



Food and Agriculture
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Potential implications of corporate zero-net deforestation commitments for the forest industry

Discussion paper prepared for the 58th
Session of the FAO Advisory Committee
on Sustainable Forest-based Industries

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Introduction

During 2015 and 2016, the ACSFI and FAO have worked together to understand the momentum around zero deforestation commitments, put forward by consumer goods companies, and its implications for the forest industry.

During the ACSFI 57th session in July 2016, a paper was presented on this topic, entitled "Zero deforestation initiatives and their impacts on commodity supply chains". During the following discussion it was generally agreed that "one of the biggest challenges is the multitude of existing terms and concepts which have different implications for zero-deforestation commitments. The most commonly used concept seems to be 'zero-net deforestation', however, even this concept lacks clarity. The key issue is (a) to define acceptable deforestation and (b) who should define it."

In follow up, ACSFI requested FAO at the 57th session "to conduct a more in-depth analysis of the zero-net deforestation concept including its implications for the forest industry". Further discussion on the work to be undertaken took place at the 58th preparatory session in Rome, January 2017.

This paper summarizes work undertaken to address the ACSFI recommendations through a review of corporate zero deforestation commitments by consumer goods companies, retailers and banks and their relevant corporate policies for sourcing, lending and other deal making. Risks and potential benefits to the forest industry from zero-deforestation commitments by its customers and financiers are analysed and some recommendations towards the forest-based industry are formulated. It is proposed to follow up with a survey among the forest industry to understand how their activities measure up against the criteria included in corporate policies surrounding zero-deforestation commitments.

The paper starts out with background information on the zero-deforestation movement that was developed under earlier work between ACSFI and the FAO (Neff & Linhares-Juvenal, 2017).

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Background information on the zero deforestation movement

An increasing number of private companies are voluntarily committing to eliminate deforestation from their supply chains. Companies have long been working to integrate supply chains, not only with a view to improve procurement efficiency but also to enhance environmental and social impacts, e.g., through responsible sourcing and green supply chains (Gerrits, 2012).

Zero-deforestation pledges have reached an impressive scale. The New York Declaration on Forests from 2014 was endorsed by 36 national governments, 53 companies and 54 civil society organizations. Many of the same companies are also part of the Consumer Goods Forum that overall represents 400 companies across 70 countries, employing nearly 10 million people, with combined sales of more than USD 3 trillion. Its Tropical Forest Alliance 2020 again includes many of the same companies, next to governments and NGOs. The Soft Commodities Compact by the Banking and Environment Initiative, the World Wide Fund for Nature (WWF) and the Consumer Goods Forum account for approximately 50% of global trade finance.

Companies act in order to reduce their business risk. Fierce campaigning by Non-Governmental Organizations (NGOs) has created reputational risks from being associated with deforestation (Bregman et al., 2015; CDP, 2014a, 2014b, 2015). Moreover, there are regulatory risks in working with land use because the policy environment is prone to interference from governments (Bregman et al., 2015; CDP, 2014a, 2015; TFD, 2014). In addition, using natural resources sustainably may also reduce operational risks of eventually depleting the production base (Bregman et al., 2015; CDP, 2014a, 2015; Meijer, 2014).

Mostly, large consumer goods companies, retailers and banks assume zero-deforestation commitments, but these affect traders, processors and producers upstream across the supply chain (Forest Trends, 2015; GCP, 2015). Most of the burden for complying with pledges is foisted onto producers (TFD, 2014). In few cases, however, zero-deforestation pledges have also been assumed by processors (National Wildlife Federation, 2015; Soy Moratorium, 2014) or producers (Golden Agri-Resources, 2012). Many companies are, in fact, vertically integrated and cover several supply chain segments, and these have also assumed zero-deforestation pledges (GCP, 2015; TFA 2020, n.d.).

'Zero net deforestation' means allowing no change to the total forest area, with new forests compensating for converted forests. The WWF, the Banking and Environment Initiative, and the Consumer Goods Forum all use this definition of zero deforestation (BEI, 2015). Global

benchmark data on forest trends are mostly based on FAO's Global Forest Resource Assessment which uses net forest area change as a key variable (FAO, 2012). Using this definition, some forest loss could be offset by forest restoration (WWF, 2008). However, what is meant by 'forest' needs to be carefully specified to understand the full implications of this concept of zero deforestation. Underlying is the problem of what kinds of new forest are good enough to compensate for lost forest area and what can, therefore, be considered 'acceptable deforestation'. For example, plantations replacing natural forests may or may not be acceptable because they are less biodiverse or store less carbon. Also, deforestation that occurred a long time ago may or may not count. These finer points are important for introducing clarity into corporate activities aiming to be deforestation free.

Companies' zero-deforestation targets largely apply to individual commodities within their supply chains. The WWF's original proposal for zero net deforestation did not refer to specific supply chains (WWF, 2015). Through the Consumer Goods Forum, companies have aligned themselves with the WWF but it is of note that their pledges work within supply chains, on a different scale to the aims of the WWF (CGF, n.d., 2010, 2013, 2015). The Brazilian Cattle Agreement, the Brazilian Soy Moratorium and the Indonesia Palm Oil Pledge stand out because broad participation in these schemes almost equates to full coverage of these sectors (Meijer, 2014). Mostly, however, companies choose to tackle individual forest-risk commodities within their own supply chains (Bregman et al., 2015; GCP, 2015; Sam Lawson, 2014).

Rather than aiming at eliminating deforestation altogether, most zero-deforestation pledges include a certain degree of 'acceptable deforestation' (Rod Taylor, 2015; TFD, 2014). This means that clear criteria are needed for determining what kinds of vegetation companies can convert while still upholding their zero-deforestation claim. Typical criteria include a reference timeframe, legal status, structure, conservation value and origin of the vegetation. These and other highly technical issues all have a bearing on what zero deforestation means.

Palm oil, not timber, pulp and paper, has been the main focus of zero-deforestation initiatives even though forest products are omnipresent in global supply chains. NGOs have focused their campaigning on palm oil as a forest-risk commodity, as have several high profile corporate zero-deforestation pledges (CLUA, 2014). Pulp and paper is found everywhere in global supply chains because of its use in packaging, including for consumer goods. Some campaigns have targeted pulp and paper, although timber has received less attention because it is not so pervasive.

While timber, pulp and paper are themselves forest-risk commodities, a significant portion of the global market is shielded from deforestation risk. Most of the timber, pulp and paper used in Europe and North America come from low-risk jurisdictions in developed countries. Tropical countries have a smaller share in global markets for forest products than for other forest-risk commodities, such as palm oil (Mario Rautner, Leggett, & Davis, 2013). Further, imports from

developing countries to North America and Europe are highly regulated under the EU Timber Regulation and the US Lacey Act (EC, 2010; USDA, n.d.).

