946**	**119 825 508**	**9 452**	**180 456 299**	**31 398**

Note: Double-counting may occur in cases where companies have achieved certification under both systems. Totals may not tally due to rounding. Sources: www.fsc.org and pefc.org, accessed September 2013. A blank indicates no reported accreditation.

FLEGT VPA countries has taken longer than foreseen, however, and there is currently no FLEGT-licensed timber. Chapter 4 addresses some of the challenges of establishing TLASs.

National public TPPs go beyond the requirement for timber to be "legal", specifying that timber should be from sustainable sources. The rules for the treatment of FLEGT-licensed timber products are not yet published. In the UK, the CPET has alerted contractors serving the UK Government that they will need chain-of-custody assurance from the port of entry of FLEGT-licensed timber to the worksite. The CPET has also stated that timber imported from FLEGT VPA countries that do not yet have approved TLASs will be processed according to Category B verification practices.

3.6 Financial implications for exporter countries

Evaluating the financial implications of TPPs for exporter countries requires a base for analysis. Many financial measures in the forest sector, such as employment, are poorly documented and heavily influenced by domestic production and consumption. A reasonably clean and uniform measure that can be applied across many countries is total export earnings from HS 44 products.

Table 32 shows that the global value of HS 44 imports grew from US$70 billion in 2001 to US$126 billion in 2011, or by about 82%. It is worth noting that global value peaked at US$129 billion in 2007 before collapsing to US$92 billion in 2009. Table 33 shows that, collectively, wood-product exporters suffered notable declines in earnings in 2007–2008 and major declines of up to 33% in 2008–2009.

The data in these two tables are noteworthy because they serve as benchmarks against which to compare the export earnings of ITTO producers. Table 34 shows the HS 44 export earnings of ITTO producer countries in the period 2001–2011. ITTO producer-country export earnings rose 48% during the period, from US$8.3 billion in 2001 to US$12.3 billion in 2011. Table 35 shows the year-on-year variation in HS 44 export earnings of ITTO producers, both as a group and individually.

Table 32: Global exports of HS 44 products, by value, 2001–2011 (US$ million)

HS44 code	Description	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
HS44	Total world	69 564	73 515	83 071	101 143	107 307	114 970	129 456	122 189	92 229	109 939	126 039
4407	Wood sawn/chipped lengthwise sliced/peeled	23 575	24 260	26 017	31 583	32 990	34 313	37 671	32 353	24 430	30 058	34 035
4403	Wood in the rough	9 350	9 494	10 559	12 358	13 181	14 191	17 602	16 635	11 483	15 014	18 575
4412	Plywood, veneered panels and similar laminated wood	7 083	7 572	8 557	10 878	11 633	12 731	14 004	13 120	9 039	11 345	13 142
4418	Builders' joinery and carpentry of wood	6 057	6 602	7 739	9 458	10 161	11 689	13 185	13 047	10 130	11 233	12 459
4411	Fibreboard of wood or other ligneous materials	3 621	4 425	5 322	6 731	7 453	7 910	9 268	9 104	7 365	8 208	9 491
4401	Fuelwood; wood in chips or particles; sawdust and wood waste and scrap	2 523	2 508	2 896	3 432	3 880	4 409	5 272	6 229	5 384	6 780	8 189
4410	Particleboard and similar boards of wood or other ligneous materials	3 796	4 072	5 474	7 437	7 565	7 471	7 599	7 071	5 316	6 170	7 044
4421	Articles of wood, nes	2 973	3 203	3 782	4 508	4 743	5 128	5 687	5 698	4 805	5 208	5 760
4409	Wood continuously shaped along any edges	2 821	3 157	3 664	4 753	5 142	5 817	6 114	5 526	4 081	4 668	4 913
4408	Veneer sheets and sheets for plywood and other wood sawn lengthwise	2 458	2 628	2 875	3 340	3 490	3 659	4 040	3 759	2 574	2 912	3 179
4415	Packaging materials of wood	1 396	1 445	1 729	1 862	1 925	2 121	2 722	2 934	2 120	2 443	2 909
4420	Wood marquetry & inlaid wood; caskets and cases or cutlery of wood	1 294	1 350	1 437	1 510	1 565	1 655	1 858	1 831	1 424	1 567	1 666
4419	Tableware and kitchenware of wood	556	583	639	695	731	798	885	979	800	863	976
4402	Wood charcoal (including shell or nut charcoal)	288	304	384	425	503	537	627	738	765	802	962
4414	Wooden frames for paintings, photographs, mirrors or similar objects	764	846	858	949	972	1 022	1 106	1 093	918	945	910
4416	Casks, barrels, vats, tubs etc. of wood	361	383	386	413	456	517	622	721	606	538	609
4406	Railway or tramway sleepers (cross-ties) of wood	147	167	200	191	228	234	262	378	270	390	306
4417	Tools, tool and broom bodies and handles shoe lasts of wood	171	181	193	211	224	240	271	288	239	266	328
4413	Densified wood in blocks, plates, strips or profile shapes	159	150	173	193	218	262	354	360	241	262	281
4404	Hoopwood; split poles; piles, pickets, stakes; chipwood	143	151	147	171	195	209	237	250	179	193	217
4405	Wood wool; wood flour	28	32	40	45	51	58	70	75	60	75	87

Note: Totals may not tally due to rounding.

Table 33: Year-on-year variation in global HS 44 export value, 2001–2002 to 2010–2011

HS44 code	Description	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011
		%									
HS44	Total world	5.7	13.0	21.8	6.1	7.1	12.6	-5.6	-24.5	19.2	14.6
4407	Wood sawn/chipped lengthwise, sliced/peeled	2.9	7.2	21.4	4.5	4.0	9.8	-14.1	-24.5	23.0	13.2
4403	Wood in the rough	1.5	11.2	17.0	6.7	7.7	24.0	-5.5	-31.0	30.8	23.7
4412	Plywood, veneered panels and similar laminated wood	6.9	13.0	27.1	6.9	9.4	10.0	-6.3	-31.1	25.5	15.8
4418	Builders' joinery and carpentry of wood	9.0	17.2	22.2	7.4	15.0	12.8	-1.0	-22.4	10.9	10.9
4411	Fibreboard of wood or other ligneous materials	22.2	20.3	26.5	10.7	6.1	17.2	-1.8	-19.1	11.4	15.6
4401	Fuel wood; wood in chips or particles; sawdust and wood waste and scrap	-0.6	15.5	18.5	13.0	13.6	19.6	18.1	-13.6	25.9	20.8
4410	Particle board and similar board of wood or other ligneous materials	7.3	34.4	35.8	1.7	-1.2	1.7	-6.9	-24.8	16.1	14.2
4421	Articles of wood, nes	7.8	18.1	19.2	5.2	8.1	10.9	0.2	-15.7	8.4	10.6
4409	Wood continuously shaped along any edges	11.9	16.1	29.7	8.2	13.1	5.1	-9.6	-26.2	14.4	5.2
4408	Veneer sheets and sheets for plywood and other wood sawn lengthwise	6.9	9.4	16.2	4.5	4.8	10.4	-7.0	-31.5	13.1	9.1
4415	Packaging materials of wood	3.5	19.7	7.7	3.4	10.2	28.4	7.8	-27.8	15.2	19.1
4420	Wood marquetry and inlaid wood; caskets and cases or cutlery of wood	4.4	6.4	5.0	3.6	5.8	12.2	-1.4	-22.3	10.0	6.4
4419	Tableware and kitchenware of wood	4.9	9.5	8.7	5.3	9.2	10.9	10.6	-18.2	7.8	13.1
4402	Wood charcoal (including shell or nut charcoal)	5.9	26.2	10.6	18.4	6.7	16.7	17.8	3.7	4.8	19.9
4414	Wooden frames for paintings, photographs, mirrors or similar objects	10.8	1.4	10.6	2.4	5.1	8.3	-1.2	-16.0	3.0	-3.7
4416	Casks, barrels, vats, tubs, etc. of wood	6.1	0.6	7.1	10.3	13.4	20.3	15.9	-16.0	-11.2	13.2
4406	Railway or tramway sleepers (cross-ties) of wood	13.5	19.9	-4.9	19.5	2.8	11.9	44.3	-28.7	44.7	-21.6
4417	Tools, tool and broom bodies and handles, shoe lasts of wood	6.3	6.3	9.4	6.3	7.1	13.0	6.0	-16.9	11.2	23.6
4413	Densified wood, in blocks, plates, strips or profile shapes	-5.6	15.1	11.6	13.1	19.9	35.2	1.8	-33.0	8.6	7.0
4404	Hoopwood; split poles; piles, pickets, stakes; chipwood	5.1	-2.4	16.6	13.4	7.6	13.2	5.5	-28.5	8.1	12.4
4405	Wood wool; wood flour	16.6	22.8	14.0	13.6	12.2	21.2	7.1	-20.0	24.4	16.6

Table 34: HS 44 export earnings of ITTO producers, 2001–2011 (US$ million)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total world	69 564	73 515	83 071	101 143	107 307	114 970	129 456	122 189	92 229	109 939	126 039
ITTO producer countries	*8 281*	*8 015*	*8 450*	*9 577*	*10 355*	*11 660*	*12 153*	*12 207*	*9 621*	*11 212*	*12 291*
Benin	3	8	5	4	4	5	4	5	4	5	7
Cambodia	23	16	9	9	10	10	9	4	5	38	52
Cameroon	288	274	355	462	433	528	508	601	355	446	482
Colombia	29	34	31	32	33	39	68	69	46	35	33
Congo	-	-	-	-	-	-	214	225	170	115	-
Côte d'Ivoire	277	-	259	345	340	308	356	380	218	236	205
Democratic Republic of the Congo	26	28	40	67	98	143	192	204	112	131	158
Ecuador	69	65	85	86	96	116	148	176	155	206	228
Fiji	-	19	17	24	28	22	32	38	20	43	-
Gabon	331	291	193	372	475	502	665	634	558	-	-
Ghana	-	-	179	-	640	281	299	286	221	196	483
Guatemala	23	17	20	21	49	28	67	63	51	48	57
Guyana	37	38	30	50	50	66	72	58	46	43	51
Honduras	141	58	60	58	46	67	63	59	40	40	29
India	30	43	50	82	100	120	149	187	147	164	221
Indonesia	3 354	3 278	3 181	3 271	3 111	3 356	3 128	2 880	2 341	2 936	3 375
Liberia	109	147	103	0	-	0	0	1	6	7	39
Malaysia	2 812	2 953	3 139	3 798	4 049	4 656	4 695	4 725	3 767	4 319	4 489
Mali	0	0	0	0	0	0	0	0	-	0	-
Mexico	387	358	331	381	408	468	422	388	295	288	299
Mozambique	12	18	16	34	32	36	32	39	38	56	146
Myanmar	-	-	-	-	-	-	-	-	-	607	-
Panama	9	7	9	-	9	15	13	10	7	16	30
Papua New Guinea	83	105	67	183	-	-	-	-	-	-	-
Peru	78	103	97	122	153	199	196	209	149	164	158
Philippines	147	144	165	167	181	688	814	960	866	1 068	1 747
Togo	2	1	1	1	1	-	1	1	1	2	2
Trinidad and Tobago	11	10	8	8	10	6	6	6	4	5	-

Note: Totals may not tally due to rounding.

