TROPICAL TIMBER:
A GUIDE TO RESPONSIBLE SOURCING AND FINANCING
They also store vast quantities of carbon, “locking in” a key greenhouse gas in vegetation and nutrient-rich forest soils. It is estimated that around 250 billion tonnes of carbon are stored in tropical forest above-ground biomass alone, equating to roughly 90 years of global fossil fuel emissions at today’s levels. However, growing recognition of the importance of tropical forests comes at a time when forests are increasingly under threat from unsustainable production of forest-risk commodities including palm oil, beef, soy, timber and natural rubber.

It has been estimated that the loss of tropical forest canopy between 2014–2018 was equivalent to an area the size of the UK each year, and the CO₂ emissions caused by the deforestation of tropical forests in 2019 was equivalent to the entire annual carbon emissions of the European Union. The drivers of deforestation in the tropics are multidimensional and vary across landscapes and geographies.

One of the most significant has been the rapid expansion of agri-commodities including oil palm in Southeast Asia and cattle ranching and soybean production in South America. The degradation of tropical forests has received far less public attention than deforestation, despite also having significant negative impacts on ecosystem function and biodiversity. The key driver of degradation is unsustainable logging practices, but degradation can also be caused by natural occurrences such as fire, floods and storms. However, these natural occurrences will continue to become more prevalent with increased global heating.

Both deforestation and forest degradation are significant contributors to runaway climate breakdown, as well as drivers of habitat destruction and associated biodiversity loss. Additionally, both have a detrimental impact on the lives of Indigenous peoples and local communities whose cultural survival depends on intact forests and ecosystems.
Timber has been a vital resource for thousands of years and serves many functions. When produced at industrial scale, timber is harvested either through exploitation of areas of naturally occurring forest (natural forest management) or through forest areas expressly planted for exploitation (timber plantations).

**Natural forest management**

Forest land in tropical countries is usually mandated as under the ownership of the state within the countries’ constitutions or Forest Codes. When allocating forest land for timber extraction, standard practice is to lease or “concession” areas to timber companies for commercial exploitation, often with a time horizon of 20+ years. In concessions under management, there are significant differences in intensity of harvest depending on geographic region and distribution of high value species within the management area; for example in many areas of Africa or South America as little as one or two commercially valuable trees are harvested per hectare; in Asia, where commercially viable species are more frequently distributed in the forest stand, this can be far higher. In the economies of developing nations with areas of significant tropical forest cover, the timber industry represents an important contributor to the national economy. For example, in Republic of Congo, logging activities represent the country’s second largest sector (around 5% of national GDP) and provide significant employment opportunities in harvesting, production and logistics.

**Timber plantations**

Timber plantations are prevalent in tropical and sub-tropical regions (notably Indonesia and Brazil) and temperate regions such as South Africa and New Zealand. This production method typically prioritises monoculture growth of high value and fast-growing species. Harvests are often carried out as soon as the crop is considered mature enough and then replanted. Timber plantations in tropical or sub-tropical climates usually feature non-native species and typically include eucalyptus (*Eucalyptus spp.*), pine (*Pinus spp.*), beech (*Fagus spp.*) and spruce (*Picea spp.*). These species are also used for construction and furniture making as well as packaging, paper, pulp, clothing and biomass.
One of the most significant risks posed by unsustainable logging in natural forests is forest degradation. Degradation has been defined in many ways, but principally refers to a forest’s reduced ability to provide ecosystem services such as carbon storage and water cycle regulation, and to provide habitats for forest dwelling species – without total forest clearance. Natural occurrences (such as fire and floods) can cause degradation, as can human activity – logging, mining and fuelwood extraction are typical causes. Typically, forest degradation has been considerably more difficult to measure than deforestation, as it is challenging to observe remotely through satellite data. However, recent studies have shown that forest degradation could have affected a larger area of the Amazon than has been cleared by deforestation. It has also been estimated to account for around 84% of all forestry-related emissions in Africa, and a quarter of forestry-related emissions worldwide. In addition, unsustainable logging has had a considerable impact on Indigenous peoples’ access to land and resources as well as diminishing habitats of species such as the African lowland gorilla, whose population rate has declined by 20% in the last eight years. Severe degradation and unsustainable rates of harvesting in natural forest areas under management can reduce a forests’ financial viability: over-harvesting can lead to economic pressure to clear degraded forest in order to prioritise the establishment of timber plantations or other agricultural commodities such as oil palm, cocoa or rubber (see Deforestation right).

Deforestation is defined as the clearance and permanent land use change of a forested area. There can be multiple drivers of forest conversion to other land uses, and these differ substantially across geographies. Land can be cleared for smallholdings, agricultural plantations, livestock grazing and settlements. Major drivers of large-scale deforestation include the planting of oil palm plantations in Southeast Asia, beef and soy production in South America, and small-scale agriculture in the Congo Basin. Forest clearance to facilitate the establishment of commercial timber plantations is also common in many tropical forest landscapes, particularly in Southeast Asia. This often arises when natural forest stands have already been severely degraded (see Forest Degradation left).

