WORLD RESOURCES INSTITUTE

FOREST LEGALITY ALLIANCE

ISSUE BRIEF

CASE STUDY

IKEA'S RESPONSE TO THE LACEY ACT: DUE CARE SYSTEMS FOR COMPOSITE MATERIALS IN CHINA

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INTRODUCTION

This series of case studies is intended to show commercial buyers of wood and paper-based products, especially those who trade in species and/or source from places with a perceived risk of illegality, how their supply chains can conform with U.S. legal requirements on importing certain types of wood. The case studies, compiled by the Forest Legality Alliance (FLA), draw lessons from emerging best practices for managing risk in high-risk contexts. They discuss the impacts of the U.S. Lacey Act (see Box 1) and other market demands for legal wood products and identify and highlight potential problem areas as well as pragmatic opportunities for reducing the complexity of compliance.

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The FLA hopes the Lacey Act will encourage best practices in forest supply chains and provide valuable information about the global flow of forest products, without imposing undue burdens on the private sector.

To that end, the FLA case studies of best practices in private sector procurement describe:

- How the Lacey Act affects operations in countries that supply forest products to U.S. importers;
- How to supply information consistent with the Act's intent, while reducing transaction costs and unintended consequences for producers;
- Best practices along supply chains to streamline the flow of information about forest products; and
- How to scale up these best practices to support the private sector in complying with new legality requirements, consistent with the FLA's goal of increasing the capacity of supply chains to deliver legal wood and paper and to help the private sector respond to emerging forest product legality assurance requirements.

The case studies do not attempt to assess the legality of the supply chains in question. They are not investigations, legality verifications, product tracing, or chain-of-custody analyses. The FLA does not intend to suggest that the resources highlighted in the series are a model for supply chains since supply chains differ vastly in size, location, or product, but they do offer examples and insights that might spur actions by other companies.

EXECUTIVE SUMMARY

This study focuses on IKEA and the company's production of composite products (board materials such as particleboard, Medium Density Fiber Board (MDF), etc.) in China. The study describes the internal systems of IKEA and how they work to ensure that the material sourced can be shown to have been purchased with an adequate level of due care to help ensure legality. Specifically, the study looks at how composite products made up of a large percentage of waste material supplied by diverse small producers within a weak governance context can be imported into the USA while showing that a high level of due care was attained.

The study shows how IKEA is adapting its operations to meet the requirements of a challenging procurement situation and the company's understanding of how they can show adequate levels of due care. Four main lessons have been identified and are explored in this paper:

Lesson 1. The implementation of the Lacey Act means that responsible procurement is no longer voluntary but is now mandatory.

Lesson 2. Each company must understand the supplying country's laws and associated risks so that it can define its own level of appropriate traceability.

Lesson 3. A risk assessment can help determine the level of traceability required to ensure confidence in any forest product supply and ensure that a reasonable level of due care can be shown.

Lesson 4. To be able to complete the declaration form, a company needs to understand its supply chain fully. Good information management is key, and a proactive approach to the management of the supply chains is required. It is no longer enough to just rely on trust: a company must now ask questions and back this up with on-the-ground audits.

CONTEXT AND BACKGROUND

Founded in 1943 by Swede Ingvar Kamprad, IKEA has become the world's largest home furnishings retailer with over 280 retail stores in 26 countries. The company has enjoyed sustained growth, and the IKEA concept and business model have remained relatively unchanged since the early days of the company. IKEA, still a privately held company, currently employs more than 127,000 workers and reported sales of €23.1 billion in fiscal year 2010. The goods sold at IKEA are manufactured at more than 1,000 suppliers in 55 countries, and IKEA operates purchasing offices in approximately half of those countries. In addition to the retail outlets, IKEA operates many warehouses, a global distribution network, and its own industrial group which manufactures much of

BOX 1

THE U.S. LACEY ACT

The Lacey Act is a 1900 U.S. law that bans trafficking in illegal wildlife. In 2008, it was amended to include plants and plant products such as timber and paper. This legislation is the world's first ban on trade in illegally sourced wood products. The 2008 amendments also included a requirement that wood products importers make a declaration describing their product(s), including the scientific names of all tree species included in the product, the country of origin, the volume, and the value. The declaration requirement does not apply to all wood products, but it covers solid wood. Providing false information is punishable under the law.

What is illegal under the Lacey Act?

Two things need to happen to incur a Lacey Act violation. First, a plant must be taken, harvested, possessed, transported, sold, or exported in violation of an underlying law in the United States or any foreign country that protects plants or regulates the following:

- Stealing plants;
- Taking plants from an officially protected area, such as a park or reserve;
- Taking plants from other types of "officially designated areas" that are recognized by a country's laws and regulations;
- Taking plants without, or contrary to, the required authorization, or;
- Failing to pay appropriate royalties, taxes, or fees associated with the plant's harvest, transport or commerce; or
- Laws governing export or transhipment, such as a log-export ban.

Second, an individual or company must trade this illegally-sourced plant in the United States to trigger a Lacey violation. Penalties depend on a variety of factors including level of knowledge, whether the violation is perpetrated by an individual or a corporation, and the value of the products. For more information about the Lacey Act, please visit www.aphis.usda.gov/plant_health/lacey_act/.

IKEA works to improve its supply chain through the company's Code of Conduct, known as the IKEA Way on Purchasing Home Furnishing Products, or "IWAY."

the wooden merchandise for IKEA stores. The management of the IKEA concept and the design of the products are carried out from the corporate headquarters in Sweden under the guidance of the IKEA Group management board, which includes Kamprad family members.[1]

The company first began addressing environmental issues in the production of its goods in the 1980s, at which time it came under pressure from environmental non-governmental organizations (ENGOs) to take action on formaldehyde content in particleboard furniture. In the 1990s, the company developed environmental policies that included requirements on tropical wood material and installed environmental and forestry specialists to advance implementation of an IKEA code of conduct for its supply chains that covered social, environmental, and working condition requirements. The research for this case study was carried out through field visits to China. In August 2011, a Forest Legality Alliance team travelled to Shenzhen, China, to join IKEA representatives in a 3-day supply chain visit in order to learn more about the complexities of fiber sourcing for particleboard production and the ways that IKEA is addressing challenges in that region. The visit started with the IKEA furniture producer and traced back fiber chains to one of the forest sources for particleboard production.

IKEA Position on Forestry

Wooden furniture has traditionally been dominant within the IKEA furniture range. Due in part to its dependence upon wood as a raw material, IKEA was a pioneer in developing and implementing

forestry-specific requirements for its wood merchandise suppliers.

Today IKEA works to improve its supply chain through the company's Code of Conduct, known as the IKEA Way on Purchasing Home Furnishing Products, or "IWAY." The IWAY comprises the IKEA minimum requirements relating to the environment, social and working conditions across all its business activities. The forestry requirements in the IWAY system are listed in Box 2.

The IKEA code of conduct was originally designed around European sourcing conditions to control and audit social, environmental and working conditions of the IKEA suppliers. However, IKEA recognized in the 1990s, in consultation with forest conservation ENGOs, that the code of conduct would also need to include forest management requirements. This inclusion brought about the creation of IKEA IWAY Forestry Requirements. To support this initiative, IKEA employs approximately 16 forestry specialists who work in the main wood purchasing regions to support the business teams in ensuring that minimum forestry requirements are implemented within IKEA supply chains.[2] IKEA is the only large retailer to have put in place such a comprehensive auditing process.

The IKEA forestry requirements were crafted to avoid sourcing timber from controversial sources, as identified at that time in cooperation with forest conservation focused ENGOs. The early IWAY standard requirements, applicable for all suppliers of solid wood, included stipulations on the treatment/usage of high conservation value forests, intact natural forests, and high value tropical wood. From the beginning, IKEA included a requirement to avoid illegally logged timber. This demand was a component of IKEA's general commitment to conducting all aspects of its business in accordance with legal requirements. IKEA's policy has since broadened in scope to encompass requirements on forest-related social conflicts, conversion of natural forests, and genetically modified organisms (GMOs). (See Box 2)

In September 2010, the scope of the forestry requirements expanded from the original focus on solid wood to include all suppliers of furniture containing any wood-based board materials. The forestry requirements within the IWAY standard are now applicable to all IKEA suppliers of products containing wood-based board materials, solid wood, plywood, veneer and layer glued wood. This inclusion more than doubled the total volume of wood covered by IKEA forestry requirements.[3] The total roundwood equivalent consumption by IKEA suppliers of solid wood and wood-based board in 2011 was 13.8 million m^3.