Zero-deforestation campaigns and related corporate action concerned with forest products focus on pulp and paper, not on timber. Recent advocacy actions against well-known brands have focused on tropical pulp and paper, notably in Indonesia (Greenpeace, 2011, 2012a, 2012b; Rainforest Action Network, 2014; Mario Rautner et al., 2013) while timber has received comparatively less attention. There are three reasons for this. Firstly, pulp and paper is used for packaging and therefore found throughout the supply chains of consumer goods companies with strong brand names, making it an easy target for environmental campaigning. Secondly, a part of the global market for tropical timber does not come from plantations replacing natural forests, but from natural forest management. This poses a lower risk of deforestation than of unsustainable logging, which is beyond the scope of most zero-deforestation action. Thirdly, timber markets are generally more fragmented than those of pulp and paper, or other forest risk commodities, and the smaller size of firms hampers supply chain-based campaigning (Mario Rautner et al., 2013).

Analysing the zero deforestation movement to gauge its impacts on the forest industry, earlier work between FAO and ACSFI (Neff & Linhares-Juvenal, 2017) has led to the following conclusions, *inter alia*, that are point of departure for the analysis in this paper:

- The kind of zero deforestation concepts that has attracted most momentum is 'zero-net deforestation'.
- For understanding implications to the forest industry, corporate zero-deforestation commitments through supply chains are of primary importance. These amply draw on the use of certification because few forest companies are vertically integrated.
- Few forest companies have zero deforestation commitments themselves, but they are part of the supply chains of consumer goods companies and customers of banks, whose corporate policies are a key concern.
- Although the forest sector is not at the centre of attention in the zero deforestation movement, such zero-deforestation commitments are relevant to forest sector value chains.

The forest sector value chains of highest relevance for zero deforestation are related to packaging materials and use of fibres, value chains for sawn wood are not equally relevant.

Using the background information on the zero-deforestation movement in this section as a point of departure, the following analyses implications of zero-net deforestation commitments for the forest industry. But before turning to the zero-deforestation commitment themselves, first, it needs to be understood well how firms operationalize CSR commitments.

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How firms make zero deforestation commitments operational through their corporate policies

To assess its implications for the forest industry, it needs to be understood well how firms operationalize CSR commitments, including zero-deforestation commitments. A systematic review needs to consider any available zero-deforestation commitments, the principles and guidance that these are embedded in, and applicable corporate policies for sourcing, lending and other deal making (Figure 1). The approach to operationalizing commitments through corporate policies for sourcing and lending will be pivotal for defining implications for the forest industry.

Figure 1: Levels of corporate zero-net deforestation commitments assessed.



There is large diversity among firms' zero deforestation (and other CSR) commitments. That no two pledges are alike reflects the diversity among involved firms and their supply chains. They may have direct control over forest production, purchase from companies that have direct control or they may be placed further downstream. The wood products in question may be fibres, packaging materials, cellulosic fibres, sawnwood, processed wood products or fuelwood. Companies may source wood products as inputs for their own manufacturing, or as packaging material, or they may only be retailers or only provide financial services to production and processing. Companies may have more or less consumer exposure and may have more or less developed CSR policies.

Zero deforestation commitments are fully integrated into firms' CSR policies. Commitments to using natural resources sustainably often pre-date the specific 'zero deforestation' commitments (e.g., the HSBC policy for Forest Land and Forest Products dates from 2004). By the same token, zero deforestation commitments do not usually imply specific sourcing or lending policies. Rather, zero-deforestation commitments are one among many CSR commitments that firms with sophisticated supply-chains and consumer exposure aim to achieve. For example, the principles embedded in Unilever's sourcing policies including halting deforestation alongside promoting best practices and sustainable forest and pulp plantation management, as well as driving positive economic and social impact on people and communities.

CSR commitments can reflect a broad range of relevant issues for responsible procurement of wood and paper-based products (Box 1): sourcing and legality aspects, environmental and social aspects. Companies usually merge zero deforestation commitments with such broader CSR commitments.

Box 1: The WBCSD / WRI's ten key issues related to sustainable procurement of wood and paper-based products (WBCSD & WRI, 2011).

Sourcing and legality aspects

- Origin: Where do the products come from?
- Information accuracy: Is information about the products credible?
- Legality: Have the products been legally produced?

Environmental aspects

- Sustainability: Have forests been sustainably managed?
- Special places: Have special places, including sensitive ecosystems, been protected?
- Climate change: Have climate issues been addressed?
- Environmental protection: Have appropriate environmental controls been applied?
- Recycled fiber: Has recycled fiber been used appropriately?
- Other resources: Have other resources been used appropriately?

Social aspects

- Local communities and indigenous peoples: Have the needs of local communities or indigenous peoples been addressed?

The impacts of zero deforestation commitments on the forest industry are given by the intersection of CSR policies for wood products (that usually cover issues beyond deforestation) and zero-deforestation commitments (that usually cover several forest risk commodities) (Figure 2 next page). This study uses CSR policies for wood products as its reference – although these are broader than zero deforestation itself.

Figure 2: The key interest in this study (impacts of zero deforestation commitments on the forest industry) at the intersection of CSR policies for wood products (that usually cover issues beyond deforestation) and zero-deforestation commitments (that usually cover several forest risk commodities).



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Analysis of corporate policies at consumer goods companies and banks relevant for zero-net deforestation commitments

A set of 12 prominent zero-deforestation commitments and related corporate policies were examined in detail (Annex: Section 9), which included: the relevant zero deforestation guidance by two industry organizations (Consumer Goods Forum and the Banking and Environment Initiative), as well as a range of firms from the consumer goods industry, retailers and banks. The firms were chosen based on the Global Canopy Programme's comprehensive zero deforestation review, the Forests500 (GCP, 2015), considering all firms rated five star that had >USD 20 billion total revenue in 2016, all financial institutions rated five star, and some selected retailers (Table 1).

Table 1: Overview of firms with zero net deforestation commitments assessed.