Deforestation can have significant direct and indirect negative environmental and social consequences. It results in carbon emissions, habitat destruction and associated biodiversity decline, as well as a heightened risk of flooding and landslides. Social effects can include the violation of the rights of Indigenous peoples and local communities, and a loss of access to vital resources (e.g. fuel and firewood, hunting, non-timber forest products and fresh water) and the cultural and religious value of forest areas to certain Indigenous and local community groups.

Governments and timber companies should prioritise the planting of timber plantations in areas where forest regeneration is highly unlikely (for example, degraded farmland/agricultural areas). Prioritising the restoration and regeneration of degraded forest areas is crucial to ensure the return of ecological functions and the associated ecosystem services that natural forests provide. Methodologies such as the High Carbon Stock Approach (HCSA) (a joint initiative between environmental and social NGOs and forest-risk commodity producers) allow companies to distinguish between degraded landscapes suitable for development and areas of primary, secondary and regenerating forest that should not be cleared.
FOREST DEGRADATION IN MALAYSIAN BORNEO

A 2013 study using satellite data from the Carnegie Landsat Analysis System-lite (CLASlite) analysed how logging had caused forest degradation in Malaysian Borneo. The study found that, in contrast to logging in Central Africa and South America, Malaysian Borneo had a higher density of commercially exploitable trees, which had fuelled a much higher rate of extraction per ha in the region – causing significant damage to forest stands. Mongabay quoted the authors as stating “Substantial damage to soil, waterways and forest structure and residual trees is caused by this form of logging, with progressive degradation of biomass over repeated harvest cycles. For these reasons initial timber yields cannot be maintained over multiple harvest cycles, with 25-30 years between harvests too short a period to allow regeneration of timber stocks.” The report stated that 44% of the region’s forests were classified as “degraded” or “severely degraded,” while another 28 percent had been converted to plantations or was in the process of recovering from logging.

NATURAL FOREST CONVERSION FOR TIMBER PLANTATIONS IN INDONESIA

A 2019 study using satellite imagery from the Global Forest Change dataset to assess the drivers of deforestation in Indonesia found that together, oil palm and timber plantations contributed more than 40% of total deforestation in the country between 2001-16. The report claimed that forest clearance for timber plantations had contributed to an estimated 1,261,029 ha of deforestation – approximately the same size as Northern Ireland. The FSC disassociated from two of Indonesia’s largest pulp and paper producers, Asia Pulp and Paper (APP) and Asia Pacific Resources International Holdings Ltd. Group (APRIL) after receiving complaints providing evidence that the companies had engaged in clearing natural forest in Indonesia, resulting in the destruction of High Conservation Values and associated traditional and human rights violations. Both companies are now committed to zero-deforestation policies that apply to both themselves and their suppliers, although NGOs have made accusations that both have continued to contribute to forest clearance in recent years.
HUMAN RIGHTS AND COMMUNITY LAND TENURE

International human rights law (and in an increasing number of states, national constitutions and legislation) provides a legal basis for land rights claims by Indigenous and local communities. However, in many countries, these claims are not recognised in practice and legal rights do not translate into community ownership of land. In most jurisdictions, forest land remains under both de facto and de jure control of the state; forest land is typically mandated as state owned in the country’s constitution or Forest Code. Indigenous peoples and local communities thus frequently face the challenge of competing claims for their land; communities may find that land they have continuously occupied for generations is allocated to a timber concession or planned plantation by national or regional authorities. This can be compounded by poor understanding of land allocation at national and local government level, and a lack of knowledge of the rights of communities under international law, leading to confusion about which group has legal ownership of the area in question due to contradictory legal systems.

Such conflicts may be further complicated due to the fact it is rare that communities possess official documents demonstrating their legal ownership of the land, especially in cases where Indigenous peoples and local communities live far from major conurbations. Many Indigenous peoples live a nomadic or semi-nomadic way of life and are not literate, which further complicates their ability to register for documentation.

The risk of poor community relations and/or protracted conflict between companies and communities can be avoided through ongoing, thorough, and respectful Free, Prior and Informed Consent (FPIC) processes carried out with any community affected by the companies’ activities. These standards are clearly outlined in international law and form a key component of voluntary certification schemes such as the Forest Stewardship Council (FSC).

DANZER GROUP AND THE CASE OF SIFORCO IN THE DEMOCRATIC REPUBLIC OF CONGO

In 2011, Greenpeace submitted a Policy for Association complaint to FSC International that SIFORCO had violated the human and traditional rights of the Yalisika community in the Democratic Republic of Congo. SIFORCO was at the time a Danzer-owned subsidiary. An FSC International complaints panel investigated the complaint and recommended disassociation; FSC International subsequently disassociated from Danzer Group. Danzer sold its SIFORCO concession to Groupe Blattner Elwyn in February 2012, but continued to hold the IFO Ngombe timber concession in Republic of Congo. FSC International approached Forest Peoples Programme (FPP), a UK-based NGO, to verify Danzer’s fulfilment of the conditions for re-association, as stipulated by the 2013 FSC-Danzer Memorandum of Understanding. FPP stated that “Based upon our analysis of events we judge that SIFORCO’s failure to operate fully on the strict basis of community FPIC is key to understanding the 2011 conflict that is at the root of Danzer’s disassociation from the FSC.” FSC’s International Board of Directors approved a roadmap for re-association with the FSC in 2014 which was subject to remedy being provided to Yalisika community and independent verification by FPP of material improvement of FPIC procedures in Danzer’s IFO concession. The FSC ended its disassociation with Danzer Group in August 2014.
LABOUR RIGHTS AND
HEALTH AND SAFETY

