

Understanding ‘Deforestation-Free’: The State of Play and Issues to Consider during TFD’s October 2014 Dialogue

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I. Introduction

Concerns around deforestation and efforts to halt it are not new. In the United States, fears in the mid-19th Century that the nation was losing its forestland led to the establishment of the precursor to the U.S. Forest Service.¹ Various iterations of a forest-focused unit within the UN—culminating in today’s UN Forum on Forests—have raised international awareness since the 1990s of the problem of deforestation, and around the same time forest certification arose as a non-governmental mechanism for promoting forestry practices that do not degrade forests. REDD+ (Reducing Emissions from Deforestation and forest Degradation plus enhancing forest carbon stocks) has gained momentum since 2007 as a mechanism under the UN Framework Convention on Climate Change for financially incentivizing reductions in deforestation and degradation at scale. The novel development in the past several years within the anti-deforestation movement is that governments, companies, and other organizations have begun setting deforestation targets of ‘zero.’

It is intuitive that deforestation-free commitments will not be sufficient on their own to stem deforestation. Stakeholders will need to hold governments and companies accountable to their commitments, and governments will need to address illegality in both domestic economies and global supply chains.² However, ‘zero’ commitments represent a new facet in the struggle to slow deforestation that may supplement other efforts that are ongoing or that may develop in the future.

The ‘zero’ movement has grown strikingly quickly, with scores of organizations—particularly corporations—announcing commitments within the span of just a few years. Very quickly, the ‘zero’ approach has attained a measure of international legitimacy; a group of around 130 governments, companies, NGOs, and civil society groups affirmed during New York Climate Week 2014 the need to bring deforestation to a complete halt.³ While admirable in principle, commitments have followed one after the other so swiftly that there has been little opportunity to take stock of zero deforestation—either as a concept or as a mechanism—creating the dual risk that actors may be setting the wrong targets⁴ and that even the right ones may not be possible to achieve. The Forest Dialogue’s October

¹ Gerald W. Williams (2005), “The Early Forest Service Organization Era, 1905-1910,” The USDA Forest Service—The First Century, http://www.foresthistory.org/ASPNET/Publications/first_century/index.htm.

² See Sam Lawson, Art Blundell, Bruce Cabarle, Naomi Basik, Michael Jenkins, and Kerstin Canby, Sept. 2014. Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations, FOREST TRENDS, http://www.forest-trends.org/documents/files/doc_4718.pdf.

³ “New York Declaration on Forests: Action Statements and Action Plans,” Sept. 23, 2014. <http://www.un.org/climatechange/summit/wp-content/uploads/sites/2/2014/09/FORESTS-New-York-Declaration-on-Forests.pdf>.

⁴ “Companies at Risk of Sourcing Illegal Palm Oil Despite Zero Deforestation Commitments, Finds Investigation,” Sept. 5, 2014. MONGABAY.COM. <http://news.mongabay.com/2014/0905-eoy-tainted-palm-oil.html>.

2014 dialogue on “Understanding Deforestation-Free” will seek to understand the commitments that have been made, and to unpack the ‘zero’ concept.

The present report provides context for the upcoming dialogue. It begins by attempting to unpack the terms that are used in making deforestation-free commitments in order to clarify what these commitments in fact mean. It then maps the commitments that have been made to date, explores some of the critiques of these types of pledges, discusses the relationship between deforestation-free and REDD+, examines the possibility that forest certification schemes might address concerns with conversion, and highlights a few important trends. This report accompanies a concept note, which lays out the particular issues that the dialogue on “Understanding Deforestation-Free” plans to address.

II. Understanding ‘Zero’ Commitments around Deforestation

Confusion surrounds deforestation-free commitments because four similar, but distinct terms are used: ‘zero gross deforestation’ (ZGD), ‘zero deforestation,’ ‘zero net deforestation’ (ZND), and ‘zero illegal deforestation (ZID). Beyond the fact that these terms are sometimes used interchangeably to confusing effect, each does not even have its own commonly accepted definition.

ZGD is the least ambiguous term. It means an end to conversion of all existing forestland, without considering offsetting gains in forest cover (the same way that gross income refers to income before adjustments due to expenses, taxes, etc., while net income refers to the adjusted total). However, certain parameters still need clarifying if ZGD commitments are to be meaningful. For example, from what baseline date must products not be associated with deforestation? By what date must suppliers comply with the new rules? What counts as a ‘forest’ for purposes of a ZGD commitment?

ZND means no change to the total forested area of the geographic unit in question, but permits new forests to compensate for converted forests. While that much is clear, controversy arises concerning which sorts of new forests may be counted in the netting of converted and new forests. According to WWF, new forests should only be counted where they maintain “the net quantity, quality and carbon density” of the converted forests.⁵ Thus, timber plantations that replace natural forests would not count because they are less environmentally valuable⁶ (e.g., less biodiverse, store less carbon). Meanwhile, the government of British Columbia has defined ZND to allow plantations—including those planted with exotic species—to compensate for converted natural forestland.⁷ Indeed, the UN Food and Agriculture Organization’s Forest Resource Assessment (FRA) takes into account gains in forest cover from timber plantations in calculating net deforestation,⁸ although the FRA is not

⁵ WWF International, n.d. Zero Net Deforestation by 2020: A WWF Briefing Paper, http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_2020_zero_net_deforest_brief.pdf.

⁶ Id.

⁷ Bill 5 – 2010: Zero Net Deforestation Act. 2010 Legislative Session: 2nd Session, 39th Parliament, Third Reading (May 6, 2010), http://www.leg.bc.ca/39th2nd/3rd_read/gov05-3.htm.

⁸ FAO-FRA, 2000. On Definitions of Forest and Forest Change, Working paper 33, FAO: Rome, <http://www.fao.org/docrep/006/ad665e/ad665e00.htm>.

connected with ZND commitments. In addition to the disagreement about whether to count plantations is the question of how to define “plantation” (see the discussion of the Forest Stewardship Council’s definition in Section VI below).

ZID means no deforestation that is not governmentally sanctioned or that violates applicable legal instruments. In addition to similar questions such as how to define ‘forest’ that pertain to the other ‘zero’ terms, ZID commitments may not be clear about what constitutes ‘illegal deforestation.’ Individual countries often have multiple laws and regulations that govern various aspects of forest management. Indonesia, for example, has over 800⁹—does ZID mean that not one may be violated? Another question is which country’s laws are relevant? Import rules in the US, the EU, and Australia that ban the importation of illegal timber specify that ‘legality’ references the laws of the country of harvest, but they do not agree over which such laws are relevant to the legality inquiry.

‘Zero deforestation’ (alternatively, ‘no deforestation’ or ‘deforestation-free’) is an inherently ambiguous term because it implies a modifier to the word deforestation, but without context it is unclear whether the modifier ‘gross,’ ‘net,’ ‘illegal,’ or something else. Some people assume ‘gross,’ such as Mette Løyche Wilkie, who, while Senior Forestry Officer at FAO in 2009 distinguished between zero deforestation by 2020 as utopian, and a 50% reduction in ZND by 2020 as feasible.¹⁰ But this understanding may not be shared by all actors that have made zero deforestation commitments.

Despite the many ambiguities that currently surround ‘zero’ commitments, some progress has been made to clarify terms. For example, some commitments specify baseline years after which deforestation must cease, and some companies have provided a date by which they will require suppliers to fully comply with deforestation-free policies. The following sub-section describes the progress that has been made to define ‘forest’ for purposes of these policies.

a. ‘Forest’ Defined?

Although deforestation has been the subject of large-scale mobilization on the part of activists and policymakers for decades, “there is a lack of widespread agreement on its technical definitions.”¹¹ In fact, over 100 definitions exist globally, including variations among countries as well as within countries at the state, provincial, and local levels.¹² Reflecting this lack of certainty on what is a ‘forest,’ few efforts

⁹ David Brown et al., *LEGAL TIMBER: VERIFICATION AND GOVERNANCE IN THE FOREST SECTOR*, Overseas Development Institute (London: 2008), 257.

¹⁰ Paula Alvarado, Oct. 20, 2009. “WFC 2009: Zero Deforestation by 2020 a Utopia; Net Deforestation Reduction, Not That Much,” *TREEHUGGER.COM*, <http://www.treehugger.com/corporate-responsibility/wfc-2009-zero-deforestation-by-2020-a-utopia-net-deforestation-reduction-not-that-much.html>.

¹¹ Mike Barry, n.d. “How to Assess and Address Supply Chain Risks,” in *How Business Can Tackle Deforestation* (ed. Ian Welsh), *INNOVATION FORUM*, <http://innovation-forum.co.uk/perch/resources/if-briefing-how-business-can-tackle-deforestation.pdf>, p. 6.

¹² Catriona Moss, Nov. 7, 2013. “Defining ‘Forest’ Could Improve REDD+ Monitoring in Indonesia,” *FORESTS NEWS*, http://blog.cifor.org/20055/defining-forest-could-improve-redd-monitoring-in-indonesia#.VD23y_IdV1Y. Definitions may be based on land cover; land use; declared, legal, or administrative unit; or other properties. Erika

have been made to define the term for purposes of deforestation-free commitments. This is a key issue because the absence of a standard definition opens the door to green-washing. Companies could readily commit to eradicate deforestation from their supply chains while continuing to destroy valuable forests that they do not characterize as such in the context of their commitments. This scenario would be averted if corporate commitments were to incorporate a publicly communicated threshold for what constitutes a 'forest,' which stakeholders could use to hold companies accountable to their pledges.

There is widespread agreement among the 'zero' commitments made to date that High Conservation Value (HCV) forests may not be cut.¹³ It would be problematic, however, to base the definition of 'forest' exclusively on whether an area displays HCV. One issue is that there is a backlog of companies waiting for qualified HCV assessors because the number of assessors is small and each assessment takes a long time.¹⁴ Thus, many areas which might qualify as HCV forest will not be given that designation for some time to come, and are at risk of being cut before then. Further, even where HCV assessments are conducted, the process of identifying such forests is subject to human error, and provides no opportunity for appeal. Scott Poynton, Executive Director of The Forest Trust, observed that "we have seen HCV assessment reports in Indonesia that clearly do not follow the HCV Network's rules and are, to be kind, not well done."¹⁵ In many cases, HCV assessments do not identify the proper types or sufficient areas of land that are important for local needs or for cultural values.¹⁶ Finally, limiting the scope of 'zero' commitments to HCV forests would exempt vast forested areas from the commitments. An analysis of forest areas which the Rainforest Alliance's SmartWood program audited during one year between mid-2007 and mid-2008 revealed that forestry operations designated an average of 22% of their total area as HCV forests.¹⁷ There is thus a need for another metric for determining the forest areas that may and may not be cut.

Only one other approach appears to have been proposed thus far: determining the quantity of carbon that a forest stores. The concept of a high carbon stock (HCS) forest was developed by Golden Agri Resource (GAR), Greenpeace, and The Forest Trust (TFT) to supplement HCV evaluations in

Romjin, John Herbert Ainembabazi, Arief Wijaya, Martin Herold, Arild Angelsen, Louis Verchot, & Daniel Murdiyarso, 2013. "Exploring Different Forest Definitions and their Impact on Developing REDD+ Reference Emission Levels: A Case Study for Indonesia," ENVIRONMENTAL SCIENCE & POLICY, 33: 247.

¹³ As defined by the Forest Stewardship Council and endorsed by the Roundtable on Sustainable Palm Oil, the six HCVs are: species diversity, landscape-level ecosystems and mosaics, ecosystems and habitats, ecosystem services, community needs, and cultural values. Ellen Brown, Nigel Dudley, Anders Lindhe, Dwi R. Muhtaman, Christopher Stewart, and Timothy Synnott (eds.), Oct., 2013. Common Guidance for the Identification of High Conservation Values, HCV Resource Network, 3.

¹⁴ Conversation with Robin Barr, The Forest Trust (August 13, 2014).

¹⁵ Mrinalini Erkenwick Watsa, May 22, 2014. "Zero-Deforestation Commitments Pose Acute Challenges for Commercial Giants in the Palm Oil Industry," MONGABAY.COM, <http://news.mongabay.com/2014/0522-watsa-balikpapan-zero-deforestation.html>.

¹⁶ Marcus Colchester, Sept. 8, 2014. "Respecting Rights, Securing Livelihoods: Identifying, Managing and Monitoring HCV 5&6," presented at the HCVRN side meeting of the FSC General Assembly held in Seville, Spain.

¹⁷ Deanna Newsom, Feb. 4, 2009. Rainforest Alliance Global Indicators: First Results from the Forestry Program (June 2997-August 2008), RAINFOREST ALLIANCE, http://www.rainforest-alliance.org/resources/documents/forestry_global_indicators.pdf, 2.

determining which forests could be converted and which could not following GAR's zero deforestation commitment in 2011.¹⁸ The concept is currently being tested on a small scale in Indonesia, Liberia, and Papua New Guinea,¹⁹ and numerous other companies have specified HCS as a metric, alongside HCV, to be used in their deforestation commitments.