Firm or organization	Type of organization	Rating in the Forests500	Revenue 2016 (billion USD)
Nestlé	Consumer Goods Company	Five star	90.1
M&S	Consumer Goods Company	Five star	12.9
Unilever	Consumer Goods Company	Five star	52.7
Danone	Consumer Goods Company	Five star	22.4
Procter & Gamble	Consumer Goods Company	Five star	65.3
TESCO	Retailer	Four star	54.4
Carrefour	Retailer	Four star	103.3
Deutsche Bank	Bank	Five star	33.5
BNP Paribas	Bank	Five star	43.4
HSBC	Bank	Five star	48.0
Consumer Goods Forum	Industry association	Not applicable	Not applicable
Banking and Environment Initiative	Industry association	Not applicable	Not applicable

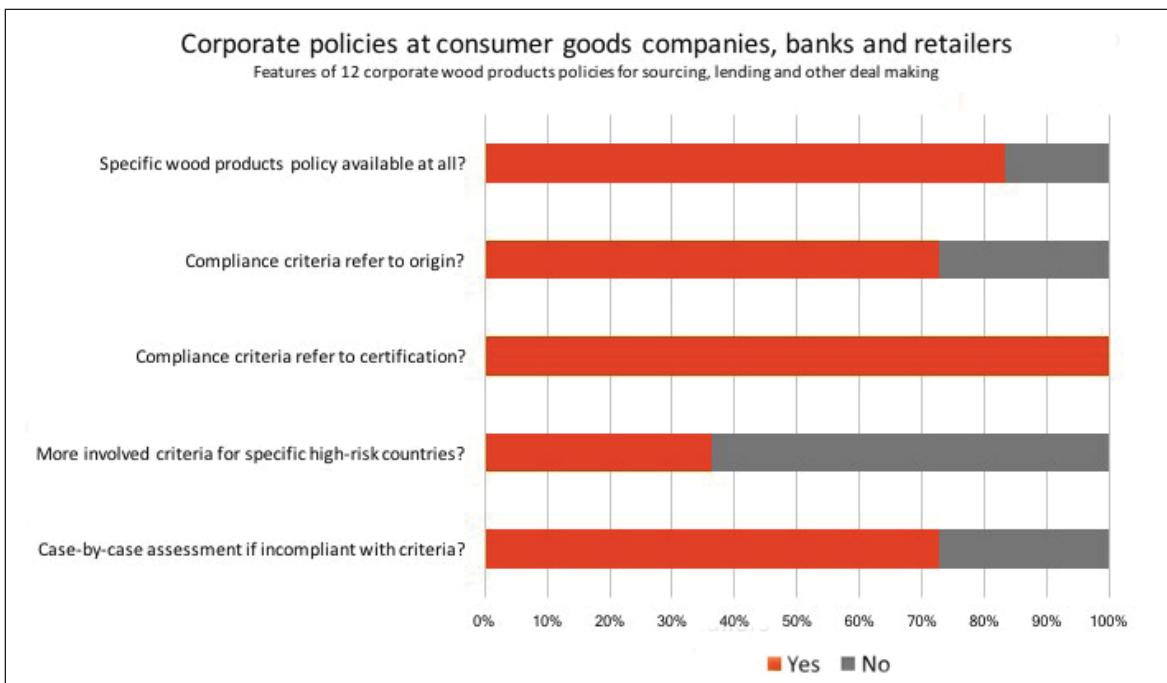
The assessment of corporate zero-deforestation commitments focuses on those aspects directly applicable to pulp, fibre, paper and packaging materials. Generally not considered were aspects around sawnwood, fabrics for clothing, furniture, office and stationary materials and wood for energy.

Although the results obtained seem generally plausible, there are important methodological caveats that need to be understood. The sample was chosen to represent consumer goods companies and banks with particular ambition in their zero-net deforestation commitments.

In consequence, the results do not reflect 'average conditions of wood products markets' but a small sample of larger companies with greater consumer exposure that have arguably more developed CSR programmes than smaller companies with less consumer exposure. Focusing this small paper on firms with more developed CSR programmes gives a good qualitative indication of potential impacts on the forest industry. Better understanding the pertinence to the forest industry will require conducting a proposed survey among the forest industry to understand how it measures up against the corporate policies that operationalize zero-net deforestation commitments (Section 5).

Most firms reviewed have operational policies to narrow down their commitments and the often somewhat aspirational principles to actionable guidance. These policies cover sourcing or lending activities or product retailing, depending on the businesses taking on the pledges. The policies make reference to verifiable topics such as the origin of produce, presence of certification and other issues (Figure 2).

Figure 3: Features of corporate wood products policies assessed.



Almost all firms reviewed (83% of firms) had specific guidelines for wood products (Figure 2). Apparently, activities in the forest sector are generally considered to present the significant CSR risks and complexities that make it necessary to develop bespoke guidance. Some firms, particularly the banks, even establish explicit lists of sectors that are considered high risk and routinely include the forest sector, next to e.g., investments in defence, nuclear energy, mining and others (Annex: Section 11). Such high-risk sectors trigger particularly involved due diligence before firms can engage in deals.

The origin of wood is a key criterion for corporate risk management (73% of firms) (Figure 2). The origin can be basis for corporate policies to establish risk ratings and about one in three firms assessed have lists of high-risk countries. Some firms classify only few countries as high risk, others consider long lists of countries as high risk (Annex: Section 10). Mostly, the assessed corporate strategies do not explain how elevated risk ratings were chosen or how often they would be re-assessed in light of conceivably changing country circumstances.

Many corporate policies require collecting information on country of origin, species and compliance with national legislation to underlie a deforestation risk assessment. These are mandatory under the EU Timber Regulation where operators need to assess the risk of illegal timber in supply chains (Annex: Section 12). For firms operating in the EU, such requirements in CSR policies are not additional to regulatory requirements.

All corporate policies assessed make reference to certification (100% of firms) (Figure 2). Certification under the most common standards is a key criterion in due diligence for lending or sourcing. There is universal reference to FSC certification (100% of firms) and almost all corporate policies (91%) also reference the PEFC certification. Other standards are also referred to. Most corporate policies (64% of firms) do not distinguish between certification for forest management, for mixed sources or for chain of custody although these refer to rather different underlying issues (Annex: Section 13). Many corporate policies seem to consider just any third-party standard with a degree of credibility an important source for due diligence processes.

Not immediately complying with most basic due diligence requirements, e.g. as to origin and certification, would usually trigger more involved case-by-case assessments. The corporate policies assessed would not usually categorically exclude deals with forest companies from high-risk regions or without desired certification standards. Rather, many policies (73% of firms) describe more complex due diligence processes that involve collecting more detailed information on the business in question, often including the use of external experts to gather the necessary confidence for an engagement.

Beyond considering production circumstances, the corporate policies also check more generally for indications of reputational risk in proposed deals. Some corporate sourcing policies even make explicit reference to specific other companies that should be avoided. But many corporate policies more generally require factoring in also indications of potential image risk beyond assessing information provided by the forest company itself.