Working in forestry (especially in natural forest concessions) can be dangerous work. Health and safety risks are considerable when working in the sawmill and operating chainsaws or skidders, and felling large trees can cause injury even with full provision of personal protective equipment (PPE) and full training for staff members. In the worst cases, such accidents can cause severe injuries or even death. According to data from ZSL’s 2020 SPOTT assessments of 100 influential tropical timber and pulp natural forest and plantation companies’ disclosures, 35 companies reported experiencing at least one fatality at their operations, of which seven reported experiencing multiple fatalities.

GOVERNANCE, BRIBERY AND CORRUPTION

Commercial forestry in developing countries carries similar risks to other extractive industries, such as the potential for bribery and corruption around contract tendering and concession allocation, and fines for misdemeanors. Initiatives such as the EU’s flagship Forest Law Enforcement, Government and Trade (FLEGT) programme aims to improve forest governance and reduce illegalities in the timber sector through Voluntary Partnership Agreements (VPAs) with tropical timber-producing countries. To date, only Indonesia has concluded the VPA process and is issuing FLEGT licenses for tropical timber, although VPA agreements have been ratified and are ongoing in multiple geographies, including Ghana, Liberia, Cameroon, Republic of Congo, Central African Republic, Honduras, and Vietnam; a recent study suggests that VPA agreements have had significant benefits on forest governance in Indonesia, Ghana and Cameroon.33 Tools such as the Open Timber Portal32 can assist stakeholders sourcing from or financing companies in the DRC, Republic of Congo and Cameroon to assess whether companies have made evidence of their compliance with legal requirements publicly available, such as right to harvest, forest management plans and export licenses.

ENVIRONMENTAL INVESTIGATION AGENCY AND DEJIA GROUP

Between 2015-2019, EIA investigated the activities of Dejia Group, one of the most influential groups of affiliated timber companies in Africa. The group includes several affiliated companies involved in the harvest, transport, processing and export of timber, and accounts for around 36% of all the timber exported from Gabon and the Republic of Congo to the US, mostly in the form of okoume (Aucoumea klaineana) veneers. According to claims by EIA, Dejia Group routinely bribed ministers in both the Republic of Congo and Gabon to gain access to timber concessions and avoid the payment of corporate taxes, through transfer pricing techniques that involved offshore companies based in Hong Kong.34 Much of the timber produced by the company was destined for EU and US markets, despite the EU Timber Regulation and US Lacey Act prohibiting the import of illegal timber.

Authorities from the Republic of Congo denied the claims within the report. In Gabon, EIA stated that authorities launched their own investigation, and their findings confirmed the validity of those in EIA’s report. Gabonese authorities subsequently suspended the logging rights of the companies in Gabon, seized their available logs, and are pursuing a more in-depth investigation.34
The forestry sector has seen several attempts to create incentives for more sustainable management of timber commodities.

One of the primary attempts at achieving this has been the creation of voluntary certification schemes. These are market-driven systems (rather than mandatory regulations) which are predicated on a mutual benefit for both producer and consumer. On the company side, the producer invests capital into improving the sustainability of their forestry operations to achieve certification, and as a result is recognised by the consumer as a more sustainable and therefore preferable choice when purchasing a timber-based product. A growing number of buyers and financial institutions rely on timber certification as a minimum standard in their sourcing, investment or lending policies.35 The Forestry Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) are the dominant sustainability certification schemes catering to the timber and pulp sectors.

FOREST STEWARDSHIP COUNCIL (FSC)

What is FSC certification and what does it cover?

The FSC claims 221.8 million ha of certified forest worldwide as of December 2020.36 FSC’s 10 Principles and Criteria (P&C) are extensive, covering topics including workers’ rights, the rights of Indigenous peoples, reduced-impact logging (RIL) and the protection of High Conservation Values (HCVs; see box p.13). Companies are audited annually against these P&C by independent Certification Bodies.

Companies that are FSC certified must commit to the Policy for Association (PfA), which outlines unacceptable activities for companies directly or indirectly associated in logging activities, such as significant natural forest conversion and illegal logging.37 Finished timber products sold with an FSC ‘claim’ or label must go through an audited Chain of Custody process which ensures that the timber sold has not been mixed with non-FSC material if it is to be sold as FSC 100%. Other companies sell “FSC Mix” products in which FSC inputs are mixed with FSC Controlled Wood.38 This is particularly common in the paper and packaging industry and ensures even non-certified material used does not derive from unacceptable sources as outlined in the Policy for Association.

Does FSC Certification minimise a buyer or financial institution’s exposure to ESG risk?