Some of these companies' commitments do not explain what they mean by HCS,²⁰ while the rest use the term to refer to the approach developed by GAR, Greenpeace, and TFT.²¹ This approach distinguishes six distinct classes of vegetation, to be identified using satellite imagery and field measurements of the above-ground biomass represented by trees larger than 5cm in diameter. The classes are: High Density Forest (HDF), Medium Density Forest (MDF), Low Density Forest (LDF), Young Regenerating Forest (YRF), Scrub (S), and Cleared/Open Land (OL)²² (see Figure 1). Most of the corporate commitments not to deforest HCS forests specify that HDF, MDF, LDF, and YRF forests are off-limits, while S and OL may be cleared. The HCS classification scheme does not include peatland, which is recommended to be covered separately by a commitment not to develop in peatland.²³

¹⁸ Greenpeace, Mar., 2013. Identifying High Carbon Stock (HCS) Forest for Protection: Towards Defining Natural Forests and Degraded Lands (Formerly Forest) in the Tropics, <http://www.greenpeace.org/international/Global/international/briefings/forests/2013/HCS-Briefing-2013.pdf>; See also Golden Agri-Resources, The Forest Trust, & Greenpeace, June 2012. High Carbon Stock Forest Study Report: Defining and Identifying High Carbon Stock Forest Areas for Possible Conservation, http://www.goldenagri.com.sg/pdfs/misc/High_Carbon_Stock_Forest_Study_Report.pdf.

¹⁹ Greenpeace, Mar. 10, 2014. "The HCS Approach: No Deforestation in Practice," http://www.greenpeace.org/international/Global/international/briefings/forests/2014/HCS%20Approach_Breifer_March2014.pdf.

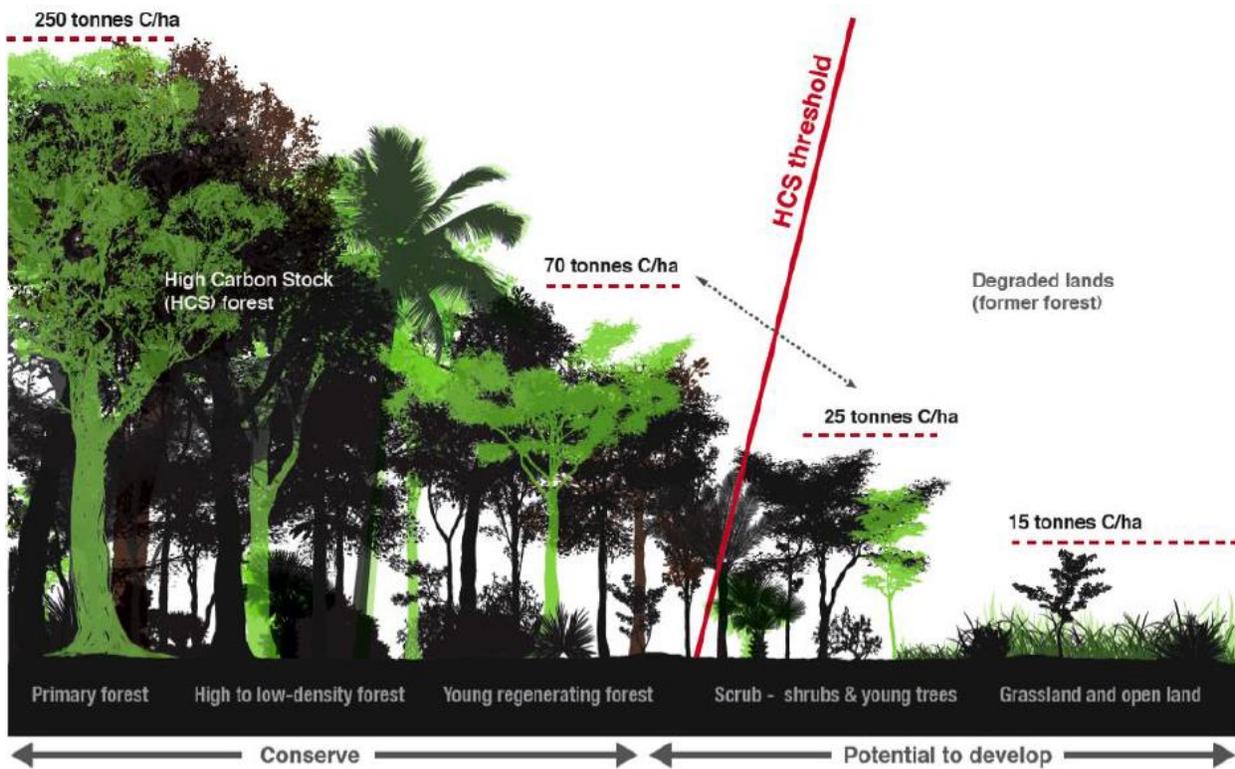
²⁰ Examples of these companies include Kellogg, Smucker's, L'oréal, Mondelez International, and Dunkin' Brands Group.

²¹ Examples of these companies include Delhaize Group, Nestlé, PepsiCo, Danone, and Colgate.

²² Greenpeace, Mar. 10, 2014. "The HCS Approach: No Deforestation in Practice," http://www.greenpeace.org/international/Global/international/briefings/forests/2014/HCS%20Approach_Breifer_March2014.pdf. These correspond to the following Indonesian definitions: High Density Forest (HK3), Medium Density Forest (HK2), Low Density Forest (HK1), Old Scrub (BT), Young Scrub (BM), and Cleared/Open Land (LT). Id.

²³ Greenpeace, Mar. 10, 2014. "The HCS Approach: No Deforestation in Practice," http://www.greenpeace.org/international/Global/international/briefings/forests/2014/HCS%20Approach_Breifer_March2014.pdf.

Figure 1. HCS Vegetation Classifications



Source: Greenpeace, Mar. 10, 2014. "The HCS Approach: No Deforestation in Practice,"

http://www.greenpeace.org/international/Global/international/briefings/forests/2014/HCS%20Approach_Breifer_March2014.pdf.

GAR's own commitment adopts the HCS classification system, but rather than commit to avoiding development of certain vegetation classes, it sets a numerical maximum threshold of 35 tons of carbon per hectare to define the areas that may be cut.²⁴ The effect is similar because pilot studies have determined that vegetation classes correspond with average stored carbon quantities in Kalimantan, Indonesia of 192tC/ha for HDF, 166tC/ha for MDF, 107tC/ha for LDF, 60tC/ha for YRF, 27tC/ha for S, and 17tC/ha for OL.²⁵ As a result, GAR's commitment would only permit development of S and OL forests in Kalimantan. In other regions with different soils and vegetation communities, the average stored carbon quantity that each class represents would have to be adjusted, and a different numerical threshold might have to be chosen.

²⁴ Golden Agri Resources, Feb. 9, 2011. Forest Conservation Policy, http://www.goldenagri.com.sg/pdfs/sustain_policies/GAR_Forest_Conservation_Policy.pdf, 1.

²⁵ Greenpeace, Mar. 10, 2014. "The HCS Approach: No Deforestation in Practice," http://www.greenpeace.org/international/Global/international/briefings/forests/2014/HCS%20Approach_Breifer_March2014.pdf.

A group of seven of the world's largest palm oil growers and traders²⁶ recently signed a Sustainable Palm Oil Manifesto, which commits to no development of HCS forests or peatlands, and proposes to include these objectives in the Roundtable on Sustainable Palm Oil (RSPO) Principles and Criteria. But it does not adopt the GAR/Greenpeace/TFT approach to define HCS; rather it announces the launch of a study to determine what constitutes HCS forests, and declares that the signatory companies will abide by the results.²⁷ The study will attempt to quantify total carbon emissions associated with oil palm development, including both above- and below-ground carbon,²⁸ and until the study is complete, the signatories that own plantations have announced a moratorium on forest clearing.²⁹ Environmental groups have derided this initiative as an effort to raise the carbon threshold in the definition of HCS in order to increase the land area available for oil palm development.³⁰ A group of institutional investors seems to agree. Led by Green Century Capital Management, the investors—which together manage over \$600 billion in assets—called on the publicly traded signatories of the Manifesto to immediately cease development in potential HCS forests as defined under the GAR/Greenpeace/TFT approach (which they have since done), and to end attempts to undermine the existing HCS approach.³¹

After the Sustainable Palm Oil Manifesto group formed, a second group of companies comprising actors in the palm oil and timber sectors—including GAR—agreed to create a body which will standardize the GAR/Greenpeace/TFT HCS approach.³² The goal is for this approach to be practical, transparent, robust, scientifically credible, widely accepted, and protective of local peoples' rights,

²⁶ The companies are IOI Corporation Berhad, Kuala Lumpur Kepong Berhad, Sime Darby Plantation, Asian Agri, Musim Mas Group, Cargill, and Apical. "The World's Largest Palm Oil Players Commit to Funding High Carbon Stock Study," July 30, 2014, SIME DARBY, http://www.simedarby.com/The_world%E2%80%99s_largest_palm_oil_players_commit_to_funding_High_Carbon_Stock_Study.aspx. These

²⁷ "Sustainable Palm Oil Manifesto," n.d. http://www.simedarby.com/upload/Sustainable_Palm_Oil_Manifesto.pdf, 1-3. The study is funded by the same companies that signed the manifesto, with the exception that Apical is not funding the study, and Wilmar is. See *supra*, n. 20.

²⁸ Tom Bawden, Sept. 2, 2014. "Leading Environmentalist Sir Jonathan Porritt Hits Out at Colleagues' Unrealistic Aims," THE INDEPENDENT. <http://www.independent.co.uk/environment/leading-environmentalist-sir-jonathan-porritt-hits-out-at-colleagues-unrealistic-aims-9707119.html>. The study appears to be led by Forum for the Future, which is led by well-known British environmentalist Jonathan Porritt. Tony Juniper, Sept. 8, 2014. "Why Zero Deforestation is Compatible with a Reduction in Poverty," THE GUARDIAN. <http://www.theguardian.com/sustainable-business/2014/sep/08/zero-deforestation-poverty-jonathon-porritt-prince-charles>.

²⁹ "Palm Oil Giants Announce Deforestation Moratorium – Effective Immediately," Sept. 20, 2014. MONGABAY.COM, <http://news.mongabay.com/2014/0920-palm-oil-deforestation-moratorium.html>.

³⁰ Megan Rowling, Aug. 7, 2014. "Row Erupts Over Magic Number that Could Save Forests from Palm Oil," THOMPSON REUTERS FOUNDATION, <http://www.trust.org/item/20140807091203-7bcje/?source=dpagehead>; Glenn Hurowitz, Sept. 2014. "The Green Tigers: Which Southeast Asian Companies Will Prosper in the New Age of Forest Conservation," https://d3n8a8pro7vhmx.cloudfront.net/foresthheroes/pages/131/attachments/original/1411386115/Green_Tiger_s-Forest_Heroes.pdf?1411386115http://www.forestheroes.org/greentigers, 11.

³¹ "Treehuggers Get Tough and Have Leverage," Sept. 8, 2014. FUTURES MAGAZINE. <http://www.futuresmag.com/2014/09/08/tree-huggers-get-tough-and-have-leverage>.

³² In addition to GAR, the group includes Asia Pulp & Paper, Cargill, Golden Veroleum Liberia, Wilmar, Agropalma, and New Britain Palm Oil. Cargill is a member of the Sustainable Palm Oil Manifesto group as well.

livelihoods, and aspirations. In the meantime, the companies have committed to cease converting land to plantations until HCS assessments have been performed and appropriate management plans have been implemented. The group plans to coordinate with institutions including the RSPO, Forest Stewardship Council (FSC), and the High Conservation Values Research Network to develop a process for ensuring quality control in the use of the HCS methodology. A number of other organizations have partnered with these companies around the initiative.³³

HCS as a proxy for 'forest' is a valuable concept that may help in developing mechanisms for verifying 'zero' commitments, but it has not yet been sufficiently tested in the field and there is not yet enough transparency to enable effective assessment.³⁴ Further, it "is highly technical, and may require significant expertise and resources to meet the scale of the claims being made."³⁵ It is at least fairly clear, however, that some cutoff point will need to be drawn beyond which a forest is no longer considered a 'forest' for purposes of a 'zero' commitment, so that progress to meet the commitment may be verified. But this raises two challenges. The first involves public perception: imagine a company that has committed to ZGD trying to persuade horrified customers that ugly pictures of a landscape that it was responsible for denuding are not images of deforestation because the forest contained too little carbon. The second challenge is that proxies for 'forests' that require statistical analyses or visual estimates of carbon storage based on assessments via satellite imagery or field visits could permit conversion of valuable forests if assessments are not well managed.

III. Current Deforestation-Free Goals

Numerous companies, governments, and other organizations have made some form of 'zero' commitment, and NGOs are now working with some of them to implement and monitor their commitments.³⁶ One journalist characterized the early pledges made by Asia Pulp & Paper (APP) and Wilmar as having produced a "domino effect," with enough companies announcing 'zero' commitments

³³ "Steering Group Established to Oversee the High Carbon Stock (HCS) Approach for Implementing 'No Deforestation' Commitments," Sept. 16, 2014, http://www.greenpeace.org.uk/sites/files/gpuk/HCS_Steering%20Group_Announcement_16092014.pdf. The partner organizations include Conservation International, Daemeter, Forest Heroes, Forest Peoples' Programme, Greenpeace, National Wildlife Federation, Proforest, Rainforest Action Network, Rainforest Alliance, TFT, Union of Concerned Scientists, WWF, The Nature Conservancy, and the World Resources Institute.

³⁴ Communication with Linda Walker, World Wildlife Fund (July 16, 2014). TFT is in the process of developing guidelines for applying the HCS system, which should improve transparency. Conversation with Robin Barr, The Forest Trust (August 13, 2014).

³⁵ Adam Wiskind, Sept 25, 2014. "Companies Scramble to Meet Consumer Demand for Zero Deforestation," TRIPLE PUNDIT, <http://www.triplepundit.com/2014/09/companies-scramble-meet-consumer-demand-zero-deforestation/>.