The analysis of corporate policies at consumer goods companies and banks relevant for zero-net deforestation commitments delivers a range of insights into common requirements of relevance for the forest industry. Next, it will be discussed what risks (and potentially benefits) could arise from those.

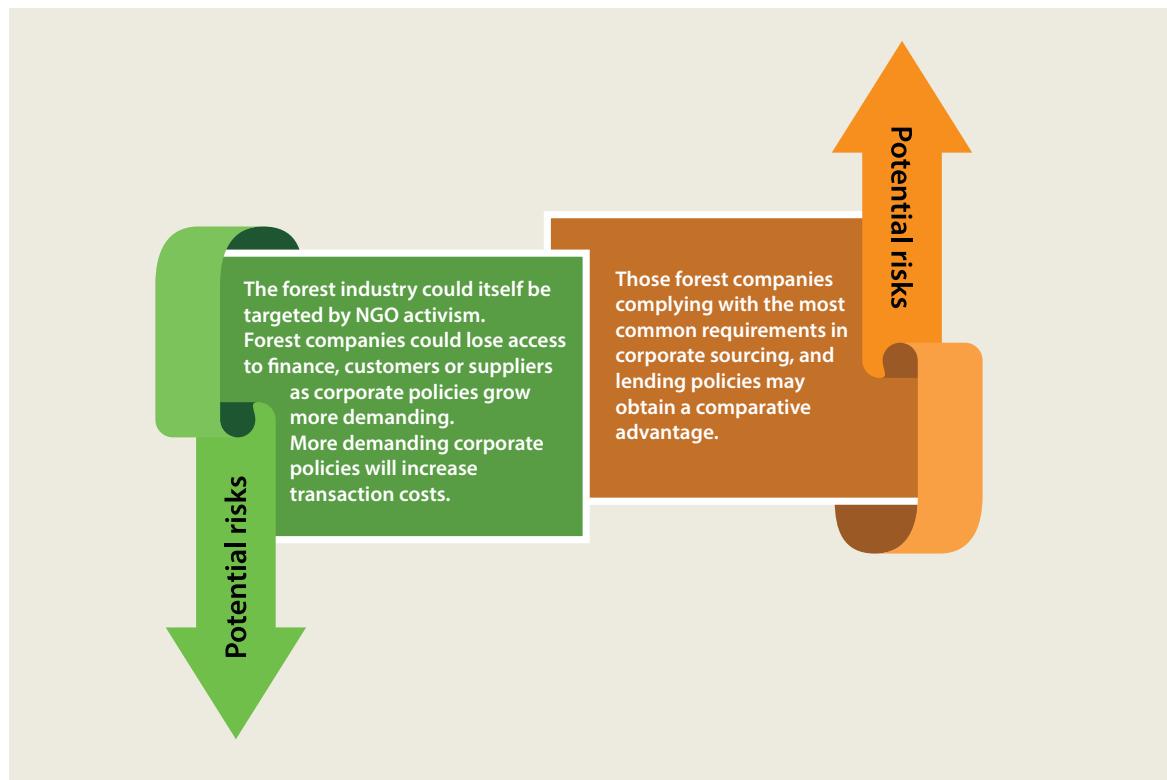
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Preliminary discussion of risks and benefits from corporate zero-net deforestation commitments for the forest industry

The corporate wood products policies at their customers and financiers have already placed a demand on the forest industry to adapt to requirements. Going forward, further and increasingly adapting to shifting requirements may be necessary as rapid momentum around corporate zero-deforestation commitments continues. In this context, several potential sources of risk come to mind for the forest industry: to be itself targeted by NGO activism, to lose customers because of shifting demand patterns, to lose suppliers if these can no longer meet requirements, and to comply with increasingly onerous documentation requirements. Conversely, for some parts of the forestry industry, the zero-deforestation movement may also translate into a comparative advantage.

Figure 3: Features of corporate wood products policies assessed.



The forest industry could itself be targeted by NGO activism. So far, NGO activism has focused on companies with largest consumer exposure because this is where most traction could be obtained. But activists have already targeted some large forest companies (e.g., Greenpeace,

2011), and in principle could step up action against the forest industry itself. Regardless of the factual basis of such negative publicity, it could become a major liability for a forest company under attack, in deals with customers and financiers. The analysis in this paper shows that such consumer goods companies and banks would need to address the negative publicity around the forest company in their own deal due diligence to exclude reputational risks. For this reason, any activist claim of irresponsible business practices needs to be taken extremely seriously.

Forest companies could lose access to finance, customers or suppliers as corporate policies grow more demanding. This is the most obvious risk to the forest industry. Clearly, consumer goods companies and banks have a natural interest in designing corporate policies for sourcing and lending that their business partners can generally comply with (Neff & Linhares-Juvenal, 2017). But nonetheless, the analysis in this paper shows quite clearly how there is pressure building up through the supply chain for forest companies to improve their business practices along the lines of corporate policies of their customers and financiers. It is also directly observable that certain companies are losing access to markets, often portrayed as success of the zero deforestation movement (Box 2).

Beyond confining access to finance, customers and suppliers, more demanding corporate policies will increase transaction costs. The analysis in this paper shows that difficulties in meeting corporate policies for sourcing and lending of customers and financiers may also translate into an increasingly burdensome due diligence process, rather than categorically losing access.

Box 2: Do the sourcing policies have teeth? Case of a major bank, HSBC (HSBC, n.d.)

"Compliance with our policies

The new policies included deadlines for our customers to meet by the end of 2014. We have since gathered data on the implementation of these policies: the figures below are not audited, and are the result of a detailed manual reporting exercise at the 2014 year end. We are in the process of implementing an IT solution to make management information more readily available in the future.

Impact of policies at 31 December 2014

We had 913 customers in the forestry sector, the highest concentrations of which were in Canada, the UK and France. We estimated that our customers were responsible for 50 million hectares of certified forest, approximately the size of Spain, and 3,100 certified operations – about 10 per cent of the global certified forestry market.

However, 60 customers were unable or unwilling to meet our policy requirements and we have ended or are in the process of ending those relationships, as soon as contractual obligations allow."

Arguably, certain value chain segments are particularly exposed to the above set of risks from zero-net deforestation initiatives and the corporate policies operationalizing them. These include companies working without chain-of-custody and/or forest management certification; the sourcing of raw material from partners that do not (yet) hold forest certification; supplying

forest products to companies that are potential targets for NGOs because of large consumer exposure and / or large market share; and producing or working with producers from developing countries with high deforestation rates or a weak forest governance environment, especially those included in the lists of high-risk countries.