On balance, the HS 44 export earnings of ITTO producer countries as a group were more volatile than global export earnings up to 2006 and then more stable than global earnings after 2006. The export earnings of ITTO producer countries declined less during the global recession of 2008–2009 and gained less in the more prosperous period of 2009–2011. In 2011, the HS 44 export earnings of ITTO producer countries exceeded their level in 2007, whereas global export earnings in 2011 were below the 2007 peak.

Thus, the HS 44 export earnings of ITTO producer countries were affected less by the global financial crisis than were global HS 44 export earnings. The EU27 has been importing progressively lower levels of HS 44 products from ITTO producer countries, however. This trend began before the establishment of public TPPs in EU countries. The decline in HS 44 imports from ITTO producer countries occurred throughout Europe but was greatest in Italy, Spain, Greece and a number of other countries without public TPPs.

In Australia and New Zealand, ITTO producer countries have, as a group, sustained their market share during a period of relative prosperity. The HS 44 exports of Asian ITTO producer countries to Australia increased more than fivefold from 2001 to 2012.

US imports of HS 44 products declined from about US$25.6 billion in 2005 to just under US$12 billion in 2011. This trade is dominated by softwood lumber imports from Canada, but ITTO producer countries maintained their share of total imports during this period of market contraction. The United States market for HS 44

imports had contracted by more than US$10 billion by the end of 2008. The entry into force of the 2008 Lacey Act amendment occurred after this strong market correction, and its implementation occurred during a period of increasing imports from ITTO producer countries.

Table 35: Year-on-year variation in HS 44 export earnings, ITTO producers, 2001–2002 to 2010–2011

	2001–2002	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011
	%									
Total world	*5.7*	*13.0*	*21.8*	*6.1*	*7.1*	*12.6*	*-5.6*	*-24.5*	*19.2*	*14.6*
ITTO producer countries	*-3.2*	*5.4*	*13.3*	*8.1*	*12.6*	*4.2*	*0.4*	*-21.2*	*16.5*	*9.6*
Benin	167.9	-44.5	-21.0	16.8	25.5	-25.0	23.7	-9.5	1.6	44.8
Cambodia	-30.1	-41.5	-0.3	1.6	4.0	-9.7	-60.5	34.2	695.0	37.8
Cameroon	-5.1	29.9	30.1	-6.3	22.1	-3.9	18.3	-40.9	25.8	8.0
Colombia	16.7	-9.0	2.6	3.0	19.3	71.7	2.5	-33.7	-24.2	-4.9
Congo	-	-	-	-	-	-	5.5	-24.7	-32.4	-
Côte d'Ivoire	-	-	33.5	-1.6	-9.5	15.8	6.7	-42.6	8.1	-13.0
Democratic Republic of the Congo	9.7	40.2	68.3	45.9	46.5	34.5	6.0	-45.1	16.5	21.1
Ecuador	-5.2	30.3	1.2	12.2	20.6	27.5	18.6	-11.5	32.4	10.7
Fiji	-	-8.9	42.6	14.4	-19.6	44.9	16.4	-48.0	117.1	-
Gabon	-12.1	-33.5	92.5	27.6	5.6	32.4	-4.7	-11.9	-	-
Ghana	-	-	-	-	-56.1	6.5	-4.4	-22.6	-11.1	145.8
Guatemala	-29.3	18.8	7.6	130.5	-41.9	137.5	-6.4	-18.7	-5.2	18.0
Guyana	3.1	-22.3	67.7	0.3	32.5	9.6	-19.1	-21.9	-5.6	17.6
Honduras	-59.1	3.1	-3.1	-19.7	44.6	-5.7	-7.3	-32.3	-0.1	-27.1
India	40.9	17.0	64.9	21.0	20.7	24.4	25.2	-21.7	11.8	34.7
Indonesia	-2.2	-3.0	2.9	-4.9	7.9	-6.8	-7.9	-18.7	25.4	15.0
Liberia	35.7	-30.4	-99.8	-	-	-59.7	1158.8	416.1	24.0	467.2
Malaysia	5.0	6.3	21.0	6.6	15.0	0.8	0.6	-20.3	14.6	4.0
Mali	-41.5	-39.5	239.1	-70.5	-17.4	842.1	87.2	-	-	-
Mexico	-7.3	-7.6	15.1	7.1	14.6	-9.8	-8.0	-24.0	-2.3	3.8
Mozambique	45.6	-11.2	110.4	-3.7	10.0	-10.8	22.7	-2.0	46.6	161.4
Myanmar	-	-	-	-	-	-	-	-	-	-
Panama	-17.1	26.3	-	-	64.3	-14.4	-24.6	-28.3	118.1	93.8
Papua New Guinea	26.8	-36.3	172.8	-	-	-	-	-	-	-
Peru	32.4	-5.5	25.4	25.2	29.9	-1.4	6.8	-28.6	9.6	-3.5
Philippines	-2.2	15.0	0.9	8.2	281.1	18.2	18.0	-9.8	23.4	63.5
Togo	-54.6	-36.2	0.8	87.5	-	-	127.2	-13.1	64.4	31.4
Trinidad and Tobago	-9.5	-11.6	-5.7	19.3	-36.0	-6.4	8.8	-40.3	33.7	-

4 CHALLENGES FACED BY PRODUCERS AND CONSUMERS IN COMPLYING WITH THE REQUIREMENTS OF TIMBER PROCUREMENT POLICIES AND IN DEVELOPING AND IMPLEMENTING SUCH POLICIES

4.1 Difficulties and obstacles faced by tropical timber producers and consumers in meeting the requirements of timber procurement policies

In their adoption or amendment, all known national public TPPs establish two means for complying with their requirements. One is the use of nominated certificates of forest management and certificates demonstrating chain-of-custody control. This is often referred to as Category A compliance. A second means involves meeting a set of explicit standards by the provision of documentation (which may include certificates of forest management and chain of custody); this is often referred to as Category B compliance.

The detail and rigour of the requirements of national-level public TPPs for legal and/or sustainable timber has caused most users of the system—government procurement agents and central government contractors—to rely exclusively on labelled timber products. The authors could not find any evidence of a Category B acceptance.

All known public and private TPPs accept the combined FSC forest certification and associated FSC chain-of-custody certificate as fully meeting their requirements. In principle, there is no difficulty or obstacle for tropical timber producers and consumers if all forest owners, all wood-product producers and all wood-product importers only process, transport or import FSC-certified wood.

In their implementation, some but not all public and private TPPs accept PEFC certificates. An even smaller set of TPPs accepts certificates from national standard-setting processes.

In principle, tropical timber producers and consumers should be able to meet the requirements of TPPs. In practice, however, tropical timber producers in ITTO producer countries find it extremely difficult to understand the applicable rules and standards.

The shared principles are straightforward. No ITTO member country condones the practice of illegal timber harvesting or trade in illegal timber products. No ITTO member country wishes to export illegally produced products, and no ITTO member country wishes to import products not meeting the laws of the exporting country. All ITTO member countries have affirmed this through their support of decisions by the International Tropical Timber Council on illegal trade.

Equally, ITTO members have endorsed numerous guidelines on SFM covering various aspects of tropical forests—such as plantations, natural forests and biodiversity conservation. The International Tropical Timber Council has taken various decisions supporting forest certification, standard-setting and the role of third-party audits as a voluntary practice.

In most ITTO member countries, the harvesting, processing, export and import of tropical timber products is conducted by private-sector entities. Each ITTO member country faces challenges in supervising these firms and ensuring that they meet national laws and standards. All ITTO members seek additional funds, either internally or externally, to improve their supervision of private-sector compliance with national laws and regulations.

Forest certification, chain-of-custody certification and third-party auditing emerged as private-sector solutions to broker trust and confidence in the products sold by private-sector firms. Numerous national certification standards were established to help reduce the costs of building confidence in forest products and helping small landowners maintain access to domestic and international markets.

Forest certification is a competitive field with different systems vying for recognition, market

share and customer support. The challenge is not necessarily the process of administering the forest certification systems themselves, but each system has a cadre of champions promoting specific issues or causes within the standard-setting process of each forest certification system.[65]

The challenge faced by tropical timber producers and consumers is that the implementation of public and private TPPs has fallen under the sway of competing forces in forest certification.

Well-known leading environmental NGOs were pivotal in launching the FSC. They have remained key supporters, feeling strongly that the FSC's governance process is more socially responsive than that of other systems. These environmental NGOs have been key supporters in the establishment of national public TPPs, and they have been instrumental in persuading important private firms to embrace FSC standards. They have also been effective in working at the national level in committees and review processes to champion FSC certification and to cast doubt on the use of other standards. In the end, the push by the NGOs has been less about economics or following the right procedures; the outcomes they have achieved are a consequence of effective public advocacy based on deep convictions.

For example, Australia and New Zealand recognize most national systems of forest certification and chain-of-custody certification as documenting "legal and sustainable" timber; their public TPPs require legal timber but prefer timber from sustainably managed sources. The Malaysia Timber Certification Scheme (MTCS) is one of the recognized forest certification standards verifying legality and sustainability.