³⁶ Erik Wohlgemuth, May 15, 2014. "Zero Deforestation: The New Norm – Implications for Major Brands," SUSTAINABLE BRANDS, http://www.sustainablebrands.com/digital_learning/webinar/supply_chain/zero_deforestation_new_norm_%E2%80%944_implications_major_brands. For example, TFT and the Rainforest Alliance are respectively working to implement and audit Asia Pulp & Paper's Forest Conservation Policy. Rhett A. Butler, Jan. 29, 2014. "Rainforest Alliance to Independently Audit APP's Zero Deforestation Commitment," MONGABAY.COM, <http://news.mongabay.com/2014/0130-rainforest-alliance-app.html>.

that such commitments have become a new norm.³⁷ The New York Declaration on Forests suggests that the commitments made by producers, traders, financiers, and consumer goods companies amount to a “supply chain revolution.”³⁸ This section outlines every ‘zero’ commitment the author could find and groups them as pledges of ZND, ZGD, ZID, and zero deforestation (the latter group includes all commitments that could not be definitively characterized as one of the other commitment types).

Note: A number of the government commitments were made in the context of REDD+ plans; REDD+ and deforestation-free are not necessarily isolated processes at the state level.

ZND Goals

- a. NGOs
 - i. **World Wildlife Fund** – WWF calls for pledges of ZND by 2020, defined to exclude timber plantations from the netting calculation.³⁹
- b. Governments
 - i. **67 countries and the European Commission** – at the 9th Conference of Parties to the Convention on Biological Diversity in 2008, 67 countries and the European Commission pledged support for WWF’s call for ZND by 2020,⁴⁰ presumably endorsing WWF’s definition of the term.
 - ii. **Perú** – Perú is a signatory to WWF’s call for ZND by 2020. In 2010, it also separately committed, through its delegate to the UN Framework Convention on Climate Change, to achieve ZND in its “primary or natural forests” by 2021.⁴¹
 - iii. **Mexico** – In addition to signing WWF’s call for ZND by 2020, Mexico has passed a climate change law that mandates ZND.⁴²
 - iv. **Colombia** – the government has developed a program called Vision Amazon that, among other things, would seek zero net deforestation in the Colombian Amazon by 2020.⁴³ Germany, Norway, and the UK have contributed \$125 million

³⁷ Sara Santiago, Apr. 13, 2014. “All Eyes on the Forests: The New Norm of Zero-Deforestation,” TRIPLE PUNDIT, <http://www.triplepundit.com/2014/04/zero-deforestation/>. See also, Amy Moas, speaking on a panel entitled “Reimagining Partnerships: The Evolution of Stakeholder Relationships on the Path to Zero Deforestation,” Sustainable Brands conference, San Diego, May 22, 2014, http://www.sustainablebrands.com/digital_learning/event_video/collaboration/reimagining_partnership_evolution_stakeholder_relationshi.

³⁸ “New York Declaration on Forests,” Sept. 23, 2014, *supra*, n. 2.

³⁹ WWF, n.d., *supra*, n. 9.

⁴⁰ Id. The list of signatories is available in the annex.

⁴¹ Republic of Perú, Document no. OOII/2010/03, http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/Perúphaccord_app2.pdf.

⁴² Ellysar Baroudy, Apr. 17, 2014. “Bold Ideas from Pioneering Countries: Saving the Climate One Tree at a Time,” <http://blogs.worldbank.org/climatechange/bold-ideas-pioneering-countries-saving-climate-one-tree-time>.

⁴³ “Joint Statement of Colombia, Germany, Norway and the United Kingdom on Reducing Emissions from Deforestation and Forest Degradation in the Colombia Amazon,” n.d. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/273337/joint_statement_deforestation_colombian_amazon.pdf.

- to support the program, but implementation of the program is contingent on the government reaching a peace agreement with the FARC.⁴⁴
- v. **Pará (state of), Brazil** – the governor of Para committed at the Rio+20 conference in 2012 to achieve ZND across the state by 2020, defining ZND as requiring that converted forest be offset by planted native forest.⁴⁵
 - vi. **British Columbia (province of), Canada** – the Zero Net Deforestation Act (adopted in 2010) mandates that British Columbia achieve ZND by the end of 2015, defining ZND as permitting plantations—including those comprised of exotic species—to be counted in the netting calculation.⁴⁶
- c. Multi-stakeholder groups
- i. **Global Roundtable on Sustainable Beef** – GRSB has not released its own ‘zero’ commitment, but it has jointly formed a Working Group on Forests with the Brazilian Roundtable on Sustainable Livestock and the Consumer Goods Forum to work toward the latter’s ZND goal.
- d. Industry groups
- i. **Consumer Goods Forum** – CGF has committed to “mobilize resources ... to help achieve zero net deforestation by 2020 ... both by individual company initiatives and by working collectively....”⁴⁷ CGF has released sourcing guidelines for soy⁴⁸ and paper, packaging & pulp⁴⁹ to help companies move toward ZND.
 - ii. **Banking Environment Initiative** – In April 2014, BEI entered into a ‘Soft Commodities’ Compact with CGF. The Compact aims to “lead the banking industry in aligning with the CGF’s resolution to help achieve zero net deforestation by 2020,” and commits member banks to specific activities toward that end.⁵⁰
 - 1. BEI’s current members are: Barclays, BNY Mellon, China Construction Bank, Deutsche Bank, Lloyds Banking Group, Nomura, Northern Trust, Santander, SMBC, and Westpac.⁵¹

⁴⁴ Maren Soendergaard, Dec. 31, 2013. “Colombia to Bring Amazon Deforestation Rate to Zero by 2020,” COLOMBIA REPORTS, <http://colombiareports.co/colombian-program-save-amazon/>.

⁴⁵ <http://www.loterpa.pa.gov.br/?q=node/368>.

⁴⁶ Bill 5 – 2010: Zero Net Deforestation Act, *supra*, n. 11.

⁴⁷ Consumer Goods Forum, n.d. TCGF Board Resolution on Deforestation, http://sustainability.mycgforum.com/images/sustainability-pic/board_resolutions_on_deforestation_and_refrigeration.pdf.

⁴⁸ Consumer Goods Forums, n.d. The Sustainable Soy Sourcing Guidelines, <http://www.theconsumergoodsforum.com/files/Publications/2014-sustainable-soy-sourcing-guidelines-july-final.pdf>.

⁴⁹ Consumer Goods Forums, June 21, 2013. CGF Pulp, Paper & Packaging Guidelines, http://www.theconsumergoodsforum.com/files/Publications/Pulp_Paper_and_Packaging_Guidelines_June_21.pdf

⁵⁰ Banking Environment Initiative & Consumer Goods Forum, April 2014. ‘Soft Commodities’ Compact, http://www.cisl.cam.ac.uk/Business-Platforms/~media/Files/Business_Platforms/BEI/The_BEI_and_CGFs_Soft_Commodities_Compact.ashx.

⁵¹ “Members,” n.d. BANKING ENVIRONMENT INITIATIVE, <http://www.cisl.cam.ac.uk/Business-Platforms/Banking-Environment-Initiative.aspx>.

e. Companies

- i. **General Mills** – In July, 2014, General Mills released a Policy on Climate, which “aim[s] to achieve zero net deforestation in high-risk supply chains by 2020 ... includ[ing] palm oil, packaging fiber, beef, soy and sugarcane.” The Policy specifies that risks include loss of HCV and HCS forests, and of peatland.⁵²
- ii. **Kellogg** – the company’s 2012 Corporate Responsibility Report supports the CGF’s ZND by 2020 commitment, and lists the actions it is taking to further that commitment in the palm oil, forest and paper products, and soy sectors.⁵³
- iii. No other company appears to have independently committed to ZND, although the 400+ members of CGF may be said to support ZND on some level through their membership in the organization.

ZGD Goals

a. Governments

- i. **Paraguay** – the Zero Deforestation Law (enacted in 2004 and renewed for two years in 2006) bans forest conversion in the eastern part of the country. After announcing in 2008 that it would enact a policy to achieve zero net CO₂ emissions from land use changes by 2020, Paraguay extended the law in 2013 for five years.⁵⁴
 1. Although the deforestation rate in eastern Paraguay dropped by 85% in 2005/06,⁵⁵ compliance with the ban has been poor.⁵⁶

b. Industry groups

- i. **Brazilian Association of Vegetable Oil Industries (ABIOVE) and Brazilian National Association of Cereals Exporters (ANEC)** – these groups announced a moratorium in July, 2006 on trading in or financing soy planted after the date of the announcement in deforested parts of the Amazon.⁵⁷ Companies involved in a Soya Working Group created to implement the moratorium include McDonald's, Carrefour, Nestle, Tesco, Ahold, Marks & Spencer, Waitrose, Sainsbury's, and Asda. The moratorium was renewed for a final year in 2014.⁵⁸

⁵² “Policy on Climate,” July 2014. GENERAL MILLS, http://www.generalmills.com/ChannelG/Issues/climate_policy.aspx/.

⁵³ Kellogg, n.d. Better Days, Brighter Tomorrow: 2012 Corporate Responsibility Report. http://www.kelloggcompany.com/content/dam/kelloggcompanyus/corporate_responsibility/pdf/2012/2012_Kellogg_CRR.pdf, 11-12.

⁵⁴ “Paraguay Extends Zero Deforestation Law to 2018,” Sept. 3, 2013. WORLD WILDLIFE FUND, <http://wwf.panda.org/?210224/Paraguay-extends-Zero-Deforestation-Law-to-2018>.

⁵⁵ Id.

⁵⁶ Lawson et al., 2014, *supra* n. 2, at 62.

⁵⁷ Associação Brasileira das Indústrias de Óleos Vegetais, n.d. “Soy Moratorium,” <http://www.abiove.org.br/site/index.php?page=soy-moratorium&area=MTtMy0x>.

⁵⁸ Megan Rowling, Feb. 4, 2014. “Soya Moratorium Extended in Effort to Protect Brazil’s Forests,” THOMSON REUTERS FOUNDATION, <http://www.trust.org/item/20140204130310-d10m5/>.

c. Companies

- i. **Nestlé** – in its Policy on Environmental Sustainability, Nestlé committed (in May 2010) to “ensure that all its raw materials sourced from forested areas [] have not led to deforestation.”⁵⁹ Nestlé’s Responsible Sourcing Guidelines specify that no products will be sourced from areas converted from natural forests after February 1, 2013 or earlier, depending on the material. Further, it commits to protecting HCVs, defined to include areas with HCS, protected areas, and peatland.⁶⁰
- ii. **Safeway** – Safeway released palm oil sourcing guidelines in March, 2014 that commit it to sourcing (without a time horizon) 100% of its palm oil from plantations and farms that engaged in no conversion of natural forests—both primary and secondary—after December 20, 2013.⁶¹
- iii. **McDonald’s** – As on 2011, the company had imposed a moratorium on its soy suppliers that prohibited them from selling to McDonald’s soy grown on newly deforested land.⁶²
- iv. **Orkla** – Orkla is generally seeking to reduce its use of palm oil, in part to de-link its products from tropical deforestation. For products where there are no better alternatives, the company has pledged to source palm oil that involves no rainforest clearance, protection of “high carbon value and high conservation value” forests, and protection of peatland from cultivation for palm oil. The company has set the end of 2017 as the deadline for achieving this commitment.⁶³
- v. **Neste Oil** – Published on April 3, 2013, the company’s No-Deforestation and Responsible Sourcing Guidelines state that it will only purchase biofuel or biofuel feedstock from suppliers that protect HCVs, HCS areas, and peatland. (No specific deadline for meeting this commitment is provided.) In addition, it commits to not making biofuels and bioliquids from materials sourced from areas that were comprised, in or after January 2008, of “forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed.” Further, no biofuels and bioliquids are to be made from land over a hectare in size, which in January 2008 had trees capable of exceeding five meters in height

⁵⁹ Nestlé, Feb. 2013. Nestlé Commitment on Deforestation and Forest Stewardship, http://www.nestle.com/asset-library/documents/library/documents/corporate_social_responsibility/commitment-on-deforestation-2013.pdf.

⁶⁰ Nestlé, Sept. 2013. Nestlé Responsible Sourcing Guideline, http://www.nestle.com/asset-library/documents/library/documents/corporate_social_responsibility/nestle-responsible-sourcing-guidelines.pdf, 4.

⁶¹ Safeway, n.d. “Safeway Responsible Palm Oil Sourcing Guidelines,” <http://csrsite.safeway.com/wp-content/uploads/2012/07/Safeway-Responsible-Palm-Oil-Sourcing-Guidelines.pdf>.

⁶² Rhett Butler, Mar. 11, 2011. “McDonalds Launches New Sourcing Policy for Palm Oil, Paper, Beef to Reduce Global Environmental Impact,” MONGABAY.COM, <http://news.mongabay.com/2011/0310-mcdonalds.html>.

⁶³ Orkla, n.d. “Orkla Policy for Sustainable Palm Oil,” <file:///C:/Users/Akiva/Downloads/Orkla%20Policy%20for%20sustainable%20palm%20oil.pdf>.

and 30% canopy cover, or even trees that might only reach 10% canopy cover under certain conditions.⁶⁴

1. These additional commitments potentially denote that even forests with low carbon stock would have to be conserved.
- vi. **Agropalma Group** – the company has committed to only undertaking new oil palm plantings on land that “[was] not covered by native vegetation, even secondary forests, since November 2005,” does not have any HCVs, and “does not have peat (since 2006) or any kind of soils considered unsuitable to oil palm plantation.”⁶⁵ It is also a signatory of the Palm Oil Innovations Group charter, which entails deforestation-free commitments tied to HCS assessments.