The company's suppliers in areas of the world with high risk of illegal activity struggle with low availability of certified wood volumes and traceability in complex supply chains. From IKEA's perspective the IWAY system and its support of certification is the best way for the company to contribute to lasting positive change by conducting responsible business in countries such as China and Russia.

IKEA forestry requirements for suppliers

The IWAY forestry standard details the procurement systems and procurement parameters that sup-

BOX 2

IKEA IWAY FORESTRY REQUIREMENTS

Wood used in IKEA products shall fulfill the following criteria:

- Not from forests that have been illegally harvested;
- Not from forestry operations engaged in forest related social conflicts;
- Not harvested in uncertified Intact Natural Forests (INF) or other geographically identified High Conservation Value Forests (HCVF);
- Not harvested from natural forests in the tropical and sub-tropical regions being converted to plantations or non-forest use; and
- Not from officially recognized and geographically identified commercial genetically modified (GM) tree plantations.

pliers are required to follow, which are auditable. The forestry section includes specific requirements for initiating business with new suppliers and is subsequently divided into procedures for various types of suppliers (i.e., those with small volumes and those using board materials compliant with IKEA requirements by virtue of specific certifications).[4] Suppliers who use "IKEA Preferred Wood"[5] are exempt from many of the procurement routines detailed in the standard.[6] All suppliers are required to report wood origin, species and volumes, both before starting business with IKEA and then on an ongoing basis.

The procurement routines detailed in the IKEA standard are intended to ensure that the supplier has responsible personnel who have been trained to implement a system for wood tracking and handling from procurement through production. The supplier system should be guided by a written procedure, and should include communication of the IKEA raw material requirements to all sub-suppliers. Some key elements that suppliers are required to have in their system are:

- Collection of wood origin data;
- Risk assessment of incoming material;
- Separation of unwanted material;
- Regular reporting to IKEA via the IKEA Forest Tracing Survey;[7] and
- Maintenance of records of incoming material for a period of five years.[8]

Following years of internal discussions on the applicability of forestry requirements to the far more complex supply chains of wood-based board furniture, IKEA took concrete steps to include board materials.

Updates on IKEA requirements

All sections and requirements contained within the IWAY standard are regularly reviewed and updated by IKEA specialists, with major changes to requirements implemented every few years or as needed, depending on importance. When the last major changes to the forestry requirements were conducted in 2009, the potential importance of the Forest Stewardship Council's (FSC) Controlled Wood standard[9] was an influencing factor in the significant updates made to the IKEA requirements on raw material and supplier routines. Because IKEA has stated that its long-term goal is to "source all wood for IKEA products from forests certified as responsibly managed,"[10] the IWAY forestry requirements are considered fundamental to entering a stepwise approach to sourcing certified material.

Inclusion of board material in the IKEA IWAY forestry requirements/standard

The IWAY forestry requirements originally applied only to solid wood materials. Following years of internal discussions on the applicability of forestry requirements to the far more complex supply chains of wood-based board furniture, IKEA took concrete steps to include board materials in the IWAY standard from September 1, 2010. The impetus for this move was threefold:

- The company's obligation under the U.S. Lacey Act;
- The inclusion of board materials in the forthcoming EU Timber Regulation;[11] and
- The company's belief that applying requirements to fiberboard was a natural extension of working with forestry requirements on solid wood.

FIGURE 1

KEY PERFORMANCE INDICATORS (KPI) – ENVIRONMENT: FORESTRY

	FY08	FY09	FY10	FY11	Goal
Responsible forest management, %					
Wood[1] used in IKEA products coming from preferred sources, % total	-	-	15.8[2]	16.2[2]	FY17: 50%[3]
Wood[1] used in IKEA products coming from preferred sources, m³	-	-	1,988,110[2]	No	10,000,000[3]
Solid wood used in IKEA products coming from preferred sources[2], % total	7%	16%	23.6%	22.9	FY12: 35%
Audited wood volumes that comply with IKEA minimum forestry requirements, %	80%	92%	97%	94%	

[1]Includes solid wood and board materials. [2]FSC certified. [3]FSC certified or recycled.

Figure 1: IKEA 2011 Forest Key Performance Indicators (IKEA Sustainability Report 2011 http://www.ikea.com/ms/en_US/about_ikea/pdf/sustainability_report_fy11.pdf)

Since 2010, the IKEA forestry requirements distinguish between board materials that are "compliant," that is, certified by a standard recognized by IKEA, or "non-compliant," and therefore subject to the same forestry requirements on materials and routines as non-certified solid wood material. IKEA has classified compliant sources into the following categories:

- Manufacturers with materials from specific countries in combination with recognized Chain of Custody certifications;
- Manufacturers who are integrated with an IKEA supplier who has been IWAY audited or approved by a third party.

Implementation and verification of the forestry requirements

IKEA forestry requirements, as part of the IWAY package, are communicated to suppliers via both documentation and face-to-face meetings with IKEA business developers prior to signing a business agreement. Once a purchase agreement is in place, IKEA can verify compliance using two mechanisms:

- The Forest Tracing Survey: the supplier is required to report wood origin, species and volume three times annually via the Forest Tracing Survey;
- Regular audits: the supplier is subject to regular audits to ensure that they meet the requirements of the IWAY standard. In some cases, IKEA engages a third party auditor to conduct wood supply chain audits.

When violations of the IKEA forestry requirements are discovered, the company initiates a process requiring the supplier provide evidence of having implemented corrective actions within an agreed time frame or face escalating consequences that could lead to termination of business with IKEA. Moreover, during the time period that the wood source is considered non-compliant, deliveries of the wooden merchandise are sus-

FIGURE 2

OTHER KPI FIGURES

	FY08	FY09	FY10	FY11
Total amount of wood used in IKEA products (m3)				
Solid wood	7,223,000	5,686,000	5,320,000	5,924,300
Board material	-	-	7,000,000	7,855,500
TOTAL	**-**	**-**	**12,320,000**	**13,779,800**
Number of IWAY and wood supply chain audits				
Performed by IKEA foresters	84	60	117	134
Performed by 3rd party	3	3	7	5
Volumes audited by IKEA foresters in IWAY and wood supply chain audits				
Cubic metres	1,500,000	500,000	1,270,820	1,692,896
Share of total wood used in IKEA products, %	-	-	10.3	12.3
Externally verified				
Share of IKEA suppliers that are FSC CoC certified, %	7.9	19.6	20.3	34.9
Share of total wood volume that comes from FSC CoC certified suppliers, %	23.9	35.3	47.0	62.0

Figure 2: IKEA 2011 Forest Key Performance Indicators (IKEA Sustainability Report 2011 http://www.ikea.com/ms/en_US/about_ikea/pdf/sustainability_report_fy11.pdf)

FIGURE 3

TOP 5 TREE SPECIES USED FOR SOLID WOOD IN IKEA PRODUCTS

Figure 4: IKEA 2011 Forest Key Performance Indicators (IKEA Sustainability Report 2011 http://www.ikea.com/ms/en_US/about_ikea/pdf/sustainability_report_fy11.pdf)

FIGURE 4

TOP 5 SOURCING COUNTRIES FOR WOOD

Figure 5: IKEA 2011 Forest Key Performance Indicators (IKEA Sustainability Report 2011 http://www.ikea.com/ms/en_US/about_ikea/pdf/sustainability_report_fy11.pdf)

pended until compliance with IKEA forestry requirements are verified. An action plan to prevent future such violations of forestry policy must be approved by IKEA.[12]

IKEA suppliers are required to report details of their wood sourcing three times annually through the FTS. The IKEA FTS, as stated above, allows suppliers to input the sub-suppliers, material type, species, wood origin, certification status and volumes used over the previous four-month period. This information is reviewed by IKEA's business developers and the IKEA forester for the region, and is ultimately used to analyze the development of wood sourcing at several levels within the IKEA organization. IKEA foresters use information collected from suppliers to evaluate the level of risk associated with the supplying forest resource, to review the supplier's history of IWAY compliance, and to determine where supply chain audits are necessary as a means of evaluating Lacey and IWAY compliance.

