High-Value-Added Wood Products from South-East Asia

An export guide
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An export guide
About the paper

Exporting responsibly sourced high-value-added wood products from South-East Asia, including the Lao People’s Democratic Republic, can drive economic growth. Rising demand for timber in Europe offers opportunities for small to medium-sized producers. Strengthening the regional wood-processing sector through increased exports can yield significant economic and social benefits.

This guide provides essential information on European Union (EU) import requirements, showcases potential products for the European market and facilitates successful exports from South-East Asia to the EU. It serves as a valuable resource to help governments tackle climate change and address sustainability and quality issues to ensure exporters maintain market access.

Publisher: International Trade Centre
Title: High-Value-Added Wood Products from South-East Asia: An export guide
Publication date and place: Geneva, May 2024
Page count: 76
Language(s): English
ITC Document Number: GIVC-24-168.E

Citation: International Trade Centre (2024). High-Value-Added Wood Products from South-East Asia: An export guide. ITC, Geneva.

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Foreword by ITC

Forests play an integral role in tackling the climate challenge and other urgent environmental imperatives. Their value is especially apparent in South-East Asian economies, such as the Lao People’s Democratic Republic, whose forests are critical for supporting local livelihoods and meeting daily needs, from food to fuel. Conserving and restoring forests is also important to enable countries to meet their Paris Agreement commitments and to deliver on the ambitions of the Kunming-Montreal Global Biodiversity Framework.

Yet, forests have experienced significant harm and outright loss, including from climate change. Without swift action, low-income households that rely on forests and the products derived from them will be among the first to feel the fallout, while the environmental damage will have implications that extend globally. But these same forests can, if managed sustainably, open new opportunities for South-East Asian exporters, while helping to deliver on sustainable development goals such as ending poverty and conserving biodiversity.

Governments are increasingly adopting trade-related environmental measures to make sure that products entering their markets do not contribute to deforestation or forest degradation, with one of the most recent examples being the European Union Deforestation Regulation (EUDR). Other governments, including the United States, the United Kingdom and various developing economies, are weighing similar measures.

At the same time, it is critical that these same measures do not inadvertently lead to small and medium-sized enterprises (SMEs) being shut out of supply chains and markets. These measures can create a hefty compliance burden for producers, especially SMEs. Such firms are often well aware of why tackling deforestation and forest degradation matters, and many are already taking steps to limit the environmental harm that their activities may cause. Others would readily do so if they had the resources, information and finance to make the necessary changes.

That is where capacity building can make a lasting difference, and that is why the International Trade Centre (ITC) actively supports SMEs, business support organizations and policymakers as they adapt to these trade-related environmental measures. Along with hosting dedicated roundtables on deforestation-free global value chains in priority commodity sectors, ITC works directly to help SMEs and producers’ associations comply with the requirements of the EUDR.

This support also extends to helping small businesses access the finance and technologies they need and providing training in sustainable agroforestry practices. In parallel, ITC is engaging with policymakers on where existing standards and regulations can help in meeting the new requirements.

This new export guide is part of ITC’s contribution to these capacity-building efforts. It is designed to be comprehensive, accessible and timely, so that South-East Asian SMEs in timber processing and traders in wood-based products can easily find the information they need.

The guide reflects recent developments in the European Union, given its role as a major export market, while outlining where export opportunities lie. The authors also describe national export requirements within producer countries’ legislation, examine the role and potential for national and international export promotion programmes, and cast a forward glance at what the market for wood-based products could look like.

ITC stands ready to continue this capacity-building support for South-East Asian SMEs, especially at this critical moment for their local economies, their forests and the 2030 Agenda for Sustainable Development.

Pamela Coke-Hamilton
Executive Director
International Trade Centre
Foreword by the Delegation of the European Union to the Lao People’s Democratic Republic

The political, economic and development connection between the Lao People’s Democratic Republic and the EU has grown stronger over the past few decades due to shared principles, mutual respect and common interests. To handle global concerns such as digitalization, climate change and regional integration, we are both committed to a rules-based multilateral system.

ITC is carrying out a project funded by the European Union called ASEAN Regional Integration Support from the EU (ARISE+) to encourage inclusive economic growth, enhanced climate change resilience, vulnerability mitigation and job creation in the region. The project’s goals in the Lao People’s Democratic Republic are to enhance the business climate and boost the country’s involvement in global value chains for two specific industries – coffee and wood processing – that have the greatest potential for trade between the EU and the Lao People’s Democratic Republic.

Illegally harvested timber has been prohibited from EU markets since 2013 by the EU Timber Regulation, which also mandates that importers verify the origin of their products. However, the EU superseded the previous law on the legality of timber in 2023 with the EUDR, which seeks to stop goods connected to deforestation or forest degradation from coming onto the EU market and being offered for sale. This aims to prevent EU citizens’ consumption from causing deforestation in partner nations.

While the Lao government’s significant efforts to create a national Timber Legality Assessment System will be very helpful in demonstrating the legality of timber, operators must also make sure that goods imported into the EU market did not cause deforestation after 31 December 2020, to comply with the EUDR. This guidebook offers helpful information on what will be required from operators, pending the finalization of the EUDR implementation guidelines.

In addition to the wood-processing export roadmap that was approved in 2021, this export guide is a useful tool for regional small and medium-sized wood businesses that want to enter the EU market to increase their market share. The guide covers Lao national export procedures, best practices and available help desks in addition to EU market potential and import regulations.

I am convinced that this technical assistance will help small and medium-sized enterprises in the wood sector grow even more, leading to more employment, economic growth, exports and income for the government to promote the country’s socioeconomic development. The EU and its member states are pleased to play an active role in supporting this goal, in the context of the forthcoming graduation of the Lao People’s Democratic Republic from the least developed country category.

I take this opportunity to convey my gratitude for the excellent working relationship that has been built with the Ministry of Agriculture and Forestry, especially with its Forestry Department. I also want to commend the ITC team for working in tandem with all relevant government agencies, leaders from the business community and development partners to realize our shared goal of making the Lao People’s Democratic Republic a wealthier nation.

I’m sure the Lao government, development partners, financial institutions and companies will find this guide to be a helpful resource in taking proactive steps to further the nation’s industrial growth.

Ina Marciulionyte
Ambassador
Delegation of the European Union
to the Lao People’s Democratic Republic
Foreword by the Ministry of Agriculture and Forestry

In the heart of the Lao People’s Democratic Republic’s transformative journey towards a greener and more resilient economy, our government is actively steering ambitious reforms in the forestry sector. This isn’t just a policy shift; it’s a commitment to foster economic and export growth that embraces sustainability and inclusivity.

While our country is undoubtedly blessed with abundant forest resources, we recognize that the full potential of downstream timber processing remains largely untapped, resulting in limited value addition for local economic and rural development. Our wood-processing industry, mostly comprising small, labour-intensive businesses with outdated technology, stands in stark contrast to larger foreign joint ventures dominating end-product manufacturing.

Understanding the untapped potential of our forestry sector, the Department of Forestry, in collaboration with ITC under ARISE+, is embarking on an initiative to empower SMEs and enhance their competitiveness in the global market. This meticulously crafted export guide is not just a document; it’s a tool designed to provide detailed insights, strategies and practical advice, with a strong emphasis on sustainability.

Within this dynamic landscape, our government envisions a rejuvenated green forest economy, offering exciting prospects for our nation. The adoption of sustainable forest management isn’t just a goal; it’s a journey positioning the Lao People’s Democratic Republic on the path to achieving our ambitious 70% forest cover target.

Beyond its environmental benefits, this increased forest cover is poised to meet socioeconomic needs, nurturing downstream industries like reconstituted wood, fibre products and furniture production. This strategic endeavour aligns seamlessly with our commitment to the nationally determined contribution for climate action, addressing climate risks, and contributing to poverty reduction.

I extend my sincere appreciation to all contributors including Lao government counterparts, the EU, the Lao wood and forestry sector and the ITC team for their dedication to this guide. I am confident that it will serve as a catalyst for the growth and prosperity of SMEs in the wood sector. To our entrepreneurs and stakeholders, I urge you to leverage the information in this guide to propel your businesses to new heights, contributing not only to the economic advancement of the Lao People’s Democratic Republic, but also to the broader region.

Thank you for your dedication to sustainable forestry practices and your unwavering commitment to the success of our SMEs. Together, we build a future where growth is synonymous with prosperity and sustainability.

Somvang Phimmavong
Director-General
Department of Forestry
Ministry of Agriculture and Forestry
Acknowledgements

Peter Viehbeck (Consultant) wrote this paper under the supervision of Alexander Kasterine, Senior Advisor Trade and Environment (ITC). Hiba Batool, Associate Sustainable Development Officer (ITC) coordinated management of the work. Khamtan Phonetip (Consultant) provided research input. The ITC local project team – Khankeo Moonvong, Kinnaphone Sounthongdeng and Orlavang Chanthavong provided technical and logistical support. Appreciation is extended to Gabriela Byrde, Emilie Dairon, Marie Claude Frauenrath, Mathieu Lamolle, Anne Kathrin Pfister and Michaela Summerer (all ITC), who provided peer review comments, and special thanks to Marnie McDonald, who provided the preliminary editing of the paper.

ITC extends its gratitude to the Government of the Lao People’s Democratic Republic, the Lao National Chamber of Commerce and Industry, and the Department of Forestry, Ministry of Agriculture and Forestry, Lao People’s Democratic Republic, for supporting the consultative workshops undertaken during the preparation and dissemination of the guide.

ITC would also like to thank Anne Griffin (ITC), for her support in the editorial and production process, Jennifer Freedman, who edited the paper, Design Plus, for graphic support, and Serge Adeagbo (ITC), for printing support.

This report was prepared with the generous funding of the European Union under the ARISE+ programme.
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**Acronyms**

Unless otherwise specified, all references to dollars ($) are to United States dollars.

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<td>ASEAN Regional Integration Support from the EU</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>CE</td>
<td>Conformité Européenne (European Conformity)</td>
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<td>CITES</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
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<td>EU</td>
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<td>EUDR</td>
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<td>European Union Timber Regulation</td>
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<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade</td>
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<td>HS</td>
<td>Harmonized System</td>
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<td>International Organization for Standardization</td>
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<td>International Standards for Phytosanitary Measures</td>
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<td>ITC</td>
<td>International Trade Centre</td>
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<tr>
<td>MDF</td>
<td>medium-density fibreboard</td>
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<tr>
<td>MoIC</td>
<td>Ministry of Industry and Commerce</td>
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<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorization and Restriction of Chemicals</td>
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<td>SIPPO</td>
<td>Swiss Import Promotion Programme</td>
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<tr>
<td>SMEs</td>
<td>small and medium-sized enterprises</td>
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<tr>
<td>TARIC</td>
<td>integrated Tariff of the European Union</td>
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<td>VPA</td>
<td>voluntary partnership agreement</td>
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Executive summary

This export guide provides essential information for traders of wood products and small and medium-sized enterprises (SMEs) involved in timber processing in South-East Asia that want to start exporting or expand their exports to European markets. In most instances, examples from the Lao People’s Democratic Republic are used to illustrate current situations, regulations and specific features in South-East Asia.

This detailed information includes tariff and non-tariff measures and requirements as outlined in EU decisions, directives and regulations. Information is also provided on wood products that hold promising export potential in EU markets, thereby serving as a guide for the types of goods in demand. In addition, the guide delineates requirements that are product-specific; for example, EU procedures that are established to treat wooden packages to prevent pest movement and control risks inherent to the modest quality of wooden material of which packages are typically made.

This guide offers small and medium-sized exporters valuable insights to help them swiftly grasp and efficiently navigate diverse market access requirements, encompassing both regulatory mandates and voluntary standards. While it provides concise consolidation of the requirements that a successful exporter must know, the guide also makes liberal use of links – both throughout the text and in the full reference list – that the user can simply click to access and download relevant materials.

This guide is suitable for occasional use or as a comprehensive reference before embarking on export decisions and activities. Staff overseeing exports in companies can discover valuable insights and extensive information on how to proactively mitigate potential export-related challenges.