As mentioned earlier, a procedural factor that varies among governments with public TPPs is the process for reviewing forest certification systems and other evidence of compliance with implementing standards. The implementation of the Netherlands' public TPP is guided by the document *Framework for Evaluating Evidence of Compliance with Timber Procurement Requirements (February 2010)*. The relevant minister established the Timber Procurement Assessment System and the TPAC, which serves the relevant minister in an advisory capacity. The TPP requires that timber meets a rigorous test of sustainability through "a set of clear 'Procurement Criteria for Timber' which have been developed with Dutch stakeholders".[66]

The Dutch review concluded that the MTCS did not meet the TPP standards for sustainability. Specifically, the published TPAC review of the MTCS[67] concluded that standards for social aspects, the interests of stakeholders and biological diversity maintained or enhanced were not met. TPAC's Stakeholder Forum Report of 3 March 2010, in which it documented public comments on its review of the MTCS, is effectively a dialogue with Greenpeace (Netherlands).

When TPAC considered the adoption of the PEFC International label, procedural appeals were launched claiming that the PEFC could not maintain sufficiently rigorous oversight of national systems under the PEFC umbrella—such as the Australian Forestry Standard and the SFI—and thus, under the umbrella label, there was a risk that unsustainably managed timber could be procured for use by the national government. TPAC persuaded the arbitration board that it could demand adequate compliance from the national systems directly and from the PEFC, where needed.

By recounting this example we are not calling into question the decisions of TPAC or the right of concerned national NGOs to challenge government. The example demonstrates unequivocally the active advocacy of national groups in standard-setting for the implementation of public TPPs and the competition—direct or implied—among forest certification systems.

It should be noted that this dispute over the acceptability of certification systems is not limited to tropical suppliers. The United States Green Building Council (USGBC) is in the process of establishing its newest Leadership in Energy and Environmental Design (LEED) rating tool, LEED v4. The SFI, the CSA and the American Tree Farm System have had a long-running debate with the USGBC on LEED's "building product disclosure and optimization—sourcing of raw materials" credit, which only recognizes certified timber from the FSC.

65 This is not unusual in commerce, and the tropical timber trade has not been singled out. The giants of the electronics world have battled over every imaginable standard for two decades, such as recording standards for video (e.g. PAL, VHS, NTCS, Blu-ray), wireless transmission, and web browsers.

66 www.tpac.smk.nl/32/home.html.

67 TPAC (2010).

In summary, tropical timber suppliers can meet the requirements of TPPs by obtaining certification for their products that is recognized by their customers. However, complying with the necessary procedures, including certification, typically requires sustained commitment by suppliers as well as significant financial, organizational and social resources. It should be remembered that even in those countries with TPPs, central-government procurement is only a niche segment of the total national market. Seen in a wider context, not all producers find it profitable to obtain the required certificates when they have competitive alternative markets.

The subtle variations in certification requirements among various national TPPs and private-sector procurement practices increase cost and confusion among suppliers and consumers. The failure to achieve a reasonable degree of reciprocity, mutual recognition and respect among the proponents of competing forest certification systems has become a significant impediment to sustaining the tropical timber trade and advancing SFM in the tropics.

4.2 Ability of suppliers of tropical timber to meet the requirements and costs of timber procurement policies

A small number of tropical timber suppliers have met the requirements and costs of TPPs, both public and private, and are supplying these markets. These suppliers tend to be firms operating in the tropics with direct marketing relationships with consumer-country firms and with a focus on high-value niche markets. They have gained FSC or PEFC certification and have the ability to control their wood supplies and product transport. As noted in section 2.4, FSC and PEFC certification is considered in most public TPPs to be Category A evidence of compliance.

However, the bulk of tropical timber production has not yet met the requirements of TPPs. Oliver and Donkor (2010) identified the strengths, weaknesses, threats and opportunities that tropical timber producers face in the rapidly evolving marketplace. They noted that the wood-products industry remains fragmented, with firm size quite small compared with industries offering competing building materials such aluminium, cement, plastics and steel. This fragmentation and small size is even more pronounced in the tropics than in other major wood-producing regions. Oliver and Donkor (2010) noted the effect of firm size on the capacity to undertake research, development and marketing for new products. Larger firms also have a greater capacity to market the environmental credentials of their products and processes in key end-use products.

The importance of research, development and marketing capacity is evident in the success of Malaysia in developing its rubberwood resource.

Oliver and Donkor (2010) noted that tropical hardwoods from natural forests face steep competitive pressures from rapidly evolving substitutes in their traditional markets (the EU, Japan and North America). In general, competitively priced substitute wood products are eroding the market share of tropical products, and this is squeezing the price margins for products that are still in the market. Our analysis shows that this erosion is strongest in the EU and is also happening to a certain extent in Japan; on the other hand, tropical timbers are maintaining their market share in Australia and North America.

It is important to distinguish between public TPPs, the procurement practices of private-sector firms, and legality assurance requirements. Public TPPs apply to government purchases of timber, which, in reality, account for a very small proportion of the modern marketplace. The procurement practices of private-sector firms are intended to be economically advantageous to the firms while maintaining their social credibility. Only a small (but visible) number of direct retail firms have policies on wood; the majority of these relate to the use of paper with recycled content.

Legality assurance requirements represent the greatest challenge to tropical producers supplying traditional markets. Some analysts have argued that it is unreasonable to expect a single operator to conduct business according to the rules if its neighbour is able to cut costs by ignoring the rules. This is the basis for a "rule of law" that serves the common good. The ITTO Thematic Programme on Forest Law Enforcement, Governance and Trade is based on this concept.

Australia, the EU and the United States have been actively communicating their legality requirements to their trading partners. The EU has conducted an extensive, broad-based outreach effort through VPAs within the context of its FLEGT initiative.

Progress in implementation of VPAs in producer countries

The EU FLEGT VPA intends to assist participating countries in building capacity to issue FLEGT licences for timber exports to the EU. The engagement of civil society throughout the process is considered vital. Timber accompanied by FLEGT export licences meets the EUTR's legality requirements.

Central to the success of FLEGT timber export licensing is a transparent system in timber-producing countries—a TLAS—to verify product compliance with applicable national laws. Annex 3 identifies the tropical timber-producing countries engaged in the EU FLEGT VPA process as of mid-2013. Trade agreements are complex to negotiate and complex to implement and, as of mid-2014, none of the countries that have engaged in the EU FLEGT VPA process had succeeded in issuing FLEGT licences. This slow progress is indicative of the administrative, economic and social complexities of demonstrating the unequivocal legality of timber exports at a national scale. The FLEGT community is aware that for forest legality verification to be effective, countries must have forest governance systems in which the machinery to integrate policies with the legal framework and the institutional architecture operates in a consistent and coherent manner. At the moment, most tropical timber-producing countries have a serious lack of capacity for addressing timber legality and other TPP requirements. Indeed, most are saddled with the fundamentals of poverty, with inadequacies such as under-strength enforcement capabilities and shortages of human and financial resources, knowledge and skill, and transportation and communication infrastructure. Several other basic constraints pose challenges in complying with TPP requirements (these are listed in section 1.3).

Nonetheless, FLEGT practitioners and VPA stakeholders are generally keen to attain the goals of FLEGT. The economically weaker countries see value in VPAs beyond the market benefits they offer—such as an opportunity to obtain international assistance for strengthening law enforcement, through which they can reduce illegal logging and the over-exploitation of their forests.

Countries currently involved in VPAs are at varying stages. Malaysia (despite not having signed a VPA) and Indonesia are both virtually ready. Both have started issuing timber export licences, which are effectively the precursor of FLEGT licensing.

The EU has engaged in formal negotiations in the context of VPAs with 18 tropical timber-producing countries. These VPA countries, as well as several other countries that have not associated themselves with the EU VPA FLEGT process, have begun developing national FLEGT systems and have reached various levels of advancement.[68]

Experience has shown that building the social and administrative infrastructure necessary to issue a FLEGT licence is challenging, and perhaps more elaborate and time-consuming than any of the parties expected. Assessments of the capacity of tropical timber suppliers to meet TPP requirements should, where applicable, refer to requirements under VPAs, the goals of which include:

- policy and legal reform;
- governance and transparency;
- capacity building;
- improved control, tracking and verification of legal compliance;
- better rent capture and revenue collection; and
- secure and improved market share.

This is a comprehensive and ambitious set of goals, the attainment of which will meet the primary objective of trading in legally and sustainably produced timber. Each VPA will need to incorporate a national TLAS that:

- defines what constitutes legal timber;
- verifies compliance with this definition;
- traces product movement from forest to export for legality verification;
- issues FLEGT licences for exports to provide assurance to markets; and
- subjects the TLAS to periodical independent monitoring.[69]

There cannot be generalization in performance. Assessments of VPA implementation need to take into consideration inherent national differences and the complexities of individual countries in addressing forest governance, forest-related legislation, rights to forests and land, and other issues.

68 Prescott et al. (2010).
69 Adapted from European Commission (2007).

Some developing countries will require considerably more time than others in implementing their VPAs, and they will require more institutional strengthening and capacity building. VPAs need to recognize the differing needs of participating countries for technical and financial assistance.

Cost of compliance and the journey to the market

Establishing a TLAS in the context of an EU FLEGT VPA can reinvigorate a country's existing process of control and oversight. It is a positive but rigorous process that can impose a heavy financial burden on the country. The country's financial capability and social and administrative infrastructure need to be considered because they are pivotal for long-term success.

Typically, a TLAS is a managerial process involving a series of technical activities that makes the process more complex than is generally perceived. A TLAS is a package of tasks that are largely performed manually in the field (although increasingly there is a move to apply electronic systems). For production forest areas, the tasks normally begin with initial planning and risk mapping (relating to forest security or sustainability) at the office, prior to the issuance of forest harvesting licences. Monitoring work follows in the licensed area; the supply chain begins at the tree stump and ends at the export point. The TLAS involves overseeing site preparations (boundary clearing and road mapping), tree marking and identification, the recording of harvested logs, log tracking, revenue assessment and collection, and transportation to mills, where inspections may be made en route or at the mill for log-entry verification. Aerial detection and satellite imagery may also be used. The final checking and verification of timber in transit takes place at the export point, where FLEGT export licences are issued and the product dispatched to the EU.

The implementation of a TLAS requires multi-agency collaboration to meet all criteria for FLEGT licensing, but the forestry authority and the export licensing authority are the crucial parties in ensuring completion of the process.

The cost of a TLAS is the sum of the costs of the process described above. It is difficult to estimate a realistic cost of implementing a TLAS because none of the signatory member countries is structurally geared for it, and no VPA country has yet issued a FLEGT licence. It appears that most VPA signatory countries may require more time before they are fully ready to start. Sociopolitical and technical (forestry) situations and, not least, geographical and geophysical difficulties on the ground have already deferred originally envisaged launch dates.