IWAY AND THE REQUIREMENTS OF THE U.S. LACEY ACT

IWAY-IKEA forestry requirements

Via the supplier routines and raw material requirements, IKEA

IKEA is clear and prescriptive in its requirements to its suppliers for reporting, tracking and handling routines, and follow-up and verification.

attempts to safeguard forest resources at the level of the forest, focusing on virgin fiber. Because the emphasis of IKEA's forestry demands is on transparency throughout the supply chain all the way back to the forest, knowledge of the origin of the wood has always been a pre-condition to ensuring that unwanted material does not enter IKEA wooden merchandise.

Although engaging in legal business transactions is a guiding principle of the company, IKEA does not specifically extend the forestry requirements to cover other potential risks of illegal activity in the forest product trade that are not directly related to forestry operations (e.g., unpaid taxes and tariffs at downstream players in the supply chain). IKEA's approach to securing compliance with its forestry requirements is to be on the ground and "hands-on" in its wood supply chains.

The U.S. Lacey Act

IKEA is clear and prescriptive in its requirements to its suppliers for reporting, tracking and handling routines, and follow-up and verification. In contrast, the U.S. Lacey Act does not give clear prescriptive guidance on how to meet due care (see text box). At a minimum, the statute "prohibits all trade in plant and plant products (e.g., furniture, paper, or lumber) that are illegally sourced from any U.S. state or any foreign country" and requires, for many products, reporting of plant species name and country of origin.

Penalties for unknowingly violating the prohibition are much less severe if a company can show that it exercised "due care" to prevent illegal material from entering the U.S. as a result of its business transactions. However, it is important to note that due care is not a requirement, and failure to exercise due care is not itself a violation of Lacey. The notion of due care may encompass many different factors depending on the situation, importantly not just factors governing forest management but also laws related to the movement and sale of the product. This means there is no "master list" of protocols or routines that are unequivocally sufficient for demonstrating due care in every case.

At the time of writing, the U.S. government has issued a guidance document[12] for the Lacey Act's wood provisions that indicates that composite materials may be treated differently for reporting purposes than other plant material categories. The guidance note recognizes the difficulty of identifying the genus, species, and country of harvest of all plants in imported composite products. If the due care process is fully implemented and does not produce the details required by Lacey, the importer may label the material with a Special Use Code intended to communicate that "it is not possible through the exercise of due care to determine the genus, species, and/or country of harvest of the materials."[14]

IWAY and the U.S. Lacey Act

IKEA's very specific set of forestry requirements, extensive team of foresters, and follow-up procedures that ensure IWAY compliance, results in a highly prescriptive auditing process that in turn gives the company a high level of transparency and understanding of risk and of the origin of the raw material. However the implications of the IKEA approach may be

BOX 3

DUE CARE

- Means - that degree of care which a reasonably prudent person would exercise under the same or similar circumstances
- Expectations - are different for different categories of persons with varying degrees of knowledge or responsibility
- Due care is not necessarily about obtaining formal documents

that the company's quest for greater transparency in its supply chains ultimately necessitates a more rigorous due care approach to meet what it perceives as its Lacey obligations.

That said, there is no prescriptive process involved with Lacey, so there is a great deal of flexibility allowed to a company in determining what it feels is the best course of action with respect to its own level of understanding.

IKEA and the Lacey Act Declaration Form

As one of the largest retailers in the world, IKEA has been struggling with the capture of a vast amount of information and how to manage and consolidate this information into the Lacey declaration[15] form. The declaration must contain the scientific name of any species used, the country of harvest, the quantity and measure, and the value.

When the amendments to the Lacey Act passed in 2008, IKEA argued that it would take, annually, 25 person-years to complete the information and fill out all the necessary declaration forms for IKEA's global supply chain. The diagram (Figure 5-7) below show that even a simple product has multiple component parts and suppliers, and to add to the task each supplier to IKEA has many more sub-suppliers.

To capture this information and present it in the declaration form presented a major challenge for IKEA and one the company originally argued would be insurmountable. However, the company has now created a solution by reprogramming IKEA's internal Connect System to at least help streamline the data capture. The Connect System was created to store and register all technical information about IKEA's entire product range. IKEA has now reconfigured part of the system to be able to pull out the relevant information to be used for the completion of the Lacey Declaration Form. This has now made the data collection process easier and more manageable. However, the actual U.S. Department of Agriculture Animal and Plant Health Inspection Service's on-line reporting is still creating significant challenges, which means IKEA still has to rely on manual paper based submission of the declaration form.

It is not uncommon, for IKEA, that a single shipment generates a 1000 page document because each container consists of several products. There is therefore a need to file several declarations with each consignment, which is still generating significant work and expense in time and cost for IKEA.

CHINA CASE STUDY DISCUSSION

Close to 90 percent of IKEA's fiberboard comes from European producers, with relatively uncomplicated supply chains that are traceable to the wood supply region. In collaboration with Nature Ecology and People Consult (NEPCon) and the Chinese Academy of Forestry, the company has recently completed two pilot supply chain studies[16] in China in order to better understand the categories of fiber used in particleboard and medium density fiberboard production processes in the country. In most of Asia, the fiber inputs to board production are varied and include more pre-consumer recycled material than in Europe, making

FIGURE 5

MATERIALS IN A SIMPLE PRODUCT

Materials of wood origin in a modern simple chest of drawers

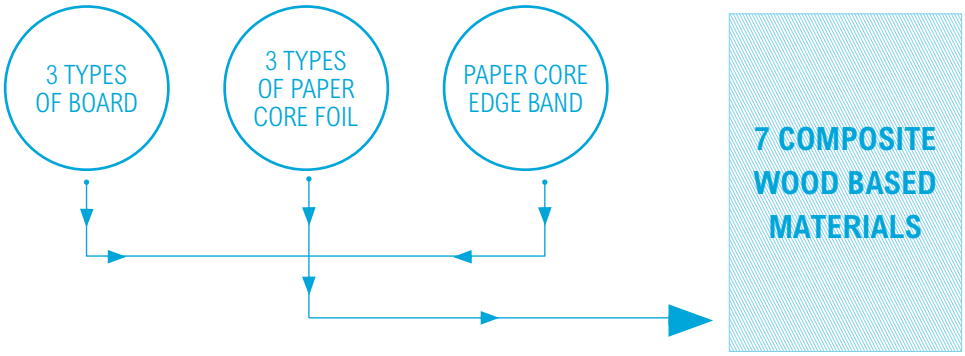


Illustration of the components parts for a simple product.

them more complex, and thus, the material more challenging to track.

In its 2010 sustainability report, IKEA stated that during calendar year 2010 it had heightened its attention to supporting Chinese suppliers to ensure legal wood supplies in its day-to-day business. 14.8 percent of IKEA's solid wood material comes from Chinese forests, and additional raw material inputs travel across the Russia-China border to Chinese manufacturers.

Attention to legality is a priority for IKEA's China-based foresters. The approach to due care has been stepped up in China with the inclusion of board material into the forestry requirements in IKEA's IWAY standard. The aim is to meet both the requirements of Lacey and to adapt to the more complex supply chains inherent to the wood-based board industry.

IKEA has developed an internal action plan for its Chinese purchasing region to ensure that suppliers are compliant with IKEA's own forestry requirements and to demonstrate adequate due care for the purposes of the Lacey Act. The plan includes:

- Building knowledge of suppliers and internally regarding Chinese regulation;
- Partnering with external organizations (Rainforest Alliance, WWF) to facilitate development of risk assessments for sourcing areas in China; and
- Evaluating what level of determining the origin of wood is possible and necessary to ensure compliance with the IKEA forestry requirements and adequate due care for Lacey in board supply chains.

The table below shows the structure of the different supply chains feeding into the production of composite material. The chain highlighted in the table shows the focus of this study. The complexity in these supply chains and the reliance on small producers is evident.