Collecting information on the forest industry's own position in the supply chains along the lines of those criteria will go a long way towards understanding exposure to shifting zero-deforestation requirements of customers and financiers. This paper aims to contribute there, proposing to conduct a survey among forest companies for assessing how they measure up against the requirements included in corporate wood products policies of consumer goods companies and banks.

Despite much attention to risks, pressure being put on firms in certain value chain segments implies that other firms have a comparative advantage because of their compliance with the most common requirements in corporate policies. For the forest industry from developing countries, the need to comply with zero deforestation commitments may constitute an additional barrier to access international markets, in particular in Europe or North America. The analysis in this paper shows how some of the requirements in corporate sourcing and lending strategies are aligned with existing regulatory requirements. The incumbents in those European and North American markets may enjoy an increased comparative advantage over international competitors in consequence.

At this stage, discussing impacts of corporate zero-net deforestation commitments for the forest industry is only preliminary. A more detailed discussion would require not only identifying risks and benefits in general terms but understanding how specifically the forest industry measures up against the requirements in corporate wood products. This is what the next section discusses.

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A proposed survey for understanding how the forest industry measures up against the corporate wood products policies of consumer goods companies and banks

The most important possible reservation against the results in this brief paper is that a handful of major consumer goods companies and banks do not adequately represent the global market for wood products. Although the examined companies are large and may account for significant portion of markets the results in this paper can only represent trends and it is difficult to gauge the relevance of results to the forest industry.

It is proposed to conduct a survey among ACSFI members to understand their position in supply chains and their ongoing activities with relevance to zero-net deforestation. The survey design is based on the overview of corporate wood products policies in this paper. A more detailed list of information to be collected is also available (Annex: Section 8) that follows the following set of questions:

- Where are companies in the respective supply chains for wood products?
- What is the origin of wood?
- How large is the relative importance of those countries included in lists of 'high-risk countries'?
- How prevalent is certification?
- What kinds of certification standards are being used?
- How large is the wood products market share of major consumer goods companies with a global brand that are likely to have zero-deforestation commitments?
- How large is the reliance on banks that have a global brand and likely to have zero-deforestation commitments?
- How readily available are documentation on origin and legality?

Whether or not conducting a survey is practical should be discussed at the forthcoming session of the ACSFI in Berlin in May 2017. But regardless of the decision to be taken there, several important recommendations can already be formulated.

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Recommendations to the forest industry

The forest industry should closely monitor their business partners' stance on environmental policies, as well as activities of the NGOs in the sector. First, this may relate to the customers and financiers that may have or assume zero-deforestation commitments. Equally, it will be useful to understand the environmental performance of suppliers. Third, forest companies should monitor the activities of NGOs in the sector to understand general trends and be prepared to react in case environmental requirements shift.

The risk of changing environmental requirements at their customers and financiers should factor into risk management strategies at forest companies. Excluding negative impacts from re-orienting demand patterns is difficult because of the diversity of issues related to forest production that are covered in corporate sourcing and lending policies. To manage risks it will be key to prevent difficulties with shifting demand patterns from zero-deforestation before they occur, which may imply that forest companies should stay ahead of their customers' requirements in terms of available certification and documentation. But more detailed strategies should be drawn up to manage risks from environmental requirements at forest industry's business partners.

Forest companies should proactively engage with consumer goods companies, banks and NGOs to contribute specific knowledge and viewpoints on the forest industry to the discussion around the zero deforestation movement. This may serve to make the zero deforestation movement more robust. For example, the analysis has found that many sourcing and lending policies treat wood certified for forest management and controlled wood indiscriminately, although in reality controlled wood standards hardly exclude deforestation, which could undermine some of the messaging in the zero-deforestation movement. For example, the analysis found universal reference to FSC / PEFC certification in corporate wood policies, although only a fraction of global forest area is certified, which calls the feasibility of achieving zero deforestation at a scale beyond individual supply chains into question. For example, the analysis has shown that corporate sourcing and lending policies all but exclude business with forest companies from high-risk countries although from a developmental perspective these are arguably most in need of investment in an orderly forest sector, which highlights how NGO campaigning can create perverse incentives. These and other examples illustrate that a forest-sector perspective could contribute to a better grounded zero-deforestation movement with lower risk of creating an environmental backlash and better chances of long-term success.

In engaging more fully with the stakeholders around the zero-deforestation movement, the forest industry may wish to take a strong view regarding the importance of environmental concerns in their businesses. Environmental impacts of forest management and the forest-based industry already received much attention long before the concept of zero deforestation emerged. For decades, developments in forest management have focused on progress towards sustainable forest management, which was laid down in the UNCED's Forest Principles as early as 1992 ("Forest Principles," 1992). The Forest Stewardship Council was established in 1993 and forest management certification schemes are relatively mature, compared against the certification schemes by the Roundtable on Responsible Soy and the Roundtable on Sustainable Palm Oil that were established 10-20 years later. With such a long history of attention to forest management issues from policy makers and NGOs, today, environmental concerns and sustainable management practices have long been mainstream in large parts of the forest industry. It is because of this that grouping the forest sector together with defence, mining etc. as presenting high environmental and reputational risk jars with the self-perception of large parts of the forest industry.

Literature cited

BEI. (2015). The BEI & CGF's "Soft Commodities" Compact: technical guidance. Banking Environment Initiative (BEI). Retrieved from http://www.cisl.cam.ac.uk/business-action/sustainable-finance/banking-environment-initiative/pdfs/BEI_CGF_Soft_Commodities_Compact_Technical_Guidance_January_2015.pdf

Bregman, T., Mitchell, A., Lachaux, C., Mardas, N., Belfield, H., Lawrence, L., ... Goodman, L. (2015). Achieving Zero (Net) Deforestation Commitments - What it means and how to get there. Oxford, UK: Global Canopy Programme (GCP).

CDP. (2014a). Deforestation-free supply chains: From commitments to action - CDP Global Forests Report. London, UK: Carbon Disclosure Project (CDP). Retrieved from <https://www.cdp.net/cdpresults/cdp-global-forests-report-2014.pdf>

CDP. (2014b). Deforestation-free supply chains: From commitments to action - Policy Briefing.

CDP. (2015). Realizing zero-deforestation: Transforming supply chains for the future. London, UK: Carbon Disclosure Project (CDP).