Zero Illegal Deforestation Goals

- a. Multilateral Organizations
 - i. **UN Food and Agriculture Organization** – The FAO has called for ZID globally.⁶⁶
- b. Companies
 - ii. **Unilever** – Unilever has not published a written zero deforestation commitment in so many words, but it has stated that “it is essential that we eliminate deforestation from our supply chain.”⁶⁷ No parameters clarifying this statement have been published. Further, the company’s CEO clarified during New York Climate Week 2014 that when it references ‘deforestation,’ it means ZID.⁶⁸

Zero Deforestation Goals

- a. NGOs
 - i. **Greenpeace** – Greenpeace calls for zero deforestation in Brazil by 2015 and globally by 2020.⁶⁹
- b. Governments

⁶⁴ Neste Oil, Apr. 3, 2013. “No Deforestation and Responsible Sourcing Guidelines,” <http://www.nesteoil.com/default.asp?path=1,41,12079,12082,17611,21954>.

⁶⁵ “Social & Environmental Responsibility,” n.d. AGROPALMA, <http://www.agropalma.com.br/eng/responsabilidade-socioambiental.asp>.

⁶⁶ FAO, Mar. 21, 2013. “FAO Calls for ‘Zero Illegal Deforestation’ Target,” <http://www.fao.org/news/story/en/item/172595/icode/>.

⁶⁷ “Combatting Deforestation,” n.d. UNILEVER. <http://www.unilever.com/sustainable-living-2014/reducing-environmental-impact/greenhouse-gases/combating-deforestation/>.

⁶⁸ Paul Polman, Sept. 22, 2014. Statement by CEO Paul Polman of Unilever at “The Forest and Climate Change: Business, Government, and Indigenous Community Leaders Call for Action,” hosted at the Ford Foundation.

⁶⁹ “Greenpeace Calls for Zero Deforestation Globally by 2020,” Mar. 22, 2012. MONGABAY.COM, http://news.mongabay.com/2012/0322-greenpeace_zero_deforestation.html.

- i. **Acre (state of), Brazil** – the government does not appear to have stated a public commitment, but it has designed strategies to bring deforestation due to the beef industry to zero.⁷⁰
 - ii. **European Union** – in a 2008 communication on deforestation, the EU stated its goal of achieving agreement through the UN Framework Convention on Climate Change negotiations to achieve zero deforestation by 2030 at the latest, and to reduce gross tropical deforestation by at least 50% by 2020.⁷¹
 - iii. **Liberia** – Liberia and Norway announced during New York Climate Week 2014 that Norway would pay Liberia \$150 million to end deforestation by 2020.⁷²
 - iv. **Kamar Dagang dan Industri** – KADIN, Indonesia’s Chamber of Commerce and Industry, announced its support at the New York Climate Summit 2014 for continuing Indonesia’s moratorium on clearing natural forests for plantations and for protecting peatland.⁷³
- c. Multi-stakeholder groups
- i. **New York Declaration on Forests** – the Declaration is a non-legally binding document that commits its signatories to “do[their] part to,” among other things: “At least halve the rate of loss of natural forests globally by 2020 and strive to end natural forest loss by 2030[, and s]upport and help meet the private-sector goal of eliminating deforestation from the production of agricultural commodities such as palm oil, soy, paper and beef products by no later than 2020, recognizing that many companies have even more ambitious targets.”⁷⁴
 - 1. The Declaration is signed by 27 governments, 8 subnational governments, 34 companies, 16 indigenous peoples groups, and 45 NGOs and civil society organizations.⁷⁵
 - ii. **Brazilian Roundtable on Sustainable Livestock** – the group announced its commitment to zero deforestation in a white paper on deforestation in the Amazon. The commitment is, however, “subject to the creation of conditions and forms of economic compensation to make it feasible,” especially given that

⁷⁰ Chris Meyer, Alisha Staags, & Dana Miller, Sept. 29, 2014. “The Road to Zero Deforestation: Lessons from Brazil,” GREENBIZ.COM, <http://www.greenbiz.com/blog/2014/09/29/road-zero-deforestation-lessons-brazil>; Ane Alencar, Daniel Nepstad, Elsa Mendoza, Britaldo Soares Filho, Paulo Moutinho, Marcelo C.C. Stabile, David McGrath, Simone Mazer, Cassio Pereira, Andrea Azevedo, Claudia Stickler, Sonaira Souza, Isabel Castro, & Osvaldo Stella, 2012. Acre State’s Progress Towards Jurisdictional REDD: Research, Analysis, and Recommendations for the State Carbon Incentive Program (ISA-Carbono). Instituto de Pesquisa Ambiental da Amazônia, Brasília, http://www.gcftaskforce.org/documents/acre%27s_progress_towards_jurisdictional_redd.pdf.

⁷¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0645:FIN:EN:PDF>.

⁷² Matt McGrath, Sept. 23, 2014. “Liberia Signs ‘Transformational’ Deal to Stem Deforestation,” BBC, <http://www.bbc.com/news/science-environment-29321143>.

⁷³ Greenpeace, Sept. 23, 2014. “Indonesian Govt Urged to Keep Pace with Palm Oil Commitments,” <http://www.greenpeace.org/seasia/Press-Centre/Press-Releases/Indonesian-Govt-Urged-to-Keep-Pace-with-Palm-Oil-Commitments/>.

⁷⁴ “New York Declaration on Forests,” Sept. 23, 2014, *supra*, n. 2.

⁷⁵ *Id.*

Brazilian law permits landowners in the Amazon biome to deforest up to 20% of their property.⁷⁶

1. The group is made up of companies and industry associations, ranchers and their associations, retailers, input suppliers, banks, civil society organizations, research centers, and universities.⁷⁷
- iii. **Palm Oil Innovation Group** – POIG was founded to “bridge the gap between responsible palm oil producers and the growing list of palm oil consumer companies ... which have made 'No Deforestation' commitments.”⁷⁸ The Group published a charter on November 13, 2013 that lays out the commitments which members must undertake above and beyond RSPO certification. These include refraining from new plantings on HCS areas identified for conservation after March 2014, and from new plantings on peatland (no baseline date is provided).⁷⁹
1. A specific exception is made to the general prohibition on deforestation to allow for “small-scale low intensity subsistence conversion by indigenous peoples and forest dependent traditional communities (consistent with HCV 5).”⁸⁰
 2. The signatories of the POIG charter are Agropalma Brazil, DAABON Group, Forest Peoples Programme, Greenpeace, New Britain Palm Oil Ltd., Rainforest Action Network, and WWF.⁸¹
- iv. **Tropical Forest Alliance 2020** – TFA has not adopted a ‘zero’ commitment, but it has avowed that responsible palm oil companies “[e]xclude primary forest from clearance[, m]aintain or enhance high conservation value (HCV) areas[, m]inimize greenhouse gas emissions from deforestation or clearance of areas with high carbon stocks[, and a]void and protect peat areas and fragile soils...” (bolding removed).⁸²

⁷⁶ Grupo de Trabalho da Pecuária Sustentável, n.d. “Mechanisms for Control and Mitigation of Deforestation in the Brazilian Amazon Biome,” [http://grsbeef.org/Resources/Documents/GTPS_White_Paper_on_mechanisms_for_control_and_mitigation_of_deforestation_in_the_Brazilian_Amazon_Biome_\(Livestock_Cattle\).pdf](http://grsbeef.org/Resources/Documents/GTPS_White_Paper_on_mechanisms_for_control_and_mitigation_of_deforestation_in_the_Brazilian_Amazon_Biome_(Livestock_Cattle).pdf).

⁷⁷ Id.

⁷⁸ “Responsible Palm Oil Initiative Issues Invitation for New Members,” Mar. 10, 2014, <http://www.nbpol.com.pg/wp-content/uploads/downloads/2014/03/JointStatement-POIGInviteNewMembers-03102014.pdf>.

⁷⁹ “Palm Oil Innovations Group Charter,” Nov. 13, 2013. V1.0, <http://www.greenpeace.org/international/Global/international/photos/forests/2013/Indonesia%20Forests/POIG%20Charter%2013%20November%202013.pdf>; “Palm Oil Innovations Group Charter Pilot Indicators,” Apr., 2014, <http://www.greenpeace.org/international/Global/international/photos/forests/2013/Indonesia%20Forests/POIG%20indicators%20April%202014.pdf>.

⁸⁰ “Palm Oil Innovations Group Charter,” Nov. 13, 2013, at fn. 3.

⁸¹ Id. at 5.

⁸² Tropical Forest Alliance 2020, June 2014. “TFA 2020 Action Plan on Palm Oil Development in Africa,” http://www.banktrack.org/manage/ems_files/download/tfa2020_africaoilpalm_bn1_july14_1_pdf.

1. TFA is a broad public-private partnership, comprising the governments of the US, the UK, the Netherlands, Liberia, and Norway; the CGP; and a number of NGOs.

d. Companies

- i. **Asia Pulp & Paper** – APP announced its Forest Conservation Policy in February 2013, which committed the company to immediately end natural forest clearance across its supply chain.⁸³
 1. This apparently commits APP to ZGD within natural forests, but makes no promises that plantations will not be converted to non-forest uses.
 2. TFA has reported that APP now has enough timber plantations to meet 100% of its pulp requirements, with the exception of a minor supply gap in 2020, which can be filled via efficiency increases.⁸⁴
- ii. **Asia Pacific Resources International Limited** – APRIL’s Sustainable Forest Management Policy, announced in January 2014, makes several commitments. First, it places a moratorium on logging in concession areas throughout APRIL’s supply chain where assessments to identify HCV forests have not been completed. Second, APRIL and its Long-Term Supply Partners will finish establishing their plantations by the end of 2014. Third, by the end of 2019, APRIL will source fiber only from plantations.⁸⁵
 1. The third commitment is a partial ZGD commitment the same way that APP’s is, but it grants the company a license to potentially convert even natural forest for 5 more years.
- iii. **SCA** – SCA’s wood sourcing policy includes a “target of zero fresh fiber-based material from controversial sources.”⁸⁶
 1. The meaning of the word “controversial” is ambiguous, but could be interpreted to include some sort of goal around deforestation, particularly in light of SCA’s membership in CGF. Even so, it is unclear whether SCA intends to eradicate all conversion fiber from its supply chain, or whether conversion fiber that is offset by re-growing fiber elsewhere would be acceptable.
- iv. **Wilmar International** – Wilmar’s No Deforestation, No Peat, No Exploitation Policy, released in December 2013, obligates its own operations and all suppliers to abide by “[n]o development on peat regardless of depth,” “[n]o

⁸³ “Forest Conservation Policy,” Asia Pulp & Paper, <http://www.asiapulppaper.com/sustainability/vision-2020/forest-conservation-policy>.

⁸⁴ Will Nichols, Sept. 4, 2014. “Why Asia Pulp and Paper’s Zero Deforestation Policy Looks Like it is Here to Stay,” BUSINESS GREEN. <http://www.businessgreen.com/bg/analysis/2363262/why-asia-pulp-and-papers-zero-deforestation-policy-looks-like-it-is-here-to-stay>.

⁸⁵ Asia Pacific Resources International Limited, Jan. 28, 2014. APRIL’s Sustainable Forest Management Policy, <http://www.aprilasia.com/news/APRIL%20SFM%20POLICY.pdf>.

⁸⁶ “Fiber Sourcing & Biodiversity,” SCA, <http://www.sca.com/en/Sustainability/Nature/sustainability-target-fibre-sourcing-and-biodiversity/>.

development of High Conservation Value areas,” as defined by RSPO,⁸⁷ and “[n]o development on High Carbon Stock forests,” defined as forests that have not been cleared in the past 10 years. It also announces, however, that Wilmar will work to determine whether “young regenerating forests” (i.e. areas that have mostly been cleared within the last 10 years but that have some patches of older forest) may be selectively converted.⁸⁸

- v. **Golden Agri Resources** – GAR’s Forest Conservation Policy, announced in February 2011, seeks “to ensure that its palm oil operations have no deforestation footprint.” Specifically, it commits to “no development on high carbon stock forests,” which it provisionally defines as forests that contain over 35 tons of carbon per hectare, with the possibility that the definition “may change as applicable to the industry, and as a result of [] fieldwork and after consultation with stakeholders.” Further, it commits to “no conversion of High Conservation Value forest areas,” which it does not define, but which likely references the RSPO definition.⁸⁹ On February 28, 2014, the company expanded this policy to include all palm oil that it trades.⁹⁰
- vi. **Cargill** – In July 2014, the company announced a commitment—covering the palm oil it produces, trades, and process—to no deforestation of HCS or HCV areas, and no development on peat, regardless of depth. The commitment was not accompanied by a deadline, containing instead a pledge to publish annual time-bound implementation plans beginning in December 2014.⁹¹ At the New York Climate Summit 2014, Cargill promised to extend its efforts to stem deforestation to other commodity supply chains, but it did not specifically apply its ‘zero’ commitment to other commodities.⁹²
 - 1. Together, Wilmar, GAR, and Cargill comprise over 60% of global palm oil production.⁹³

⁸⁷ Specifically, principles 5.2 and 7.3 of the RSPO Principles and Criteria for the Production of Sustainable Palm Oil 2013.

⁸⁸ Wilmar International, Dec. 5, 2013. “No Deforestation, No Peat, No Exploitation Policy,” <http://www.wilmar-international.com/wp-content/uploads/2012/11/No-Deforestation-No-Peat-No-Exploitation-Policy.pdf>.

⁸⁹ Golden Agri Resources, 2011, *supra*, n. 5.

⁹⁰ Rhet Butler, Mar. 3, 2014. “After GAR Expands Policy, Over 50% of World’s Palm Oil Bound by Zero Deforestation Commitments,” MONGABAY.COM, <http://news.mongabay.com/2014/0303-gar-palm-oil.html>.

⁹¹ Cargill, July, 2014. “Policy on Sustainable Palm Oil,” http://www.cargill.com/wcm/groups/public/@ccom/documents/document/palm_oil_policy_statement.pdf.