In summary, the EU FLEGT VPA process, including the establishment of supporting TLASs, is illustrative of the conceptual problem faced by tropical timber-producing countries. Existing TPPs require that timber is obtained from sources judged to be sustainably managed or legally verified (depending on the policy). Not all timber produced in a given country is the same. Company XYZ may follow all the rules, pay all the fees and obtain all the necessary permits, and company ABC may have done none of these. Thus, countries cannot prohibit imports based solely on the country of origin. Many tropical timber-producing countries have reacted to the establishment of TPPs and legality issues as a national issue, necessitating a national-level control mechanism for the whole sector.

The challenge is to recognize openly that what is vital for a select set of firms may not be so important or even relevant for the full set of producers. In most countries, only a few firms export timber products, and not all of these export to markets with legality assurance requirements. As mentioned above, firms with market advantage and capacity already provide Category A evidence of compliance with public TPPs by obtaining FSC or PEFC certification for SFM and chain of custody. In general, such certification also meets the due-diligence requirements of most legality assurance systems.

It is clear that most tropical timber-producing firms cannot and would not even attempt to meet the requirements of some legality assurance systems. They serve local or regional markets that do not have legality assurance requirements.

ITTO members would do well to consider carefully the evolving nature of the international tropical timber market and what it implies for public versus private investment in timber control systems. The traditional markets for tropical timber (Europe, Japan and North America) are mature, whereas the markets in ITTO producer countries and China are growing rapidly. GDP growth rates in Africa, Asia and Latin America are robust. Populations are

booming and urbanization is rapid. The market analysis here has shown that tropical producers are increasingly supplying emerging markets that are growing, while most of the mature markets are taking a declining share of the total tropical timber output. More tropical timber is being consumed domestically and regionally or shipped to other emerging markets. ITTO members would do well to avoid overinvesting in declining markets and underinvesting in growing markets.

This does not negate the importance of good forest governance. Achieving it involves the construction of a public good—a platform that will help all market participants and maintain an orderly market. But achieving good governance is not the same as meeting the specific requirements of TPPs or the "due diligence, due care" responsibilities of private-sector firms, which can be done by obtaining FSC or PEFC certification. A government decision to engage in a broad partnership to improve forest governance and legality assurance for the entire sector is worthy, but a TLAS cannot be characterized as essential for meeting the requirements of existing TPPs.

In summary, the ability of tropical timber suppliers to meet the requirements and costs of TPPs is a function of their ambition and capacities. Well-organized and capitalized firms are meeting the requirements by obtaining FSC or PEFC certification. A sector-wide approach to legality assurance has proven to require considerable skill, capacity and technological resources. It is a laudable objective but incurs costs that are not directly attributable to TPPs.

5 RECOMMENDATIONS FOR FURTHER ACTION BY ITTO TO PROMOTE TRADE IN TROPICAL TIMBER AND TIMBER PRODUCTS IN THE CONTEXT OF PUBLIC TIMBER PROCUREMENT POLICIES

Simula (2010) hinted at growing interest in both the public and private sectors in TPP initiatives that promote improved governance and SFM in producer countries. This reflects changing social values that increasingly favour greater market transparency and reject practices such as illegal operations, money-laundering and social injustice. The European Forest Institute (2010) indicated a clear, positive trend across the EU towards demand for "good wood".

Yet there are persistent media reports of illegal logging, implying governance failures and market indifference as causative factors. Three suggestions arising from debate on this issue are included here as recommendations for mitigating measures:

1) Use trade policy to create clear market signals—all countries that import wood need to send the market signal that trade in illegal timber is no longer acceptable in those countries.
2) Help ITTO member countries create a supply of certified legal timber to fill demand from increasingly environmentally conscious consumers, thereby creating a financial incentive for tropical timber-producing countries to produce a legal, sustainable supply of timber.
3) Use procurement policies to drive demand. Public TPPs perform a leadership role in the marketplace, helping raise the profile of SFM. All ITTO members welcome the renewed focus on SFM.

Collectively, three recent ITTO reports have offered almost 100 technical recommendations for the consideration of the International Tropical Timber Council that are highly relevant. Oliver and Donker (2010) identified a number of actions to strengthen information sharing and capacity building to respond to emerging market requirements. Tissari (2011) listed actions that members and ITTO could take to address issues related to the image and competitiveness of tropical timber in the global marketplace. And Maplesden et al. (2013) addressed the most recent global economic crisis and recommended actions to strengthen the capacity of ITTO producer countries to prepare for and respond to economic shocks. All three sets of recommendations could be repeated here because all remain relevant. In particular, each includes recommendations on communication tools and methods, such as seminars, to exchange information with a view to improving the image of tropical timber, building confidence in its future, and improving understanding of market requirements.

Globally, ITTO and its members face a number of challenges. Three takeaway messages from this analysis are offered below.

Seek to reinforce the presence and relevance of ITTO in growing and emerging tropical timber markets. The analysis presented here shows that tropical timber suppliers are competing successfully in many emerging markets. In addition, south–south trade and domestic markets in producing countries account for a rapidly increasing share of tropical timber consumption. These markets should be an increasing focus of ITTO's efforts to develop and showcase producer-friendly policies to promote legal and sustainably produced timber.

Seek to understand why relatively few forest-product firms with market clout and global presence are operating in the tropics. This and prior ITTO analyses have shown that well-capitalized firms are able to invest in product research and development and will invest in marketing to protect the reputation of their products and processes. Such firms will also invest in assuring their consumers of the environmental credentials of their products.

Give up the old arguments and operate in today's markets. The policy dialogue in ITTO must move beyond old battles over access to traditional markets. Although these markets remain important, they nevertheless account for a declining share of the output of tropical forests. Patterns of economic

growth, tropical timber consumption and trade have shifted dramatically in the last 30 years. ITTO producers and consumers should increasingly focus on emerging markets, promoting fundamental concepts of sustainability, legality, lifecycle analysis and renewability. These markets represent the future, and ITTO can play a central role in helping develop and implement effective trade, procurement and other policies—such as green building codes—that promote the consumption of legal and sustainable tropical timber as a building material of choice.

REFERENCES

Alexander, K. 2012. *The Lacey Act: protecting the environment by restricting trade.* Congressional Research Service. Report prepared for Congress R42067.

CPET 2013. *UK Government timber procurement policy: timber procurement advice note*. Fifth edition, June 2013. Central Point of Expertise on Timber, Department of Environment, Food and Rural Affairs, London, UK.

European Commission 2003. Communication from the Commission to the Council and the European Parliament: Forest Law Enforcement, Governance and Trade (FLEGT)—Proposal for an EU Action Plan. Brussels, Belgium.

European Commission 2007. *A timber legality assurance system*. FLEGT Briefing Notes. Forest Law Enforcement, Governance and Trade initiative. Briefing Note No. 3.

European Forest Institute 2010. *Changing international markets for timber and wood products*. Policy Brief No. 5.

European Timber Trade Federation 2012. *2011 statistics—Belgium timber trade monitoring in support of effective, efficient and equitable operation of the EU Timber Regulation (EUTR).*

Government of Australia 2013. Illegal Logging Prohibition Amendment Regulation 2013 (No. 1). Select Legislative Instrument No. 88. Federal Register of Legislative Instruments F2013L00883. 30 May 2013.

Government of Belgium 2006. MONITEUR BELGE — 09.02.2006 — BELGISCH STAATSBLAD. *18 NOVEMBRE 2005*. Circulaire P&O/DD/2 comportant la politique d'achat de l'autorité fédérale stimulant l'utilisation de bois provenant de forêts exploitées durablement, pp 6718–6720.

Government of Belgium 2011. MONITEUR BELGE — 07.04.2011 — BELGISCH STAATSBLAD. Accord sectoriel du 1er mars 2011 visant à augmenter l'offre de produits à base de bois provenant de forêts exploitées durablement, pp 22747–22752.

Government of France 2005. Journal officiel de la République française. Circulaire du 5 avril 2005 portant sur les moyens à mettre en oeuvre dans les marchés publics de bois et produits dérivés pour promouvoir la gestion durable des forêts. JORF n°82 du 8 avril 2005 page 6336 texte n° 1. Paris, France.

Government of France 2009. Journal officiel de la République française**.** Circulaire du 3 décembre 2008 relative à l'exemplarité de l'Etat au regard du développement durable dans le fonctionnement de ses services et de ses établissements publics, JORF No. 0036 du 12 février 2009, p 2489, texte n° 4. Paris, France.

Fripp, E., Carter, A. & Oliver, R. 2010. *An assessment of the impacts of the UK Government's timber procurement policy.* Efeca, London, UK.

FSC 2012. *Global market survey 2012.* Forest Stewardship Council, Bonn, Germany.

ITTO 2011. *ITTO annual review and assessment of the world timber situation 2011.* Yokohama, Japan.

Maplesden, F., Attah, A., Tomaselli, I. & Wong, N. 2013. *Riding out the storm: improving resilience of the tropical timber sector to the impacts of global and regional economic and financial crises*. ITTO Technical Series No. 41. ITTO, Yokohama, Japan.

OECD 2011a. Size of public procurement market. In: *Government at a glance 2011*, pp. 148–149. Organization for Economic Co-operation and Development. OECD Publishing. http://dx.doi.org/10.1787/gov_glance-2011-46-en.

OECD 2011b. *Government at a glance 2011*. Country note—Belgium. Organization for Economic Co-operation and Development. OECD Publishing.

Oliver, R. & Donkor, B. 2010. *Leveling the playing field: options for boosting the competitiveness of tropical hardwoods against substitute products.* ITTO Technical Series No. 36. ITTO, Yokohama, Japan.

PEFC 2012. *PEFC annual review 2012.* Programme for the Endorsement of Forest Certification, Geneva, Switzerland.

Prescott, M.J., Durst, P. & Leslie, R. (eds.) 2010. *Forest law enforcement and governance: progress in Asia and the Pacific*. FAO Asia-Pacific Forestry Commission.

Sheikh, P. 2012. *The Lacey Act: compliance issues related to importing plants and plant products.* Congressional Research Service. Report prepared for Congress R42119. 24 July 2012.

Simula, M. 2010. *The pros and cons of procurement: developments and progress in timber-procurement policies as tools for promoting the sustainable management of tropical forests.* ITTO Technical Series No. 34. ITTO, Yokohama, Japan.

Tissari, J. 2011. *Raising the standards: monitoring the technical and environmental standards of tropical timber products in international markets*. ITTO Technical Series No. 39. ITTO, Yokohama, Japan.