Studies on environmental benefits to forests in FSC certified areas have drawn mixed conclusions with no strong evidence that FSC certification of natural forest concessions leads to more positive outcomes in terms of biodiversity preservation than non-FSC certified concessions.39,40,41,42 However, reports on improvements in social outcomes are generally more conclusive, especially in the tropics.43 One in-depth study in the Congo Basin found that company workers enjoyed improved working and living conditions, and conflict between companies and local communities was solved more peacefully in FSC certified forests compared with the alternative.44

Common criticisms of the FSC revolve around significant delays in investigating companies perceived to have violated their PfA,45 the high cost of becoming certified and the barrier this poses to smallholders looking to pursue more sustainable practices (especially in the tropics),46 and a lack of on-the-spot audits.47 In tropical areas, FSC has limited penetration; FSC certification only accounts for an estimated 7% of tropical forest land under management.

NGOs such as Greenpeace48 have left the FSC due to a perceived lack of progress in these areas. The FSC was recently accused by NGO Earthsight of failing to stop illegal forest clearing within FSC certified concessions in the Ukraine; the concession was a supplier of timber to Swedish furniture vendor IKEA.49

Despite these issues, FSC certification continues to be the strongest standard currently available to financial institutions and buyers financing or purchasing timber. These parties are encouraged to drive further improvement through the FSC system as active stakeholders. Buyers and financial institutions should be aware that environmental, social and governance risks may be reduced but not eliminated by adherence to FSC certification principles. As such, investing in or purchasing from FSC certified businesses must not preclude robust engagement with producers to ensure that their commitments are being realised.
PROGRAMME FOR THE ENDOREMENT OF FOREST CERTIFICATION

What is PEFC certification and what does it cover?

PEFC reports over 320 million hectares of certified forest worldwide. In contrast to the FSC, which was set up in conjunction with environmental NGOs, PEFC was set up by timber industry stakeholders. PEFC’s P&C cover similar themes to the FSC, with some significant exceptions; for example, PEFC does not assess companies for compliance with preservation of HCVs.

PEFC National Members draft National Interpretations of the PEFC Standards which are then endorsed by PEFC International. Examples of these interpretations include the Malaysian Timber Certification Council and Brazil’s CERFLOR. Companies are subject to annual audits and any company selling PEFC end products must also demonstrate PEFC Chain of Custody compliance, although there are some minor differences between how FSC and PEFC assess these processes.

Does PEFC Certification minimise exposure to sustainability and ESG risk?

PEFC has been heavily criticised by several environmental NGOs on the strength of PEFC standards as well as its lack of “on the ground” impact. A significant criticism includes the retention of the certification of companies such as APRIL, APP and Holzindustrie Schweighofer – companies from which the FSC has disassociated after evidence of significant deforestation and human rights abuses was found. The Environmental Investigation Agency stated in 2017 that “PEFC certification is based nearly exclusively on information provided by the companies themselves, and the system doesn’t provide a functional or transparent complaints and auditing mechanism.”

ZSL considers PEFC in its current form to fall short of guaranteeing sustainability, unless it is purchased from a low-risk jurisdiction (for example, a UK-based buyer sourcing timber from within the UK). Members of PEFC and its related programmes are encouraged to engage constructively with the scheme to drive improvement.

“Financial institutions and buyers can make a real difference to halt deforestation, conserve vital biodiversity and protect the livelihoods of forest communities around the world. Purchasing and investment policies applied to the forestry sector should include Forest Stewardship Council certification as a minimum standard, not as an optional add-on. However, it is vital for financiers and buyers to share the costs of certification and help responsible producers compete in a market which often doesn’t reward sustainable practice.”

OLIVER CUPIT
SPOTT MANAGER | ZSL
THIRD-PARTY LEGALITY VERIFICATION

Many companies operating in areas of high-risk of illegality (for example, illegal logging, community rights violations, or bribery and corruption) may seek third-party legality verification of their operations. There are a number of certification bodies who offer this service – for example, Bureau Veritas’ Origine et Legalite des Bois (OLB), Preferred by Nature’s Legal Source, or Control Union’s Timber Legality Verification (TLV).

Many producers seek third-party legality verification due to the fact operators importing products under the European Union Timber Regulation (EUTR) have to undergo due diligence to show that the timber they import has been harvested in line with the regulations of the host country and not been produced illegally.

It is important to note that although legality schemes can be seen as a useful intermediary step in a company’s increased focus on sustainable practice, a company that boasts legality certification does not in itself show that the product has been produced sustainably. Buyers, investors and lenders should encourage companies to pursue third-party legality verification as a first step, but also demand that they go further to ensure sustainability certification for their products as a minimum requirement.

WHAT CAN FINANCIAL INSTITUTIONS AND BUYERS DO IN RELATION TO CERTIFICATION?

While relying on certification and legality verification schemes is crucial from a due diligence and risk mitigation perspective, investors, lenders and buyers can take additional and complementary measures to push for sustainability in timber and pulp supply chains.

Timber Financing and Purchasing Policies

As sustainability claims are increasingly scrutinised for robustness in the context of taxonomic or labelling efforts, financial institutions and buyers must ensure that the companies they finance or purchase from meet minimum criteria. To do so, they should have a clear organisational policy for the timber sector stating minimum requirements that must be met when sourcing and financing timber. This facilitates screening or engagement with companies that do not meet policy criteria. Preferably, organisations should prioritise the purchasing of wood products or investment in companies which are FSC certified across 100% of their operations or have time-bound commitments to achieve certification for all forest management units. If a time-bound FSC certification commitment is required, legality verification should be in place covering all forest management units as a minimum requirement for buyers.
Mindful that land use change is one of the major contributors to biodiversity loss, and much of this is driven by crop commodity production, Robeco started an engagement theme on biodiversity in 2020. Robeco decided to include tropical timber and pulp in the scope of this biodiversity themed engagement - alongside cocoa, natural rubber, soy and beef - because of the deforestation and forest degradation concerns it poses.