CGF. (n.d.). The Sustainable Soy Sourcing Guidelines. The Consumer Goods Forum (CGF). Retrieved from <http://www.theconsumergoodsforum.com/download-the-sustainable-soy-sourcing-guidelines>

CGF. (2010). Deforestation Resolution. Consumer Goods Forum (CGF). Retrieved from <http://www.theconsumergoodsforum.com/sustainability-strategic-focus/sustainability-resolutions/deforestation-resolution>

CGF. (2013). Pulp, Paper & Packaging Guidelines. The Consumer Goods Forum (CGF).

CGF. (2015). Sustainable Palm Oil Sourcing Guidelines. Consumer Goods Forum (CGF).

CLUA. (2014). Disrupting the Global Commodity Business. San Francisco, CA, USA: Climate and Land Use Alliance (CLUA).

EC. (2010). Timber Regulation. European Commission (EC). Retrieved May 20, 2010, from http://ec.europa.eu/environment/forests/timber_regulation.htm

FAO. (2012). FRA 2015: Terms and Definitions. Rome, Italy: Food and Agriculture Organization (FAO). Retrieved from <http://www.fao.org/docrep/017/ap862e/ap862e00.pdf>

Forest Principles. (1992). In United Nations Conference on Environment and Development (UNCED). Rio de Janeiro, Brazil. Retrieved from <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm>

Forest Trends. (2015). Corporations, Commodities, and Commitments that Count. Washington, DC, USA.

GCP. (2015). The Forest 500. (M. Rautner, L. Lawrence, T. Bregman, & M. Leggett, Eds.). Oxford, UK: Global Canopy Programme (GCP). Retrieved from <http://forest500.org>

Gerrits, R. (2012). Sustainability in the Supply Chain. In K. Ahmed (Ed.), Getting to Green—A Sourcebook of Pollution Management Policy Tools for Growth and Competitiveness (pp. 194–204). Washington, DC, USA: The World Bank. doi:10.1007/978-3-642-23562-7

Golden Agri-Resources. (2012). High Carbon Stock Forest Study Report. Singapore: Golden Agri-Resources and SMART and The Forest Trust and Greenpeace. Retrieved from <http://www.goldenagri.com.sg>

Greenpeace. (2011). Sinar Mas Under Investigation - How APP is Toyng with Extinction.

Greenpeace. (2012a). How KFC is Junking the Jungle by Driving Rainforest Destruction in Indonesia. Amsterdam, Netherlands.

Greenpeace. (2012b). The RMIN Paper Trail. Amsterdam, Netherlands.

Meijer, K. (2014). Can Supply Chain Initiatives Reduce Deforestation? A comparative analysis of cases from Brazil and Indonesia. Bonn, Germany: German Development Institute (die).

National Wildlife Federation. (2015). A Path to Zero-Deforestation Cattle. Retrieved October 1, 2015, from <http://www.zerodeforestationcattle.org/index.html>

Neeff, T., & Linhares-Juvenal, T. (2017). Zero deforestation initiatives and their impacts on commodity supply chains. Rome, Italy. Retrieved from <http://www.fao.org/3/a-i6857e.pdf>

Rainforest Action Network. (2014). A New Chapter for the Publishing Industry: Putting Promises into Practice. San Francisco, CA, USA.

Rautner, M., Leggett, M., & Davis, F. (2013). The Little Book of Big Deforestation Drivers. Oxford, UK: Global Canopy Programme (GCP). Retrieved from http://www.globalcanopy.org/sites/default/files/LittleBookofBigDeforestationDrivers_EN_0.pdf

Rod Taylor. (2015). Deforestation-free supply chains & investment: progress and challenges. In FAO (Ed.), The Economics of Climate Change Mitigation Options in the Forest Sector. Rome, Italy: Food and Agriculture Organization of the United Nations (FAO). Retrieved from <https://www.youtube.com/watch?v=Iltl-XD-wgs>

Sam Lawson. (2014). Consumer Goods and Deforestation: an analysis of the extent and nature of illegality in forest conversion for agriculture and timber plantations. Washington, DC, USA: Forest Trends.

Soy Moratorium. (2014). Mapping and Monitoring Soy Planting in the Amazon Biome Seventh Year. Brazilian Association of Vegetable Oil Industries (ABIOVE). Retrieved from http://www.abiove.org.br/site/index.php?page=reports&area=MTItOTk4LTM=&relatorio=996-Monitoring_of_Soy_Moratorium_-_Seventh_Year

TFA 2020. (n.d.). Reducing Supply Chain Deforestation - Civil Society Backgrounder and Inventory.

TFD. (2014). Scoping Dialogue on Understanding Deforestation-Free (UDF) - Co-Chair Summary Report. New Haven, CT, USA: The Forests Dialogue (TFD).

USDA. (n.d.). Lacey Act. United States Department of Agriculture (USDA). Retrieved from http://www.aphis.usda.gov/plant_health/lacey_act/

WBCSD, & WRI. (2011). Sustainable Procurement of Wood and Paper-based Products. Retrieved from www.sustainableforestprods.org

WWF. (2008). Zero Net Deforestation by 2020 - A WWF Briefing Paper. World Wildlife Fund (WWF). Retrieved from http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_2020_zero_net_deforest_brief.pdf

WWF. (2015). Global Network Position: Deforestation-free production and finance. Gland, Switzerland: World Wildlife Fund (WWF). Retrieved from [wwf.panda.org/about_our_earth/deforestation/forest_publications_news_and_reports/position_papers_forest/](http://www.wwf.panda.org/about_our_earth/deforestation/forest_publications_news_and_reports/position_papers_forest/)

Annex: Outline of a questionnaire for a proposed survey among ACSFI members and/or associated forest companies

Ideally, such a survey should be conducted among companies connected to the ACSFI, not only among the industry associations that are part of the ACSFI. For key forest countries, it should be aimed to have at least 2-3 companies participating.

The questionnaire will be implemented in a web-based, clickable format. It will require approximately 10 minutes. Where there is interest in this, there may also be a follow up through a brief phone call to discuss in-depth

Indicatively, information to be collected may relate to issues such as:

Background on the company

- HQ location: country
- Scale of company: revenue
- Scale of company: number of employees
- Placement in the value chain: forest management / processing / manufacturing / retail / several
- Products: pulp & paper / sawn wood / consumer products / packaging / fibre
- Origin of raw materials: fraction natural forest / planted forests / recycled / unknown
- Markets
- Selling of products: fraction Europe / North America / other (where?) / unknown
- Sourcing of raw materials: fraction Europe / North America / other (where?) / unknown
- Fraction of raw material sourcing from Malaysia / China / Thailand / Colombia / Myanmar / Vietnam / Papua New Guinea / Cambodia / Democratic Republic of Congo / Cameroon / Ghana?