TPAC 2010. Overview of scores of the revised judgement of the Timber Procurement Assessment Committee (TPAC) on the Malaysian Timber Certification System (MTCS) dated 22 October 2010. Timber Procurement Assessment Committee, the Netherlands. Available at: www.tpac.smk.nl/Public/TPAC%20Assessments%20results/Overview%20of%20scores%20MTCS.pdf.

van Dam, J. & Savenije, H. 2011. *Enhancing the trade of legally produced timber: a guide to initiatives*. Tropenbos International, Wageningen, the Netherlands.

World Business Council for Sustainable Development and the World Resource Institute 2012. *Guide to sustainable procurement of wood and paper-based products*. Update version 3. Available at: www.SustainableForestProducts.org.

Annex 1: Terms of reference for the consultancy team

Background

Legality requirements and timber procurement policies are being introduced in many countries. These requirements and policies are principally aimed at addressing public concerns about the legal and environmental credentials of products. Many purchasers are demanding that products should come from sustainable, or at least legal, sources and that this be verifiable, in order to maintain credibility with buyers in the marketplace. These requirements and policies have significant and far-reaching implications for tropical timber suppliers. As developments are occurring at a rapid rate, there is an urgent need for tropical wood-product exporters to monitor these developments, assess their ability to meet these requirements which are being widely adopted, and explore the market implications and opportunities presented by these developments.

This proposal by the Secretariat is to assist in analyzing the economic impact of governmental procurement policies on tropical timber markets through the update of the developments of legality requirements and timber procurement policies and the assessment of market implications and opportunities for ITTO producer and consumers.

Output 1: Update of the ITTO study "The Pros and Cons of Procurement", published as Technical Series 34 in April 2010

Activity 1.1: Update on developments and progress on the issues relating to legality and procurement policies since the issue of the study;

Activity 1.2: Overview the developments and trade flows in major importing countries;

Activity 1.3: Identify the market shares of private and public procurements in importing countries;

Activity 1.4: Review common and different elements among procurement policies.

Output 2: Comprehensive analysis of the economic impact of procurement policies on the tropical timber markets and trade

Activity 2.1: Conduct analysis on the effects of procurement policies on demand, supply, market, trade and prices;

Activity 2.2: Assess the impacts of procurement policies on costs and financial implications to exporter countries.

Output 3: Examination and assessment of the challenges faced by producer and consumer members in complying with the requirements of timber procurement policies and in developing and implementing these policies

Activity 3.1: Identify and examine the difficulties and obstacles faced by tropical timber producers and consumers in meeting the requirements of timber procurement policies.

Activity 3.2: Analyze and assess the ability of suppliers of tropical timber in meeting the requirements and costs of timber procurement policies.

Output 4: Recommendations for further action by ITTO to promote trade in tropical timber and timber products in the context of governmental procurement policies

Activity 4.1: Identify and address recommendations to ITTO and its members on further actions relating to procurement policies with a view to promoting trade in tropical timber and timber products from legal and sustainable sources.

Annex 2: Statistical summaries, selected EU27 import markets

Austria HS 44 import values (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*5*	*5*	*3*	*2*	*2*	*3*	*4*	*4*	*3*	*4*	*3*	*3*	*3*	*3*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Côte d'Ivoire	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Democratic Republic of the Congo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	0	0	0	0	0	0	0	1	0	1	1	0	0	0
Indonesia	4	4	2	1	1	1	1	2	2	2	1	1	2	1
Liberia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Malaysia	1	0	0	1	0	1	1	1	0	0	0	0	1	1
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*1 278*	*1 388*	*1 353*	*1 331*	*1 406*	*1 582*	*1 640*	*1 943*	*1 920*	*1 788*	*1 703*	*1 925*	*2 132*	*2 143*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
China	5	6	7	7	6	6	11	13	19	17	16	19	21	20
EU27	1 222	1 262	1 250	1 268	1 353	1 514	1 572	1 863	1 832	1 702	1 624	1 827	2 035	2 051
Japan	0	0	0	0	1	0	0	0	0	1	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	6	5	1	0	0	0	0	0	0	0	0	0	0	0
Republic of Korea	0	0	0	0	0	0	0	2	3	1	0	0	0	0
Switzerland	34	107	89	51	41	54	49	54	58	59	58	72	70	67
United States of America	10	8	6	4	6	8	7	9	9	8	5	7	6	5
Total (non-EU27 ITTO consumer countries)	*56*	*127*	*103*	*62*	*53*	*68*	*68*	*80*	*89*	*86*	*80*	*98*	*97*	*92*

Note: Totals may not tally due to rounding.

Denmark HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*48*	*57*	*59*	*50*	*44*	*44*	*62*	*62*	*70*	*55*	*34*	*29*	*32*	*33*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	1	1	2	1	1	1	1	2	2	3	1	1	1	1
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	1	0	0	1	1	1	1	2	2	1	0	1	0	0
Côte d'Ivoire	1	1	2	1	1	1	1	1	2	2	1	1	1	1
Democratic Republic of the Congo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	0	0	0	0	0	3	11	11	15	15	8	6	6	5
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	0	0	0	0	0	1	1	0	1	0	0	0	0	0
Ghana	2	2	2	1	1	1	1	2	2	2	1	1	0	4
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	1	0	1	1	1	1	1	1	2	1	1	1	1	1
Indonesia	22	26	19	17	17	15	20	19	16	12	7	8	6	5
Liberia	0	0	0	0	0	0	0	0	0	0	0	0	4	1
Malaysia	16	19	24	20	15	15	17	20	21	17	12	10	11	12
Mali	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	4	5	8	6	4	4	7	4	5	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	2	0	0	1
Peru	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Philippines	0	0	1	0	1	0	0	0	1	1	0	0	0	0
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*971*	*1 062*	*1 011*	*1 082*	*1 125*	*1 159*	*1 242*	*1 471*	*1 554*	*1 315*	*1 008*	*1,103*	*1 205*	*1 208*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	1	1	1	2	2	1	2	3	1	1	0	0	0	0
China	7	9	11	16	20	29	41	48	54	52	34	45	39	39
EU27	877	949	910	973	1 030	1 061	1 130	1 336	1 420	1 201	928	1 003	1 115	1 118
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Norway	53	63	51	56	50	46	49	58	56	46	38	35	38	38
Republic of Korea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	2	3	6	6	3	0	1	1	1	2	0	0	0	1
United States of America	31	36	32	28	19	20	18	26	22	13	7	19	12	12
Total (non-EU27 ITTO consumer countries)	*95*	*113*	*101*	*110*	*95*	*98*	*112*	*135*	*134*	*114*	*80*	*100*	*91*	*90*

Note: Totals may not tally due to rounding.

France HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*364*	*429*	*414*	*367*	*349*	*344*	*360*	*346*	*392*	*359*	*232*	*258*	*247*	*214*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	65	61	61	40	39	37	43	42	50	44	31	38	37	30
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	20	16	18	25	28	43	33	29	21	25	14	30	24	24
Côte d'Ivoire	28	30	32	28	21	23	20	21	22	20	12	12	8	9
Democratic Republic of the Congo	3	5	4	3	4	8	20	24	33	29	12	17	14	12
Ecuador	1	1	1	1	0	1	3	2	3	3	2	3	4	5
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	113	132	142	133	132	130	129	125	155	140	93	71	71	58
Ghana	20	22	21	20	17	18	18	15	14	12	5	7	6	3
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Honduras	4	3	1	1	1	0	0	0	0	0	0	0	0	0
India	4	5	5	5	5	4	5	5	7	6	4	5	4	4
Indonesia	46	63	55	48	48	45	51	50	45	48	32	39	37	31
Liberia	17	36	32	32	20	0	0	0	0	0	0	1	5	4
Malaysia	30	42	28	19	24	23	24	25	32	25	20	30	30	25
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	1	1	1	0
Myanmar	5	4	6	5	5	6	9	6	3	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	1	1	1	4	5
Philippines	8	8	6	5	3	3	3	2	4	4	1	2	2	2
Togo	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*1 657*	*1 932*	*1 939*	*1 873*	*2 000*	*2 159*	*2 448*	*2 669*	*3 230*	*3 139*	*2 683*	*3 018*	*3 169*	*3 080*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	0	0	0	1	2	2	2	2	1	1	1	1	1	1
China	43	53	62	65	64	68	95	116	172	173	158	210	205	215
EU27	1 479	1 726	1 737	1 689	1 831	1 998	2 261	2 461	2 958	2 870	2 453	2 725	2 877	2 788
Japan	1	1	1	0	0	0	1	1	1	1	0	1	1	1
New Zealand	0	0	0	0	0	0	0	1	0	1	1	2	4	1
Norway	4	4	3	2	2	1	1	0	0	0	0	0	0	1
Republic of Korea	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	48	61	58	53	54	47	50	51	64	64	47	51	53	48
United States of America	80	88	77	63	47	43	37	38	34	30	23	27	27	25
Total (non-EU27 ITTO consumer countries)	*178*	*206*	*202*	*184*	*169*	*161*	*187*	*209*	*272*	*269*	*231*	*293*	*292*	*292*

Note: Totals may not tally due to rounding.