⁹² “Cargill Pledges to Protect Forests in All Agricultural Supply Chains,” n.d. CARGILL, <http://www.cargill.com/news/releases/2014/NA31693655.jsp>.

⁹³ “Disrupting the Global Commodity Business: How Strange Bedfellows Are Transforming a Trillion-Dollar Industry to Protect Forests, Benefit Local Communities, and Slow Global Warming,” 2014. CLIMATE AND LAND USE ALLIANCE, http://www.climateandlandusealliance.org/uploads/PDFs/Disrupting_Global_Commodity.pdf?utm_source=Invitee_s+to+CLUA%2FFord+Event&utm_campaign=fb13e45296-Global_Commodities_paper9_18_2014&utm_medium=email&utm_term=0_2b934af9a0-fb13e45296-116123745,

- vii. **Proctor & Gamble** – beyond its implicit support for ZND through its membership in CGF, P&G independently committed (in April 2013) to “zero deforestation” in its palm oil supply chain by 2020.⁹⁴ It is working with the Malaysia Institute for Supply Chain Innovation (MISI) on a field study focused on small farmers, and plans to share any tools and best practices that it develops with other companies by the end of September 2014.⁹⁵
- viii. **L’oréal** – the company has pledged that 100% of its palm oil supply will be free from deforestation by 2020, and that it will “ultimately work with suppliers whose responsible practices can guarantee ... [t]he conservation and restoration of HCV and HCS Areas when expanding palm plantations.”⁹⁶
- ix. **ConAgra** – ConAgra announced that by December 2015, it would only source palm oil that can be traced back to suppliers that are independently verified as not developing on HCS or HCV forests or on peatlands.⁹⁷
 - 1. This commitment came in response to a shareholder proposal filed by Green Century Capital Management, Inc. and the New York State Common Retirement Fund.⁹⁸
- x. **PepsiCo** – PepsiCo has made zero deforestation commitments in the context of palm oil and paper/wood sourcing. The respective policies, both announced on May 16, 2014, each set a “zero deforestation” goal for “company-owned and -operated activities” as well as throughout the company’s supply chain.⁹⁹ Both commitments specify “[n]o further development” of HCS and HCV forests, and “[n]o new conversion” of peatlands. HCS is defined to include any forest development phase characterized as Old Scrub or older, and peat soil is defined as soil that contains more than 65% organic matter.¹⁰⁰ The two commitments differ in that the palm oil commitment sets a target date of 2016 for no further development on HCS and HCV forests and no new conversion of peatlands, and

⁹⁴ “P&G is Committed to No Deforestation in Our Sourcing of Palm Oil, Palm Kernel Oil, and Derivatives,” PROCTOR & GAMBLE, http://www.pg.com/en_US/sustainability/policies_practices/palmoil.shtml.

⁹⁵ “P&G Launches Work with Small Farmers to Ensure No Deforestation in Its Palm Oil Supply Chain,” July 24, 2014. PROCTOR & GAMBLE, <http://news.pg.com/press-release/pg-corporate-announcements/pg-launches-work-small-farmers-ensure-no-deforestation-its->.

⁹⁶ L’oréal, n.d. “Zero Deforestation Commitment,” <http://loreal-dam-front-resources-corp-en-cdn.brainsonic.com/ressources/afile/88306-cd6b3-resource-sharing-beauty-with-all-0-deforestation.html>.

⁹⁷ “Food Giant ConAgra Agrees to Eliminate Suppliers Engaged in Deforestation for Palm Oil,” Aug. 14, 2014. GREEN CENTURY FOODS. http://greencentury.com/food-giant-conagra-agrees-to-eliminate-suppliers-engaged-in-deforestation-for-palm-oil/?utm_source=Green+Century+Media+List&utm_campaign=5a3b0b8e72-RELEASE_ConAgra_Palm&utm_medium=email&utm_term=0_b14306ce79-5a3b0b8e72-99160433.

⁹⁸ Id.

⁹⁹ PepsiCo, May 16, 2014. PepsiCo Palm Oil Commitments, http://www.pepsico.com/Assets/Download/PepsiCo_Palm_Oil_Commitments.pdf; PepsiCo, May 16, 2014. PepsiCo Forest Stewardship Policy, http://www.pepsico.com/Assets/Download/PepsiCo_Forestry_Stewardship_Policy.pdf.

¹⁰⁰ Id.

a target date of 2020 for zero deforestation throughout the supply chain, while the forest stewardship commitment sets no target dates.

1. Despite these new commitments, Greenpeace, the Rainforest Action Network, and the Union of Concerned Scientists have not lifted their campaign against PepsiCo, stating that the company must adopt an implementation plan that includes full traceability of palm oil back to the source, verifiable safeguards for human rights, forests, and peatlands, and a demand for similar commitments from suppliers.¹⁰¹
- xi. **Danone** – The company’s Forest Footprint Policy, released on October 15, 2012, states that it will “[e]liminate deforestation impacts from [its] supply chain by 2020,” and that “[t]his ambition covers all of Danone [sic] products and activities that may have a potentially negative impact on forest management.”¹⁰² With respect to palm oil, a separate policy requires that sourced oil must come from plantations “whose expansion does not threaten” HCV and HCS forests, or peatlands, regardless of depth. It sets no specific deadline beyond the general 2020 target date that applies to all of Danone’s products and activities.¹⁰³
- xii. **Mondelez International** – In June 2014, Mondelez announced that it was taking steps to ensure that the palm oil it sources “does not lead to deforestation.... Specifically, palm oil development should not take place in Primary Forest, High Conservation Value (HCV) areas, [or] High Carbon Stock (HCS) forests....”¹⁰⁴ While an accompanying action plan requires that suppliers be fully able to trace their palm oil to the mill level by 2015, it does not require traceability to the plantation.
- xiii. **Colgate** – Colgate announced in March 2014 that it will require independent verification—without specifying a deadline—that the palm oil it buys “does not come from areas where [HCS and HCV forests] were deforested” or where “[p]eat lands (regardless of depth) were developed into plantations or drained.” However, with respect to pulp & paper the company has only committed to *reducing the risk* that sourced fiber comes from areas marked by conversion, and only where this conversion has been *significant* since December 31, 2010.¹⁰⁵

¹⁰¹ Rhett Butler, May 21, 2014. “PepsiCo Announces Zero Deforestation Commitment for Palm Oil,” MONGABAY.COM, <http://news.mongabay.com/2014/0520-pepsico-palm-oil.html>.

¹⁰² Danone, Oct. 15, 2012. “Forest Footprint Policy,” http://www.danonewaters.com.cn/dev/static/download/danone_forest_footprint_policy_en.pdf.

¹⁰³ Danone, May 23, 2014. “Groupe Danone Palm Oil Policy,” http://www.danonewaters.com.cn/dev/static/download/Palm_Oil_Policy_Danone.pdf.

¹⁰⁴ Mondelez International, June 2014. “Palm Oil and Deforestation,” http://www.mondelezinternational.com/~media/MondelezCorporate/uploads/downloads/Palm_Oil_Statement.pdf.

¹⁰⁵ Colgate, March 2014. “Our Policy on No Deforestation,” <http://www.colgate.com/app/Colgate/US/Corp/LivingOurValues/Sustainability/Deforestation.cvsp>.

- xiv. **Smucker's** – the company's 2014 corporate responsibility report commits (without a deadline) to no development in HCS or HCV forests, or peatland, regardless of depth.¹⁰⁶
- xv. **Delhaize** – Delhaize committed on February 17, 2014 to sourcing 80% of its palm oil from responsibly managed plantations by 2018, and 100% by 2020. Its definition of “responsibly managed” includes preservation of HCS forests and HCV areas, and no development on peatlands regardless of depth.¹⁰⁷
- xvi. **Bertín, JBS, Mafrig, and Minerva** – these four companies—jointly responsible for a third of cattle slaughtered in the Amazon—signed the G4 Cattle Agreement, which designated a timeline within which to source cattle only from ranches that are able to demonstrate zero deforestation.¹⁰⁸
 - 1. Signing of the G4 Cattle Agreement followed local and international NGO campaigns (including one by Greenpeace) in 2009 and a billion-dollar lawsuit brought by a Brazilian federal prosecutor in the state of Pará.¹⁰⁹ Around the same time, Brazil's three largest supermarkets—Walmart, Carrefour, and Pão de Açúcar—announced that they would suspend contracts with suppliers responsible for deforestation in the Amazon.¹¹⁰ Greenpeace alleged in 2012 that despite the G4 Cattle Agreement, JBS continued to purchase cattle from ranches responsible for illegal deforestation and occupation of indigenous lands.¹¹¹
- xvii. **Ferrero** – the company's Palm Oil Charter, released on November 11, 2013, commits to ensuring that its palm oil suppliers maintain HCV areas and do not clear HCS forests or plant on peat soils.¹¹²
 - 1. The way the company phrases its HCV commitment could allow clearing of HCV areas that are not important for protecting endangered species: “We are committed to ensuring that our palm oil suppliers are ...

¹⁰⁶ Smucker's, n.d. 2014 Corporate Responsibility Report, <http://www.jmsmucker.com/smuckers-corporate/smuckers-corporate-responsibility>, 38

¹⁰⁷ Delhaize Group, Feb. 17, 2014. Delhaize Group Responsible Palm Oil Sourcing Policy. http://delhaizegroup.com.dsrv999.belbone.be/Portals/0/2014/PressReleases/1702PalmOil/Delhaize%20Group%20Responsible%20Palm%20Oil%20Sourcing%20Policy_2014.pdf

¹⁰⁸ Carbon Disclosure Project, n.d. “Beef & Leather,” <https://www.cdp.net/en-US/Programmes/Pages/forests-beef.aspx>.

¹⁰⁹ Carbon Disclosure Project, n.d. “Beef & Leather,” <https://www.cdp.net/en-US/Programmes/Pages/forests-beef.aspx>.

¹¹⁰ “Wal-Mart Bans Beef Illegally Produced in the Amazon Rainforest,” June 12, 2009. MONGABAY.COM. http://news.mongabay.com/2009/0612-abras_beef_wal-mart.html. The entire membership of the Brazilian Association of Supermarkets would go on to sign an agreement in 2013 to keep beef associated with Amazonian deforestation out of their stores. “Brazilian Supermarkets Ban Beef Linked to Amazon Deforestation,” Mar. 27, 2013. MONGABAY.COM. <http://news.mongabay.com/2013/0327-brazil-supermarkets-beef.html>.

¹¹¹ Sarah Sharoka, June 6, 2012. “JBS Caught Red Handed Again in Brazil,” GREENPEACE, <http://www.greenpeace.org/international/en/news/Blogs/makingwaves/jbs-caught-red-handed-again-in-brazil/blog/40812/>.

¹¹² Ferrero, Nov. 11, 2013. “Ferrero Palm Oil Charter,” <http://www.ferrero.com/group-news/Ferrero-Palm-Oil-Charter>.

protecting orang-utans and other endangered species by maintaining High Conservation Value areas.”¹¹³

- xviii. **Carrefour** – at the end of 2010, the company set a goal of zero deforestation by 2020, to apply to goods made from wood, paper, and pulp; agricultural commodities that may impact forests; and non-merchandising items such as publications and cash register receipts.¹¹⁴
- xix. **Walmart** – the company has a zero deforestation goal with respect to beef raised in the Amazon rainforest. When initially set in 2009, the commitment applied only to Brazilian stores, but an announcement on October 14, 2010 expanded the commitment of “only sourcing beef that does not contribute to the deforestation of the Amazon rainforest” to all stores across the globe, setting a 2015 deadline.¹¹⁵
- xx. **Johnson & Johnson** – the company published sourcing criteria for palm oil in April 2014, which require growers who supply the company to manage HCV areas per the requirements of the High Conservation Value Network, and refrain from development of HCS forests and of peatland, regardless of depth. The sourcing criteria were effective as of May 1, 2014, and the company committed to completing a mapping and risk assessment of its high volume palm oil supply chains by the end of 2014. It has not specified a deadline for achieving conformance with its criteria.¹¹⁶
- xxi. **Dunkin’ Brands Group** – the company announced on September 16, 2014 its commitment to source palm oil only from suppliers that do not develop HCS forests, HCV areas, or peatland regardless of depth. It set March 1, 2015 as the date by which it will have mapped its international supply chain, after which it will come out with an implementation plan.¹¹⁷
- xxii. **Krispy Kreme Doughnuts** – the company announced on September 17, 2014 that it will require all of its palm oil suppliers to trace their sourcing, by the end of 2016, to plantations that protect forests, including HSC and HCV forests, and peatlands of any depth.¹¹⁸
 - 1. Both the commitments by Dunkin and Krispy Kreme followed campaigns by the Union of Concerned Scientists, Rainforest Action Network, and

¹¹³ Id.

¹¹⁴ Sevda Latapie-Bayro, Apr. 19, 2012. “Carrefour’s Commitment for 2020: Work towards ‘Zero Deforestation,’” <http://csr-academy.org/en/projects/Carrefour-s-Commitment-for-2020--Work-towards--Zero-Deforestation-.php>.

¹¹⁵ “Walmart Unveils Global Sustainable Agriculture Goals,” Oct. 14, 2010. WALMART. <http://news.walmart.com/news-archive/2010/10/14/walmart-unveils-global-sustainable-agriculture-goals>.

¹¹⁶ Johnson & Johnson, April 2014. “Responsible Palm Oil Sourcing Criteria,” <http://www.jnj.com/sites/default/files/pdf/cs/JnJ-Responsible-Palm-Oil-Sourcing-Criteria.pdf>.