FIGURE 6

SUPPLY CHAINS

Material sourcing for a simple product

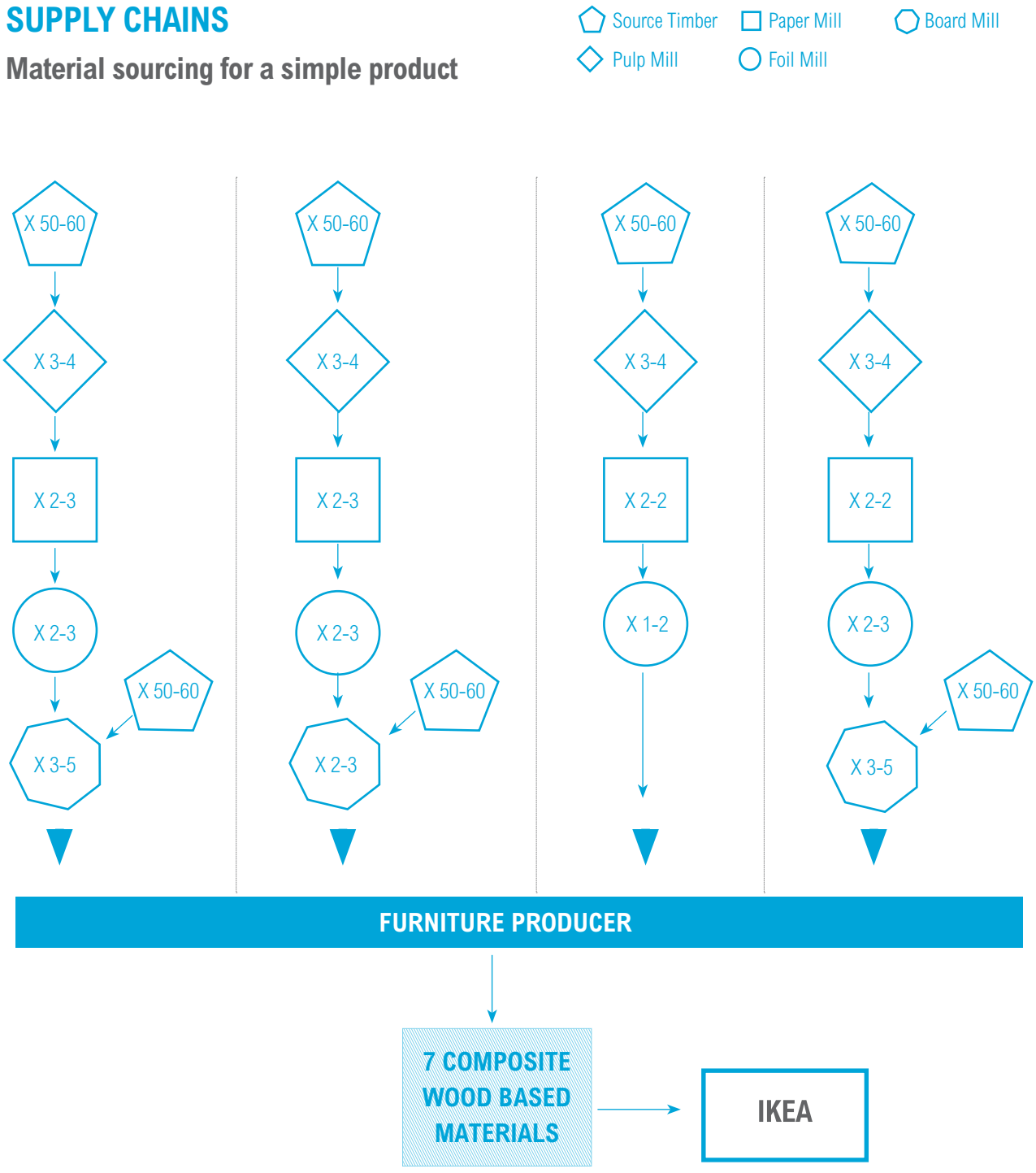
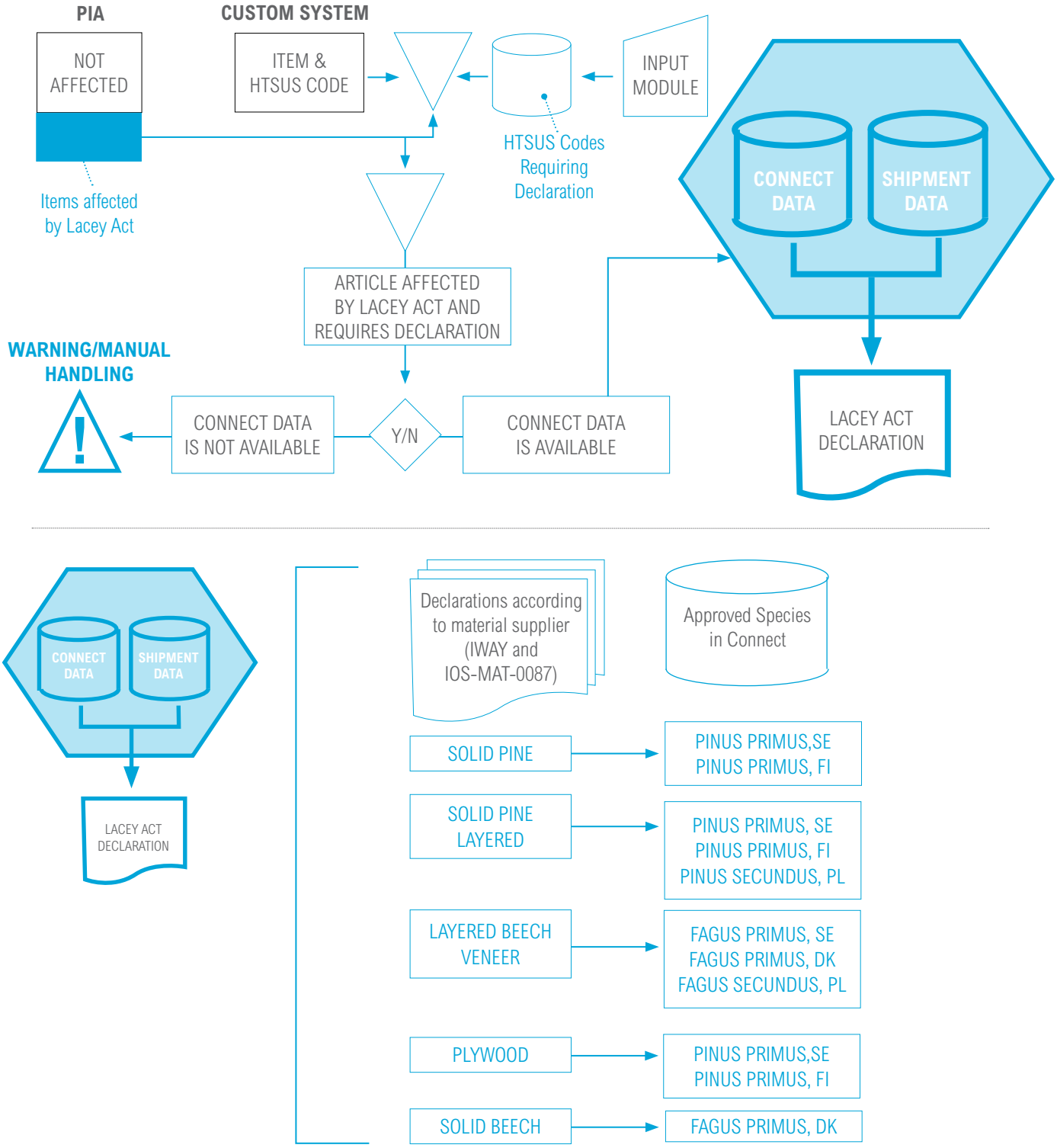


Illustration of the complexity of the supply chain.
Each node represents the number of potential sub-suppliers for each IKEA supplier.

FIGURE 7

CONNECT SYSTEM



The Connect system and how it has been updated to incorporate the needs of the declaration process.
The system automates the declaration form completion pulling from technical information.

A three-pronged approach to due care in China

IKEA is engaging in three main areas in order to integrate board materials into its IWAY forestry requirements with the IWAY global standard. These are: mapping and understanding the relevant Chinese legislation and regulations; conducting risk assessment of sources; and analyzing fiber inputs into the board production process.

1. Mapping of legislation

At present, IKEA and the Chinese Academy of Forestry (CAF) are collaborating on a comprehensive mapping of the Chinese forest legislation pertaining to legal documentation for wood fiber trade. In an ideal scenario, documentary evidence would be present all the way back to the local forest bureau level where the wood originated to aid in physical tracking of material.

What the mapping exercise shows is that different counties and provinces in China currently require different forms of documentation to verify that wood fiber has been legally harvested and traded. Different forest classifications (natural forest, plantation, community, etc.) also have different documentation requirements. These different approaches can create inconsistent paper trails. For example, wood from plantations is considered an agricultural product, and it is therefore subject to specific documentation requirements within that classification.