Information availability

- Fraction of documented country of harvesting information?
- Fraction of documented species information?
- Fraction of detailed information on upstream suppliers?
- Fraction of documented named forest / mill?

Use of certification

- Fraction of FSC forest management certification: fraction FSC / PEFC / other / none
- Fraction of FSC chain of custody certification: fraction FSC / PEFC / other / none
- Fraction of PEFC forest management certification
- Fraction of PEFC chain of custody certification
- Fraction of other certification (which?)
- Use of FSC controlled wood certification: fraction
- Use of legality certification (which?)
- Other forestry schemes (which?)

Ongoing activities and perceived exposure

- Biodiversity considerations in forest management?
- Community considerations in forest management?
- Climate-change considerations in forest management?
- Perceived exposure to zero deforestation pressure: low / medium / high

Annex: Examples of zero net deforestation commitments and the corporate policies of relevance

Firm (or other organization)	Concept	Principles (for timber, pulp & paper)	Compliance requirements in corporate policies	Corporate policies considered
Consumer Goods Forum	Zero net deforestation (endorsing WWF's concept)	<ul style="list-style-type: none"> Legality Low risk of controversial sources contributing to deforestation Contribute to sustainable forest management 	<ul style="list-style-type: none"> For all virgin fibre, risk assessment on controversial sources (illegally harvested, violating rights, from forests with particular environmental /ecosystem / cultural value, with endangered species, from areas converted after 2010) For high-risk countries use legality, certification (e.g., VlC, FLEGT). Also require FSC controlled wood, PEFC CoC, or other independent verification of low risk of controversial sources 	<ul style="list-style-type: none"> Deforestation Resolution Pulp & paper sourcing guidelines The 'Soft Commodities' Compact The 'Soft Commodities' Compact: Technical Guidance
Banking and Environment Initiative	Soft Commodities Compact	<ul style="list-style-type: none"> Finance the transformation of commodity supply chains Raise banking standards to ensure compliance with CGFs zero net deforestation concept 	<ul style="list-style-type: none"> For banking customers with significant production or processing of timber at high risk of tropical deforestation, require FSC / PEFC certification 	<ul style="list-style-type: none"> FSC certification Alternatively, recognized company to assess: no forest conversion, HCV, known and legal source, paper scorecard (amended WWF scorecard), working practices, FPIC, conflict wood, water in plantations, small-holders & communities Commitment on Deforestation and Forest Stewardship Responsible Sourcing Guidelines – specific requirements for paper & board Not considered: RSG – general requirements
Nestlé	No deforestation and responsible forest stewardship	<ul style="list-style-type: none"> No deforestation or loss of HCVs Respect laws and international norms Create shared value for society and local communities Legal harvest and trade 		

Firm (or other organization)	Concept	Principles (for timber; pulp & paper)	Compliance requirements in corporate policies	Corporate policies considered
M&S	Remove commodity-driven deforestation from supply chains, source raw materials from most sustainable sources	<ul style="list-style-type: none"> Wood is legally harvested Forests with HCV areas are protected Traditional and civil rights are protected Plantations converted from natural woodland are avoided 	<ul style="list-style-type: none"> Country of origin and species information FSC forest management / FSC controlled wood / PEFC from countries with an FSC controlled wood risk assessment Alternatively, other forestry schemes (PEFC from other countries, VLC, FLEGT, TFT, etc.) next to named forest and/or paper mill with management information Alternatively for non-certified sources, full information on supply chain for risk assessment Exclude high risk companies 	<ul style="list-style-type: none"> Wood Sourcing Policy Not considered: Commitment on Protecting Forests through Fabric Choices Not considered: Global Sourcing Principles
Unilever	Zero net deforestation, ensuring that the net quantity, quality and carbon density of forests is maintained	<ul style="list-style-type: none"> Halt deforestation: Protect HCV, high carbon stock and tropical peat forests, no illegally harvested wood, no sourcing of wood fibres from controversial sources Promote best practices in sustainable forest and pulp plantation management: traceability of the fibre value chain, growth in forest certified materials, use of sustainable virgin and recycled fibres in packaging Drive positive economic and social impact on people and communities: respect the rights of all workers, land tenure rights, support the role of small scale family forestry 	<ul style="list-style-type: none"> Country of origin FSC / PEFC CoC certified Additional risk assessment required for sourcing from high-risk countries regarding available certifications, timber species, supply chain structure, meeting requirements of EUTR and US Lacey Act 	<ul style="list-style-type: none"> Position on Eliminating Deforestation Sustainable Wood Fibre-Based Material Policy Not considered: Responsible Sourcing Policy Not considered: Sustainable Agriculture Code
Danone	Eliminate deforestation impacts from supply chain by 2020 and Pro-actively contribute to programs preventing deforestation or promoting reforestation	<ul style="list-style-type: none"> Recycled: develop the use of recycled fibres for packaging as a priority Certified sources: when it is not possible to use recycled fibres, ensure virgin fibre legal origin and chain-of-custody traceability Forest is 'responsibly managed' when harvesting is environmentally, socially and environmentally appropriate, beneficial and viable, and excludes: illegal wood harvesting, violation of traditional and civil rights, threat to high conservation values, and conversion of natural forests. 	<ul style="list-style-type: none"> Country of origin information For virgin fibre, require FSC / PEFC or national certification schemes Additionally, third-party audits when sourcing from high deforestation risk areas 	<ul style="list-style-type: none"> Forest Footprint Policy Position "Forest" for Paper & Board Packaging Packaging Policy Group Charter for the Environment Not considered: Climate Policy Not considered: wood for energy production