¹¹⁷ “Dunkin’ Brands Announces Commitment to 100% Sustainable Palm Oil,” Sept. 16, 2014. DUNKIN’ BRANDS, <http://news.dunkinbrands.com/Press-Releases/DUNKIN-BRANDS-ANNOUNCES-COMMITMENT-TO-100-SUSTAINABLE-PALM-OIL-4cc.aspx>.

¹¹⁸ “Krispy Kreme, Dunkin’ Donuts to Cut Palm Oil Linked to Deforestation,” Sept. 19, 2014. MONGABAY.COM, <http://news.mongabay.com/2014/0919-doughnuts-palm-oil-zero-deforestation.html>.

Forest Heroes, which linked the companies' sourcing practices to social conflict, carbon emissions, and harm to biodiversity.

- xxiii. **Hershey** – Hershey committed on September 24, 2014 to requiring that its suppliers source palm oil from a supply chain that “[d]oes not contribute to deforestation, including protection and conservation of High Conservation Values and High Carbon Stock forests,” and that does not involve new development on peat, regardless of depth. Suppliers will be required to comply in 2016.¹¹⁹
- xxiv. **PZ Cussons** – the company committed on August 18, 2014 to “work[] with [its] suppliers to find palm oil from sources that demonstrably: Do not contribute to deforestation, by which [it] mean[s]: No development of High Carbon Stock (HCS) forest areas[; n]o development of High Conservation Value (HVC) areas[; and] ... [n]o planting on peat soils.” The company aims to map its supply chain and develop an action plan to move toward meeting its commitments by the end of 2014.¹²⁰
- xxv. **Mars** – Mars committed on March 10, 2014 to only sourcing palm oil from companies whose operations involve no development in HCV areas or HCS forests, or on peatland, regardless of depth. It will mandate all suppliers by the end of 2015 to comply with these requirements, or to have plans in place to ensure compliance.¹²¹
- xxvi. **Cérélia** – the company has committed to sourcing only ‘no deforestation’ palm oil by 2018.¹²²
- xxvii. **Reckitt Benckiser** – the company has committed to using only those “natural raw materials” in its products and product packaging that “do not contribute towards the deforestation or degradation of peatlands of any depth, primary forests or High Conservation Value areas.” Where “reasonably practicable,” it expects suppliers to further ensure that sourced materials do not contribute to deforestation or degradation of HCS forests. No date is specified by which full compliance with this policy is expected.¹²³
 - 1. “Primary forest” is defined for purposes of this commitment as being limited to those forests that are typically defined as “mature,” “old growth,” or “virgin.” Thus, HCS forests that do not have the status of “primary forest” need only be protected where reasonably practicable.

¹¹⁹ “Hershey Announces Enhanced Palm Oil Sourcing Policy,” Sept. 24, 2014. HERSHEY,

<http://www.thehersheycompany.com/newsroom/news-release.aspx?id=1970779>.

¹²⁰ PZ Cussons, Aug. 18, 2014. “PZ Palm Oil Promise,”

http://www.pzcussons.com/en_int/sites/en_int/files/PZ%20Palm%20Oil%20Promise.pdf.

¹²¹ “Palm Oil,” MARS, <http://www.mars.com/global/about-mars/mars-pia/our-supply-chain/palm-oil.aspx>.

¹²² “Cérélia Becomes a TFT Palm Oil Member,” Feb. 21, 2014. THE FOREST TRUST, <http://www.tft-forests.org/news/item/?n=19025>.

¹²³ “Standard for the Responsible Sourcing of Natural Raw Materials,” Dec. 2013, <http://www.rb.com/documentdownload.axd?documentresourceid=37781>.

- xxviii. **Vandemoortele** – the company’s palm oil procurement policy requires no clearing of HCS forests or HCV areas, and no planting on peatland, regardless of depth. No date is specified by which to have this policy implemented.¹²⁴
- xxix. **New Britain Palm Oil Ltd.** – NBPOL’s forest policy includes refraining from developing forests identified via HCV and HCS assessments, among other types of assessments.¹²⁵ It is also a founding member of the Palm Oil Innovations Group, and a signatory to its charter.
- xxx. **Daabon Group** – the company is a founding member of the Palm Oil Innovations Group, and a signatory to its charter, which includes a zero deforestation commitment. It has not separately published a deforestation-free commitment.
- xxxi. **Florin** – Florin has committed to being able to trace all palm oil it produces,¹²⁶ and although no publicly available company materials specify a deforestation-free commitment, TFT asserts that it is working with the company to ensure that palm oil producers that supply Florin “are not linked to practices resulting in deforestation, or to peat land destruction for the establishment of palm oil plantations.”¹²⁷
- xxxii. **Marks & Spencer** – the company has committed to working with its beef suppliers to ensure that they do not contribute to deforestation. It has also committed to working with its coffee suppliers to ensure that the coffee it purchases comes only from sources that do not contribute to deforestation. The deadline for implementation of both of these sourcing policies is 2015.¹²⁸
- xxxiii. **Sainsbury’s** – the company’s sustainability policy with respect to land states that “[b]y 2020, our own brand products won’t contribute to global deforestation.” In other words, the commitment does not extend to other products sold in Sainsbury’s stores. It appears that the company intends to achieve this goal by sourcing only certified materials from commodity supply chains associated with deforestation, and it makes no mention of HCS or any other method for ensuring an absence of deforestation.¹²⁹

IV. Organizations Working to Support Commitments

¹²⁴ “Vandemoortele’s Commitment to Traceable, No Deforestation, No Exploitation Palm Oil,” n.d. VANDEMOORTELE, <http://www.vandemoortele.com/en/detail182.htm>.

¹²⁵ “New Britain Palm Oil Ltd’s Forest Policy,” n.d. <http://www.nbpol.com/pg/wp-content/uploads/downloads/2013/07/NBPOL-Forest-Policy.pdf>.

¹²⁶ “Florin AG – Sustainability Commitment,” Mar. 2013, http://florin-ag.ch/img/content/nachhaltigkeit/Florin-Nachhaltigkeit_EN.pdf.

¹²⁷ TFT, July 16, 2012. “Florin and TFT Team Up on Responsible Palm Oil Sourcing,” <http://tft-forests.org/news/item/?n=15633>.

¹²⁸ “Tackling Deforestation,” n.d. MARKS & SPENCER, <http://corporate.marksandspencer.com/plan-a/stories/food-and-drink/tackling-deforestation>.

¹²⁹ “Summary of Sainsbury’s Policies on Water, Land, and Carbon Emissions,” n.d. <http://www.rspo.org/file/acop/sainsburys-supermarket-ltd-j-sainsbury-plc/R-Policies-to-PNC-waterland.pdf>.

A number of actors are working in the background to support the deforestation-free commitments that have been made by companies, governments, and other groups. One type of support is financial. The **US Agency for International Development** launched a three-year multi-million dollar project in 2011—implemented by **The Nature Conservancy**, the **Rainforest Alliance**, and several local NGO partners—to develop ZND zone demonstration projects in Peru, Ecuador, and Colombia that demonstrate how to move toward ZND at scale in the longer term.¹³⁰ Ahead of the UN Climate Summit 2014, **Norway** pledged \$100 million in part to support deforestation-free supply chains.¹³¹ The **United Kingdom** similarly pledged £60 million, to be used in part to support companies that are committed to removing deforestation from their supply chains.¹³² **Germany** is also supporting deforestation-free efforts in Colombia and Peru.¹³³

The second type of support is around the development of the commitments themselves. **Oxfam** has worked with General Mills and Kellogg to develop their deforestation-free commitments as a means to reduce their carbon emissions.¹³⁴ **TFT** has worked with many other companies to develop and implement commitments, using a membership model to engage the private sector. A group of NGOs—made up of **Catapult**, the **Union of Concerned Scientists**, **SumOfUs**, **Greenpeace**, the **Rainforest Action Network**, and the **Philadelphia Zoo**— is working in an advocacy capacity to pressure companies to make commitments, and then working with the companies on the commitments’ precise formulation. The NGOs update each other on progress and occasionally work together on particular projects.¹³⁵

V. Critiques of Deforestation-Free

- a. **ZGD**. Critiques are premised on the fact that ZGD permits no land use planning flexibility—where there is forest, the forest must remain irrespective of anything else. This is problematic for various reasons:
 - i. It may hinder development efforts in some of the countries most in need of it, leading one prominent environmentalist to label ZGD “eco-imperialism.”¹³⁶

¹³⁰ US Agency for International Development (USAID), 2014. Net Zero Deforestation (NZD): Andean Amazon, Semi-Annual Performance Report (FY12 S1), Oct. 1, 2013 – Mar. 31, 2014. Cooperative Agreement No. AID-OAA-A-11-000-39, http://pdf.usaid.gov/pdf_docs/PA00JVF1.pdf.

¹³¹ Hans Brattskar, Sept. 22, 2014. Statement by State Secretary Brattskar of Norway’s Ministry of Foreign Affairs at “The Forest and Climate Change: Business, Government, and Indigenous Community Leaders Call for Action,” hosted at the Ford Foundation.

¹³² “UK Reveals Plan to Tackle Deforestation in Developing Countries,” Sept. 23, 2014. CLICK GREEN, <http://www.clickgreen.org.uk/news/international-news/125080-uk-reveals-plans-to-tackle-deforestation-in-developing-countries.html>.

¹³³ Soendergaard, 2013, *supra*, n. 42; “Peru, Germany, Norway Launch Climate and Forest Partnership,” Sept. 23, 2014, <http://www.un.org/climatechange/summit/2014/09/peru-germany-norway-launch-climate-forest-partnership/>.

¹³⁴ Valerie Volcovici, Aug. 13, 2014. “Kellogg to Set Targets for Suppliers to Cut Carbon Emissions.” YAHOO! FINANCE. <http://finance.yahoo.com/news/kellogg-set-targets-suppliers-cut-110000485.html>.

¹³⁵ Communication with Deborah Lapidés, Outreach Director, Climate Advisers (Oct. 2, 2014).

¹³⁶ Ben Webster, Sept. 4, 2014. “‘Let Poor Countries Cut Down Forests’; Prince’s Green Adviser Says Development is the Only Way Out of Poverty for Millions,” THE TIMES. <http://www.thetimes.co.uk/tto/environment/article4196055.ece>. The “eco-imperialism” label was applied by

Brazil, for example, permits a certain amount of deforestation in recognition of development needs, and did not sign the New York Declaration on Forests for that reason.¹³⁷ The CEO of the Malaysian Palm Oil Council has argued that oil palm development in Malaysia is critical to overcoming poverty and meeting the global food demand.¹³⁸ A related critique is that it would potentially be hypocritical if ZGD were to mean that developing countries would be unable to clear forests to promote economic growth in much the same way that developed countries did in the 19th and 20th Centuries.

1. Some argue that ZGD and development need not be at odds; development could take place on degraded land without jeopardizing intact forest, and the case of Costa Rica demonstrates that development can actually be spurred by explicit forest conservation policies.¹³⁹
- ii. It ignores the rights of indigenous and other forest-dependent people to make autonomous decisions concerning how to use the forest, which might include clearing land for roads, schools, farms, or other socially beneficial purposes.
- iii. It precludes the possibility of “trading” less valuable forest areas for previously converted areas which, if reforested, could provide valuable ecological benefits such as stabilizing riverbanks or serving as biodiversity corridors.¹⁴⁰
- iv. Conversion may be impossible to stop in some cases, such as where local communities in countries with low enforcement capacity determine that they need more agricultural land, or where national governments refuse to stop economic growth tied to development in forests. In such cases, it would be preferable to guide the choice of land to convert toward degraded forests rather than prohibit all conversion and risk outright non-compliance and conversion of more valuable forests.

b. **ZND.** Critiques can be divided into substantive and procedural challenges:

- i. **Substantive** – Three critiques fall under the umbrella principle that the environmental value of new forests is not equivalent to that of standing natural forests:
 1. ZND permits, in principle, net positive carbon emissions, at least in the near and medium term. If an area of natural forest is cleared and its

Jonathan Porritt, who formerly chaired Britain’s Green Party, currently advises the Prince of Wales on environmental issues, and heads the HCS study that frames itself as an alternative to the GAR/Greenpeace/TFT approach. Id.

¹³⁷ Simon Romero, Oct. 3, 2014. “Clashing Visions of Conservation Shake Brazil’s Presidential Vote,” NEW YORK TIMES, http://www.nytimes.com/2014/10/04/world/americas/brazil-rainforest-amazon-conservation-election-rousseff-silva.html?_r=0.

¹³⁸ Yusof Basiron, Mar. 18 2014. “No Deforestation – An Ethically Irresponsible and Flawed Demand by ENGOs,” CEOPALMOIL.COM, <http://www.ceopalmoil.com/2014/03/no-deforestation-an-ethically-irresponsible-and-flawed-demand-by-engos/>.

¹³⁹ Juniper, 2014, *supra*, n. 23.

¹⁴⁰ See, Barry, n.d., *supra*, n. 10, at 8 (arguing that a no deforestation approach “can limit the opportunity for well-managed trade-offs in land use to make sure the highest value landscapes continue to be protected”).

carbon stock is emitted, an equivalent area of new forest will take time to sequester the full amount of carbon that was lost.¹⁴¹ The relatively long residence time of CO₂ in the atmosphere (~100 years) means that in the interim, global warming effects will be exacerbated.