Additionally, IKEA's suppliers report that it is not always easy to obtain the correct paperwork. There are costly processes[17] required to obtain wood origin documents, such as village council agreements and certification of forest area. The easiest document to obtain is always the transportation license. However, for smaller suppliers, the cost of obtaining this document outstrips any profit they can make by supplying the recycled or waste material. Transportation licenses are therefore sometimes not obtained due to day-to-day financial decisions by the small suppliers.

This understanding of what is happening on the ground is forcing IKEA into a situation where they might need to stop using a supply which is actually helping local communities create livelihoods and make more efficient use of their resources. The more detailed research of the supply chain has brought an understanding of the pressure small individual suppliers are under, but unfortunately has potentially put the continued purchase of that supply under threat. The IKEA project to map the legislation in the country will hopefully bring a rationalization of these issues and help IKEA and others to continue purchasing from these community based sources.

This project and IKEA's willingness to work with the Chinese authorities is an extremely important and an interesting example of private sector involvement in legislative improvement.

2. Risk assessment

As a second step, the information collected regarding relevant forest legislation is being used as input towards a general risk assessment project, initiated by IKEA, targeting an area of forty Chinese counties that are wood sourcing areas for IKEA suppliers. This project, carried out in cooperation with the Rainforest Alliance (RA), CAF, and WWF China, aims to develop a risk register that will inform decisions about whether wood material from specific sourcing areas is at risk of failing to comply with IKEA minimum requirements and Chinese regulation. The methodology guiding the risk assessments includes both desk and field evaluations to determine the specific forestry conditions in each county.

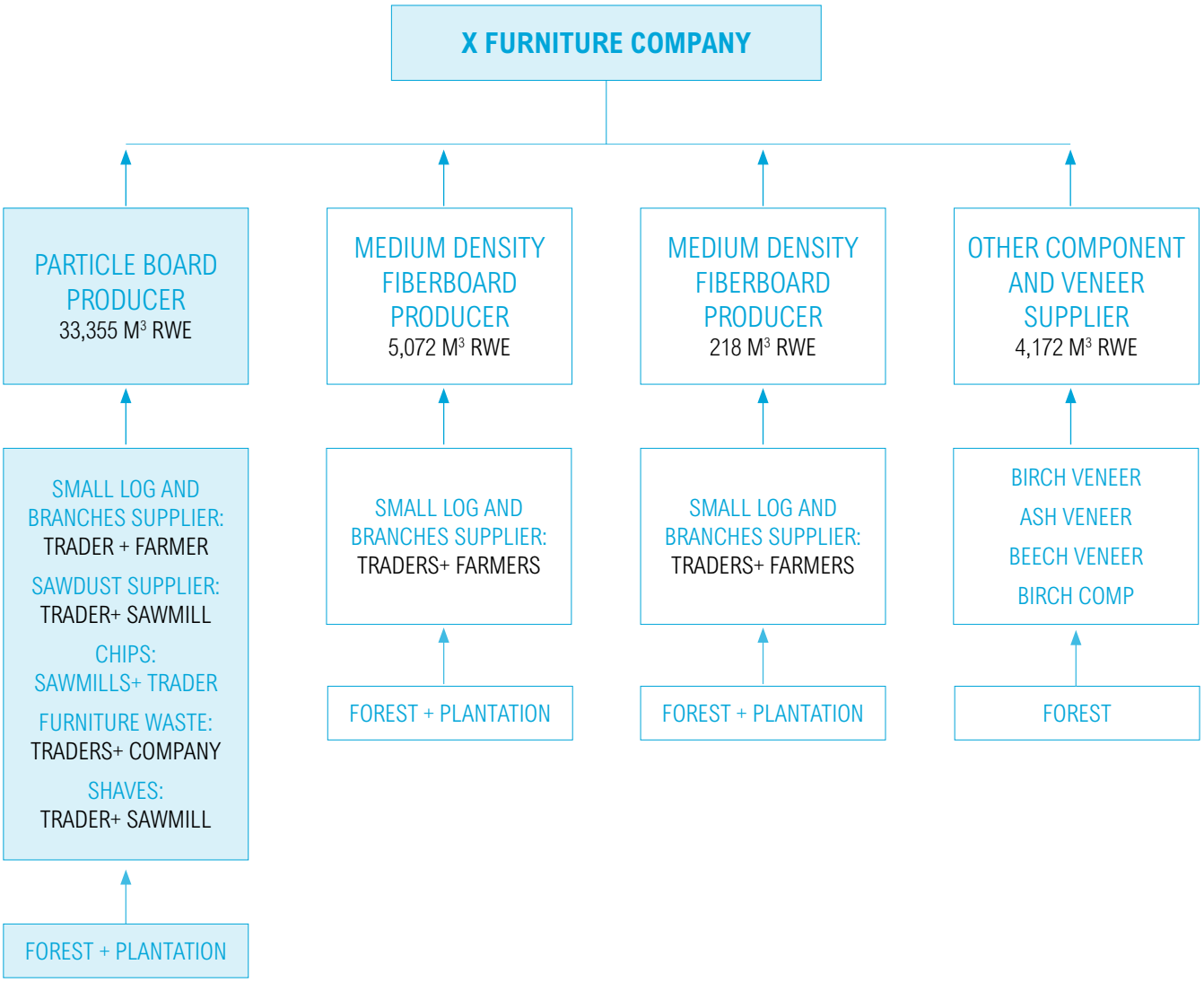
Once the risk assessments for all counties are completed, the outcome will be risk designations for IKEA sourcing areas that may help inform IWAY compliance verification and Lacey Act due care approaches.

IKEA is engaging in three main areas in order to integrate board materials into its IWAY forestry requirements.

FIGURE 8

SUPPLY CHAIN STRUCTURE

IKEA Funiture Producer



Supply chain flow chart. Blue boxes show chain followed in present study.

TABLE 1

DOCUMENT REQUIREMENTS FOR PROCUREMENT AND TRANSPORTATION OF BOARD RAW MATERIAL INPUTS IN CHINA

Type	Produced from	Comments	Documents required	Transport license required?
Branches and small logs	Standing trees	Documentation requirements vary based on source of standing trees	Cutting permit if plantation belongs to community or forest bureau (but not if sourced from household land). Cutting permit required in case of logging contractor.	Yes, if transported between provinces and cities. No, if transported within same county; sometimes not required between different counties of same province.
Furniture production leftovers	Furniture production by-products/excess materials	Pre-consumer recycled product	Supplier invoice, which is not always available at board factory	Unknown
Shaves	Leftovers from veneer production	Pre-consumer recycled product	Supplier invoice, but not always available at board factory	No
Chips	Logs or branches; other sources		Supplier invoice, but not always available	Yes, for source roundwood if produced from logs/ branches; otherwise not required. Not required to transport chips.
Sawdust	Normally from primary processing of wood products		Sales invoice from primary processor	No

3. Analysis of fiber input

The third prong of the approach to securing compliance in IKEA's Chinese purchasing region is an analysis of the fiber inputs to different board supply chains in order to determine which materials are at a high, medium or low risk of violating applicable forest legislation. Core materials, which are more likely to have been minimally processed from the original log are easily traced back to their source. Post-consumer materials, such as furniture waste, hold very little risk of having violated legislation in their form as input to board production. By-products of other processes, such as sawmill waste, shavings (sawdust), or chips have varying degrees of risk and are categorically much more difficult to trace.

The majority of the raw material used in the manufacturing of composite material in the supply chain, audited for this study, is recycled or waste material, of which on average only 30 percent can be tracked to source through currently available paperwork. Currently, according to Rainforest Alliance research, the law in China does not require full documentation for much of the recycled material used in the composite material manufacturing process, which creates concerns for IKEA as it tries to find the correct approach to showing due care for Lacey and due diligence for the upcoming EU Timber Regulation. In addition, the various classifications of land use, with their differing management prescriptions and requirements, help to create a trading framework that is extremely difficult to manage. IKEA's current efforts to track all sources back to the Forest Bureau[18] administrative level is challenging, particularly for composite material comprised mainly of recycled and waste materials.

Proof of supply chain control

Although IKEA requires suppliers to report species and origin (to forest bureau resolution) for all board materials, the likelihood of being able to fulfill this requirement in China is low. Regulations governing the transport of wood material in China are inconsistent and unenforced, and patterns of trade often include a multitude of cash transactions and traders.