Germany HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*284*	*337*	*269*	*251*	*218*	*236*	*261*	*296*	*300*	*264*	*224*	*248*	*237*	*231*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	25	30	31	26	25	27	28	27	36	28	13	16	16	13
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	8	11	9	6	4	5	4	8	6	3	3	2	2	2
Côte d'Ivoire	13	13	15	11	12	14	17	14	14	15	9	11	8	11
Democratic Republic of the Congo	1	2	1	2	1	2	1	1	1	1	1	0	0	0
Ecuador	2	1	1	1	1	1	6	7	7	8	9	9	10	12
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	5	8	10	8	6	12	14	15	15	11	6	3	0	1
Ghana	32	31	29	25	22	20	18	16	18	17	12	13	15	12
Guatemala	1	0	0	0	0	0	0	0	0	1	1	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	1	2	1	1	1	1	2	1	2	1	1	1	1	1
India	3	3	2	2	2	3	3	4	5	6	7	7	7	10
Indonesia	132	172	117	125	107	111	129	150	131	119	108	134	129	114
Liberia	1	2	5	4	2	0	0	0	0	0	0	0	0	1
Malaysia	49	52	37	31	25	30	29	43	48	46	48	49	45	49
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	1	1	1	1	0	0	0	0	1	1	1	1	1	1
Mozambique	1	2	1	1	1	0	0	0	1	1	2	0	0	0
Myanmar	6	5	6	5	5	5	6	7	12	2	0	0	0	2
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	1	0	1	1	1	0	1	0	0	0	0	0
Peru	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Philippines	3	2	2	2	2	2	2	2	2	2	2	2	1	2
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*4 130*	*4 367*	*3 723*	*3 558*	*3 612*	*3 585*	*3 706*	*4 350*	*4 846*	*4 613*	*3 957*	*4 882*	*5 441*	*5 609*
Albania	1	1	0	0	0	1	0	0	0	0	0	0	0	0
Australia	1	1	1	1	1	1	1	1	1	0	0	0	0	0
China	86	114	113	111	123	159	195	242	334	316	281	347	355	360
EU27	3 560	3 761	3 223	3 124	3 160	3 078	3 182	3 736	4 114	3 959	3 380	4 199	4 750	4 928
Japan	6	5	4	4	4	2	2	2	1	1	2	2	2	2
New Zealand	0	0	0	0	0	0	0	0	2	1	0	2	1	1
Norway	77	51	37	40	23	23	18	22	24	18	18	26	35	39
Republic of Korea	2	1	0	0	0	0	0	0	0	0	0	1	1	1
Switzerland	146	161	134	118	153	181	174	205	231	210	187	197	198	187
United States of America	251	272	210	159	147	140	133	142	139	107	88	108	100	89
Total (non-EU27 ITTO consumer countries)	*570*	*606*	*500*	*433*	*452*	*507*	*524*	*614*	*732*	*654*	*577*	*683*	*691*	*680*

Note: Totals may not tally due to rounding.

Netherlands HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*299*	*399*	*330*	*320*	*297*	*310*	*343*	*467*	*447*	*417*	*301*	*314*	*307*	*253*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	31	49	43	37	28	29	29	41	54	48	39	39	21	21
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	2	0	0	0	1	1	1	2	0	1	1	0	1	1
Côte d'Ivoire	20	10	9	5	3	4	5	6	10	9	5	5	7	4
Democratic Republic of the Congo	0	0	0	0	0	0	5	17	18	16	8	6	4	1
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	8	11	12	10	7	7	6	10	16	19	21	15	15	15
Ghana	4	4	4	5	7	6	8	6	8	5	1	1	2	1
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	1	1	1	1	1	1	1	2	2	3	2	4	4	2
Honduras	1	1	0	0	0	0	0	0	0	0	0	0	0	0
India	4	4	4	4	4	4	3	4	5	7	5	4	6	9
Indonesia	91	126	110	115	110	119	145	183	149	130	102	107	112	94
Liberia	0	2	2	1	1	0	0	0	0	0	0	0	0	0
Malaysia	134	186	140	137	129	133	133	190	177	176	115	129	132	101
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Myanmar	2	2	3	3	4	3	4	4	5	1	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Philippines	1	1	1	1	1	1	1	1	1	0	0	1	1	1
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*1 866*	*2 063*	*1 928*	*1 781*	*1 687*	*1 744*	*1 759*	*2 007*	*2 434*	*2 310*	*1 772*	*2 018*	*2 086*	*2 014*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	1	0	0	1	1	1	0	1	1	0	1	9	3	3
China	44	65	73	80	81	85	110	139	182	214	162	202	206	203
EU27	1 727	1 895	1 781	1 644	1 559	1 619	1 611	1 830	2 213	2 054	1 552	1 731	1 793	1 690
Japan	1	1	1	1	1	1	1	0	0	0	0	1	1	1
New Zealand	0	0	0	0	0	0	0	0	2	4	2	12	2	5
Norway	29	27	17	10	10	9	8	5	4	2	1	1	2	2
Republic of Korea	7	1	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	12	7	8	11	7	4	5	5	5	4	3	2	3	7
United States of America	45	65	49	33	28	25	23	28	27	30	50	60	77	103
Total (non-EU27 ITTO consumer countries)	*138*	*168*	*148*	*137*	*128*	*125*	*148*	*177*	*221*	*256*	*220*	*287*	*293*	*325*

Note: Totals may not tally due to rounding.

Poland HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*18*	*24*	*21*	*26*	*23*	*20*	*20*	*31*	*36*	*35*	*27*	*24*	*20*	*21*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	0	1	1	0	1	1	1	1	0	0	0	0
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	1	0	0	0	0	0	0	1	1	2	1	1	1	0
Cote d'Ivoire	1	1	1	1	1	1	1	1	1	1	0	1	1	0
Democratic Republic of the Congo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Ghana	1	1	1	1	1	0	0	1	1	1	0	0	1	2
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	0	0	0	0	0	0	0	0	0	0	0
India	0	0	0	0	0	0	0	1	1	1	1	0	0	0
Indonesia	13	20	16	21	17	15	14	22	26	24	19	16	11	10
Liberia	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Malaysia	1	1	1	2	2	2	2	4	5	4	4	5	4	3
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Peru	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*271*	*341*	*387*	*410*	*423*	*539*	*666*	*802*	*947*	*1,055*	*685*	*830*	*957*	*866*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	0	0	0	0	1	1	1	0	0	0	0	0	0	0
China	2	3	6	5	6	7	13	17	29	37	29	38	41	43
EU27	255	324	369	393	408	524	643	775	907	1 007	649	786	907	816
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	1	1	2	2	3	3	2	2	2	2	2	1	3	3
Republic of Korea	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Switzerland	3	1	1	1	1	1	1	1	1	1	1	1	1	0
United States of America	10	12	9	9	5	4	6	6	7	6	4	4	6	3
Total (non-EU27 ITTO consumer countries)	*16*	*17*	*18*	*17*	*15*	*15*	*22*	*27*	*40*	*47*	*36*	*44*	*51*	*49*

Note: Totals may not tally due to rounding.

Spain HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*202*	*221*	*245*	*211*	*205*	*208*	*223*	*180*	*191*	*169*	*71*	*79*	*79*	*58*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	75	84	88	72	77	70	84	64	65	58	22	24	22	16
Colombia	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Congo	11	15	20	20	15	18	17	12	16	16	5	12	10	8
Côte d'Ivoire	70	70	80	61	51	62	63	48	39	35	10	14	13	10
Democratic Republic of the Congo	1	1	0	1	2	2	2	2	2	2	1	1	1	3
Ecuador	1	1	1	1	0	2	3	5	9	10	4	3	3	1
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	6	6	8	9	9	9	10	7	8	11	7	6	10	5
Ghana	9	9	10	9	11	9	8	7	7	6	2	2	3	2
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	2	3	3	3	2	2	1	1	1	0	0	0	0	0
India	4	5	6	7	9	8	8	8	8	6	4	4	4	3
Indonesia	15	16	17	14	14	13	13	15	20	16	9	9	9	6
Liberia	1	3	4	4	3	0	0	0	0	0	0	0	0	0
Malaysia	4	4	6	8	7	7	7	8	9	7	3	2	2	2
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	0	1	1	0	2	1	1	1	1	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Peru	1	0	0	0	1	1	1	1	3	1	1	0	1	0
Philippines	1	1	1	1	1	1	1	1	1	0	0	1	0	0
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ITTO consumer countries	*1 052*	*1 418*	*1 440*	*1 472*	*1 594*	*1 643*	*1 735*	*1 916*	*2 058*	*1 548*	*1 049*	*1 098*	*997*	*858*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	1	1	1	1	1	2	1	1	1	0	0	0	0	0
China	32	42	47	54	71	96	129	159	212	160	93	115	99	86
EU27	765	1 041	1 102	1 164	1 297	1 335	1 402	1 541	1 645	1 264	886	907	833	722
Japan	0	0	0	0	0	0	0	0	0	0	0	0	1	0
New Zealand	2	1	1	1	2	4	3	4	5	3	3	5	4	2
Norway	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Republic of Korea	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Switzerland	6	9	13	10	3	2	2	3	2	2	1	2	1	1
United States of America	245	322	274	241	219	203	198	208	193	118	66	69	59	46
Total (non-EU27 ITTO consumer countries)	*287*	*377*	*338*	*308*	*297*	*308*	*333*	*375*	*413*	*284*	*163*	*191*	*164*	*136*

Note: Totals may not tally due to rounding.

United Kingdom HS 44 import values, 1999–2012 (€ million)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ITTO producer countries	*349*	*402*	*390*	*360*	*311*	*330*	*302*	*339*	*353*	*311*	*212*	*265*	*227*	*253*
Benin	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameroon	20	28	23	20	21	22	25	26	31	18	14	19	22	26
Colombia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Congo	1	1	1	2	4	2	1	3	4	6	5	7	7	4
Côte d'Ivoire	8	13	10	13	12	16	14	14	19	17	10	12	10	10
Democratic Republic of the Congo	1	0	0	0	0	0	0	0	0	1	1	1	1	1
Ecuador	0	0	0	0	0	1	2	1	3	2	1	1	1	0
Fiji	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gabon	1	1	1	1	1	1	1	0	0	0	0	0	0	0
Ghana	16	16	15	14	12	12	12	8	9	6	5	5	4	4
Guatemala	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guyana	6	8	7	6	3	4	4	6	5	2	2	2	0	1
Honduras	2	2	2	1	1	1	1	1	1	0	1	0	0	1
India	7	7	9	11	10	9	9	11	9	9	9	11	8	10
Indonesia	158	183	190	165	135	121	109	108	105	91	58	76	72	85
Liberia	0	1	2	2	1	0	0	0	0	0	0	0	0	0
Malaysia	121	130	122	118	104	134	118	153	159	153	104	128	99	107
Mali	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Myanmar	2	8	4	3	3	2	3	3	2	0	0	0	0	0
Panama	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru	1	0	0	0	1	1	0	0	0	0	0	1	1	1
Philippines	4	4	3	3	3	3	2	3	5	3	2	2	1	1
Togo	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ITTO consumer countries	*2 707*	*3 153*	*3 171*	*3 451*	*3 397*	*3 576*	*3 476*	*3 704*	*4 227*	*3 216*	*2 537*	*3 068*	*2 999*	*3 226*
Albania	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Australia	6	5	9	10	12	11	10	10	7	4	3	3	3	3
China	83	101	126	166	179	255	318	427	494	447	370	492	507	589
EU27	2 264	2 656	2 677	2 952	2 937	3 058	2 878	2 992	3 450	2 526	1 971	2 337	2 268	2 354
Japan	1	2	1	1	1	1	1	1	1	1	1	1	1	1
New Zealand	1	3	1	2	2	2	1	1	1	1	1	1	3	1
Norway	60	66	61	60	54	52	57	56	56	44	31	34	29	28
Republic of Korea	22	3	1	1	1	1	1	0	1	0	0	0	0	0
Switzerland	17	25	29	41	20	7	5	3	5	3	2	3	3	3
United States of America	253	293	265	219	192	190	204	213	213	189	157	196	185	247
Total (non -U27 ITTO consumer countries)	*443*	*497*	*494*	*499*	*460*	*518*	*598*	*712*	*778*	*690*	*566*	*731*	*731*	*872*

Note: Totals may not tally due to rounding.