2. ZND can result in biodiversity loss even if new forests compensate in area for converted forests that serve as habitat for rare species because the new forests may not support the same species of plants and/or animals. This may be due to the fact that the new forests provide unsuitable habitat, or because the rare species are not mobile enough to safely reach them.
 - a. These first two critiques could potentially be addressed by quantifying the degree to which the compensatory forest is worse than the converted forest, and requiring additional compensating forest area until the values balance out. For example, if a converted forest has an environmental value of 10 and the forest area which would compensate for the conversion has an environmental value of 2, five times the area of the converted forest would be needed in compensation. (This assumes, of course, that all environmental values can be satisfactorily quantified.)
3. ZND is insufficient to protect local hydrological services, which require forests in specific locations to trap sediment, provide shade, and perform other locally important functions. Shifting the locations of forests can also impact weather patterns, for example, by altering the amount of solar radiation received by different areas.
 - ii. Procedural – ZND is too fuzzy a target for companies to aim for effectively.¹⁴² It would allow companies to source commodities from converted forestland so long as a compensatory area of new forest is created elsewhere. But it would be difficult for a company to know for certain whether such new forests are really being created, and whether they are compensating for the forest conversion caused by the company rather than that caused by other forces. Companies could even fall back on “accounting tricks” if they were to run a shortfall in compensatory forest area during a particular year.¹⁴³ As one observer commented, “[g]enerally, the larger the geographic region to which the [ZND] concept is applied, the more suspect it is, as exploitative practices can be more easily masked by unrelated []afforestation[...] activities within the same region.”¹⁴⁴

¹⁴¹ Sandra Brown & Daniel Zarin, 2013. What Does Zero Deforestation Mean? *Science* vol. 342, 805-806.

¹⁴² *Id.*

¹⁴³ David Fogarty, n.d. “Zero’ Deforestation Targets Misleading, Say Experts,” FORESTSCLIMATECHANGE.ORG, <http://www.forestsclimatechange.org/news/zero-deforestation-targets-misleading-say-experts/#comment-457>.

¹⁴⁴ Wiskind, Sept 25, 2014, *supra*, n. 32.

- Brown & Zarin (2013) argue that actors should set separate targets for reducing gross deforestation and for reforestation.¹⁴⁵ WWF acknowledges that ZND should not be a corporate goal with respect to supply chains, arguing that deforestation-free is a better type of goal.¹⁴⁶ USAID's effort to demonstrate the potential for reaching ZND targets at the country level¹⁴⁷ reinforces the notion that ZND might be most appropriate as a national target to drive forest policy, while ZGD might be more suitable as a corporate goal.

c. Deforestation-free commitments, generally

- i. Deforestation-free commitments may shift patterns of conversion without actually putting a stop to deforestation:
 - 1. Suppliers may try to achieve their commitments and those imposed on them by downstream buyers in part by selling land that is prime for conversion to other actors without such commitments.¹⁴⁸ If this possibility is realized, deforestation-free commitments would do little to slow the rate of forest loss.
 - 2. Most companies with commitments to date are Western. Unless companies in China, Russia, and other emerging markets join the deforestation-free movement, sales of problem commodities may simply shift to those markets. For example, Russia recently embargoed Western beef and increased its demand for Brazilian beef by 10% without requiring that beef to be deforestation-free.¹⁴⁹
 - 3. Deforestation-free commitments to date have generally focused on individual commodities rather than on jurisdictions. This risks bringing about a mere shift in the particular commodities that drive deforestation without actually reducing deforestation overall. Beyond the benefit of applying to all deforestation drivers, a jurisdictional approach to deforestation-free certifications would allow auditors to track a single geography rather than numerous producers.¹⁵⁰
- ii. Un- (or tangentially-) related issues, such as land tenure, may prevent effective transition toward zero deforestation. For example, moving from deforestation-based cattle ranching to sound pasture management in Brazil requires an

¹⁴⁵ Brown & Zarin, 2013, *supra* n. 131.

¹⁴⁶ Conversation with Rod Taylor and Kerry Cesareo, World Wildlife Fund (June 19, 2014).

¹⁴⁷ USAID, 2014, *supra* n. 21.

¹⁴⁸ One observer has asserted that Wilmar sold its subsidiary PT Asiatic Persada in order to maintain its green image. Peter Gerhardt, May 19, 2014. "Don't Be Fooled by 'Zero Deforestation' Promises," *ECOLOGIST*, http://www.theecologist.org/News/news_analysis/2397878/dont_be_foiled_by_zero_deforestation_promises.html.

¹⁴⁹ Alex Kirby, Oct. 12, 2014. "Croppers Pose New Threat to Amazon Rainforest," *CLIMATE NEWS NETWORK*, <http://www.climatenewsnetwork.net/2014/10/croppers-pose-new-threat-to-amazon-rainforest/>.

¹⁵⁰ Rhett A. Butler, Oct. 9, 2014. "Brazil Unlikely to Sustain Gains in Reducing Deforestation Without New Incentives for Ranchers, Says Study," *MONGABAY.COM*, <http://news.mongabay.com/2014/1008-cattle-ranching-amazon-challenges.html>.

upfront investment that many ranchers cannot afford without assistance. But it can take years for them to receive title to their land, without which banks will not extend the credit they need to move away from deforestation.¹⁵¹

- iii. Large plantation and ranch owners may be more capable of meeting deforestation-free demands than smallholders. This could lead to smallholders being removed from international supply chains and denied important market access.
- iv. Deforestation-free commitments are top-down strategies for reducing deforestation that do not inherently include local people in decision-making processes, or account for their needs and wants.¹⁵² For example, the Forest Peoples Programme has pointed out that the HCS approach may deny local communities use of lands to which they claim use rights, and that it directs development to recently cleared areas which may be most important for local livelihoods.¹⁵³ Beyond the moral issues with this type of patronizing approach, the literature on free, prior, and informed consent (FPIC) suggests that the absence of local consultation can elevate the level of risk associated with development projects.¹⁵⁴
 1. This problem has begun to be addressed. There seem to be no examples of corporate ‘zero’ commitments around deforestation that were made following consultation with communities that would be affected by the policy. However, the developers of both the GAR/Greenpeace/TFT HCS approach and the Sustainable Palm Oil Manifesto HCS approach are seeking to introduce measures to their methodologies that will accommodate community rights and livelihoods.¹⁵⁵ In addition, some companies have included social safeguards in their deforestation-free commitments, either explicitly by requiring FPIC or other procedures, or implicitly by embracing certification standards that do the same (such as RSPO and FSC).
 - a. A potential issue is that if HCS or other methodologies for implementing deforestation-free commitments grant local

¹⁵¹ Id. See also, Shawn Stokes, Marcy Lowe, & Sarah Zoubek, 2014. “Deforestation and the Brazilian Beef Value Chain,” Datu Research, http://www.daturesearch.com/wp-content/uploads/Brazilian-Beef-Final_Optimized.pdf.

¹⁵² Marcus Colchester, 2014. “Palm Oil Company Efforts to Slow Deforestation Not Sustainable,” Forest Peoples Programme E-Newsletter: February 2014, <http://www.forestpeoples.org/sites/fpp/files/publication/2014/02/e-newsletter-feb-2013-colour-englishlowres.pdf>.

¹⁵³ Marcus Colchester, Norman Jiwon, & Emilola Kleden, 2014. “Independent Review of the Social Impacts of Golden Agri Resources’ Forest Conservation Policy in Kapuas Hulu District, West Kalimantan,” Forest Peoples Programme & Transformasi Untuk Keadilan, 16, 44.

¹⁵⁴ See, e.g., Lisa J. Laplante & Suzanne A. Spears, 2008. “Out of the Conflict Zone: The Case for Community Consent Processes in the Extractive Sector,” YALE HUMAN RIGHTS AND DEVELOPMENT JOURNAL, 11:1, Article 6, <http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1070&context=yhrdlj>; Steven Herz, Antonio La Vina, & Jonathan Sohn, 2007. “Development Without Conflict: The Business Case for Community Consent,” WORLD RESOURCES INSTITUTE, http://www.wri.org/sites/default/files/pdf/development_without_conflict_fpic.pdf.

¹⁵⁵ Communication with Marcus Colchester, Senior Policy Advisor, Forest Peoples Programme (Sept. 10, 2014).

communities the right to veto designations of areas where operations are forbidden, this could conflict with the goal of ensuring that no deforestation takes place on land defined as forested.

- b. Additionally, although the companies that have included social safeguards in their commitments have taken an admirable step, implementation remains an issue. An investigation of one of GAR's concessions revealed that a number of communities did not understand HCS and HCV zoning, had not accepted the HCV assessment that had been carried out, were being pressured to give up their land despite their opposition, and were not accorded due process during interactions with the company. These are all violations of RSPO rules to which GAR had subscribed.¹⁵⁶

VI. Relationship between 'Deforestation-Free' and REDD+

Like deforestation-free commitments, REDD+ is an attempt to address the challenge of deforestation. It is thus not surprising that some of the questions that emerge from a consideration of deforestation-free commitments have been the subject of much discussion in the REDD+ context. For example, there is a whole literature on the need for and ways to ensure social safeguards to protect indigenous rights, and over 30 standards for REDD+ and forest carbon initiatives currently exist which contain such safeguards.¹⁵⁷ Actors making deforestation-free commitments might consider adapting these safeguards to be sure that their policies do not adversely impact forest-dependent communities.

There is likewise much debate concerning how to define 'forest' in the context of REDD+. The Marrakech Accords, signed at the 7th Conference of the Parties to the UN Framework Convention on Climate Change in 2001, requires all Parties to select a definition of 'forest,' but permits a range of definitions that vary by minimum area, canopy cover, and tree height.¹⁵⁸ While this flexibility accounts for physical differences and varying cultural understandings in terms of what constitutes a forest in different regions, it has resulted in a situation where the estimates of emissions from deforestation and forest degradation vary significantly depending on how 'forest' is defined. For example, total deforestation in Indonesia between 2000-2009 was calculated to be 27% higher when using the national definition than when using the FAO definition.¹⁵⁹ This sort of confusion would be best avoided in the

¹⁵⁶ Colchester, La Vina, & Sohn, 2007, *supra* n. 82, at 18-19.

¹⁵⁷ See Stephanie Roe, Charlotte Streck, Luke Pritchard, & John Costenbader, May 2013. "Safeguards in REDD+ and Forest Carbon Standards: A Review of Social, Environmental and Procedural Concepts and Applications," CLIMATE FOCUS, <http://www.climatefocus.com/documents/files/safeguards.pdf>.

¹⁵⁸ UNFCCC, 2001. "Land Use, Land-Use Change and Forestry," Decision 11/CP.7, <http://unfccc.int/resource/docs/cop7/13a01.pdf#page=54>.

¹⁵⁹ Romjin, et al., 2013, *supra* n. 12.

‘deforestation-free’ context, where stakeholders need clarity on whether particular areas are or are not available for conversion.

Unfortunately, discussions in the context of REDD+ cannot inform all issues that require attention in clarifying ‘deforestation-free’ commitments because while the commitments attempt to eradicate deforestation, REDD+ aims only for a reduction. For example, the REDD+ discourse has defined ‘baseline’ to mean the rate of deforestation or forest degradation that is expected to occur in a particular geographic area absent a REDD+ project.¹⁶⁰ While such baselines are critical for determining whether a REDD+ project has a real forest protection impact, and thus how many avoided deforestation credits it is worth, this discussion is irrelevant in the deforestation-free context which permits no deforestation at all. Actors that make a ‘zero’ commitment instead simply need to specify the date after which any amount of deforestation represents a violation of the commitment. Some commitments specify such a date while others do not.

The question of how to monitor and verify REDD+ projects has been closely scrutinized, and may be useful when considering how to monitor and verify deforestation-free commitments. The focus in the REDD+ context is on estimating anthropogenic carbon emissions from deforestation and degradation, which would allow a comparison of actual emissions with the baseline projected emissions. Some of the mechanisms for estimating forest carbon toward this end could potentially be used in distinguishing those forests that may be converted versus those that are too carbon-rich under an HCS approach.

Beyond the possibility that definitions and mechanisms developed in the REDD+ context could be usefully applied to deforestation-free commitments, there is a question about whether the recent focus on deforestation-free may detract from REDD+. Governmental and public attention may turn away from REDD+ in favor of a new set of buzzwords, and funders may see an opportunity to shift resources toward a ‘solution’ to deforestation that carries less baggage and the possibility of quicker payoffs. It remains to be seen whether the attention and funding that are available for anti-deforestation initiatives will grow to encompass deforestation-free efforts, or whether they will remain fixed in amount and merely be diverted away from REDD+.

VII. Forest Certification as Evidence of No Deforestation

Various certification standards contain requirements that restrict the potential for deforestation. For example, the Round Table on Responsible Soy’s standards for soy production designate a baseline of May 2009, after which soy cultivation cannot lead to clearing of native habitat

¹⁶⁰ Avoided Deforestation Partners, Apr. 2009. “Estimation of the Baseline Rate of Unplanned Deforestation,” Version 1.0, http://www.v-c-s.org/sites/v-c-s.org/files/10_BL-UR_Baseline_rate_unplanned_deforestation.pdf.

unless certain conditions are met.¹⁶¹ This report does not explore all types of certification standards; rather it focuses on standards for certifying timber products as sustainable.