Requirements are elaborated throughout the guide, focusing on the most relevant features that small companies could otherwise ignore or overlook. In this context, it should be noted that the listed regulations, requirements and product trends may be revised. Therefore, companies should be vigilant about staying informed and up-to-date.

This guide is a valuable resource for SMEs entering export markets for the first time and for those with experience that are seeking to diversify their export strategy. This diversification may involve collaboration with partner companies in terms of production specialization, outsourcing or change in material type.

The guide has uncovered a dynamic scenario in the wood-based products industry, contrasting plantation timber with wood from natural forests across ecological, economic and material dimensions. The emergence of voluntary forest certification schemes has shaped industry practices considerably. Reflecting evolving consumer preferences, there is a clear shift towards sustainability and eco-friendly materials, particularly wood, notably in home furnishing.
The fusion of wood with other materials in furniture design introduces innovation. Price considerations steer material choices, while customizable furniture options grant consumers greater design freedom.

The ongoing discourse on solid wood versus engineered materials highlights the intricacies of material selection. Additionally, the exploration of forest management nuances evaluates the implications of timber sourcing, addressing environmental sustainability and industry dynamics.

Chapter 1 presents product groups that are in demand within EU markets, supported by market data. Additionally, it provides insights into the fundamentals of conducting market research and leveraging the findings to formulate an effective market entry strategy.

Chapter 2 provides comprehensive information on the import requirements and product-specific regulations of the European Union. It introduces and provides explanations of these, including new legislation such as the European Union Deforestation Regulation and the European Union Supply Chain Regulation. It also lists the common expectations that EU buyers have of their suppliers.

Chapter 3 guides the reader through the details of the European Union Combined Nomenclature, a tool for classifying goods, and the integrated Tariff of the European Union, known as TARIC, using wooden flooring and furniture as an example.

Chapter 4 explores the national export requirements in producer countries’ legislation, using the Lao People’s Democratic Republic as a prime example and under the premises of voluntary partnership agreement implementation. The chapter distinguishes between general and product-specific prerequisites while outlining the specific steps involved in the export process. In this context, it illuminates challenges that SMEs frequently encounter. It also analyses the significance of due diligence measures and voluntary certification as potential export facilitators.

Chapter 5 delineates the significance of national and international export promotion programmes, highlighting the critical role of collaboration with other companies and the need for adequate technical expertise in this context.

Chapter 6 examines long-term market trends pertaining to wood-based products. It compares the ecological, economical and material attributes of plantation timber versus wood sourced from natural forests. In addition, the use of wood-based materials is discussed in relation to solid wood products. The chapter also looks at the key role of voluntary forest certification.
CHAPTER 1

Unlocking market opportunities: Product demand and entry strategy insights

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CHAPTER 1
Unlocking market opportunities: Product demand and entry strategy insights

This chapter presents product groups that are in demand in European Union (EU) markets, supported by market data. It also offers insights into the fundamentals of conducting market research and leveraging the findings to formulate an effective market entry strategy.

This guidance is valuable for businesses seeking to enter EU markets. By identifying high-demand product groups backed by market data, the chapter helps companies understand current market trends and consumer preferences. It also equips them with the knowledge and tools they need to conduct market research effectively, make informed decisions and develop targeted market entry strategies that are more likely to succeed. Ultimately, such insights can greatly enhance the chances of a successful market entry and sustainable growth in the EU market.

Figure 1  French, German and Italian imports of secondary wood products (€ thousands)


Prefabricated wooden cottage in Thailand (© Peter Viehbeck)

Vietnamese traditional furniture making (© Peter Viehbeck)
Products with potential in EU markets

The EU is a major consumer of wood products, and growing demand has led to rise in imports. Factors such as population growth, urbanization and consumer preferences for wood-based products drive this trend. While traditional suppliers such as China, Viet Nam and Malaysia remain significant, these products are increasingly sourced from other countries in South-East Asia (New Forests, 2022).

Demand is especially rising for environmentally and socially sustainable wood products as buyers and consumers prioritize goods that comply with responsible sourcing practices. This trend reflects the social focus on both environmental concerns and the preservation of forests.

Solid wood panels

Solid hardwood panels are used for elements such as kitchen worktops, table tops, kitchen fronts and stair steps. Their softwood equivalents are sought for a wide range of applications such as in the do-it-yourself sector (e.g. for cabinets, shelves, claddings) (Mahmud, n.d.). Basically, all types of wood can be used, depending on the current fashion trend (as long as there is a reliable supply for a longer period, usually 3–5 years).

Typically, solid wood panels consist of lamellas assembled with finger joint technology. Lamellas also can be assembled lengthwise with finger joints, thus allowing the use of shorter pieces (offcuts) that would otherwise be discarded.

Semi-automated or even full automated machinery for finger-jointed panels and lamellas may require large investments, depending on the level of automation and the scale of production. However, higher investment can be offset by greater efficiency, improved quality and minimized waste.

Lesser-known species are a valid alternative to produce panels compared to commonly used species in the European Union such as oak, maple or spruce. Promoting lesser-known species is an important part of sustainable forest management schemes. The scarcity of some traditional and popular tropical species offers good opportunities for new species (World Wildlife Fund, & Global Forest and Trade Network, 2013).

A useful standard for further product characteristics and requirements is DIN EN 13353: Solid wood panels. This standard specifies requirements for solid wood panels – defined according to DIN EN 12775: Solid wood panels, classification and terminology – with a maximum thickness of 80 mm; for use in dry, damp and outdoor areas; and defined according to service classes 1, 2 and 3 in EN 1995–1-1: Design of timber structures (Baunormenlexikon, n.d.).

Solid panel consisting of glued strips (© Shutterstock/timtv)

End fingerpoints (© Shutterstock/Atstock Productions)
Plywood

Plywood ranges from packaging and formwork panels to technical panels for the transport industry, for decorative grades and, to a lesser extent, for furniture. Suppliers should be able to deliver large volumes, so smaller producers may work together to increase capacity. The biggest suppliers of plywood to the European Union include Brazil (pine, eucalyptus, tropical hardwoods and softwoods), China (poplar, eucalyptus and pine) and the Baltic region (birch, pine, spruce and poplar) (European Panel Federation, 2018).

Form-pressed plywood components are in demand for products such as chair seats and backs, structural furniture components, musical instruments and others. The added value is markedly higher for these kinds of products than for flat plywood panels, but producing them requires technical expertise.

The product-specific standard DIN EN 636 encompasses four grades of plywood: A, B, C and D:

- The grade refers to the quality and appearance of the plywood’s face and back veneers
- A has the highest quality and is the most expensive, whereas D is the least expensive
- A-grade plywood features a smooth, sanded surface without knots (Plywood Direct, 2023)

Note: European authorities frequently scrutinize the complex timber supply chains for this product in terms of legal status of the raw material. Hence comprehensive due diligence and a transparent value chain play a pivotal role.

Mouldings

Decorative and functional wooden mouldings are widely used in Europe for interior applications. Almost all kinds of timber species can be used, and being finger-jointed lengthwise is accepted. The required cross-dimensions for these items are relatively small, so this product can provide opportunities for SMEs using offcuts with small dimensions. These types of materials may be sourced from the timber yards of larger wood-processing plants. Wood moisture content for these products must not exceed 8%-10%.

Solid wood mouldings compete with mouldings made from medium-density fibreboard (MDF) with an applied glued edge coating film. However, this is largely the domain of European processors due to the use of expensive technology.

Indonesia, Brazil and China are major European Union suppliers for this product group (Forest Law Enforcement, Governance and Trade [FLEGT] Independent Market Monitor, 2022).
Flooring and deckings

Despite fluctuations influenced by various factors – such as declining economic conditions, rising costs of materials, environmental phenomena and, in particular, the COVID-19 pandemic – the EU market for wooden flooring and decking has been remarkably stable. The latter two factors have contributed to consumption stability. Consumers rediscovered both the value of a comfortable home and the need for a sustainable lifestyle. According to a 2022 wood flooring market outlook report from Transparency Market Research, estimated growth in this market segment may reach up to 5.9% between 2022 and 2031.

On the other hand, there is undoubtedly a global shortage of wood material.\(^1\) The European authorities are about to directly limit wood harvesting in the European Union through their new Biodiversity Strategy, and indirectly in the rest of the world through more restrictive import regulations. Responsible sourcing of wood raw material is therefore likely to be critical for successful business operations in this sector (in terms of sustainable forest management and transparent supply chains).

In terms of product types, the balance of types of European parquet flooring has hardly changed in the last 10 years. Multilayer is dominant, accounting for 83% of consumption volume, followed by solid parquet accounting for 15% and mosaic accounting for 2% (European Parquet Federation, 2023a).

It should be noted that timber deckings face intense competition from substitute materials in this sector, notably wood-plastic composites, as well as from thermally and chemically modified European hardwoods and softwoods.

Wooden deckings are destined for outdoor use, such as balconies and patio floors. Further information is provided in the European Union standard EN 14342: Wood flooring (European Standards, 2015). This standard defines and specifies the relevant characteristics and requirements of flat surface wood flooring products and parquets as well as the appropriate test methods for determining their suitability for use as internal flooring (iTeh Standards, n.d.).
Handicraft and decorative articles

Handicraft products stand for tradition, solid workmanship and authenticity. They can be categorized into two major product groups: decorative and artistic products, on the one hand, and functional and technical items, on the other. Evolving demand for eco-friendly products puts wood as the leading material for handicrafts in European markets (bamboo products are also becoming popular). Various market research reports (Volza Grow Global, 2023) indicate that growth in the next few years may reach up to 2% annually.

The current major Asian supplier is China, with the remainder of imports from developing countries supplied by Indonesia, Thailand and India.

When targeting the EU handicraft market, exporters are well advised to consider consumers’ requirements for high quality and environmental consciousness. Furthermore, EU safety regulations must apply. Choosing the right trade partner can be challenging.

The trade structure of the handicraft and wooden gifts market in the European Union is rather complex (Expert Market Research, 2023). Therefore, producers seeking to export to the European Union must find the best trading partner according to the sector profile and product range.

Distribution channels exporters may consider are:

- Agents
- Importers–wholesalers
- Buying groups
- Retailers
- Export marketing organizations
Decorative and art products

Art products require artistic skills for labour-intensive items such as carvings and sculptures, and decorative articles such as designer accessories. Products such as picture frames require modern manufacturing (multiple spindle moulder) and assembling equipment for cost efficiency and quality.

Technical and functional products

This product group suits technically sophisticated companies (construction appliances, devices and jigs needed). All types of timber species are useful as raw material, including lesser-known species. These items are often manufactured from small pieces of wood such as leftovers, offcuts and production waste.
Wooden furniture

Wooden furniture is by far the largest product group imported by EU members in terms of monetary value (indoor and outdoor). Quality furniture has one of the highest levels of added value. Despite strong competition from volume producers including China and Viet Nam, this product segment offers good opportunities for SMEs when targeting mid-level and higher-end markets.

In 2019, just before the market chaos created by the COVID-19 pandemic, the European Union recorded its strongest year for wood furniture imports since 2007 (Oliver, 2020). The market has been recovering steadily since the end of the pandemic.

Safety and quality standards must be applied to protect consumers. Among other requirements, these standards cover aspects such as safe functionality, materials, chemical content and durability.

Hardwood/durable species are often used for outdoor furniture (e.g. garden furniture), and softwoods for indoor furniture such as tables, chairs and sideboards. There are significant differences in price between furniture made out of engineered materials (panels such as chipboard or MDF) – which is generally cheaper – and furniture made from solid wood. A mixture of solid parts and engineered materials may be a niche for companies with edge-banding technology and veneering capabilities.

SMEs that are newcomers to exporting may focus on producing furniture parts instead of complete goods. Starting export engagement in this product segment allows companies to acquire experience in both quality compliance and customer relations on a less intricate level. It is easier to specialize in only a few production processes, as manufacturing processes can be optimized more easily and require fewer resources.
Figure 2  Viet Nam and Indonesia supply most EU imports of wooden furniture


Indoor furniture

This furniture segment accepts a variety of timber species, depending on trends in colour and grain (which change every 3–5 years). Assembled solid panels, solid timber, MDF and chipboard in combination with veneered surfaces are all acceptable raw materials that will satisfy consumer preferences in this segment.