Summary of national HS 44 imports, by country, 1999 and 2012

Country	ITTO group	1999	2012	% change
Austria	ITTO producers	5	3	-37.96
	ITTO consumers	1 278	2 143	67.68
	EU27	1 222	2 051	67.86
	Non-EU27	56	92	63.88
Belgium	ITTO producers	306	266	-13.00
	ITTO consumers	1113	1768	58.81
	EU27	991	1451	46.47
	Non-EU27	123	317	158.52
Denmark	ITTO producers	48	33	-31.54
	ITTO consumers	971	1 208	24.36
	EU27	877	1 118	27.56
	Non-EU27	95	90	-5.22
France	ITTO producers	364	214	-41.08
	ITTO consumers	1 657	3 080	85.94
	EU27	1 479	2 788	88.52
	Non-EU27	178	292	64.50
Germany	ITTO producers	284	231	-18.58
	ITTO consumers	4 130	5 609	35.79
	EU27	3 560	4 928	38.44
	Non-EU27	570	680	19.26
Italy	ITTO producers	419	174	-58.36
	ITTO consumers	2 443	2 808	14.92
	EU27	2 057	2 488	20.96
	non EU27	386	320	-17.20
Netherlands	ITTO producers	299	253	-15.50
	ITTO consumers	1 866	2 014	7.99
	EU27	1 727	1 690	-2.16
	Non-EU27	138	325	134.72
Poland	ITTO producers	18	21	17.99
	ITTO consumers	271	866	219.47
	EU27	255	816	220.37
	Non-EU27	16	49	205.26
Spain	ITTO producers	202	58	-71.36
	ITTO consumer	1 052	858	-18.42
	EU27	765	722	-5.64
	No- EU27	287	136	-52.46
UK	ITTO producers	349	253	-27.45
	ITTO consumers	2 707	3 226	19.17
	EU27	2 264	2 354	3.96
	Non-EU27	443	872	96.98

Note: The data in this table form the basis of Figure 5 in the main body of the report.

Annex 3: Participating countries in VPA negotiations (as of 2013)

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Cambodia	Phase 1—Informal and pre-negotiation. (In communication with EU on FLEGT, 2009–2010)	Cambodia has 10.7 million hectares of forest, covering 59% of land area. Illegal forest activities resulting in deforestation and degradation are major obstacles for sustainable development and drain socioeconomic revenue. The prevalence of such activities is attributable to inadequate forest law enforcement and governance, such as poor monitoring and reporting, a lack of prevention and suppression, insufficient facilities, counterproductive trans-border relations, unorthodox negotiations with prosecutors and judges, and misguided public participation in forest management. In early 2002, Cambodia suspended all forest concessions, and export activities have plunged since then. All forest concessionaires must now submit "strategic forest management plans", but the timber industry has not recovered. The government plans to enter into VPA negotiations and, with the assistance of the European Union (EU), to build capacity to develop a timber legality assurance system (TLAS) and enable an orderly timber flow into the EU market. Forestland encroachment and land grabbing are the main issues confronting the implementation of effective forest law enforcement and governance. A growing population, economic development and suboptimal forest law enforcement and governance exacerbate the situation. The Forest Authority and the EU convened a regional conference on forest law enforcement, governance and trade (FLEGT) in Phnom Penh on 4–5 May 2010.
Cameroon	Phase 3—System development. VPA agreement signed 6 October 2010	Cameroon has a total forest area of 21.25 million hectares, which is 45.6% of the land area; it is one of the largest forest areas in West Africa. The forest is public owned. Cameroon's forest is in an economically stable part of West Africa. However, the country faces desertification in the north and deforestation in the south, resulting from logging, fuelwood collection, conversion to plantation agriculture, and subsistence farming. The situation was exacerbated in the previous decade by declining prices of commodities such as oil, coffee and cocoa. There is a call for an effective forest conservation programme. There are reports of concern over developments at the edge of several protected areas, where a large area of dense natural forests is being converted to oil-palm plantations, potentially imperilling endangered species and sowing conflicts with local people.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Central African Republic	Phase 3—System development (VPA signed 28 November 2011)	Forests cover 31% of the Central African Republic, and forestry plays an important role in the country's economy, contributing 4% of GDP and 40% of the country's export revenues. The most important markets are Europe (60%), China, North America and Africa (especially Cameroon and Chad). Under the VPA, in which local stakeholders, such as timber companies and non-government organizations (NGOs), have been involved, the Central African Republic intends to set up a national system to ensure legal compliance in timber production, covering all wood products destined for the EU as well as those sold on the domestic market and to non-EU markets. On implementation of the VPA, the EU will guarantee unrestricted access to its markets for all FLEGT-licensed wood products from the Central African Republic.
Republic of the Congo	Phase 3—System development (VPA agreement signed 17 May 2010; ratified 17 Feb 2013)	The forest area of the Republic of Congo covers around 65% of the land area. Around 3.5 million hectares of forest have been set aside as protected zones, and 19 million hectares are designated for production. The country's major timber markets are the EU and China. The Government of the Congo is updating existing legal texts and regulations and is setting up its TLAS in accordance with VPA requirements. The TLAS covers the entire timber production and control process, the verification of legality of forest companies, a wood traceability system throughout the supply chain, the issuing of FLEGT licences, and independent audits. The Forest Product Control Service for Export will issue FLEGT licences under the supervision of the Forest Economy General Inspection Unit.
Democratic Republic of the Congo	Phase 2—Formal negotiation (start of negotiation October 2010)	The Democratic Republic of Congo (DRC) has the largest forest area in the Congo Basin, totalling around 100 million hectares. Timber exports are relatively low, at around 0.5 million m^3 per year. Europe is the primary consumer, accounting for 80–90% of exports. DRC is making progress on its VPA, with the negotiation teams discussing the legality definition and exploring ways of monitoring compliance with legal requirements. Improving civil-society engagement in the VPA dialogue remains a key issue in discussions between environmental and social NGOs and the Government of the DRC and with the EU. Working sessions for civil society are focusing on improving public awareness by providing greater opportunities for NGOs and communities, both in the national capital and in the provinces, to positively contribute to the process.
Côte d'Ivoire	Phase 2—Formal negotiation (began February 2013)	Côte d'Ivoire, with a land area of 318 000 km^2, has been heavily logged. Reports indicate that less than 2% of the country's land is covered by primary forest. Côte d'Ivoire has conducted reforestation activities for the production of teak (*Tectona grandis*), black afara (*Terminalia ivorensis*) and gmelina (*Gmelina arborea*). An estimated 150 000 m^3 of timber are exported annually. Social and environmental civil-society organizations received funding from the Food and Agriculture Organization of the United Nations (FAO) to develop a representative, neutral and legitimate civil-society platform to participate effectively in negotiations and to advocate for improved forest governance and recognition of rights in VPA processes. Key issues of concern include the high deforestation rate due to agricultural expansion; tenure insecurity, which has caused land-use conflicts; a lack of implementation of the land code; and the need to revise the forest code.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Gabon	Phase 2—Formal negotiation (start of negotiation Sept 2010)	Gabon's forest covers some 21.75 million hectares, or 85% of the country's land surface. Gabon is reported to be the largest exporter of raw wood in the region and its sales represent 20% of Africa's raw wood exports. Gabon supplies 90% of the world's okoume, which makes excellent plywood, and produces other popular hardwoods as well, such as mahogany, ebony and African walnut. Roundwood removals were estimated at 4 million m^3 in 2004, 13% of which is used as fuelwood.
Ghana	Phase 3—System development (VPA signed 20 November 2009 and ratified 19 March 2010)	Ghana has a total forest area of 9.2 million hectares, which is about 40% of the land area. The northern part of the country is predominantly savanna woodlands, while tropical high forest exists mostly in the southwest. The area of rainforests amounts to 8.5 million hectares, of which about 1.8 million hectares are conserved as forest reserves and managed mainly for protection. The production forests in forest reserves are placed under sustainable management regimes. Land belongs to communities, but community tenure rights do not extend to the ownership of trees, which belong to the state. The government has made arrangements to provide a share of the revenue from the forest to the communities. There remains pressure on the forests, not confined to the non-reserved forests, where more than half of Ghana's annual timber production takes place. There are increasing demands for fuelwood extraction (75% of Ghana's energy needs are met with fuelwood and charcoal), and there are also problems of illegal chainsaw logging by local people. On a more organized scale is the conversion of forests to other uses for economic development, such as cocoa and oil-palm plantations and, not least, mining. This intervenes in and, to an extent, hinders community-based development efforts, which may include sustainable forestry and forest conservation activities. The government recognizes these challenges and has taken several steps to address forest governance, an important element of which is to foster closer collaboration between local communities and forest concession operators. Signing the VPA under the EU FLEGT initiative is an important step because it will provide opportunities for combating illegal logging—an essential basis for developing a responsible timber trade. Ghana's interest in the VPA lies in maintaining access to the EU timber market. Exporters are finding it increasingly difficult to land uncertified and unlicensed wood products in the EU. This is largely attributed to changing consumer preferences—discerning purchasing habits—and the TPPs being deployed in EU member states. Participation in the EU FLEGT programme positions Ghana to measure up to this changing international market for timber.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Guyana	Phase 2—Formal negotiation (began May 2012)	Approximately 76% of Guyana's land area—about 15 million hectares—is forested, of which 60% is classified as primary forest. Production is low, at 350 000–400 000 m^3 per year from an area of 6 million hectares of production forest. Forest product exports were valued at US$55 million in 2006 but declined to US$48 million in 2010. Exports range from raw and sawn timber to plywood, moulding and furniture. Available information indicates that few activities are causing major negative impacts in the forest, and forest harvesting is based on a conservative selection felling system. The main problems are illegal chainsaw logging, the use of unlicensed portable sawmills, and wildlife poaching.
Honduras	Phase 2—Formal negotiation (began April 2012)	Honduras has 6.59 million hectares of forest, which is 59% of the land area. The state owns 47% of the forest, while private landowners and communities own 39% and 14%, respectively. Honduras has grave issues of communal land rights and land-use conflicts. A major problem is deforestation caused by forest conversion to agricultural plantations (oil palm) and other land uses, such as mining and hydroelectricity.
Indonesia	Phase 3—System development (negotiation began March 2000; VPA agreement signed 4 May 2011)	Indonesia has a forest area of 98 million hectares, which is almost 60% of the land area. This forest area is of global significance, representing 10% of the world's remaining tropical rainforest. Indonesia is one of the world's largest producers of tropical timber. The majority of Indonesian forest products are exported to China, Japan, the Republic of Korea and the EU. Indonesia was one of the first countries to start VPA negotiations with the EU, and it was the first Asian country to sign a VPA. Illegal logging and associated trade continue to pose problems for the forest sector in Indonesia by generating considerable financial loss as well as environmental degradation. Therefore, the Indonesian Government is paying special attention to these issues. Illegal logging increased in Indonesia in the reformation era, but major government campaigns and strong coordination among related institutions have decreased its incidence significantly in recent years. The Ministry of Forestry cannot eradicate illegal logging by itself, but more intersectoral coordination could bring about effective law enforcement and governance. As of 1 January 2013, Indonesia requires that exported timber products are accompanied by a V-Legal Document, which assures the legality of timber and timber products from the stump through the processing mill to the export point. An independent evaluation of Indonesia's TLAS (known as the SVLK) was launched on 16 April 2013 to assess the system's robustness in meeting FLEGT requirements, as set out in the VPA. Observance of the V-Legal documentation in compliance with the SVLK for the export of timber will lead the way to eventual FLEGT export licensing. Illegal logging in Indonesia causes major financial losses as well as environmental degradation. The government, through strong coordination with 18 institutions related to the suppression of forest crimes, has achieved a 77.6% reduction in the last five years. Indonesia faces a global outcry, however, about the massive conversion of natural forest to agriculture, especially oil-palm plantations. In addition, there is reportedly large industrial demand for wood fibre that is far in excess of the legal supply.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Lao People's Democratic Republic	Phase 1—Informal and pre-negotiation (initiation letter with EU 28 February 2012)	At close to 16 million hectares, the forest in the Lao People's Democratic Republic (Lao PDR) covers 68% of the land area. Lao PDR is in the early stages of developing a FLEGT strategy and action plan. The introduction of the revised Forest Law and Wildlife and Aquatic Life Law in 2008 and regulations on the harvesting, processing and export of wood products will provide legislative support for the wider enforcement and governance measures that need to be taken to meet international requirements. In 2010, the Government of Lao PDR, with assistance from the EU and the European Forest Institute, conducted a baseline study of the forest resource and timber flow aimed at strengthening forest governance and the internal control mechanisms. The industry is keen to access the high-value wood-product markets of the EU.
Liberia	Phase 3—System development (VPA Agreement signed 26 July 2011)	Liberia has about 4.3 million hectares of tropical rainforest, which is almost 45% of the land area. Liberia had been afflicted with prolonged civil wars, but since 2003 it has taken significant steps to reform the forest sector and increase access to timber resources. To increase transparency, the government has instituted a national timber traceability system, LiberFor, to facilitate timber tracking and revenue payments. It is in the process of further reforming the Forestry Development Authority. Liberia has developed and implemented a national communication strategy to strengthen public understanding of the VPA. In the latter half of 2011 it developed another national communication strategy to engage the public in VPA implementation. The government is embracing policies that promote mutual understanding and support through information-sharing and dialogue.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Malaysia	Phase 2—Formal negotiation (negotiations started September 2006)	Malaysia has 18 million hectares of forest, which is 55% of its land area. Timber is an important export product and a significant contributor to the national economy. Timber and timber products were exported to more than 180 countries in 2012, valued at about US$9.3 billion. The three most important markets were Japan (21%), the United States (12%) and the EU (10%). Malaysia and the EU are at an advanced stage of VPA negotiations. Delays in signing are mainly on the streamlining of plans to institute the VPA on a phased basis, starting with the two subregions, Peninsular Malaysia and Sabah, to be followed by Sarawak. Work on resolving issues related to native customary rights in some parts of the country have also put the conclusion of the VPA on hold. The development of the Malaysian TLAS (known as the MYTLAS) has been completed and put into operation in Peninsular Malaysia and Sabah. Peninsular Malaysia started issuing MYTLAS licences on 1 February 2013 to meet EUTR due-diligence requirements. By June 2013, more than 4000 MYTLAS licences had been issued. Sabah was due to follow suit on 1 February 2014. MYTLAS in Peninsular Malaysia underwent successful independent monitoring when a trial compliance auditing was conducted in 2013. Malaysia is fully committed to FLEGT initiatives. The current legislation, as well as enforcement procedures and measures, are in place to combat illegal logging and other forest crimes, although illegal logging in Malaysia is not considered a major issue. Nevertheless, Malaysia will institute further measures to strengthen MYTLAS, including: • allocating more resources for undertaking effective forest law • enforcement; and • educating the public and forest communities, private timber companies and other relevant parties on forest conservation.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Myanmar	Phase 1—Informal and pre-negotiation (assessment of Myanmar TLAS in relation to EUTR done with European Timber Trade Federation, March 2013)	About 31.8 million hectares of Myanmar is forested, which is 48.3% of the land area. Of this area, about 10% (3.19 million hectares) is classified as primary forest. Myanmar has 988 000 hectares of planted teak forest. Myanmar is the only country that harvests high-quality teak trees from natural forests, and it accounts for one-third of global teak production. Myanmar has a long history of forest management (its forest management approach is called the Myanmar Selection System) founded on the concept of sustained yield in its rich natural forests. Myanmar has legislation in place, with appropriate regulations, to manage and control forest harvesting. It has developed certification for natural forest and plantation management and chain-of-custody procedures for the timber supply chain. The Myanmar Forest Certification Council governs forest certification based on standards it developed through a multistakeholder consultation process. The Council is constituted by representatives of NGOs, research and academic institutions, private enterprises, the government sector and other relevant stakeholders. Forestry in Myanmar is challenged by forest encroachment in remote areas, where the stealing of timber and rattan takes place and products are transported across the national border. The following FLEGT measures will be undertaken under the VPA: • institutional strengthening and capacity building of institutions under the Ministry of Forestry; • raising awareness among stakeholders of forest laws and rules and procedures regarding the legal removal of forest resources; • the implementation of extension activities related to the rights and responsibilities of forest users; • the enhancement of participation by all stakeholders; and • the launching of special operations for regular monitoring and inspections of forest products and forest reserves.
Philippines	Phase 1—Informal and pre-negotiation (initial meeting with European Forest Institute 12 November 2012)	The Philippines has 15.8 million hectares of forest, which is just more than 50% of the total land area. The Government of the Philippines has declared a moratorium on timber cutting in natural and residual forests. It has also set up an anti-illegal felling task force and TLAS mechanisms to combat illegal logging through its Multi-sectoral Forest Protection Committee, which will operate nationwide. Another initiative to support FLEGT in the Philippines include the Deputation of Environment and Natural Resources Officers of the Department of Environment and Natural Resources, which directly involves citizens in the protection and conservation of the country's environment and natural resources. Another is the National Law Enforcement Coordinating Committee.