**Engaging with companies to incentivise certification**

Those financing or buying from companies in the tropics should encourage companies to both pursue FSC certification at the earliest opportunity and to exclusively source FSC certified timber as far as this is possible. When engaging timber companies that are already partially certified, financial institutions and buyers should actively engage with the company to increase the company’s certified area/volume. Incentivising certification may involve issuing financing or awarding contracts conditional on meeting a time-bound commitment to being 100% certified (green bonds) or making shareholding or purchasing commensurate with progress on certification among other ESG-related KPIs. In other cases, particularly in the case of investors or lenders seeking positive ESG impact, financing can also include provisions for technical support for the company in question to achieve the standards set in the FSC P&C.

**Engaging with certification schemes**

Over the past years, financial institutions, starting with banks and more recently asset managers, have started taking a more active role in the Roundtable for Sustainable Palm Oil by becoming active members. In the same way, financial institutions should participate actively in the FSC’s and PEFC’s stakeholder process to demand strengthening of the areas for improvement identified for both schemes.

“Environmental management is a key focus for us, with a clear value placed on ‘zero deforestation’ commitments, biodiversity impact assessments, fauna and flora restoration and conservation, and circular economy principles within companies’ production lines. Social aspects of the production of these commodities are equally important to us, and our engagement will tackle both community and land rights, along with labour rights. To gain perspective on impacts and progress, it is crucial to engage with companies on addressing disclosures, certifications and traceability. We want to steer towards reaching 100% traceability for producers and buyers. Only then will it be possible to identify the impact on biodiversity and communities in the supply chain.”

**Peter Van der Werf**

Senior Engagement Specialist | Active Ownership
Robeco
Whether a company has yet to initiate certification processes or whether it is already 100% certified, the questions below can guide ESG research and engagement processes with timber and pulp companies. These questions are intended to stimulate meaningful discussion between financial institutions, buyers and companies. All questions provide context for growers, traders and buyers.

**Does the company disclose its landbank and publish maps of its concessions?**

**For producers:** Timber and pulp companies often operate across large areas of land and are entrusted to manage that land responsibly, yet SPOTT assessments show that information on land holdings is not clearly reported by many companies. Mapping undertaken by companies can highlight potential overlaps or conflicts with other land types and designations, such as HCVs (see box p.13), protected areas harbouring valuable biodiversity, and community lands. These potential overlaps should be considered if financial institutions are to have a more informed perception of the risks associated with a company’s land holdings and land use. The company could be holding land which may – or may not – be developed to full potential at a later stage, thus impacting a company’s short- and long-term valuation and operations, and potentially leading to land assets becoming ‘stranded’.

**For traders and buyers:** Traders and buyers should encourage suppliers to publish and regularly update their maps and details on their landbank to account for land use change.

**How much of the company’s output or supply is certified? If not 100%, when is the 100% target set for?**

**For producers:** Timber and pulp certification adds credibility to companies’ sustainability claims and can provide assurance to buyers and investors and lenders that companies are mitigating and managing their environmental and social impacts. Certification also supports the traceability of materials, which can in turn help identify which products can be associated with sustainability claims and which cannot. Companies that have been audited by a third party for legal compliance (for example, OLB or Legal Source certification) should be encouraged to use this baseline as a springboard from which to achieve voluntary sustainability certification of their forest area under management as well as their supply chain.

**For traders and buyers:** The degree of certification of a company’s timber supply, and the certification model chosen, can indicate to what degree it is reducing its exposure to upstream ESG risks. However, different types of certification models offer different levels of protection against reputational risk. If the answer is not 100%, financial institutions should enquire about time-bound plans to achieve this target, ask what sanctions have been applied to suppliers who are not able to comply, and check at a later stage in order to ensure the company continues to progress.

**Does the company have a commitment to applying FPIC processes?**

**For producers:** As communities often lack written evidence of land ownership, companies must engage with communities through FPIC processes to identify customary rights holders. This will establish good relationships with communities and prevent future conflicts which would affect the companies’ operations and risk its social license to operate.

**For traders and buyers:** Traders and buyers should commit to the High Carbon Stock Approach as well as SEIAs and HCV assessments being used in their supply chains.

**Does the company conduct HCV and environmental/social impact assessments prior to logging operations or plantation development?**

**For producers:** HCV (see box p.13) and social and environmental impact assessments (SEIA) both aim to identify the environmental and social values that are important and should be addressed and conserved prior to new development. As the pulp sector often operates and continues to expand into highly biodiverse, carbon-rich landscapes that are critical for local and Indigenous peoples, these assessments are instrumental to companies’ due diligence processes.

**For traders and buyers:** Traders and buyers should commit to the High Carbon Stock Approach as well as SEIAs and HCV assessments being used in their supply chains.
DOES THE COMPANY’S SUSTAINABILITY POLICY APPLY TO ALL OF ITS SUPPLIERS?