The indoor furniture category encompasses a wide range of furniture for indoor use – such as tables, chairs, stools and dining sets, but also semi-finished products including table tops or cabinet doors. For children’s furniture such as cribs, high chairs, chairs and changing tables, safety and adherence to specific child safety regulations are crucial.


Child’s desk (© Shutterstock/Pixel-Shot)  Individual furniture parts (© Shutterstock/Bobkov Evgeniy)
Outdoor furniture

This category includes mainly garden/balcony furniture (folding chairs, tables, shelves, stools). The global outdoor furniture market size was valued at $48.40 billion in 2022 and is projected to grow from $50.73 billion in 2023 to $72.80 billion by 2030, exhibiting a compound annual growth rate of 5.30% during the forecast period (Fortune Business Insights, 2023). Hardwood plantation timber species such as teak and eucalyptus, which are increasingly available in South-East Asian countries, are naturally resistant to decay, and thus quite suitable for garden furniture.

Alternatively, treating less-durable species with preservation liquid such as water-soluble, salt-based wood preservatives (the so-called C, K, A, B and F salts) can increase durability. However, this conflicts with the increasing environmental awareness of consumers. Conventional chemical wood preservatives are classified as biocidal products under the EU Biocidal Products Regulation (No. 528/2012).

### Box 1  Timber species for outdoor furniture

- **Teak:** Although not fully comparable with teak from natural forests, teak from plantations is a good choice for outdoor furniture due to its natural resistance to decay and insects, and its attractive appearance. It contains various natural oils, which contributes to its durability. The government of the Lao People’s Democratic Republic is promoting investment in teak plantations, allocating areas to smallholders and national and foreign investors.

- **Eucalyptus:** This wood is more affordable than teak, with many of the same benefits. The pretty red hue will darken over time and, if treated properly, it can last up to 25 years. Eucalyptus is also resistant to rotting and decay and has a fast growth rate. The high oil content of eucalyptus means it can easily withstand moisture. Mostly smallholder plantations provide timber for the processing industry in South-East Asian countries.

**Source:** Japan International Research Center for Agricultural Sciences (2016), Aung (1978) and Center for International Forestry Research–International Centre for Research in Agroforestry (2020).
Bamboo products

Every year, a substantial variety of bamboo products is imported from tropical countries into the EU market. In many areas, bamboo competes with or complements wooden materials. For products such as housewares, wooden flooring, furniture and panels, bamboo opens space for excellent product innovations (Centre for the Promotion of Imports from developing countries, 2023).

While outdoor articles as well as housewares and indoor flooring are usually made of tropical hardwood, bamboo is increasingly being used for these products. Bamboo is seen as a sustainable material, mainly because it grows rapidly. As such, it is considered a renewable material, like timber, and is being marketed as such in the European Union.

The global market for bamboo is projected to reach $98 billion by 2025 and its compound annual growth rate is forecast at 5% over 2023–31, according to Grand View Research Inc. China is indisputably the world’s top producer of bamboo and rattan products, with a market share value of $39 billion in 2018 (Market Strides, 2022). Other key exporters include Indonesia, Viet Nam, the Philippines and Thailand.

The individual bamboo species used determines possible use for commercial products. Species such as *Bambusa vulgaris*, *Dendrocalamus strictus*, *Phyllostachys edulis*, *Dendrocalamus giganteus* and *Bambusa balcooa* are used in a wide variety of products (TechSci Research, 2023).

Based on application, the market can be categorized into raw material, industrial products, furniture, handicrafts, bamboo panels, flooring, paper and others.


Further information can be obtained from the International Bamboo and Rattan Organization (https://www.inbar.int/).
Market research and strategies

Market research should be among the first activities for companies pursuing (new) export markets, and the next is elaboration of a market strategy. Both are key steps to make informed decisions on what, where, how and through which channels to sell products.

- **Market research**: Information and insights on important issues such as the competitive landscape, market trends and drivers, market size, market challenges and barriers, and legal requirements.

- Market information as a result of market research leads to market strategies.

- **Market strategy**: A roadmap on how to define and reach goals such as market entry, the right contacts and partners, export channels, pricing approach, promotion strategy, budget allocation, risk management and digital marketing possibilities.

Collecting data and information can be done in two ways: desk research or field research.

**Desk research**

Desk research is basically internet research – browsing through a range of sources such as market surveys, statistics, industry reports, government publications, academic papers and news articles. Research reports from professional market analysts provide valuable insights and information and can be helpful, but they are rather expensive (Hague & Wilcock, n.d.). The decision to invest in such reports should depend on factors such as specific business needs, budget and the value expected from the information provided.

Before heading out to the field, conduct a thorough review of the literature to understand what has already been studied and discovered about your research questions. This helps you build a solid foundation for your research and identify gaps where more information is needed.

**Field research**

This method allows you to gather data, understanding and practical insights directly from different stakeholders. You can form your own opinion by talking to consumers, importers, associations, retailers or product and market experts in your own country or in foreign marketplaces. You may use interview questionnaires, survey forms, observation checklists or direct talks during national and international fairs and exhibitions to collect data in the field.

Field research enables you to be precise and get into granular detail to inform your understanding of market needs. While desk research is a way to gather general information to point you in the right direction, field research allows you to zoom in specifically on the product and market you are researching (Fieldstat International, 2022).

**Box 2 Useful research questions**

- Who are the target customers for the products?
- For which markets are my products suitable?
- Do I have to change/adopt my product design to improve its market acceptance?
- What features do customers value most in products like mine?
- How large is the market in terms of potential customers?
- What external factors – such as economic, social and environmental changes – could affect the market?
- With whom and with what similar products do I need to compete?
- How can my product be distinguished from similar competitive ones?
- How do I find customers and through what channels?

Source: Levin (2023).
Market strategy

The EU market for wood products is among the largest in the world and competition can be challenging. A smart entry strategy is therefore essential to prevail in the market. Publicly available literature can provide information about different strategies — such as franchising, direct exporting, partnering, joint ventures, acquisition and licensing. The most suitable strategies at the start of exporting are direct exporting or partnering.

For a direct export strategy, you must first understand the relevant export procedures for your product and the respective market. Results from market research should bring you into contact with the right associations or customer groups to which you can present your product (European Forest Institute, 2010; Oliver, 2016).

Being flexible when defining a market approach may be the right choice for newcomers and small and medium-sized manufacturers:
- Flexibility in terms of adopting strategies to meet specific demands
- Flexibility regarding cost-effectiveness, product variations and entry strategies
- Flexibility in responsiveness to customer needs
- Flexibility in cooperating with local partners and alliances

These are all advantages of SMEs compared with bigger players.

Strategic key considerations are:
- Know and understand export procedures
- Know the market
- Know the customer
- Know and understand product trends
- Know the competition

Once you are clear on the type of buyers you are seeking, you should consider which trade channels to sell through. The question of how to get direct contacts with importers/buyers must be answered. Most importers are members of sector associations, which often publish membership lists on their websites, so studying these lists can help you pinpoint potential clients (Barry, 2015).

Customization is even stronger than a flexible product offer. The more a product is tailor-made to the needs of your customers, the less replaceable it is and the more they will like it.

Data analysis

All the information you have gathered must be thoroughly analysed. Review, sort and filter the information. Start to form a ‘picture’ of interesting countries that you will refine with every additional piece of information (Coursera, 2023). In this way the right market will gradually become clear.

Some EU markets will look more suitable for your products than others. Your collected information must be reliable (sources) and up to date. Situationally, it may be helpful observing your competitors to find out who their customers are, product specifications and other details.

If the export market is new for you, consider launching a small range of products or even product parts for that specific market and gauge the response through data analysis. One tool for structuring your information is its visualization in the form of a Strengths, Weaknesses, Opportunities and Threats (SWOT) table. The table assigns characteristics of your products and markets to these criteria. Understanding the four criteria will facilitate decision-making regarding market selection, quality, design trends, consumer behaviour, production capacity, cooperation and more.

Pricing

Identifying prices for your products should always be based on a solid and comprehensive price calculation. Buyers frequently ask how you arrived at your selling price. Having robust justification for your price can be a compelling argument for you during negotiation of final contract details. On the other hand, it can be tempting to top up prices once you learn that your products are in demand, and it may even work for some time. Selling below or at own costs may help you enter a market, but will not be sustainable in the long term. Market prices from competing products and companies are useful for further price orientation.

Competing in the low-end market may be too ambitious for most SMEs from developing economies because countries such as China and Viet Nam (two major production hubs) dominate in this sector. It therefore seems advisable to focus on high-value niche markets in the middle and upper-end segments, and to find buyers who appreciate authentic design, decorative and durable wood species, sustainability certifications and good quality.
‘We are too poor to buy cheap’ is a common saying in Europe. It means people are willing to pay a higher price, but expect high product quality in return, instead of replacing the product shortly after acquisition. It is thus advisable to turn your quality level to excellent from the very beginning.

High product quality (and do not forget after-sales service) will lead to a good reputation, no claims and recurrent orders. It is vital to understand that quality is not just ‘nice to have’, but is a strategy to place your products successfully on the market and maintain market share.

**Your own costs**

The first step in the process of pricing is to sketch or draw your product. This should include net measurements and parts quantities per product. This is followed by the generation of the respective parts list. Then you must consider different conversion factors to calculate cross volumes of timber necessary for the finished product. It should be remembered that the material costs are only part of the total costs.

Further costs include labour, fixed costs to take into account machine and operating facilities’ depreciation, and costs for auxiliary materials such as grease, screws and varnishes. This list is not complete, but is rather intended to emphasize the enormous importance of a comprehensible and complete cost calculation for successful export activities.

### Figure 3  Example of a parts list for materials cost calculation

| PARTS LIST |
|---|---|---|---|---|---|
| **Finished product: Livingroom Table 1400 x 1200 x 740**  
**Timber species: Teak (plantation)** | **Amount pieces per 100 units** | **Net measurements [mm]** | **Cross measurements [mm]** | **Net volume [cbm]** | **Cross volume [cbm]** |
| **Component: Top**  
**Individual piece:** Board | 500 | Length 1400 Width 100 Thickness 26 | Length 1420 Width 105 Thickness 30 | 1,82 | 2,365 |
| **Component: Structure**  
**Individual piece:** Long side rail 200 Short side rail 200 leg 400 | 1270 60 20 1070 60 20 714 55 55 | 1280 65 25 1080 65 25 724 60 60 | 0,3048 0,2568 0,86394 | 0,416 0,351 1,04256 |
| **TOTAL Volume for 100 Tables:** | | | 3,24554 4,04606 |
| **Conversion factor size cutting calculated:** | 0,82 0,73 0,73 0,83 | 0,6 |
| **Conversion factor raw timber to cross measures, empiric:** | | |

**Source:** Peter Viehbeck.
## CHAPTER 2

**EU import requirements:**
*What you need to know*

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CHAPTER 2
EU import requirements: What you need to know

This chapter offers comprehensive information on the import requirements and product-specific regulations of the European Union. It introduces and provides explanations of the latter, including new EU legislation such as the European Union Deforestation Regulation (EUDR) and the European Union Supply Chain Regulation. It also lists the common expectations that EU buyers have of their suppliers.

Complying with regulations such as the EUDR and product safety standards is essential to sell timber products in the European Union. Doing so not only mitigates legal risks, but also demonstrates a commitment to environmental preservation and sustainable practices.

Meeting buyer expectations for transparency and accountability through certifications further bolsters reputation and brand credibility. Ultimately, compliance not only facilitates market access, but also aligns businesses with consumer preferences for ethically sourced and environmentally responsible goods in the competitive EU market.

Understanding EU market requirements for wood products

This chapter addresses the most relevant safety and legal requirements for timber products in the European Union. It should also be noted that buyers often ask their suppliers for sustainable forest management certification and chain of custody, and perhaps some premium attributes such as ISO 9001 and ISO 14001.