IKEA has mapped two representative supply chains for different types of board: medium-density fiberboard (MDF) and particleboard. Small logs and branches contribute 30 percent and 100 percent, respectively, to the composition of particleboard and MDF. The primary documentation used to show chain of custody for small logs and branches is a transportation license, which is used to validate the transport of logs between the forest of origin and the board factory. In the supply chains mapped by IKEA, only about 30 percent of the small logs and branches could be accounted for by transport licenses. One reason for this is that small forest owners do not want to bear the costs associated with applying for and securing transportation licenses.[19] Other material inputs to particleboard include pre-consumer recycled sawdust, chips, and furniture waste, which do not require transport licenses to trade. These materials are practically impossible to trace accurately due to complex supply chains that involve multiple processing companies, sawmills, and forest origins.

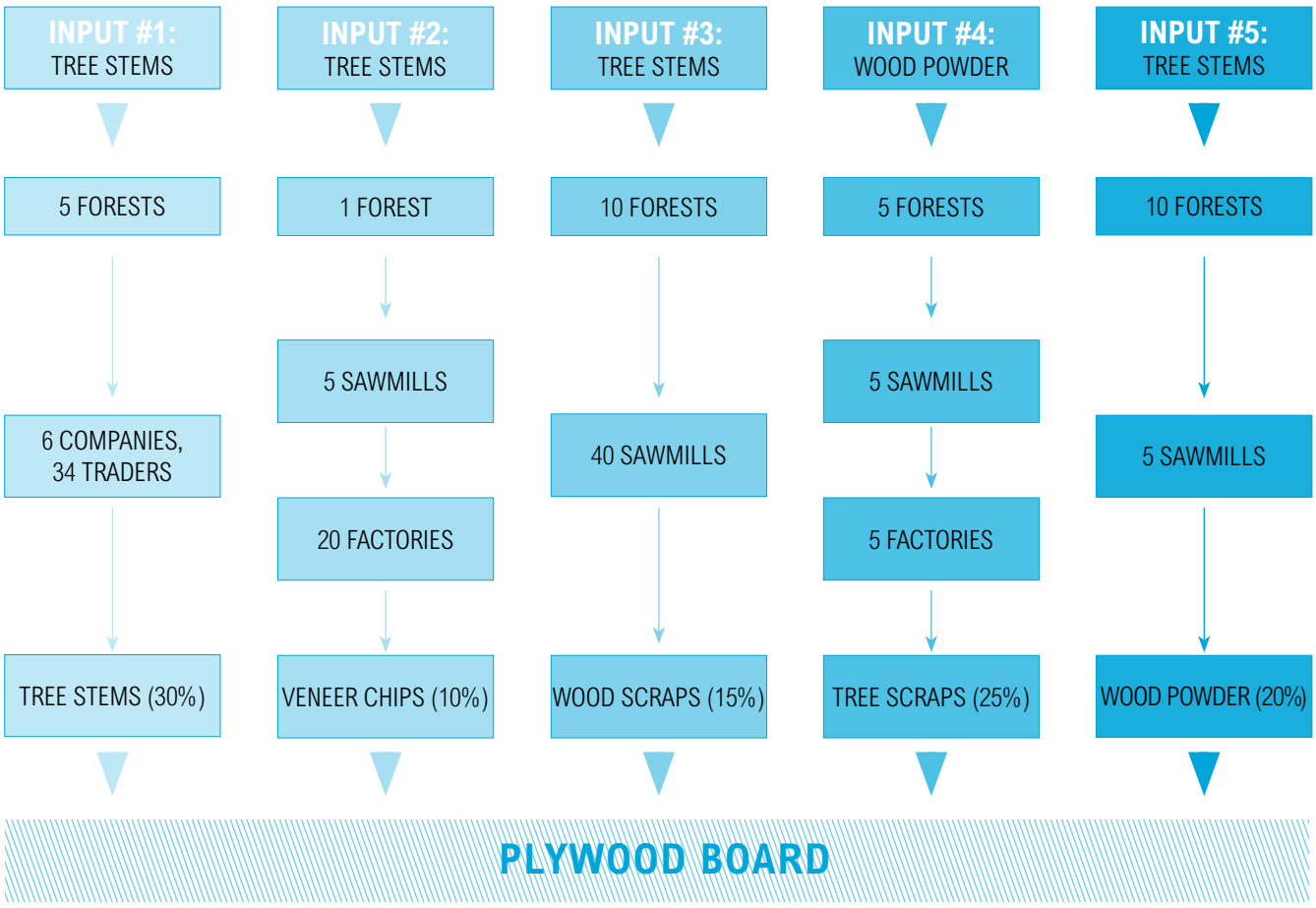
BOX 4

IKEA RISK ASSESSMENT METHODOLOGY IN CHINA

- Collecting legislation information;
- Conducting interviews with experts and NGOs on legality issues; and
- Conducting field evaluations:
  - › Interviews with officials from provincial, city and county forest bureaus, including forest managers;
  - › Review of the relevant documents provided by the forest bureau; and
  - › Field visits to some of the forest sites, including plantations, protected areas, and recognized high conservation value forests.

FIGURE 9

RAW MATERIAL SOURCING FOR PLYWOOD BOARD



The above table (Figure 9) shows a typical supply chain for IKEA's board material. It shows the different raw material types and the steps each undergoes before reaching IKEA. It also clearly shows the magnitude of suppliers that form the IKEA supply chain.

To enhance the capacity of the Chinese system to support traceability in its documentation requirements for processing companies, IKEA is supporting improvements to the Chinese transport licensing approach. The results of IKEA's forest-legislation mapping study are expected to inform a revision of some of the laws and identify gaps where new legislation is required.

Future changes will likely include the addition of wood origin information to all transport licenses for every transaction in the supply chain. Such a change will promote traceability of fiber materials that are required to be accompanied by transport licenses, namely minimally processed wood materials.

Using risk assessments to establish a due care approach

IKEA's experience with the challenges of traceability in board supply chains in China has prompted the company to reconsider the feasibility of mapping supply chains all the way back to the forest as the foundation of a due diligence approach in specific regions and for specific materials. As an alternative approach to demonstrate due care and to ensure that Chinese wood used in IKEA products meets the

company's forestry requirements, IKEA is exploring the idea of using the outcome of the county-level risk assessment conducted by RA, CAF and WWF to inform compliance evaluations. Once completed, each county assessment will designate risk level for IWAY violations, including legality, for the 40 priority wood sourcing counties. In counties where the risk assessment deems the risk of illegality in forest operations to be "high," [20] IKEA will work to gain transparency in the relevant wood supply chain or require that the IKEA supplier change sources. In all other cases, in which risk of illegal activity is determined to be low, IKEA will allow suppliers to report wood origin at county level. Although this is a coarser level of resolution for fiber origin, provided the county is at low risk for illegality it may simplify the due diligence approach without compromising the integrity of the outcome.

IKEA is also exploring how its risk assessments approach is comparable to the FSC Controlled Wood[21] risk assessments structure and how the results will be made available to the FSC.

ANALYSIS AND FINDINGS

The Lacey Act requirements and the addition of board materials to the IWAY Forest Requirements have forced a review of the applicability of the IWAY implementation approach. The original approach was to look at the suppliers to individual units and audit accordingly. With the inclusion of board material and a much more fragmented and disparate source of raw material, IKEA has had to rethink these methods. The aim of the new risk assessment approach under consideration is to assess the sources at a predetermined jurisdiction level. This resolution has been set at the district level. Therefore, the resolution on many board products may change from investigation of individual supply chains back to examination of risk at the country, Forest Bureau or District level.[22]

Criteria are still being developed, but at the time of writing they follow closely the FSC Controlled Wood Standard, although some indicators differ.[23] Since the implementation of the risk assessment is still in the testing stages, it has not yet had any effect on the IWAY system. IKEA is waiting for the results of the first RA/CAF/WWF risk assessment, which will determine the scoring or threshold of the risk assessment, to guide future change.