Firm (or other organization)	Concept	Principles (for timber, pulp & paper)	Compliance requirements in corporate policies	Corporate policies considered
Procter & Gamble	Ensure sustainability of the world's forest resources through procurement practices	<ul style="list-style-type: none"> • Committed to understanding the sources of pulp fibre • Transparency in sourcing • Ensuring that sustainable forest management practices are used • Avoiding unwanted sources of wood • Working with stakeholders on stepwise increases in preferred certification schemes 	<ul style="list-style-type: none"> • For direct suppliers of wood products, FSC Controlled Wood or other forest management certification schemes satisfying minimum criteria • Alternatively for wood from sources not directly owned and managed by suppliers, auditable assurance of legal sourcing and sustainable harvesting 	<ul style="list-style-type: none"> • Wood Pulp Procurement Policy • Not considered: Citizenship Reports
TESCO	Help achieve zero net deforestation by 2020, starting with four global deforestation drivers: palm oil, cattle products, soy and timber.	<ul style="list-style-type: none"> • Ensure that the timber used in products is from both legal and sustainable sources • Ensure that paper and pulp used in packaging and in office and store supplies is legal and sustainable 	<ul style="list-style-type: none"> • Due diligence with assessment of legality and sustainability risk using a Forest Risk Tool, considering for example tree species country or origin • Wood-fibre materials recycled or FSC / PEFC certified • Alternatively, independently certified to comply with the Tesco Wood and Wood Products Sourcing Policy 	<ul style="list-style-type: none"> • Statement on Forest Commodities: Timber • Not considered: cellulosic fibres • Not considered: furniture
Carrefour	Protecting natural resources and biodiversity – more responsible sourcing – reach zero deforestation by 2020	<ul style="list-style-type: none"> • Support the Consumer Goods Forum target of moving towards zero deforestation by 2020 	<ul style="list-style-type: none"> • [No relevant operational guidance found for packaging materials and use of fibres in products] 	<ul style="list-style-type: none"> • Webpage • Not considered: furniture • Not considered: stationary materials • Not considered: fabrics
Deutsche Bank	Committed to help achieve zero net deforestation		<ul style="list-style-type: none"> • Act as a responsible partner to all stakeholders • Formal commitments such as the Soft Commodities Compact of the BEI 	<ul style="list-style-type: none"> • Only regular environmental and social review for deals in EU and US • Otherwise, enhanced due diligence will check for FSC / PEFC certification • Or alternatively other certification or relevant public commitments • Exclude deals with evidence on clearing of primary tropical moist forests, illegal logging or uncontrolled or illegal burning • Environmental and Social Policy Framework

Firm (or other organization)	Concept	Principles (for timber, pulp & paper)	Compliance requirements in corporate policies	Corporate policies considered
BNP Paribas	<p>Working with CGF companies to help achieve net zero deforestation in their supply chains</p>	<ul style="list-style-type: none"> Contribute to a more sustainable pulp industry with respect to five main issues, three of which are relevant regarding plantations and their CoC: <ul style="list-style-type: none"> Environmental and biodiversity issues linked to the deforestation and the industrial wood plantations Social issues (respect of local people rights, involvement of local communities, job development, etc.) Health and safety management 	<ul style="list-style-type: none"> As part of due diligence, collect information on ten mandatory environmental, social and health and safety issues Encourage the use of FSC / PEFC including CoC (which addresses the ten mandatory issues) 	<ul style="list-style-type: none"> Sector Policy – Wood Pulp Not considered: pulp production process other than CoC requirements
HSBC	<p>Does not wish to finance unacceptable impacts in forestry – ensure that customers operate in accordance with good international practice</p>	<ul style="list-style-type: none"> HSBC will not knowingly provide financial services to customers involved directly, or indirectly via the supply chain, in: <ul style="list-style-type: none"> Illegal logging; Wood logged in violation of traditional and civil rights; Wood logged in forests where high conservation values are threatened by industry; or Forests being converted to plantation or to non-forest use (deforestation). 	<ul style="list-style-type: none"> For 39 high-risk countries FSC / PEFC certification In other countries, in case of a track record of credible allegations of unacceptable impacts, FSC / PEFC certification Alternatively, case-by-case evaluation for compliance with the spirit of the forest policy 	<ul style="list-style-type: none"> Introduction to Sustainability Risk Policies Forest Policy Not considered: World Heritage Sites and Ramsar Wetlands Policy

Annex: Examples of high-risk regions identified in corporate policies

CGF and BEI	Countries where supply should be verified for low risk of controversial sources: Indonesia (fiber source), Malaysia (wood chips source), China (fiber source and trader), Thailand (fiber source), Colombia (fiber source) Countries where practices should be monitored: Myanmar, Vietnam, PNG, Cambodia, DRC, Cameroon, Ghana
Danone	Indonesia, Brazil, PR Congo, Thailand, Malaysia, Russia, Australia, Bolivia and Venezuela
HSBC	Bolivia; Brazil; Cambodia; Cameroon; Central African Republic; China; Colombia; Cote d'Ivoire; Democratic Republic of Congo; Ecuador; Equatorial Guinea; Estonia; Gabon; Ghana; Guatemala; Guyana; Honduras; India; Indonesia; Laos; Latvia; Liberia; Lithuania; Madagascar; Malaysia; Mexico; Mozambique; Myanmar; Nicaragua; Panama; Papua New Guinea; Peru; Republic of Congo; Russia; Solomon Islands; Thailand; Uganda; Vietnam

Annex: Examples of high-risk sectors identified in corporate policies

BNP Paribas	Defence, Palm Oil, Wood Pulp, Nuclear Energy, Coal-fired Power Generation, Agriculture, Mining Industry, Tobacco Industry
HSBC	Agricultural Commodities, Chemicals Industry, Energy, Forestry, Freshwater Infrastructure, Mining and Metals
Deutsche Bank	Energy, Mining, Agriculture and Forestry, Hydraulic Fracturing, Fisheries

Annex: Background information on the EU Timber Regulation

According to the EC webpage (EC, 2010), regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market – also known as the (Illegal) Timber Regulation counters the trade in illegally harvested timber and timber products through three key obligations:

- It prohibits the placing on the EU market for the first time of illegally harvested timber and products derived from such timber;

It requires EU traders who place timber products on the EU market for the first time to exercise 'due diligence';

Keep records of their suppliers and customers.

The core of the 'due diligence' notion is that operators undertake a risk management exercise so as to minimise the risk of placing illegally harvested timber, or timber products containing illegally harvested timber, on the EU market.

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

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

Annex: Background information on certification of controlled wood

According to the FSC webpage ("FSC LABELS – DO YOU KNOW THE DIFFERENCE?," n.d.), FSC controlled wood is material from acceptable sources that can be mixed with FSC-certified material in products that carry the FSC Mix label.

There are five categories of unacceptable material that cannot be mixed with FSC certified materials: illegally harvested wood; wood harvested in violation of traditional and civil rights; wood harvested in forests in which high conservation values (HCVs) are threatened by management activities (HCVs are areas particularly worthy of protection); wood harvested in forests being converted to plantations or non-forest use; wood from forests in which genetically modified trees are planted.

Screenshot from the FSC webpage:

The FSC Mix Label can be made up in different ways.



At most,

30% Controlled Wood 70% Full FSC

Mix can include Recycled,

50% Recycled 50% Full FSC

Or use all three sources,

40% Full FSC 40% Recycled 20% Controlled Wood