Mandatory regulations
- Product safety
- Conformité Européenne (CE) marking
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) permit
- Regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Packaging
- EUDR

Voluntary systems
- Forest certification/chain of custody
- ISO standards
Product safety

The General Product Safety Regulation is a new key instrument in the EU product safety legal framework, that will replace the current General Product Safety Directive as of 13 December 2024. It modernizes the framework while addressing new challenges posed to product safety by the digitalization of economies (European Commission, n.d. c). Planned changes take into account topics such as online marketplaces, stricter traceability and new technologies.

The regulation does not specify technical requirements for wood products. Instead, it outlines general safety requirements that they must meet. These requirements refer to criteria such as functionality, construction, surface quality, labelling, packaging and mandatory provision of information for customers. While this regulation does not mandate CE marking of products (explained below), the symbol remains an important marker of product safety compliance.

CE mark

The CE mark indicates that a product complies with applicable EU legislation, including the General Product Safety Regulation. Although importers are ultimately liable for product compliance in the European Union, their suppliers/manufacturers play a vital role in ensuring that their products are safe. It is their responsibility to conduct conformity assessments, set up the technical documents, issue the EU declaration of conformity and affix the CE mark to a product (Compliance Gate, 2023).

The CE mark is only mandatory for goods that fall under the scope of specific EU harmonized directives or regulations (new approach directives). A comprehensive list with all the directives can be found at https://single-market-economy.ec.europa.eu/single-market/european-standards/harmonised-standards_en.

Examples of wooden products with mandatory CE marking:

- Wooden toys for children
- Children’s furniture such as cribs and high chairs
- Packaging materials such as pallets
- Load-bearing wooden structures, e.g. beams or flooring in large buildings

If your product is subject to mandatory CE marking, you need to create a Declaration of Performance document before applying the CE mark to your product. This document must be presented to the authorities and your customers. It outlines the characteristics of a product – for example, the tipping safety of a child’s high chair. It also provides assurance of how the product will perform under defined conditions.

The General Product Safety Regulation remains applicable for other wooden goods not covered by such directives, and manufacturers and distributors are responsible for ensuring the safety of their products placed on the market. No CE marking is mandatory for construction items such as staircases and windows. However, these products must comply with specific requirements under the Construction Products Regulation (European Union) No. 305/2011. Such EU regulations guarantee the harmonization of rules for the trade of construction products scaled to their end use.

For more and detailed information on how to obtain and apply the CE mark, you can visit https://single-market-economy.ec.europa.eu/single-market/ce-marking_en.
**REACH**

The EU’s REACH regulation aims to protect human health and the environment from the risks posed by chemicals (European Commission, n.d. b). Its range also covers wood products.

Wood-processing companies that plan to export wooden products to the European Union must comply with relevant REACH regulations. The manufacturing of wood products involves processes such as gluing and finishing. Materials used for these processes may release certain types of restricted pollutants (e.g. formaldehyde) or contain heavy metals or chemicals in additives.

The European Chemical Agency maintains a list of substances of very high concern for authorization. The latest list of these substances can be found at [https://echa.europa.eu/de/candidate-list-table](https://echa.europa.eu/de/candidate-list-table). Exporters of wooden goods should avoid applying varnishes, paints, stains, adhesives or other materials containing the substances on this list, which may be subject to specific obligations and/or constraints.

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<tr>
<td>Emission of formaldehyde</td>
<td>Formaldehyde-based glues in engineered material such as particle boards, MDF and plywood</td>
</tr>
<tr>
<td>Emission of isocyanates</td>
<td>Polyurethane-based adhesives used for engineered materials that are described as ‘formaldehyde-free’</td>
</tr>
<tr>
<td>Emission of volatile organic compounds</td>
<td>Solvent-based paints and varnishes, oil-based wood stains, adhesives</td>
</tr>
<tr>
<td>Odour emissions</td>
<td>Components inherent in wood, such as terpenes, are part of the so-called extractives. They only occur in a comparatively small number of timber species. Extractives from wood denote a category of organic compounds that can be derived from the wood. The link between terpenes and odour is due to the volatile nature of these compounds, which are released into the air. Most coniferous trees such as pine, spruce and fir emit terpenes.</td>
</tr>
</tbody>
</table>

*Source:* Peter Viehbeck.

Special rules and regulations apply in the case of children’s toys and, to some extent, children’s furniture. It is not uncommon for toy production to use questionable chemicals to achieve properties such as colour and hardness. In some cases, such materials contain heavy metals (lead and cadmium in paints and pigments). These chemical components are released over time through oral contact toxicity (Bergkamp, 2013).

The European Union enforces directives such as the EU Toy Safety Directive, first published in 2009. It came into partial force in 2011 and 2013. A new, more complete version was released in 2022. Exporters must demonstrate compliance with this ‘combination’ of requirements.

All these regulations and warnings may sound complicated and even deter potential exporters. However, the supply industry for wood surface materials and adhesives started to develop and commercialize environmentally friendly and safe materials for different applications many years ago. Water-based varnishes and stains, plant-based oils and epoxy resins are among the large range of alternative materials.

Examples of publications on regulations, standards and voluntary certifications
Packaging

Export packaging is often made of wooden materials. Transportation packaging such as pallets, boxes, dunnage and crates made of solid wood with a material thickness exceeding 6mm are subject to the European Packaging Directive 94/62/EC (Nageler-Petritz, 2023). The directive stipulates the requirements for packaging. Products including cardboard, plywood and engineered wooden materials (products that have undergone any process such as glueing, heating or pressuring) are exempt from these requirements.

The International Standards for Phytosanitary Measures (ISPM) 15 standard is one of the core requirements of the directive. It outlines phytosanitary measures to minimize and control the risks of pest movement. The requirements (for materials exceeding 6mm thickness only) are:

- **Removal of bark:**
  - Complete removal of bark from materials thicker than 6mm. In cases where the bark is firmly attached and does not exceed 3mm of width anywhere on the wood surface, it can be exempt from the regulation (European Chemicals Agency, 2023).

- **Application of treatment:**
  - Exposing the packaging material to a minimum wood core temperature of 56°C for a minimum of 30 minutes or
  - Technical kiln drying process to 10%–12% wood moisture content or
  - Chemical pressure impregnation or
  - Fumigation with methyl bromide gas at a minimum temperature of 10°C and a minimum exposure time of 24 hours.

- **Identification based on the internationally recognized ISPM 15 mark:**
  - International buyers of your products will certainly address this issue during contract negotiations, demanding this requirement for export product packaging.

The European Commission has proposed a new regulation to replace the existing directive 94/62/EC. It is considered no longer sufficient to meet current challenges such as waste prevention and recycling. ‘All packaging in the European Union is reusable or recyclable in an economical way until 2030’ (Schmidt & Engelmann, 2023).

In addition to the directive, the new regulation focuses on requirements such as:

- Prevention of packaging waste
- New packaging materials must be recyclable
- Avoidance of virgin materials in packaging

This EU packaging regulation is part of the European Green Deal and subsequently part of the ambitious Circular Economy Action Plan. It should come into force at the end of 2024.
Convention on International Trade in Endangered Species of Wild Fauna and Flora

If you have access to the endangered timber species listed in Appendix I or II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and you plan to process these species for export, you will need to obtain a CITES permit. With this permit, you automatically comply with the requirements of the European Union Timber Regulation (EUTR) and your timber is considered to be legally and sustainably harvested (see Chapter 2 on the EUDR, which has replaced the EUTR).

You can apply for a CITES permit at the CITES authority in your country. This authority is usually a government department or agency responsible for implementing and enforcing CITES regulations in the country. For the Lao People’s Democratic Republic, the CITES authority is assigned to the Department of Forestry Inspection, which operates under the Ministry of Agriculture and Forestry. More information can be found at https://cites-tsp.org/.

Corporate social responsibility

European companies increasingly pay attention to their corporate responsibility regarding the social and environmental impact of their business. This also affects their suppliers worldwide. Importing companies residing in the European Union therefore have policies in place to take care of these issues. These policies can include asking suppliers to commit to certain values such as human rights, gender parity, freedom of workers’ association and fair and justified salaries, as well as ensuring compliance with applicable national laws and regulations.

The European Union, meanwhile, has adopted a supply chain regulation. Closely related to this mandatory regulation is the Corporate Sustainability Due Diligence Directive, which goes far beyond the voluntary corporate social responsibility policies of companies. The objective is that companies operating in the European Union implement due diligence measures to avoid their business activities causing negative impacts on human rights and the environment in their supply chains.

So far, only larger EU-based companies are obliged to comply with these requirements. Companies with 250 or more employees and an annual turnover of more than €40 million worldwide will be subject to the regulation. SMEs are not directly affected, but can be indirectly affected if they are suppliers to these larger entities, thus being part of the entire supply chain. EU companies subject to these regulations will definitely require their suppliers worldwide to comply with due diligence obligations. Affected SMEs must demonstrate their commitment to issues such as:

- International Labour Organization labour standards (freedom of association, prohibition of child and forced labour, equal pay and no discrimination in employment)
- Human rights (physical integrity, equality before the law, recreation and leisure time)
- Environmental due diligence (caretaking measures in terms of pollution of water, air and soil)

South-East Asian suppliers should see these obligations as an opportunity. Suppliers with an adequate documented policy in place and its implementation on-site can benefit from substantial advantages over their competitors in terms of company reputation, being an attractive employer, reliability and trustworthiness.

EU Regulation on deforestation-free products

The EUDR, the new European Union regulation on deforestation-free products, replaced the EU regulation on timber legality (EUTR) in June 2023. While the EUTR focused on the legality of timber and timber products entering the European Union, based on due diligence and FLEGT licences, the EUDR goes further. It imposes an extended product scope, further considering agricultural commodities such as beef/cattle, palm oil, soya, coffee, rubber and cocoa. It aims to prevent products linked to deforestation or forest degradation from entering the EU market.

In the case of the Lao People’s Democratic Republic as a voluntary partnership agreement (VPA) country, the Timber Legality Definition No. 2: ‘Conversion Areas’ has defined timber originating from clear cutting of forest areas for infrastructure projects and agricultural use as legal, and thus legally authorized to be processed and exported. (Note: Timber Legality Definition 2: ‘Conversion Areas’ is still in the amendment stage.) Under the EUDR, ‘deforestation-free’ is defined as goods produced on land that has not been subjected to deforestation or forest degradation after 31 December 2020 (Global Traceability, n.d.).
Figure 4  Geographical forest location

Note: The purpose of this Google map is simply to illustrate to SMEs what is meant by geographical location (latitude and longitude) they need to provide to their customers – in this sample case, the location of Pak Xeng. In practice, SMEs will use exactly such type of information source to provide their customers with the information they need. For plots of land under 4 hectares, operators can use a single point of latitude and longitude of six decimal digits to provide geolocation. For larger plots of land, the geolocation shall be provided using polygons, meaning latitude and longitude points of six decimal digits to describe the perimeter of each plot of land.

Source: Google maps.

The EUDR is part of the broader European Green Deal and the European Union Biodiversity Strategy for 2030. It is supposed to stimulate markets for deforestation-free products. Exporters will have to demonstrate that their goods are not associated with deforestation to access the EU market, so timber from conversion areas will not be eligible to export after the cut-off date of 31 December 2020.

Even though EU operators are responsible for providing data and information about the source of the timber, they will request these data from their suppliers outside the European Union, which may be burdensome. In addition to the deforestation-free requirement, the commodities and selected derived products need to be produced in compliance with national legislation («legality requirement»). Supporting documentation has to be held by the «operator» (the entity importing/exporting to the EU market) for at least five years and made available to the competent authorities upon request.