For producers, traders and buyers: Timber and pulp producers, traders and buyers should ensure that all of their suppliers within their extended supply chains meet their standards. Ensuring that all timber and pulp suppliers have sustainability policies in place is a critical first step in mitigating companies’ environmental and social impacts and reducing their exposure to upstream sustainability risks. It is equally critical that the companies engage with their suppliers to ensure compliance.

HAS THE COMPANY CARRIED OUT A CLIMATE-RISK ASSESSMENT?

For producers: Both companies managing natural forest concessions and timber plantations should carry out a full climate risks assessment of the increasing risk posed to their operations by climate change. For example, rising global temperatures may cause high-value species to be more vulnerable to dieback and pests. In plantations, where monocultures often have significant dependence on water-table levels, water scarcity may pose significant risks to the future financial and ecological viability of operations.

For traders and buyers: Full climate risks assessments are a specialist and sometimes prohibitively expensive undertaking. If finance cannot be provided to companies to carry out an assessment of these risks, companies should be encouraged to build a basic matrix of their key dependencies and elaborate a plan to mitigate the impact of climate on ongoing operations.

THE HIGH CONSERVATION VALUE (HCV) APPROACH

The HCV approach consists of identifying, managing and monitoring biological, ecological, social or cultural values of critical importance at the national, regional or global level. There are six types of HCV:

HCV 1: Concentrations of biological diversity.

HCV 2: Landscape-level ecosystems and mosaics.

HCV 3: Rare, threatened, or endangered ecosystems, habitats or refugia.

HCV 4: Basic ecosystem services.

HCV 5: Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous peoples.

HCV 6: Values of national cultural, archaeological or historical significance.

For further information visit www.hcvnetwork.org
IDENTIFYING RISKS AND OPPORTUNITIES

REGULATORY AND COMPLIANCE RISKS & OPPORTUNITIES

Risks:

Governments around the world are increasingly using regulation as a means of addressing the concerns of their citizens and the international community about climate change and sustainability. In November 2020, the European Parliament voted to endorse legislation that would require companies importing forest risk commodities from outside the European Union to exercise mandatory due diligence to minimise the risk of environmental harms and human rights abuses in supply chains. Senior figures in the European Commission have stated that they intend to introduce legislation to make this a reality in 2021. This legislation would build on existing regulations such as the European Union Timber Regulation (EUTR) and the United States’ Lacey Act which require companies sourcing timber products from outside the EU and the United States respectively to carry out due diligence to eliminate the import of illegal timber. There are also signs that markets which have traditionally placed less emphasis on legality and sustainability criteria may be starting to shift. For example, China’s recent amendment to the country’s Forest Code in July included a provision initiating a ban on “buying, transporting or processing illegally sourced timber”. While there is still doubt as to whether the Chinese state intends this regulation to apply to foreign as well as domestic sources, this legislation, coupled with China’s commitment to become carbon neutral by 2060, shows signs of a government who are increasingly ready to legislate on environmental issues. Increasingly, timber companies exporting to key markets will need to satisfy legality and/or sustainability criteria in order to reach consumers in these jurisdictions.

Opportunities:

Conversely, buyers already exercising robust due diligence when importing timber, pulp and paper products into any of these markets will find themselves ahead of the competition when governments worldwide enact legislative steps to exclude non-compliant companies. A study commissioned by ZSL in 2020 demonstrates a rise in demand for timber products such as biomass, paper, recyclable packaging and for building materials. In western markets such as the EU and the UK, an emphasis on “building back better” after the COVID-pandemic has placed increasing focus on the bioeconomy, of which sustainable and renewable materials such as a timber, pulp and paper will play a significant contribution. Companies that can clearly demonstrate that ESG criteria are at the centre of their operating models will have a considerable business advantage in accessing these more regulated markets, and laggards in the sector may find that a business run unsustainably is increasingly unable to compete.

LUMBER LIQUIDATORS AND NON-COMPLIANCE UNDER THE US LACEY ACT

The Environment Investigation Agency raised concerns about US-headquartered hardwood-flooring company in its 2013 report “Liquidating the Forests”. Posing as buyers of timber, EIA investigators had traced supply chains across China to a company that admitted illegal activities, regularly paying bribes to local authorities. This company exported to the US, and Lumber Liquidators was their main partner. The U.S. Department of Justice demonstrated that Lumber Liquidators had imported flooring manufactured in China, made from timber illegally harvested in the forests of the Russian Far East, that is considered a unique habitat of the world’s last remaining wild Siberian tigers. In February 2016, the company was sentenced to USD 13.2 million in fines and forfeits for illegally importing wood. This is the largest penalty ever levied for illegal timber imports under the US Lacey Act. The company also underwent a five-year probationary period, during which it was obliged to implement a rigorous environmental compliance plan. After federal raids on the company offices, the company’s share price dropped 9.3%, the largest 24-hour decline in 19 months at the time.
FINANCIAL RISKS & OPPORTUNITIES

Risks:
Besides mismanagement directly related to a company’s bottom line, financial risk can stem from a variety of unaddressed ESG issues, posing a considerable risk to the long-term financial viability of timber and pulp companies’ operations. Examples include legal costs and penalties in case of litigation, increased costs related to climate risk, or reduced access to market or capital due to controversies. Companies that operate unsustainably will find that they are unable to access financing as financial institutions increasingly adopt approaches to minimise their exposure to ESG risk such as screening based on ESG criteria.