Country	Voluntary partnership agreement (VPA) timeline	Country brief
Thailand	Phase 1—Informal and pre-negotiation (EU FLEGT team met Thai Government in 2009)	Forests cover 14.4 million hectares in Thailand, which is 28% of the land area. Thailand has a strategic position in the Mekong region, and it is an important player in the Association of South East Asian Nations (ASEAN) region. Thailand is a major producer of (plantation-grown) rubberwood and a net importer of tropical hardwood. It exports wood products valued at US$3 billion annually. The EU is an important market. Approximately one-third of Thailand's wood-product exports go to markets that require proof of legal origin. Thailand has established the National FLEGT Negotiation Committee in anticipation of formal VPA negotiations with the EU, and it has a legal framework for addressing FLEGT. It has three key strategies for strengthening FLEGT implementation: 1) stopping forest encroachment immediately and consistently; 2) granting rights for marginalized people to live in forest areas without impacting negatively on the environment; and 3) enforcing and promoting forest rehabilitation.
Viet Nam	Phase 2—Formal negotiations (start of negotiations 29 November 2010)	Viet Nam has a forest area of 12.6 million hectares, which is 38% of the land area. Viet Nam is a significant player in the timber sector in Southeast Asia. Primarily a processing country, Viet Nam imports timber from countries in the region, including Lao PDR, Cambodia, Indonesia and Malaysia. Viet Nam's furniture export sales reached US$3.9 billion in 2012, the largest in the ASEAN region. Wood products account for more than 80% of Viet Nam's total exports, according to industry reports. The furniture industry looks forward to the creation of the ASEAN Economic Community, which holds prospects for a substantial increase in the volume of the timber trade. There is a need for FLEGT systems because violations of state forestry laws are common. Urgent government interventions are necessary to address problems of interference with forest protection and forest management in the field. Priority needs to be given to perfecting forestry laws and policies to enhance forest protection capabilities.
Others FLEGT information missions on VPAs have been conducted in the following countries under the EU FLEGT Regional Support Programme: **Africa**—Sierra Leone. **Asia**—Papua New Guinea and the Solomon Islands. **Central and South America**—Bolivia, Colombia, Ecuador, Guatemala and Peru.		

Source: Data drawn from various sources by the authors.

Timber procurement policies are intended to address concerns among the public and in the private sector about the environmental credentials of forest products. Many purchasers demand that products should come from sustainable—or at least legal—sources and that claims of legality and sustainability are verifiable in order to maintain credibility with buyers in the marketplace. These requirements and policies have important implications for tropical timber suppliers.

This publication includes: an update of information on the public timber procurement policies of ITTO consumer countries; an analysis of the impacts of timber procurement policies on markets and trade; an examination of the challenges faced by ITTO producer and consumer countries in complying with and implementing timber procurement requirements; and recommendations for further action by ITTO to promote trade in tropical timber in the context of timber procurement policies.

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