A benchmarking system operated by the European Union aims to assign high, standard or low risk to countries or parts thereof. The ‘standard’ risk is crucial, because all countries and regions start as ‘standard’ until the benchmarking assessment is complete. The risk rating impacts the number of verification checks as well as due diligence requirements.
The main new requirements for importers under EUDR legislation are:

- Due diligence process including risk assessment and risk mitigation, substantiated by a Due Diligence Statement submitted in EI Information System before placing the product on the EU market
- Supporting documentation on the legality of production
- Precise information on the geographical location of the timber source, including for imported timber (plantations, secondary and primary forests, urban/scattered trees)
- Even though timber from conversion areas may have legal status in the country of origin, it will not meet European Union requirements (conversion after 31 December 2020)
- Accurate and documented origin of wood and compliance with national legislations

European Union buyers’ expectations of their suppliers

A good relationship between buyer and producer is the basis for stable and mutually beneficial business development, and can give suppliers a competitive edge in a new market. It also provides opportunities during price negotiations and increases the buyer’s understanding of your company needs if complications arise. EU buyers often seek to establish long-term relationships with reliable suppliers. They value partners who understand their business needs and are willing to collaborate on continuous improvement and innovations (Brandstetter et al., 2006).

European buyers’ expectations of their overseas suppliers can vary due to their own standards and values. However, the following is a list of common expectations that most buyers have for their suppliers.

- Quality: Contractual agreements in terms of quality must be met or should even exceed expectations. Consistency in product quality is essential. You can achieve this by applying professional quality management in all your procedures.
- Pricing: Despite high expectations on quality, buyers are by nature price-conscious. As mentioned before, a good and trusting relationship with a buyer can facilitate the buyer’s willingness to pay premium prices for your quality products. Pricing should always be transparent, to convince a buyer that your price is justified and competitive.
- Communication: As the saying goes, ‘communication is key’. Effective and transparent communication is critical for a successful partnership with your buyer. Timely responses to inquiries, updates on production status, shipment details and information in terms of due diligence help build trust and ensure that both parties are on the same page.
- Social compliance: European buyers usually emphasize social compliance and ethical practices. They expect their suppliers to adhere to international labour standards (as mentioned in Chapter 2), corporate social responsibility policies and the Corporate Sustainability Due Diligence Directive, and to comply with environmental rules and regulations.
- Timely delivery: Delivery on time is, under normal conditions, non-negotiable for buyers. Some exceptions may be accepted if you have compelling reasons. Without timely delivery, companies will have problems with their own warehousing and material management, and will face difficulties supplying their own customers.
- Flexibility: EU buyers appreciate suppliers that can adapt to changing market conditions, customer preferences and regulations. Flexibility in manufacturing processes and the ability to accommodate customization requests can give suppliers a competitive advantage that should not be underestimated.
- Responsibility: Buyers often expect suppliers to take responsibility for the entire supply chain, including sourcing of raw materials and subcontractor services. They value suppliers that are proactive in identifying and addressing any challenges or risks within the supply chain.
- Product compliance: Compliance with applicable safety standards, certifications and legal requirements is essential. Suppliers need to ensure they meet all standards necessary for the target market.
- Due diligence, including risk assessment and risk mitigation: All operators selling products in the European Union must provide a ‘due diligence statement’ for each product batch, which the EU authorities may inspect. The extent of the inspection hinges on the risk level of the product’s origin country or region, determined by the benchmarking results.
CHAPTER 3

EU customs classification: Vital for importers and exporters

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TARIC: Integrated tariff of the community ......................................................................................................28
Harmonized System (European Union classification) ......................................................................................29
This chapter explains the details of the integrated Tariff of the European Union (TARIC), using wooden flooring and furniture as an example.

Businesses exporting in the European Union as well as importers legally located in the European Union, regardless of their size, are required to classify their goods for customs purposes using specific codes. These codes determine the amount of customs duty the EU buyer must pay to EU authorities during customs clearing. The same procedures and standards apply to all EU member states – this is called the harmonized norm.

European union tariffs (customs duties)

EU tariffs, also known as customs duties, are taxes levied on goods imported into the European Union from non-European Union countries. When goods enter EU territory, customs officials assess the applicable tariffs based on the Harmonized System (HS) code of the imported products. These tariffs aim to control trade, protect domestic industry where appropriate and, last but not least, generate revenue for the government.

The tariff rates vary depending on the type of goods being imported and their country of origin. There are also different rates (preferential tariff rates) with specific countries or regions under the Generalised Scheme of Preferences, which removes import duties from products coming into the EU market from vulnerable developing countries under three arrangements.

Visit https://policy.trade.ec.europa.eu/development-and-sustainability/generalised-scheme-preferences_en to find out which arrangement (and tariff rate) applies to your country. For example, the tariff rate is 0% for goods coming from the Lao People’s Democratic Republic.

TARIC: Integrated tariff of the community

TARIC (Tarif Intégré de la Communauté) is a database implemented throughout the European Union that provides product-related information to customs as well as to import–export enterprises. It classifies commodities based on their HS codes. This database is regularly updated and includes information such as customs duties, trade measures and other regulatory requirements related to imported and exported goods.

Harmonized System (European Union classification)

HS is a standardized system used globally to classify and code trade commodities. It assigns a unique code to each product, and these codes are used for customs declarations.

When determining the 11-digit code number for the import of goods, the basis of this number is the HS, managed by the World Customs Organization, which results in the first six digits of the tariff number. Digits seven and eight of the code number are allocated by the European Union. The relevant Customs duties, prohibitions, restrictions and import permit facts can already be assigned on the basis of these eight numbers during import clearance.
Figure 5  TARIC information on the Lao People’s Democratic Republic

TARIC measure information
[Show all information]
The reference date is 17-04-2024
Last TARIC update: 16-04-2024
Area: Laos - LA
Goods nomenclature code: 4418750000
Measure type:
Order number:
Measure publication start date must be after:
Measure publication start date must be before:
Legal base:
Add code:

SECTION IX  WOOD AND ARTICLES OF WOOD; WOOD CHARCOAL; CORK AND ARTICLES OF CORK; MANUFACTURES OF STRAW; OF ESPARTO OR OF OTHER PLAITING MATERIALS; BASKETWARE AND WICKERWORK

CHAPTER 44  WOOD AND ARTICLES OF WOOD; WOOD CHARCOAL (TN701)

4418  Builders’ joinery and carpentry of wood, including cellular wood panels, assembled flooring panels, shingles and shakes 
- Assembled flooring panels:
  4418 73  -  -  Of bamboo or with at least the top layer (wear layer) of bamboo:
  4418 74  -  -  Other, for mosaic floors
  4418 75  -  -  Other, multilayer

ERGA OMNES (ERGA OMNIES 1011) R1821/16
Measures for import:
Third country duty (01-01-2017 - ) : 0 %
Measures for import:
Suspension - goods for certain categories of ships, boats and other vessels and for drilling or production platforms (01-07-2016 - ) : 0 % (EU003) (TM510)
B1 Presentation of a certificate/licence/document C 990 Apply the mentioned duty
B2 Presentation of a certificate/licence/document Measure not applicable
Additional information/Documents produced/Certificates and authorisations
C990 End use authorisation ships and platforms (Column 8c, Annex A of Delegated Regulation (EU) 2015/2446)
GSP-EBA (Special arrangement for the least-developed countries - Everything But Arms) (EBA 2005)
Measures for import:
Tariff preference (01-01-2014 - ) : 0 %
Measures for import:
Third country duty (01-01-2017 - ) : 0 %
Measures for import:


Digits nine and ten of your tariff number are taken from the aforementioned TARIC and represent encrypted European Union measures, such as anti-dumping regulations, tariff suspensions or tariff quotas. The eleventh digit is allocated by the national authorities and also used exclusively for national purposes. The last digit is an encryption of value-added tax rates. However, it may also depict national prohibitions and restrictions (Zoll, n.d.).

Table 2  Harmonized system structure

| Structure of the HS system (European Union classification) |
|-----------------|-----------------|-----------------|
| Chapter in HS   | 2 digits        | e.g. Chapter 94 Furniture; … |
| HS heading      | 4 digits        | e.g. 9403 Other furniture and parts thereof … |
| HS subheading   | 6 digits        | e.g. 9403 60 – Other wooden furniture |
| Combined Nomenclature subheading | 8 digits | e.g. 9403 60 10 – Wooden furniture of a kind used in dining rooms and the living room |

Source: Peter Viehbeck.
European Union customs duties

Different duties result from the TARIC system and its product-bound HS code:

- **Customs duties as EU charges:**
  - Preferential tariff for Lao People’s Democratic Republic of 0%
  - Preferential tariff for Viet Nam of 0%
  - Preferential tariff for Cambodia of 0%

- **Value-added tax (also known as import tax):**
  - The import tax is a consumption tax with a special form of collection. The current rate is 19%. It must be seen as a border adjustment levied to avoid placing an importer in a better market position than a buyer who purchases goods domestically (eClear, 2023).

- **Excise taxes:**
  - These are taxes applied only to specific commodities to consider issues such as health and environmental concerns. Typical examples are alcoholic beverages, tobacco and pesticides.
CHAPTER 4

Navigating national requirements and challenges

Producer countries’ formal requirements for export .......................................................... 34
Basic requirements ........................................................................................................... 34
Consignments-specific requirements .............................................................................. 34
Export challenges that SMEs often face in producer countries ...................................... 35
Due diligence and voluntary certification schemes as export facilitators ......................... 36
CHAPTER 4
Navigating national requirements and challenges

This chapter delves into national export requirements in the legislation of producer countries, using the Lao People’s Democratic Republic as a prime example and under the premise of VPA implementation. The chapter distinguishes between general and product-specific prerequisites while outlining the steps involved in the export process. Within this context, it identifies challenges frequently encountered by SMEs and offers practical guidance for businesses navigating the complexities of international trade.

This section contains information about basic and consignment-specific requirements for export:

**Basic requirements**

Companies pursuing export of commercial goods from the Lao People’s Democratic Republic must have:

- A business certificate and operating licence including registered export activities. The Ministry of Industry and Commerce (MoIC) issues these licences.
- A tax registration document. In the Lao People’s Democratic Republic, firms will receive a tax information number when they register their company with MoIC for a business operating licence (Lao People’s Democratic Republic National Enterprise Database, 2023). The process is similar in most South-East Asian countries.
- A timber products certificate (issued by the Department of Industry and Handicraft/MoIC defining the product scope of the company).
- An input and output management and monitoring system in place (monitoring material flows and inventories).

**Consignment-specific requirements**

- Commercial invoice/sales contract
- Bill of lading (prepared by the freight forwarder)
- Packing list
- Completed ‘export licence form’ for timber products, MoIC.01 for natural timber and MoIC.02 for plantation timber products, as provided by the Department of Import and Export
- Certificate of origin/timber source certificate
- Road transit document
- Phytosanitary certificate where applicable

**Producer countries’ formal requirements for export**

In 2015, the Lao People’s Democratic Republic launched the VPA process, which has subsequently had far-reaching consequences such as continuous reform of laws and regulations. This may have the potential to give rise to misconceptions and inaccuracies during export procedures. It is thus important to note that regulations can still change and the procedures and documents mentioned may not be an exhaustive list.

The ongoing efforts within the Association of Southeast Asian Nations (ASEAN) to promote regional cooperation and harmonize policies, including those related to trade and environmental sustainability, suggest that export requirements for wood products are similar (example: ASEAN standard for legality of timber [ASEAN, 2020]).

The chapter also analyses the significance of due diligence measures and voluntary certification as potential export facilitators.

By shedding light on common challenges facing SMEs and analysing the importance of due diligence measures and voluntary certification, the chapter equips exporters with essential knowledge to overcome hurdles and facilitate successful exports. Overall, it serves as a comprehensive resource for businesses aiming to navigate export regulations effectively and capitalize on international trade opportunities.

In 2015, the Lao People’s Democratic Republic launched the VPA process, which has subsequently had far-reaching consequences such as continuous reform of laws and regulations. This may have the potential to give rise to misconceptions and inaccuracies during export procedures. It is thus important to note that regulations can still change and the procedures and documents mentioned may not be an exhaustive list.

The ongoing efforts within the Association of Southeast Asian Nations (ASEAN) to promote regional cooperation and harmonize policies, including those related to trade and environmental sustainability, suggest that export requirements for wood products are similar (example: ASEAN standard for legality of timber [ASEAN, 2020]).
Export challenges that SMEs often face in producer countries

SMEs frequently encounter challenges when engaging with government bodies in developing countries. Although these challenges may be justified in some cases, in most instances they are not – and they can impede the economic growth of the entire sector.