Opportunities:
Studies have shown the financial benefits of voluntary certification (particularly FSC); a 2015 study by WWF illustrated that FSC certified companies identified a number of financial benefits to certification, including improved market access, access to public funding, increased access to technical support, being seen as an ethical operator and finding it easier to win the trust of local communities and business clients. The study found that tropical producers were paid larger price premiums for FSC certification than their competitors in boreal forestry (3% of turnover compared to 1.2%).

In the last few years there has been enormous growth in ‘ESG Funds’; that is, funds for which ESG factors have been integrated into the investment process. At a minimum, these funds will apply sector screens or exclude companies with high controversy scores for having engaged in damaging practices like deforestation or human rights violations. They may also actively select companies they invest in based on ESG criteria (such as certification or water efficiency). In 2020, Morningstar reported that investments in ESG funds had passed USD 1 trillion and the sector is expected to continue to grow rapidly, resulting in added pressure on companies seeking capital from large financial institutions to perform well against ESG expectations.

NEW FORESTS’ IMPACT IN SOUTHEAST ASIA
An interesting example of investments seeking to push a sustainability agenda is New Forests’ Tropical Asia Forest Fund (TAFF) and potential future investment vehicles. New Forests’ future investments in Southeast Asia will aim to support the transition toward sustainable forest management in the region, with dedicated Impact Activities that relate to climate mitigation, biodiversity enhancement, and livelihoods benefits. New Forests has identified eighteen Impact Activities including environmental plantings, riparian zone restoration, smallholder agroforestry, and community joint ventures. To achieve impact, New Forests proposes to embed Impact Activities throughout the investment process, starting with assessing opportunities in due diligence and through to managing the portfolio of investee companies with a suite of projects to deliver impact.

“Beyond E&S benefits, New Forests believes the Impact Activities could also generate business model benefits, such as operational efficiency and scale, improving social license to operate, building natural capital, or supporting forest productivity. We view strong E&S foundations as a key driver of growth and commercial success in Southeast Asia.”

MARYKATE BULLEN
DIRECTOR | SUSTAINABILITY & COMMUNICATIONS
NEW FORESTS
REPUTATIONAL RISK & OPPORTUNITIES

Risks:

A company can manage reputational risk in the timber sector by embedding a commitment to ESG values throughout the organisation. Companies taking proactive steps to do so are less likely to incur high costs from rebuilding a damaged reputation. A large-scale study by the Ponemon Institute analysed 46 multinational organisations and determined that although their average costs of legal compliance was USD 3.5 million the associated non-compliance costs were USD 9.4 million; 30% of the non-compliance cost in the study were classified as “opportunity costs” from lost business opportunities due to damaged company reputation.64 Companies focusing on rebuilding a damaged reputation are likely to find environmental NGOs and a wider public skeptical of their attempts as strong negative associations with a particular company or sector take time to dispel. An international reputational risk survey carried out by Deloitte showed that in the Energy & Resources sector, 50% of respondents said that a negative reputation event had caused them to lose customers.65

Opportunities:

Good reputations in industry, whether for adopting ethical practices or for delivering quality products, can draw significant benefits, including attracting and retaining staff, customer preference or price premiums.66 For customers purchasing timber and pulp products, certification is an important factor for customers. For example, a survey carried out by Kantar showed 67% of consumers recognise the FSC logo; 82% said they are either very or fairly likely to buy a product bearing the FSC logo as opposed to one without it.67 Millennial consumers are noted for their preference for ethically sourced products and are increasingly responsible for driving consumer spending. A Nielsen survey found that 75% of millennials are altering their buying habits due to environmental concerns. The same survey stated millennials report a greater willingness to pay more for environmentally and socially responsible products.68 Companies which are able to demonstrate their sustainability are therefore likely to benefit financially as environmental and social concerns become increasingly mainstream amongst consumers in the future.

FLEGT AND THE NEED TO IMPROVE THE REPUTATION OF TROPICAL TIMBER

There are increasing signs that the demand for tropical timber in the UK and the European Union is suffering from a reputational issue; a 2019 report by the Sustainable Tropical Timber Coalition cites a FLEGT Independent Market Monitor study that found within each of seven EU countries surveyed, consumer opinion is the principle driver of a downward trend in tropical timber purchasing, and that “tropical timber is associated with deforestation” is mentioned as a key risk – regardless of whether the product is certified or not.69 Programmes like FLEGT that are working through the VPAs to improve forest governance are vital not only to improve practice in these countries but also to improve the reputation of tropical timber around the world. When buyers are assured of legality and are reassured regarding the reputation of the timber they are sourcing, sales improve. In Indonesia in 2013 and 2019 the value of timber exports from Indonesia grew from USD 6 billion to USD 11.6 billion, with the value of its wood furniture exports to the EU increasing even as EU furniture imports decreased overall. Additionally, timber producers were reportedly able to command higher prices for hardwoods such as teak, meranti and ulin.70
OPERATIONAL, FIRE & CLIMATE - RISKS & OPPORTUNITIES