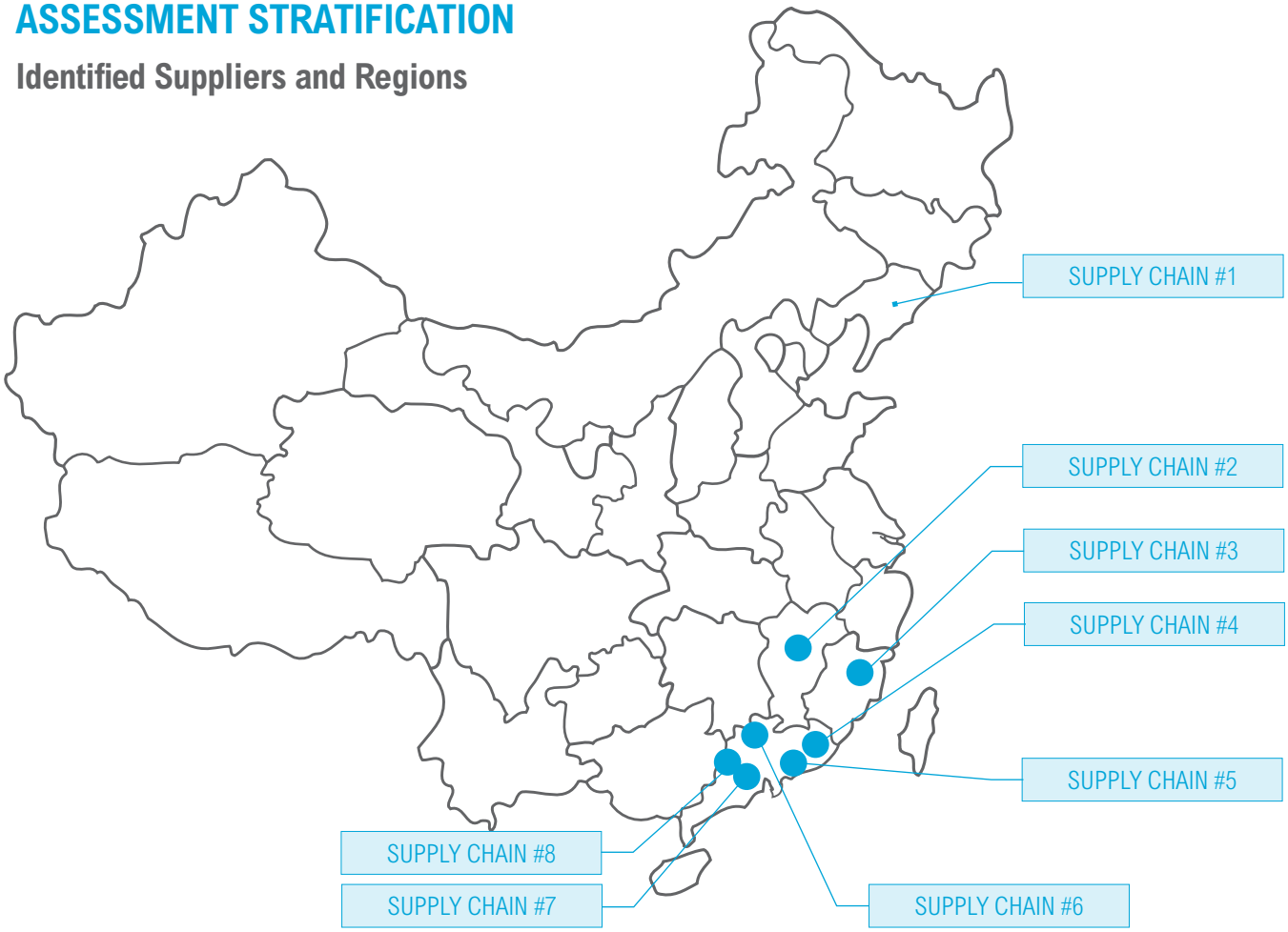
The major change expected is using county-level risk assessments to identify and manage risk. As the company better understands its risk, starting at the county level in China, IKEA will be in a better position to determine what stratification of investigation is needed to meet its own standard and more efficiently and effectively satisfy its due diligence obligations. In areas of lesser risk, a less detailed investigation will be necessary. In areas that are determined to present higher risk of

The results of IKEA's forest-legislation mapping study are expected to inform a revision of some of the laws and identify gaps where new legislation is required.

FIGURE 10

EXAMPLE OF IKEA'S RISK ASSESSMENT STRATIFICATION

Identified Suppliers and Regions



Indicates a Stratification Boundary (200 miles) for Risk Assessment for one supplier.

irregularities, IKEA will go down to the district level and even to individual suppliers through full forest supply chain audits.

As the risk assessment goes down to a more specific level (e.g. county or district) and becomes finer, more in-depth document collection and analysis may be necessary to support the due care process in high risk areas. (Figure 10)

Lessons Learned

Lesson 1. The implementation of the Lacey Act means that responsible procurement is no longer voluntary but is now mandatory.

The changing marketplace requirements brought about by the Lacey Act and similar laws being developed in the European Union, Australia and other regions mean that the purchase of legally sourced products is no longer a voluntary activity. It is now mandatory, with stiff penalties for the purchase of products manufactured using illegally procured or produced raw material.

In IKEA's case, this change from the voluntary to the mandatory has required the company to consider all sources of raw material, including board material inputs, not just solid wood elements. Even given these constraints, it is possible—though difficult—to trace the source of raw material used in solid wood products back to, at least, the District or County level in China. IKEA is currently putting more effort into supporting Chinese suppliers to ensure legal wood and is developing new tools (e.g. county risk assessments) to guide their sourcing. It is important to note, however, that it is possible for IKEA to invest in this work because of the resources of the company and the scale of its business. Smaller companies may not benefit from the same economies of scale.

However, smaller companies should not despair. There are a growing number of options available. First, they can take advantage of the tools that companies like IKEA are developing and making available through the FSC Controlled Wood system. In addition, smaller companies can access further support through third-party assistance using consulting firms or programs like the WWF Global Forest and Trade Network[24] or RA's SmartSource Program.[25] They may also work closely with their respective trade associations (and those associations' member companies) for greater leverage and guidance provided by improved economies of scale. Finally, there are legality verification and certification programs as well as new tracking technologies or online software packages that aid the control and collection of information throughout the value chain.[26]

Lesson 2. Each company must understand the supplying country's laws and associated risks so that it can define its own level of appropriate traceability.

Tracking inputs to composite material, as IKEA is now doing, is an even more complicated undertaking than trying to track solid wood products. Of the fiber input, small logs and branches contribute between 30 percent and 100 percent, and all that is legally required to track these inputs is a transportation license. IKEA has found that only 30 percent of the supply has valid transportation licenses. The main reason for this difficulty is that small forest owners cannot always bear the costs associated with applying for and securing transportation licenses. Other material inputs include pre-consumer recycled sawdust, chips, and furniture waste, which do not require any transport licenses to trade. This makes the tracking of these materials a very challenging proposition.

IKEA has therefore found it necessary and advisable to step up its approach to due care in China to attempt to adapt to the more complex supply chains inherent to the wood-based board industry and have a level of confidence in supply. IKEA has consequently developed an internal action plan for the Chinese purchasing region to gain a full understanding of the regulatory framework in China, to gain full knowledge of the IKEA supply base, and, most importantly, to determine the actual resolution of investigation needed to show a level of understanding of the origins of source to meet their own perceived notion of what they need to show due care.

Through a greater understanding of the country and its laws, it is possible to challenge the basic tenet of current chain of custody systems: tracking back to the stump. If a company fully understands its risk, and a supplying country's regulatory and legislative processes, it may not need to track back to the stump. It should be possible for a company to determine how far back in the supply chain they need to go to have a level of confidence in the supply and show due care for Lacey. However, much of the forest products industry must understand that achieving the required level of understanding takes

Through a greater understanding of the country and its laws, it is possible to challenge the basic tenet of current chain of custody systems.

time and diligence in research. To date many supply chains in the international forest products trade are based on a poor understanding and a distinct lack of knowledge of the laws and risk in the supply country.

Lesson 3. A risk assessment can help determine the level of traceability required to ensure confidence in any forest product supply and ensure that a reasonable level of due care can be shown.

Since their inception in the late 1990s, the IKEA forestry requirements have been used to avoid timber from controversial sources. IKEA's trial and potential future implementation of the risk assessment approach in China is an important development in the evolution of their IWAY Forestry Standard.

If adopted by IKEA, a risk-based due care approach would mark a shift from on-the-ground supply chain audits going all the way back to the forest to an improved understanding of risk factors at the county level. This can be a viable approach for regions in which full supply chain traceability is impossible and the risk of illegal activity in the forest is low.

The strength of this model is only as strong as the system upon which it is based. A credible risk assessment should understand and evaluate the country's governance of forest management and trade, and should account for evidence of enforcement of applicable laws. To do this, IKEA is using third party civil society partners to ensure impartiality, and where weak law enforcement is found, IKEA implements more robust traceability systems to mitigate risk.