In countries engaged in VPA programmes – such as the Lao People’s Democratic Republic, Thailand, Viet Nam and Indonesia – viable solutions have been formulated, implemented and evaluated employing a multi-stakeholder approach. This approach is generally used to enhance regulatory frameworks and address issues such as:

- Overboarding bureaucracy
- Lack of support services
- Constrained participation in policymaking
- Inefficient government services
- Lack of access to information
- Inconsistent regulations
- Corruption and bribery
- Restricted financial access
- Meeting the EU market’s high quality standards and delivery times

The elaboration of possible solutions to the vast majority of constraints lies in the hands of policymakers. Stakeholders from the private sector must therefore increasingly advocate for effective participation in political and administrative processes.

Companies should enhance capabilities in production management and technical expertise to comply with quality and delivery times. These objectives can be accomplished through various means, including sector-specific public–private partnership projects and collaboration with both national and international capacity-building programmes (more information in Chapter 4).

The Lao People’s Democratic Republic introduced its ‘national single window’ in 2021. The window aims to simplify and streamline, among other benefits, the export of all goods through submitting all papers only once at a single point (MoIC) (Lao PDR Trade Portal, 2023).
Due diligence and voluntary certification schemes as export facilitators

Due diligence and voluntary forest certification schemes can be effective export facilitators in the timber-processing sector.

Implementing due diligence measures – such as providing information, risk analysis and risk mitigation measures – are part of the EU Timber Regulation (EUDR) (see Chapter 2) with regard to timber legality and deforestation (free timber harvesting), and are thus mandatory for exporting goods to the European Union. Astute companies that are prepared for due diligence measures and have taken corresponding action are more appealing to customers.

Companies certified under voluntary forest certification (chain of custody) schemes – such as the Forest Stewardship Council or the Programme for the Endorsement of Forest Certification Schemes – have a definite competitive advantage by demonstrating commitment to sustainability and responsible business practices, which again can resonate with consumers and buyers. However, this does not automatically ensure a higher price for your products. Achieving higher prices as a result of such certification requires detailed justification during contract negotiations.

Certifying products under one of the voluntary schemes confers a dual advantage by ensuring compliance with national legislation concerning timber legality and social issues, while simultaneously emphasizing responsible management of the forest of origin. Both of these facets are integral components of the EUDR.
CHAPTER 5

Elevating export success through promotion programmes

Support programmes from the European Union and Team Europe

The EU’s bilateral/multilateral engagement on deforestation and forest degradation

Programme in Netherlands

Programme in Switzerland

Programme in Germany

National initiatives for trade promotion

Boosting export performance through collaboration and technical expertise
CHAPTER 5

Elevating export success through promotion programmes

This chapter examines national and international export promotion programmes. It highlights the critical role of collaboration with other companies and the necessity of adequate technical expertise within this context.

Support programmes from the European Union and Team Europe

All governments in South-East Asia operate trade promotion programmes to encourage the export activities of SMEs and overcome export obstacles (Organisation for Economic Co-operation and Development, 2019). Likewise, EU member states have export programmes with sectoral and country-specific focuses to support exports from developing and transitioning countries to the European Union.

Nations including the Netherlands and Germany, as well as non-EU countries in close geographical and administrative proximity to the European Union – such as Switzerland and more recently the United Kingdom of Great Britain and Northern Ireland – provide support to companies in developing and transitioning countries as an integral component of their trade promotion initiatives.

Through their foreign chambers of commerce or trade agencies, European countries address the interests and needs of foreign enterprises while advancing trade and economic ties between their nation and other countries. Some specific programmes are outlined below.

The EU’s bilateral/multilateral engagement on deforestation and forest degradation

This programme seeks to enhance the understanding of and alleviate concerns about the EUDR in relevant ASEAN member states, in particular on its core elements (i.e. mandatory due diligence rules, traceability, benchmarking) and on the European Union’s flanking measures to create an enabling environment for compliance of operator.

The programme is funded by the European Union and implemented by the German Corporation for International Cooperation in cooperation with the European Chamber of Commerce and Industry in Laos and the Lao National Chamber of Commerce and Industry. The support will run from 2023 to 2025 and ensure:

- Provision of relevant sectoral expertise through production of targeted analytical materials related to the EUDR, including on relevant flanking measures;
- Engagement with key stakeholders for relevant EU delegations, notably by organizing and participating in trainings, conferences, workshops, study exchanges, etc., to present and discuss the deforestation proposal;
- Public diplomacy/communication support to improve understanding of the elements and the expected impact of the EUDR.

Programme in Netherlands

The Netherlands’ Centre for the Promotion of Imports from developing countries offers help connecting with potential customers in search of interesting products. It also furnishes market research findings, addresses crucial inquiries about exports to the EU and facilitates participation in global trade fairs and exhibitions.
Programme in Switzerland

The Swiss Import Promotion Programme (SIPPO) works with business support organizations such as trade-related ministries and agencies, private trade promotion service providers and industry associations to improve their services to export-ready companies.

SIPPO Viet Nam focuses on capacity-building and export promotion activities, connecting Vietnamese exporters with foreign importers. SIPPO also works closely with business support organizations in the technical wood sector in Indonesia and Viet Nam. Its cooperation with the Handicraft and Wood Industry Association of Ho Chi Minh City encompasses capacity building, organization support of exhibitions and facilitating various export services (Helvetas Vietnam, 2023).

Programme in Germany

The Import Promotion Desk in Germany is an initiative of the Federation of German Wholesale, Foreign Trade and Services and sequa gGmbH – ‘the development organization of German industry’. It is a valuable resource for SMEs in selected developing countries looking to export to Germany and the wider European market. The Import Promotion Desk aims to increase exports from its partner countries and to drive innovation and greater added value to create jobs and new sources of income.

The services on offer include market entry support, networking with European importers, capacity-building measures, trade fair participation and matchmaking events connecting exporters with potential buyers (Import Promotion Desk, 2021).

National initiatives for trade promotion

Lao People’s Democratic Republic

The Lao People’s Democratic Republic Trade Portal (https://www.laotradeportal.gov.la/lo-la) says it ‘helps traders to find all the information regarding exporting goods from Laos, including related export processes, regulations for specific products, relevant laws and other useful information’.

According to its website (https://lncci.la/), the Lao National Chamber of Commerce and Industry is a key organization that supports trade and investment in the Lao People’s Democratic Republic. It offers services including networking opportunities and information on trade regulations.

ARISE Plus Lao People’s Democratic Republic is a four-year programme to increase, among other objectives, trade and participation in global value chains, including in the timber-processing sector. Within the programme component Quality Champion, a pool of quality professionals has been qualified to provide assistance to companies in improve their business environment and boost participation in global value chains (ARISE Plus Lao People’s Democratic Republic, 2020). The service includes support on issues such as quality management, international standardization and product safety.

Another component, the Lao People’s Democratic Republic Quality Compass, is under development. This tool will offer companies quality-related guidance for specific products in selected markets (ITC Quality for Trade, n.d.).

Viet Nam

The Viet Nam Trade Promotion Agency (Vietrade) facilitates digital trade promotion activities within the scope of forming a digital economy. New programmes will focus on connecting Vietnamese businesses to international buyers, promoting exports at prestigious international fairs in key markets and potential new markets, and organizing major international industry conferences in Viet Nam to promote export potential, the export industry and typical export products (Helvetas Vietnam, 2023).

According to the Ministry of Industry and Trade, trade promotion was identified in 2023 as an important and effective solution to help Vietnamese businesses develop production and the domestic market, and shore up exports (Viet Nam News, 2023).

SIPPO supports companies in emerging countries such as Viet Nam to find importers in the European Union for their products. Likewise, SIPPO connects importers in target markets to potential producers in Viet Nam (SIPPO, 2022).
Collaboration among SMEs in the wood-processing industry can yield many advantages, such as better market reach, knowledge exchange, efficient resource utilization and increased collective purchasing influence over raw materials.

As previously mentioned, an essential factor in managing larger export orders is ensuring both product quality and meeting delivery commitments. Small and medium-sized producers often face substantial challenges in upholding these commitments, particularly when operating under time constraints.

Collaborating with partner companies offers an opportunity for individual businesses to specialize in specific components of the final product. This approach is a viable alternative, especially for companies lacking their own export expertise. Additionally, apart from sharing technical expertise and learning from each other, these cooperative arrangements allow for the efficient use of production capacities.

The most common form of collaboration occurs by establishing clusters or through collaborative efforts among association members. SMEs may also pool their resources to undertake joint marketing and export initiatives. This may involve participating in trade fairs and exhibitions together, developing joint marketing materials or creating collective branding initiatives to promote the overall image and products of the country’s woodworking sector.

Importers often request product samples in advance to evaluate not only quality compliance, but also other product attributes. In many cases, manufacturers meet demands for samples demonstrating quality by investing considerable time, sometimes overlooking the importance of optimizing their manufacturing methods and processes for efficiency and quality continuity.

Consequently, when a purchase agreement for larger quantities is established, companies may struggle to maintain the specified level of quality throughout the entire order due to limitations in their existing production processes. Therefore, it is essential to plan for efficient and quality-assured production at an early stage.

Table 3  How to enhance technical expertise

<table>
<thead>
<tr>
<th>Training in specific skills</th>
<th>Allocate resources to invest in training and development initiatives for your workers and employees. These initiatives may encompass sending your staff to workshops, courses or seminars aligned with their respective industry or technology.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation and advisory services</td>
<td>Consider seeking guidance and consulting services from specialized firms or individual consultants who possess expertise in particular areas.</td>
</tr>
<tr>
<td>Hiring experienced staff</td>
<td>Hiring professionals who possess valuable technical expertise and experience relevant in their fields enriches an organization’s knowledge base.</td>
</tr>
<tr>
<td>Collaboration and partnerships</td>
<td>Create partnerships with partner companies, research institutions or industry associations and clusters. Such collaborations offer avenues to access technical expertise and opportunities to share and acquire know-how.</td>
</tr>
</tbody>
</table>

Source: Peter Viehbeck.
CHAPTER 6

Decoding wood market trends

Timber species and engineered wooden materials ................................................................. 46
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CHAPTER 6

Decoding wood market trends

This chapter explores long-term market trends for wood-based products. It compares the ecological, economic and material attributes of plantation timber versus wood sourced from natural forests and discusses the use of wood-based materials in relation to solid wood products.

In addition, the chapter examines the significant role of voluntary forest certification.

Timber species and engineered wooden materials

The growing ecological awareness of consumers, including in the home furnishing segment, has led to a greater emphasis on sustainability and eco-friendly materials such as wood as well as earthy, grounding colour palettes, with a focus on green, brown and cream shades. White Knight Consulting (2023) expects these to remain popular in the coming years, helping to establish a calming and tranquil atmosphere.

Furnishing elements such as furniture, flooring and decorative articles can be made from solid wood or wood-based materials (engineered materials such as MDF, particleboard and plywood in combination with veneers) or from a mixture of both. Increasingly, synthetic glass is being used in combination with wood; for example, for tabletops (crystal-clear epoxy resins connecting individual tabletop parts).

The practice of integrating wood with other materials such as metal, glass or engineered wooden materials has become a prominent trend. These combinations introduce contrasts and visual appeal to furniture pieces (Clarke, 2023).

The top consideration for material is price. Items manufactured from engineered materials generally tend to be less expensive than those made from solid wood. Both solid wood and engineered materials have their respective advantages and disadvantages. The production methods for engineered materials require distinct technologies compared with those for processing solid wood. This implies that companies must possess both sets of technologies when incorporating these materials (unless they outsource some processes to partner companies).

An example of a product combining these two materials is the ‘hideaway home office’, which is increasingly popular as more Europeans work from home. Houses or apartments with limited space can designate an area in the home that makes use of a clever piece of furniture that serves multiple purposes (Mamma Mia Covers, 2023). This type of product is very suitable for a mixture of solid wood and engineered materials.

Tops and cabinets made of veneered substrate material such as MDF or particle board, in combination with solid timber parts for the structure, require veneer pressing and edge-banding technology. At the same time, machines and devices for solid wood processing – such as spindle moulders, planers and thicknessers – need to be available.