Risks:
Forest operators should be aware of the increased operational and climate risks posed by unsustainable forestry operations. A rise in intensive logging in natural forest areas has been strongly linked with increased fire risk. Studies have emphasised how logging can lead to increased ignition points in moist forest which in an undisturbed state possess natural resistance to fire. This has led to an increase in both the severity and frequency of fires in areas such as the Congo Basin and the Amazon where previously fires were uncommon. Companies should ensure that they are practicing the most up-to-date RIL techniques and minimising the degrading effects of logging roads, skidding and machinery. This can reduce degradation and the likelihood of fire risk. Fires in managed forest areas and plantations may cause a loss of harvest and high value species, pose a risk to staff safety and contaminate natural dependencies, such as rivers, for both companies and local communities. One academic model also predicted dieback increasing in both plantations and natural forest areas in almost all tropical jurisdictions by 2050 due to increased prevalence of fire and pests in line with increases in global heating.

Opportunities:
Incorporating sustainable forest management techniques has been associated with increased efficiencies and cost savings across a companies’ operations. A WWF 2015 study found multiple positive benefits in certification, both financial and operational. For example, seven out of 11 companies assessed by the study reported improved morale in staff with an increased work ethic and motivation; these companies felt that the initial investment required by the FSC in workers’ housing and facilities justified this investment. Five companies reported reduced accidents due to better safety equipment, improving staff morale and reducing productivity losses. Six experienced improvement relations with governments, business partners and local communities, creating a more stable and prosperous business environment.

There is also evidence that natural forest managers who make investments in RIL techniques across their management in the pre-harvest stage enjoy considerable financing savings. A comprehensive study in the Eastern Amazon demonstrated a cost-benefit analysis of RIL to conventional logging techniques and concluded that “gains in productivity and reductions in waste more than compensated for higher planning costs” and that RIL “substantially reduced damage to the residual stand and to the ground area disturbed by the harvesting operation. This will presumably lead to greater financial and ecological benefits in the future.” The study suggested that the adoption of RIL is hindered by the incorrect assumption that its systems are more expensive than conventional logging systems.

WHAT IS REDUCED-IMPACT LOGGING?
Reduced-impact logging (RIL) is the intensively planned and carefully controlled implementation of timber harvesting operations to minimise environmental impacts on forest stands and soils. The SPOTT framework gives the following examples of accepted RIL techniques:

- Planning roads and skid trails to minimise disturbance
- Low skid trail density
- Access controls, barriers, closure after logging operations
- Planning of log landings to reduce unnecessary openings and soil disturbance
- Heli/logging
- Cutting of vines prior to harvesting
- Limiting the amount of stand basal area removed
- Conducting logging operations only under favourable conditions
Now is a critical time for the world’s tropical forests.

The production of timber and pulp poses considerable ESG risks if it is not managed sustainably. To incentivise sustainable company behaviour, buyers must set a minimum standard for the sector by purchasing FLEGT licenced and/or FSC certified timber, and financial institutions must adopt sectoral policies making financing conditional on legal compliance and certification efforts. However, timber legality and certification should be viewed as a minimum requirement rather than as the end of the “sustainability journey”. Furthermore, while the sustainability of company operations are important, more focus should be placed on the long-term sustainability of the entire timber and pulp supply chain. Companies themselves should seek to interact where possible with local initiatives that provide technical and financial support to encourage more sustainable forestry practices and assist in preparation for certification.

To create a level playing field for companies, financial institutions and buyers therefore need to review and update their own ESG requirements and engage with companies which do not meet them. It is important that companies are asked to report on the issues presented in this guide and that these issues are built into capital allocation and due diligence frameworks. This should include time-bound plans for achieving progress, and scenarios to reassess relationships if targets are not met. To multiply their impact, investors, lenders and buyers should make their commitments public and, where relevant, they should also consider joining collaborative engagements (such as Climate Action 100+) as well as landscape level approaches and multi-stakeholder initiatives which cover timber and pulp sector companies.
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ABOUT SPOTT

Developed by the Zoological Society of London (ZSL), SPOTT is a free online platform supporting sustainable commodity production and trade. By tracking transparency, SPOTT incentivises the implementation of corporate best practice.

SPOTT assesses commodity producers, processors and traders on their public disclosure regarding their organisation, policies and practices related to environmental, social and governance (ESG) issues. SPOTT scores tropical forestry, palm oil and natural rubber companies annually against over 100 sector-specific indicators to benchmark their progress over time. Investors, buyers and other key influencers can use SPOTT assessments to inform stakeholder engagement, manage ESG risk, and increase transparency across multiple industries.

For more information, visit SPOTT.org

ABOUT ZSL

ZSL (Zoological Society of London) is an international conservation charity working to create a world where wildlife thrives. From investigating the health threats facing animals to helping people and wildlife live alongside each other, ZSL is committed to bringing wildlife back from the brink of extinction. Our work is realised through our ground-breaking science, our field conservation around the world and engaging millions of people through our two zoos, ZSL London Zoo and ZSL Whipsnade Zoo.

For more information, visit zsl.org

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