The Lacey Act of course does not prescribe the use of risk assessments. However, the use of such an approach will help a buyer of forest products understand the context in which they are sourcing goods. The EU, for its development of the EU Timber Regulation, sees a risk assessment approach as core value of due diligence.[27] The European approach can be very useful for companies thinking about the Lacey Act and what is needed to show due care.

A full understanding of risk is fundamental to creating procurement policies and systems to show due care for Lacey. It should be undertaken with great care, with information and analysis collected and conducted to the highest level possible. IKEA has opted to use third-party partners even though they have excellent in-house capacity to do this work, largely to ensure that information is impartial. However, for other companies, the decision to do so will be determined by available financial resources, the capacity of internal staff, and the initial perceived risk of supply. To outsource this work to a reputable, impartial, professional third-party organization could be the safest option, although some companies might feel that keeping this information internal would be preferable.

The decision as to which approach is needed will be determined by the perceived risk from the start of any trading relationship, which is dependent in large part on the company's level of knowledge and understanding. IKEA has taken its approach because it has a high level of understanding about their supply chains and risks. It is extremely important for other companies to determine this for their own supply chains, because although the determination of whether due care has been conducted is based on level of knowledge each company or individual has, if illegal product does enter a supply, ignorance is no defense.

The aim of the IKEA risk assessment approach is to make it possible to demonstrate that due care has been

exercised by stratifying low- and high-risk regions and concentrating auditing efforts in the higher risk areas.

The non-prescriptive approach to due care presents both challenges and opportunities for IKEA and every other company that wishes to import forest products to the United States. It is up to IKEA to determine how it perceives due care and how it feels it can prove, if necessary, that it has been exercised. If IKEA has good systems in place and is sure of the source of its materials, then nothing more is needed, including third-party certification. However, if risks in the supply are found through IKEA's current assessment of its operations in China, then more work will be needed, and changes in the procurement procedures and systems will need to be carried out. IKEA is trying to lay the groundwork for potential changes by developing the risk assessment approach. Time will tell how secure the company is in its belief that this system will adequately demonstrate due care.

Given IKEA's very specific set of forestry requirements and follow-up procedures to ensure IWAY compliance, IKEA's routines are more intensive on the issue of supply chain transparency than is required by the Lacey Act. Ironically for IKEA, as the company works to increase knowledge about its supply chains, the implications are that it will need to strive continually for a more rigorous approach. For composite material, a cost-effective and robust means to track inputs is a difficult prospect. IKEA hopes that the proposed risk assessment approach will provide the answer and so allow them to focus resources in the higher risk areas so that they can continue to trade in those regions.

Lesson 4. To be able to complete the declaration form, a company needs to understand its supply chain fully. Good information management is key, and a proactive approach to the management of the supply chains is required. It is no longer enough to just rely on trust: a company must now ask questions and back this up with on-the-ground audits.

A full understanding of risk is fundamental to creating procurement policies and systems to show due care for Lacey.

The main area of concern for many companies, it would seem, has been the completion of the required declaration form. At the time of the amendment of the Act in 2008 IKEA's concern was the cost and person hours required.

In response to these concerns, IKEA has adapted its internal information management systems to complete the declaration form, so reducing increased staff costs. With the realization that most of the relevant information required to complete the declaration was available, and all that was needed was to adapt existing systems, the collection of the data for the declaration form has now been streamlined through the Connect System, although IKEA still sees the physical completion of the declaration form as a problem.

The main key to the declaration form is therefore a robust due diligence process that gives easy and timely access to relevant information. Without the collection of the data and the understanding of the context for each supply chain the declaration form will continue to be a problem for importers to the United States.

FINAL THOUGHTS

The lessons learned by IKEA in the Chinese context are being shared with other IKEA purchasing offices in similarly challenging regions in Southeast Asia and around the world. An important consideration is that although the specific regulations differ from country to country and region to region, fundamental procurement challenges remain the same. The Lacey Act and the EU Timber Regulation provide a framework to discuss, with suppliers, the necessity of providing sufficient evidence of proper wood sourcing and the management of risk.

Lacey and the EU Timber Regulation have moved the requirements for improved due diligence in supply chain management away from the green niche markets to what is now a market-wide mandatory requirement with global scope. Because this compulsory demand is spread throughout the supply chain, IKEA has found that it is a good starting point for dialogue and relationship-building with their suppliers.

The Lacey Act and the EU Timber Regulation should therefore not be viewed as a negative but as an opportunity to streamline supply chains, understand the risks and find opportunities to improve procurement practices to help safeguard supply and so future business for years to come.

ENDNOTES

1 IKEA Sustainability Report - http://www.ikea.com/ms/en_US/about_ikea/pdf/ikea_ser_2010.pdf
2 Europe, Russia, China and South East Asia
3 IKEA Sustainability Report, 2010.
4 The IWAY Standard states that 'Status of compliant source is awarded by IKEA based on availability and scope of relevant certificates or memberships.' Approved sources are contained in an appendix to the standard.
5 Defined as material which derives from forests verified as responsibly managed to a standard recognized by IKEA and which holds a Chain of Custody certificate.
6 The only standards currently recognized by IKEA are the Forest Stewardship Council's Forest Management and Chain of Custody standards.
7 The IKEA FTS allows suppliers to input the sub-suppliers, material type, species, wood origin, certification status and volumes used over the previous four-month period.
8 The full IWAY Standard can be viewed at http://www.ikea.com/ms/en_US/about_ikea/pdf/SCGlobal_IWAYSTDVers4.pdf
9 FSC has strict requirements to control the non-certified material in FSC-Mixed Sources products. The non-certified material must comply with FSC Controlled Wood standards and be independently verified before it is mixed with certified material (http://www.fsc.org/fsc-controlled-wood.149.htm).
10 IKEA Sustainability Report 2011 available at http://www.ikea.com/ms/en_US/about_ikea/pdf/sustainability_report_fy11.pdf
11 Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010. See http://ec.europa.eu/environment/forests/timber_regulation.htm
12 Those noncompliant with procedural requirements are allowed 90 days to demonstrate compliance. Noncompliance with the minimum requirements leads to suspension of deliveries.
13 The United States Department of Agriculture, Animal Plant Health Inspection Service document "Plant and Plant Product Declaration Special Use Codes" details a reporting procedure applicable for composite, recycled, and reused materials.
14 USDA APHIS, "Lacey Act Plant and Plant Product Declaration Special Use Codes." April 21 2011. http://www.aphis.usda.gov/plant_health/lacey_act/downloads/lacey-act-special-use-codes.pdf
15 Plant and Plant Product Declaration Form
16 At the time of writing these had not been completed and were not available for reference.
17 The costs incurred here will differ by village, community and district.
18 The Forest Bureau level is a subset of the District Level and is thus a much finer resolution. The structure of Chinese forest administration is: 1. Country 2. Province 3. County 4. District.
19 Even though Lacey does not require origin of materials to be reported to a greater resolution than country level, and also provides an out with regard to APHIS guidelines for composite materials, IKEA has done a level of due care that has revealed a legal inconsistency in the lack of transport licenses.
20 The criteria for risk assessment are still being decided upon with Rainforest Alliance.
21 FSC has strict requirements to supervise the controlled wood material used in FSC-Mixed Sources products. The controlled wood material must comply with the FSC Controlled Wood standards and be independently verified before it is mixed with FSC certified material.
22. The Forest Bureau level is a subset of the District Level and is thus a much finer resolution. The structure of Chinese forest administration is: 1. Country 2. Province 3. County 4. District.
23. See the boxes "IKEA IWAY Forestry Requirements" and "IKEA Risk Assessment Methodology in China" for specific criteria and evaluation methodology.
24. The GFTN—a WWF-led partnership—links more than 300 companies, communities, NGOs, and entrepreneurs in more than 30 countries around the world (http://gftn.panda.org/about_gftn/).
25. The Rainforest Alliance provides customized services to companies, governments and organizations that want to improve their forest-product purchasing practices and establish a legal, traceable and sustainable supply chain (http://www.rainforest-alliance.org/forestry/sourcing).
26. The Forest Legality Alliance website and a list of some of the main tools and standards available: http://www.forestlegality.org/tools-guides
27. Issues relating to the EU timber regulation legal framework for which guidance should be developed. http://ec.europa.eu/environment/forests/pdf/guidance_document.pdf

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