The niche sector of customizable furniture has become increasingly attainable, granting customers the flexibility to select the wood variety, finish and even the design of their furniture, tailored to their individual preferences.
### Table 4  
**Solid wood versus engineered wooden materials**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural beauty</td>
<td>Generally more expensive than engineered materials due to additional costs for technical drying, waste due to natural quality variations, limited availability and high demand, and labour-intensive surface treatment</td>
</tr>
<tr>
<td>Durability and strength</td>
<td>Timber from natural forests, if not certified, is prone to be criticized by environmentalists</td>
</tr>
<tr>
<td>More stable, less affected by humidity change</td>
<td>Lower reputation in terms of durability</td>
</tr>
<tr>
<td>Often more cost-effective</td>
<td>Limitations in product design, difficult for curved patterns</td>
</tr>
<tr>
<td>Less prone to warping and cracking</td>
<td>For many companies, new technology and processes are required (veneering, edge banding)</td>
</tr>
<tr>
<td>Easier to plan material consumption during production</td>
<td>Low ecological reputation and aesthetic appeal</td>
</tr>
<tr>
<td>Easier material management</td>
<td></td>
</tr>
</tbody>
</table>

Source: Peter Viehbeck.

---

**Plantation timber versus timber from natural forests and voluntary forest certification**

The 1992 Rio Earth Summit highlighted the importance of sustainable forest management in natural forest ecosystems. It fostered increasing awareness of the necessity of a framework that could advocate and validate sustainable forest management practices, ensuring a responsible source of timber for the wood industry. Dialogues that arose during and after the summit greatly shaped voluntary forest certification schemes such as the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification Schemes.

Today, with three decades of experience in responsible forest management in natural ecosystems and under voluntary forest certification principles as defined by the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification Schemes, it is evident that the associated costs are considerably higher than managing and harvesting forest plantations, especially in tropical regions (Sedjo, 2001).

Both natural and plantation forests play an important role in our world. Natural forests typically have a greater variety of tree species than plantation forests. Natural forests also provide a wealth of environmental benefits – including limited wood harvesting due to their ecological complexity, legal protections and community-based management – while plantations can be managed more intensively to provide a more consistent supply of timber, which is important for industries that rely on wood as a raw material (Waggener, 2001).

Material characteristics of timber from the two sources can vary substantially in terms of appearance, durability and workability. Thus both sources have advantages and disadvantages, as shown in Table 4.

It can be concluded that wood sourced from natural forests greatly enhances the value of a final product. The superior aesthetic appeal associated with this type of wood may be an extra motivation for end consumers to make a purchase (Louisa, 2022).

Conversely, the major benefit of plantation wood lies in the consistent and predictable availability of specific wood species, which notably influences the capacity of a company to meet delivery demands. Some consumers and industries may prefer the natural and unique characteristics of timber from natural forests, while others may prioritize the uniformity and consistency of plantation timber.
### Table 5  
**Timber from natural forest versus plantation timber**

<table>
<thead>
<tr>
<th>Advantages of timber from natural forests</th>
<th>Advantages of timber from plantations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher durability and resistance to decay, important especially for products for exterior use</td>
<td>More reliable availability of the same timber species</td>
</tr>
<tr>
<td>Higher aesthetic appeal due to natural variations in grain patterns, colour variations and texture</td>
<td>Generally significantly cheaper in price</td>
</tr>
<tr>
<td>Responsible use of timber under a voluntary certification scheme encourages local people to protect the natural forest ecosystems, because they have an alternative source of income</td>
<td>Simpler material management system due to better plannable material input</td>
</tr>
<tr>
<td></td>
<td>Consistent wood quality, more uniform and predictable, thus less waste</td>
</tr>
<tr>
<td></td>
<td>Reduces pressure on natural forests and habitats</td>
</tr>
<tr>
<td></td>
<td>Faster growth leads to more volume per hectare</td>
</tr>
<tr>
<td></td>
<td>Easier to demonstrate legal compliance because operations are subject to clearer regulations and certifications that ensure legality and sustainability</td>
</tr>
</tbody>
</table>

**Source:** Peter Viehebeck.
## Appendices

<table>
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<th>Appendix</th>
<th>Page</th>
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<tbody>
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<td>58</td>
</tr>
</tbody>
</table>
Appendices

Appendix I: International fairs and exhibitions

<table>
<thead>
<tr>
<th>Exhibition name</th>
<th>Venue and features</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>China International Furniture Fair</td>
<td>Guangzhou and Shanghai&lt;br&gt;The China International Furniture Fair boasts a whole category of exhibits that covers the entire industry chain of upstream and downstream home furnishing. Designer home furnishing and international home furnishing is the core, including sleeping furniture, sofas, living and dining furniture, office and commercial furniture and hotel furniture, furniture manufacturing equipment, accessories and home textiles, and outdoor furnishings.&lt;br&gt;<a href="https://ciff.furniture/">https://ciff.furniture/</a></td>
<td>Usually twice a year</td>
</tr>
<tr>
<td>Shanghai International Furniture Machinery and Woodworking Machinery Fair</td>
<td>Shanghai&lt;br&gt;International trade fair for furniture machinery and woodworking machinery.&lt;br&gt;<a href="https://www.tradefairdates.com/Shanghai+International+Furniture+Machinery+%26+Woodworking+Machinery+Fair+-+%28WMF%29-M4815/Shanghai.html">https://www.tradefairdates.com/Shanghai+International+Furniture+Machinery+%26+Woodworking+Machinery+Fair+-+%28WMF%29-M4815/Shanghai.html</a></td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Furniwood China</td>
<td>Shanghai&lt;br&gt;International exhibition of furniture accessories, materials and wood products.&lt;br&gt;<a href="https://www.boothsquare.com/events/furniwood-china/editions/furniwood-china-sep-2023/08df2b57-1ea6-4ac8-9861-d84c6c50831/">https://www.boothsquare.com/events/furniwood-china/editions/furniwood-china-sep-2023/08df2b57-1ea6-4ac8-9861-d84c6c50831/</a></td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Interzum Guangzhou</td>
<td>Guangzhou&lt;br&gt;Trade fair for the furniture production, woodworking machinery and interior decor industry in Asia. Held in conjunction with China International Furniture Fair&lt;br&gt;<a href="https://www.interzum-guangzhou.com/">https://www.interzum-guangzhou.com/</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>Domotex / Chinafloor</td>
<td>Shanghai&lt;br&gt;Leading flooring exhibition in the Asia-Pacific region.&lt;br&gt;<a href="https://www.domotexasiachinafloor.com/Exhibition-Infomation.shtml">https://www.domotexasiachinafloor.com/Exhibition-Infomation.shtml</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>Sylva Wood</td>
<td>Shanghai&lt;br&gt;Asia’s only trade expo for sourcing wood materials. Meeting event for leading wood associations and professional buyers from the flooring, furniture, doors and windows, and interior furnishing sectors.&lt;br&gt;<a href="http://www.sylvawoodexpo.com/">http://www.sylvawoodexpo.com/</a></td>
<td>Once a year</td>
</tr>
</tbody>
</table>
## Viet Nam

<table>
<thead>
<tr>
<th>Event</th>
<th>City</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>VietnamWood</td>
<td>Ho Chi Minh City</td>
<td>The Viet Nam International Woodworking Industry Fair (VietnamWood) is a leading trade fair in Asia for woodworking and wood-processing plants, supplies to the furniture industry, machinery, tools and wood. <a href="https://www.chanchao.com.tw/VietnamWood/">https://www.chanchao.com.tw/VietnamWood/</a></td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Viet Nam Furnitec</td>
<td>Ho Chi Minh City</td>
<td>The Viet Nam International Furniture Accessories, Hardware and Tool Exhibition provides an opportunity to explore displays of furniture handles, locks, accessories, metal connectors, castors, furniture parts, etc. <a href="https://vietnam-b2b.com/event/vietnam-furnitec-2023/">https://vietnam-b2b.com/event/vietnam-furnitec-2023/</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>Smart Furniture Solutions and Mass Timber</td>
<td>Ho Chi Minh City</td>
<td>International wood and woodworking expo in Viet Nam. Manufacturing processes and smart technology for the production of panel furniture, solid timber furniture, wood and wood-based panels, windows, doors and flooring, mass timber materials and technology, etc. <a href="https://smartfurnituresolutionsexpo.com/">https://smartfurnituresolutionsexpo.com/</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>Viet Nam International Furniture and Home Accessories Fair</td>
<td>Ho Chi Minh City</td>
<td>The Viet Nam International Furniture and Home Accessories Fair is the biggest international furniture fair in Viet Nam and one of the biggest furniture fairs in South-East Asia. <a href="https://www.vifafair.com/">https://www.vifafair.com/</a></td>
<td>Once a year</td>
</tr>
</tbody>
</table>

## India

<table>
<thead>
<tr>
<th>Event</th>
<th>City</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>India International Furniture Fair</td>
<td>New Delhi</td>
<td>This premier event showcases cutting-edge furniture designs, home decor ideas and innovative solutions for modern living spaces. <a href="https://www.tradefairdates.com/INDIA+INTERNATIONAL+FURNITURE+FAIR+-+IIFF-M14255/New+Delhi.html">https://www.tradefairdates.com/INDIA+INTERNATIONAL+FURNITURE+FAIR+-+IIFF-M14255/New+Delhi.html</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>DelhiWood</td>
<td>New Delhi</td>
<td>International trade fair for furniture production technologies, woodworking machinery, tools, fittings, accessories, raw materials and products. <a href="https://www.delhi-wood.com/">https://www.delhi-wood.com/</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>World Furniture Expo</td>
<td>Mumbai</td>
<td>India’s international business-to-business trade show dedicated to the furniture and design industry. <a href="https://wofxworldexpo.com/">https://wofxworldexpo.com/</a></td>
<td>Once a year</td>
</tr>
<tr>
<td>Engimach</td>
<td>Gandhinagar</td>
<td>Machinery and tools. Engimach has been one of the prime contributors to the development of the machine tools industry, enabling its participants and visitors with cutting-edge and powerhouse technology that stands for engineering excellence, innovation, quality and reliability. <a href="https://engimach.com/">https://engimach.com/</a></td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Event Name</td>
<td>City</td>
<td>Description</td>
<td>Frequency</td>
</tr>
<tr>
<td>------------------------------------</td>
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<td>-----------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Odisha Wood Exhibition</td>
<td>Bhubaneswar</td>
<td>Woodworking machinery, furniture production technologies, tools and fittings, interior design, accessories, raw materials and products.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td>India Wood</td>
<td>Bangalore</td>
<td>International exhibition of woodworking machinery, tools, fittings, accessories, materials and products.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Handtools and Fasteners Expo</td>
<td>New Delhi</td>
<td>India’s largest business-to-business exhibition focuses on the need for high-end hand tools, power tools, fasteners and speciality tools.</td>
<td>Once a year</td>
</tr>
<tr>
<td>Malaysian Wood Expo</td>
<td>Kuala Lumpur</td>
<td>This expo is jointly organized by the Malaysian Timber Council and Panels and Furniture Group. It is a coming together of top exhibitors in this part of the world for the wood and woodworking industry.</td>
<td>Every four years</td>
</tr>
<tr>
<td>Malaysian International Furniture Fair</td>
<td>Kuala Lumpur</td>
<td>Leading furniture fair in South-East Asia, provides a global business-to-business trade show experience connecting professionals with key contacts and new business opportunities. Exhibitors showcase modern and classic furniture designs for various spaces.</td>
<td>Once a year</td>
</tr>
<tr>
<td>EFE Expo</td>
<td>Kuala Lumpur</td>
<td>International furniture exhibition.</td>
<td>Once a year</td>
</tr>
<tr>
<td>International Furniture Fair</td>
<td>Singapore</td>
<td>Asian international design-led furniture and furnishing sourcing fair held in conjunction with the ASEAN Furniture Show.</td>
<td>Once a year</td>
</tr>
<tr>
<td>Wood Expo – Thailand International Woodworking and Furniture Exhibition</td>
<td>Bangkok</td>
<td>The latest technology, solutions, materials, trends and sustainability impacting the woodworking industry.</td>
<td>Once a year</td>
</tr>
<tr>
<td>LIGNA</td>
<td>Hanover</td>
<td>Large trade fair for woodworking machinery, tools and equipment.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Event</td>
<td>City</td>
<td>Description</td>
<td>Frequency</td>
</tr>
<tr>
<td>-------------------------------</td>
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<td>--------------------</td>
</tr>
<tr>
<td>Interzum</td>
<td>Cologne</td>
<td>Developments, products and technologies in the supply industry for the furniture and interiors sector.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Holz-Handwerk</td>
<td>Nuremberg</td>
<td>Latest trends and innovations in the wood-processing industry, from sawing and sanding machines to wood-processing machines and extraction systems. Holz-Handwerk is an important event on the topics of woodworking and wood processing.</td>
<td>Once a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://www.holz-handwerk.de/en">https://www.holz-handwerk.de/en</a></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Milan</td>
<td>Woodworking technology and components for the furniture industry.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td>Wood Experience</td>
<td>Verona</td>
<td>Wood Experience is an event dedicated to the entire wood supply chain, from first processing to accessory and completion elements.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://wood-experience.com/">https://wood-experience.com/</a></td>
<td></td>
</tr>
<tr>
<td>SICAM</td>
<td>Pordenone</td>
<td>An international exhibition of components, accessories and semi-finished products for the furniture industry. Product novelties and market trends for future collections of furniture, kitchens, bathrooms, contract and interior design.</td>
<td>Once a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://www.exposicam.it/en/">https://www.exposicam.it/en/</a></td>
<td></td>
</tr>
<tr>
<td>Salone Internazionale del Mobile – Milan Furniture Fair</td>
<td>Milan</td>
<td>The Salone del Mobile is an important and renowned furniture and design fair.</td>
<td>Once a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://www.salonemilano.it/en">https://www.salonemilano.it/en</a></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Atlanta</td>
<td>Woodworking machinery, supplies and services.</td>
<td>Usually every two years</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="https://www.iwfatlanta.com/">https://www.iwfatlanta.com/</a></td>
<td></td>
</tr>
</tbody>
</table>

Source: Peter Viehbeck.
## Appendix II: International and EU standards for timber processing

<table>
<thead>
<tr>
<th>Product scope</th>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solid wood panels</strong></td>
<td>ISO 13061–18:2022</td>
<td>Physical and mechanical properties of wood – Test methods for small clear wood specimens - Part 18: Vocabulary</td>
</tr>
<tr>
<td></td>
<td>EN 13986:2015</td>
<td>Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking</td>
</tr>
<tr>
<td></td>
<td>EN 13353:2022</td>
<td>Solid wood panels – Requirements</td>
</tr>
<tr>
<td><strong>Plywood</strong></td>
<td>ISO 2426–1:2020</td>
<td>Plywood – Classification by surface appearance - Part 1: General</td>
</tr>
<tr>
<td></td>
<td>ISO 1096:2021</td>
<td>Plywood – Classification</td>
</tr>
<tr>
<td></td>
<td>EN 636:2015</td>
<td>Plywood – Specifications</td>
</tr>
<tr>
<td><strong>Wood flooring</strong></td>
<td>EN 14342:2013</td>
<td>Wood flooring – Characteristics, evaluation of conformity and marking</td>
</tr>
<tr>
<td></td>
<td>EN 13990:2004</td>
<td>Wood flooring – Solid softwood floorboards</td>
</tr>
<tr>
<td></td>
<td>EN 13226:2009</td>
<td>Wood flooring – Solid parquet elements with grooves and/or tongues</td>
</tr>
<tr>
<td></td>
<td>EN 13489:2017</td>
<td>Wood flooring and parquet – Multilayer parquet elements</td>
</tr>
<tr>
<td></td>
<td>EN 14761:2006</td>
<td>Wood flooring – Solid wood parquet – Vertical finger, wide finger and module brick</td>
</tr>
<tr>
<td></td>
<td>EN 350:2016</td>
<td>Durability of wood and wood-based products – Testing and classification of the durability to biological agents of wood and wood-based materials</td>
</tr>
<tr>
<td><strong>Outdoor furniture</strong></td>
<td>EN 581–1:2017</td>
<td>Outdoor furniture – Seating and tables for camping, domestic and contract use – Part 1: General safety requirements</td>
</tr>
<tr>
<td><strong>Indoor furniture</strong></td>
<td>DIN EN 12521:2022</td>
<td>Furniture – Safety, strength and durability – Requirements for domestic tables</td>
</tr>
<tr>
<td></td>
<td>EN 16139:2022</td>
<td>Furniture – Strength, durability and safety – Requirements for non-domestic seating</td>
</tr>
<tr>
<td></td>
<td>EN 12520:2016–03</td>
<td>Usually every two years</td>
</tr>
<tr>
<td></td>
<td>EN 14749:2022</td>
<td>Furniture – Strength, durability and safety – Requirements for domestic seating</td>
</tr>
<tr>
<td><strong>Bamboo products</strong></td>
<td>ISO 19624:2018</td>
<td>Bamboo structures – Grading of bamboo culms – Basic principle and procedures</td>
</tr>
<tr>
<td></td>
<td>BS ISO 6128:2023</td>
<td>Laminated products made of bamboo strips for indoor furniture purposes. Requirements and test methods</td>
</tr>
<tr>
<td></td>
<td>ISO / TC 296 series</td>
<td>The series considers all kind of bamboo products</td>
</tr>
<tr>
<td><strong>Children's furniture</strong></td>
<td>EN 716 series</td>
<td>Furniture – Children's cots and folding cots for domestic use – Part 1: Safety requirements</td>
</tr>
<tr>
<td></td>
<td>EN 12221:2022</td>
<td>Child care articles – Changing units and changing pads for domestic use – Safety requirements and test methods</td>
</tr>
<tr>
<td><strong>Wooden toys</strong></td>
<td>EN 71:2018</td>
<td>Safety of toys - Part 1: Mechanical and physical properties</td>
</tr>
</tbody>
</table>

Source: Peter Viehbeck.
### Appendix III: Lesser-known timber species in South-East Asia

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Family</th>
<th>Local commercial names</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pometia pinnata</em></td>
<td>SAPINDACEAE</td>
<td>DAENG NAM (LA), FIJJIAN LONGAN (TH), KASAI (BN, MY), MATOA (ID)</td>
</tr>
<tr>
<td><em>Pterocarpus indicus</em> Wild</td>
<td>FABACEAE</td>
<td>DU LUAT (LA), NARRA (PH, VN), PRADU (VN), SENA (MY), SENE (VN), SONOKEMBANG (ID), THNONG (KH)</td>
</tr>
<tr>
<td><em>Eucalyptus urophylla</em> S.T.Blake</td>
<td>MYRTACEAE</td>
<td>VIK PUEK KET</td>
</tr>
<tr>
<td><em>Eucalyptus pellita</em> F. Muell</td>
<td>MYRTACEAE</td>
<td>VIK BAI HOB HOK</td>
</tr>
<tr>
<td><em>Eucalyptus camaldulensis</em></td>
<td>MYRTACEAE</td>
<td>VIK BAI KEB</td>
</tr>
<tr>
<td><em>Eriolaena candollei</em> Wall</td>
<td>MALVACEAE</td>
<td>LIENG FAY</td>
</tr>
<tr>
<td><em>Dacrydium elatum</em> (Roxb.) Wall. ex Hook</td>
<td>PODOCARPACEAE</td>
<td>HING HOM DEANG (LA), HING NAM (LA), MELOOR (VN), OUk (TH), RU (TH), SEMPILOR (MY), SRAUL KRAHAM (KH)</td>
</tr>
<tr>
<td><em>Cunninghamia lanceolata</em> (Lamb.) Hook</td>
<td>CUPRESSACEAE</td>
<td>HING KET NAM CHIN (LA)</td>
</tr>
<tr>
<td><em>Chukrasia tabularis</em> A. Juss</td>
<td>MELIACEAE</td>
<td>YOM HIN (LA), CHICRASSY (VN), CHITTAGONG WOOD (TH), LAT HOA (VN), SURIAN BATU (MY, VN), VORYAUNG (KH), YINMA (MM), YOMHIN (VN)</td>
</tr>
<tr>
<td><em>Cephalotaxus oliveri</em></td>
<td>TAXACEAE</td>
<td>KHAM POM DENG BAI SI SAEK (LA)</td>
</tr>
<tr>
<td><em>Cephalotaxus mannii</em></td>
<td>TAXACEAE</td>
<td>KHAM POM DENG BAI SONG SAEK (LA)</td>
</tr>
<tr>
<td><em>Calocedrus macrolepiss</em> Kurz</td>
<td>CUPRESSACEAE</td>
<td>LEN LE (LA), PAEK LOM (TH)</td>
</tr>
</tbody>
</table>

**Legend:**
- BN – Brunei
- ID – Indonesia
- KH – Cambodia
- LA – Lao People’s Democratic Republic
- MM – Myanmar
- MY – Malaysia
- PH – Philippines
- TH – Thailand
- VN – Viet Nam

**Source:** Peter Viehbeck.
## Appendix IV: CITES-listed species in South-East Asia

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Commercial names</th>
<th>CITES appendix</th>
<th>Geographical areas</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Aquilaria</em> spp.</td>
<td>Ágar wood</td>
<td>II</td>
<td>Asia (Indomalaysia)</td>
</tr>
<tr>
<td><em>Dalbergia cochinchinensis</em> (syn. <em>Dalbergia cambodiana</em>)</td>
<td>Thailand Rosewood, Siamese Rosewood, Phayung</td>
<td>II</td>
<td>Cambodia, Lao People’s Democratic Republic, Thailand, Viet Nam</td>
</tr>
<tr>
<td><em>Gonystylus</em> spp. All species of the genus <em>Gonystylus</em> spp.</td>
<td>Ramin, Melawis</td>
<td>II</td>
<td>Brunei, Indonesia, Malaysia, Singapore</td>
</tr>
<tr>
<td><em>Magnolia liliifera</em> var. <em>obovata</em></td>
<td>Egg-Magnolia, Balukhat, Boranthuri, Champak, Pan-Pankakro, Patpatta, Safan, Siffo, Taungme</td>
<td>III</td>
<td>Asia</td>
</tr>
<tr>
<td><em>Pterocarpus macrocarpus</em></td>
<td>Burma-Padouk, Maidu</td>
<td>D84 (19.01.2022)</td>
<td>Cambodia, Laos, Myanmar, Thailand, Viet Nam</td>
</tr>
</tbody>
</table>

*Source:* Peter Viehbeck.
References and Endnotes
Endnotes

1 The shortage is due to factors such as pandemic disruption, trade and tariff disruption (e.g. with the Russian Federation), supply chain disruption and environmental concerns.

2 CKF and CKFZ salts are wood preservatives that contain fluorine compounds in addition to the CK salts (copper hexafluorosilicate, fluorides, zinc hexafluorosilicate). CKF and CKFZ salts have an insecticidal and fungicidal effect and are weather-resistant, even with constant water or soil contact. Source: Bayerisches Landesamt für Umwelt (2020).

3 EUDR guidelines for operators are still under development in the EU, so this part will have to be regularly updated. The guidelines can be found at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1115.

4 Individual EU member states and Switzerland.
References


New Forests (July 2022). Regional profile: Investing in sustainable forestry in Southeast Asia. [https://newforests.com/insight/regional-profile-investing-in-sustainable-forestry-in-southeast-asia/#:~:text=Southeast%20Asia%20has%2019%20million%20hectares%20of%20natural%20forests%2C%20of%20which%2060%20%20of%20them%20are%20protected%20areas%2C%20and%2014%20%20of%20them%20are%20in%20primary%20forest.]


Plywood Direct (22 April 2023). Understanding the different grades of plywood. [https://plywooddirect.co.nz/blogs/news/understanding-the-different-plywood-grades#:~:text=There%20are%20four%20grades%20of%20smooth%2C%20sanded%20and%20surface%20without%20knots.]