All of the major forest certification standards speak to the issue of timber that is harvested from tracts which are being converted to other vegetation types or land uses. The question, then, is whether certification to one of these standards can serve as proof that deforestation has not occurred. As discussed above in the section on critiques, verifying that a company has met a ZND target is complicated; comments from Scientific Certification Systems (SCS), a global third-party auditing firm, go as far as asserting that existing forest certification schemes “cannot in themselves say anything about ZND.”¹⁶² The question is therefore narrowed in the following discussion to whether certification can evidence attainment of ZGD.

a. Forest Stewardship Council (FSC)

Forest Management certification. According to the newest version of the standard (which is not expected to become operational until late 2015), conversion of natural forests to plantations, and natural forests or plantations to any other land use is prohibited, except where the conversion:

- i. “affects a very limited portion” of the area in question;
 1. The FSC-US standard defines this as less than 2% of the certified forest area on the Forest Management Unit over a rolling five-year period. This limit does not include land that is converted for forest management purposes such as roads, landings, or management buildings.¹⁶³
- ii. “will produce clear, substantial, additional, secure long-term conservation benefits” in the area; and
- iii. “does not damage or threaten High Conservation Values, nor any sites or resources necessary to maintain or enhance those High Conservation Values” (original italics removed).¹⁶⁴

This most recent version of the Forest Management standard defines “plantation” as “[a] forest area established by planting or sowing with using either alien or native species, often with one or few species, regular spacing and even ages, and which lacks most of the principal characteristics and key elements of natural forests.”¹⁶⁵ In contrast, the currently operational version of the standard divides plantations into two categories: “conventional” plantations which are subject to the same requirements as natural and semi-natural forests, and “Principle 10 Plantations” which are subject to special considerations. FSC guidance provides that stands are characterized as Principle 10 Plantations where:

¹⁶¹ Round Table on Responsible Soy Association, Sept. 16, 2013. “RTRS Standard for Responsible Soy Production Version 2.0,” <http://www.responsiblesoy.org/documentos/rtrs-standard-for-responsible-soy-production-pdf/>, Principle 4.4.

¹⁶² Communication with Adam Wiskind, Chain of Custody Director, Natural Resources Division, and Brendan Grady, Director of Forest Certification (July 10, 2014).

¹⁶³ FSC-US Forest Management Standard (v1.0), Indicator 6.10.a.

¹⁶⁴ FSC Principles and Criteria for Forest Stewardship (V5-0), Principle 6.9.

¹⁶⁵ Id. at 33.

- i. They are comprised of exotic trees or block plantings of cloned trees;
- ii. They are cultivated on native non-forested ecosystems (e.g., native prairies);
- iii. Harvest cycles are short enough to prevent stands from developing natural understory stages;
- iv. Chemical herbicides are used steadily;
- v. Fertilization is applied frequently;
- vi. Excessive chemical or mechanical site treatments are performed;
- vii. Management practices are used that promote single species on sites normally occupied by multiple-species forests;
- viii. Even-aged silviculture is used for forest types that do not typically grow that way;
- ix. At least minimal trees or undisturbed spots for the benefit of wildlife are not left;
- x. Other extreme measures are taken that subvert the development of natural forest conditions.¹⁶⁶

The definition of a “plantation” to which conversion of natural forests is prohibited is construed very narrowly. In fact, FSC guidance clarifies that “the vast majority of planting projects in the United States,” are considered conventional plantations and thus permissible target end states for conversion.¹⁶⁷ As a result, whether such conversion conflicts with ZGD commitments depends on how these commitments define “plantation.” If the definition is broader than that of the FSC, Forest Management certification would not necessarily indicate an absence of conversion.

Even if ZGD commitments were to adopt the FSC’s definition of “plantation,” Forest Management certification still might not mean that wood is conversion-free. The exceptions to the blanket ban on conversion establish geographic prescriptions, and essentially limit its use to ecological restoration efforts. According to SCS, these conditions are “very difficult to meet,” and in practice, any conversion wood must be classified as FSC Controlled Wood if it comes from forest plantations, or as non-certified if it comes from conversion of natural forest to a non-forest use.¹⁶⁸ However, an argument could be made that conversion of a small part of a stand, which does not impair High Conservation Values, to a land use such as an ecological research facility, nursery, or another land use intended to promote conservation within the same forest area, meets the certification criteria despite causing forest loss.

¹⁶⁶ FSC-US Questions and Answers for Family Forest Owners: Forest Plantations (September 2011), <http://us.fsc.org/download.forest-plantations-sept-2011-update.204.htm>, 2. The most recent standard does not appear to explicitly endorse this understanding of plantations because its Principle 10 is no longer devoted to plantations. There is apparently a new Plantation Assessment Tool that is being developed and will be included in the new Controlled Wood National Risk Assessment Control Measures.

¹⁶⁷ Id. at 1.

¹⁶⁸ Communication with Adam Wiskind, Chain of Custody Director, Natural Resources Division, and Brendan Grady, Director of Forest Certification (July 10, 2014).

Although the narrow definition of “plantation” and the restrictive context in which conversion can occur severely limit the opportunities for allowable conversion, conversion is still technically permitted. Certification to FSC’s Forest Management standard, therefore, does not evidence strict compliance with a ZGD commitment.

Controlled Wood certification. There are two standards against which wood can be certified as Controlled Wood. FSC-STD-30-010 allows conversion under essentially the same conditions as under the Forest Management standard, except that the definition is more relaxed because it permits conversion from forest plantations to non-forest uses.¹⁶⁹ As a result, Controlled Wood certified to this standard could certainly include conversion wood.

The second standard, FSC-STD-40-005, mandates that companies have a policy to make their best effort to avoid sourcing fiber from forests being converted to plantations or non-forest use.¹⁷⁰ For example, fiber that comes from regions with significant deforestation is to be avoided.¹⁷¹ This standard provides no special circumstances in which conversion wood is deemed permissible. While this would seem to suggest that this standard is more stringent with respect to conversion than the Forest Management standard, it is in fact too blunt a tool to verify a lack of conversion in particular stands on the ground. Controlled Wood is a risk-based verification tool that does not require companies to conduct site-level assessments; companies often base their assessments on documentary evidence of risk. As a result, Controlled Wood certification could not be used as proof that such wood did not contribute to gross deforestation.

b. Sustainable Forestry Initiative (SFI)

There is no specific numerical limit regarding conversion.¹⁷² One analysis of the SFI standard suggests that indeed there is no definitive prohibition against conversion.¹⁷³ However, conversion of forest to a non-forested land use appears to be prohibited indirectly by the requirement that certified forests be reforested promptly after final harvest.¹⁷⁴ If conversion to other land uses takes place, manufacturers are permitted to use the roundwood and/or chips produced in order to avoid wasting it, but they cannot include it in their calculations of certified forest content.¹⁷⁵ Thus, any wood that a manufacturer claims as certified can be said not to have come from a forest that was converted to a different land use.

Conversion of a forest to other forest types is permitted, except where:

¹⁶⁹ FSC Controlled Wood Standard for Forest Management Enterprises (V2-0), § 6.

¹⁷⁰ Standard for Company Evaluation of FSC Controlled Wood (V2-1), § 1.1(d).

¹⁷¹ Id. at Appendix 2(B)(4).

¹⁷² Kathryn Fernholz, Jim Bowyer, Sarah Stai, Steve Bratkovich, & Jeff Howe, 2011. Differences between the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) Certification Standards for Forest Management. Dovetail Partners, <http://en.forestinfo.org/files/DovetailFSCSFIComparison32811.pdf>, 9.

¹⁷³ Id.

¹⁷⁴ Requirements for the SFI 2010-2014 Program: Standards, Rules for Label Use, Procedures and Guidance, Indicator 2.1.6.

¹⁷⁵ Id. at Section 13, “conversion sources.” It is worth noting that this term is never actually used in the main text of the SFI standards.

- i. The ecological impacts would be significant;
- ii. There is a significant risk that reforestation could not be accomplished promptly;
- iii. There would be significant adverse impacts to threatened and endangered species;
- iv. There would be significant adverse impacts to Forests with Exceptional Conservation Value (FECVs);
- v. The original forest type is rare and ecologically significant at the landscape level;
- vi. The original forest is old growth;
- vii. There would be significant adverse impacts to Special Sites;
- viii. Conversion is restricted by federal, state, provincial, or local laws or regulations;¹⁷⁶
- ix. The new land use is a short-rotation bioenergy plantation.¹⁷⁷

“Forest” is never defined, so it is unclear whether a plantation is deemed to be a forest. If it is, conversion of natural forest to plantations would be permitted within the narrow conditions laid out above, and certification would not indicate ZGD. If it is not, conversion of natural forest to plantations would be prohibited, but conversion of plantations to other non-forested land uses would be permitted.

Under the current standards, SFI certification would evidence ZGD under two conditions: if the SFI standard does not classify plantations as forests, and if the ZGD commitment also does not count plantations as forests. Under these circumstances, changing natural forest to a plantation would constitute conversion and be prohibited, but changing a plantation to another non-forested land use would not constitute conversion and therefore would not be prohibited. In carrying out joint FSC/SFI audits, SCS has found that the distinction between natural forests and forest plantations that is relevant under the FSC standards does not exist in the SFI standard. According to SCS, “[t]o the extent a ZGD claim defines deforestation as prohibiting conversion from natural forests to forest plantations, the SFI standard does not address this issue,” and would be unable to demonstrate compliance with a ZGD claim.¹⁷⁸

At its annual meeting in September, 2014, SFI presented a preliminary version of its 2015-2019 Standards and Rules. The new rules modify somewhat the existing requirements with respect to conversion from one forest cover type to another, prohibiting it “unless in justified circumstances.” Conversion is prohibited unless it:

- is done in “compliance with relevant national and regional policy and legislation related to land use and forest management;”

¹⁷⁶ Interpretations for the SFI 2010-2014 Program Requirements: Standards, Rules for Label Use, Procedures and Guidance (January 2013), 5.

¹⁷⁷ Id. at 32.

¹⁷⁸ Communication with Adam Wiskind, Chain of Custody Director, Natural Resources Division, and Brendan Grady, Director of Forest Certification (July 10, 2014).

- “would not convert native forest types that are rare and ecologically significant at the landscape level;”
- would not “put any native forest types at risk of becoming rare;”
- and “does not create significant long-term adverse impacts on Forests with Exceptional Conservation Value, old-growth forests, forests critical to threatened and endangered species and Special Sites.”

In addition, actors intending to convert a forest to another cover type must conduct an assessment to consider: “Productivity and stand quality conditions and impacts which may include social and economic values; Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian protection needs and others as appropriate to site including regeneration challenges; and Ecological impacts of the conversion including a review at the site and landscape scale as well as consideration for any appropriate mitigation measures.”¹⁷⁹

c. Programme for the Endorsement of Forestry Certification (PEFC)

Chain of custody standard. Timber or timber products from “controversial sources,” which includes activities that convert forests to other vegetation types,¹⁸⁰ cannot be processed or traded, and are not eligible for chain of custody certification.¹⁸¹ This definition prohibits conversion of natural forest to plantations, but does not speak to whether conversion of plantations to non-forest uses would be permitted. Further, as worded, the definition would technically permit conversion to a non-vegetated state, such as a building or paved surface. It is highly likely that the definition of “controversial sources” was poorly written and in fact was intended to prohibit conversion to other land uses. Regardless, PEFC chain of custody certification could not evidence compliance with a ZGD target if that target were to classify plantations as forests. Further, as with the FSC chain of custody standard, it is too blunt a tool to verify that no conversion wood has entered the supply chain.

VIII. Important Trends

There are a few important trends that are relevant to the dialogue on “Understanding Deforestation-Free.” First, the sheer number of companies, governments, and other organizations that are making such commitments suggest that setting a specific, aggressive deforestation target is emerging as a new norm for actors involved in the forest sector. It may be that commitments were initially made in response to NGO pressure and investor demand that climate change be taken into account in corporate practices (for example, institutional investors filed 150 climate-related resolutions

¹⁷⁹ Sustainable Forestry Initiative, Sept. 2014. “Major Enhancements to the SFI 2015-2019 Standards and Rules,” presented and distributed to participants in the SFI 2014 annual meeting, Montreal, Sept. 16-18, 2014.

¹⁸⁰ Chain of Custody of Forest Based Products – Requirements (PEFC International Standard 2002:2013), Section 3.9.

¹⁸¹ Id. at Section 5.6.

during the 2014 proxy season).¹⁸² But regardless of why they emerged, they appear to be here to stay. They are now being backed by government funding (including from Germany, Norway, the UK, and the US), and they are being pushed by some of the highest political offices (as evidenced by a UN event on deforestation-free commitments during New York Climate Week at which presentations were made by the heads of the UN Environment Programme, the UN Development Programme, and the Convention on Biological Diversity, and senior officials from the governments of Indonesia, Norway, and Peru, and from the UN Food and Agricultural Organization.)

Second, deforestation-free commitments are different in nature than other company policies that might achieve a similar effect—it could be difficult, for example, to convince external stakeholders that a company policy to avoid conversion wood is equivalent to a ‘zero’ commitment in a business climate that emphasizes the term ‘zero’ so heavily. In terms of which particular version of ‘zero’ commitment has the most momentum behind it, the verdict is still out. The economic heft of the CGF (whose member companies have combined sales of over \$3.3 trillion¹⁸³), WWF’s size and reputation, and the support of 67 countries plus the European Commission make a strong case that ZND is the variation with the most backing. However, many of the most recent commitments are ambiguous as to whether they set ‘gross’ or ‘net’ goals.

In terms of the metric by which to determine which forests may be cut and which may not under a deforestation-free commitment, HCS appears to be emerging as the preferred approach. (Forest Trends seems to be developing a zero deforestation certification scheme with the Forest, Farms, and Finance Initiative in Mato Grosso, Brazil, but its verification methodology is not publicly available.)¹⁸⁴ Numerous companies have incorporated the concept of HCS into their commitments, and several environmental NGOs are urging others to follow suit. A group of institutional investors with numerous assets under management has rallied behind the HCS approach as developed by GAR/Greenpeace/TFT, but recent controversy has arisen regarding the methodology used to identify HCS forests.

Another trend is improving monitoring capability. A non-profit organization called Rainforest Connection is installing solar-powered smartphones in Indonesian forests to detect the sounds of chainsaws and notify law enforcement of illegal logging as it happens.¹⁸⁵ Brazil has been using a satellite system called “Deter” (Deforestation in Real Time) that notifies authorities when it detects visible deforestation.¹⁸⁶ The Global Forest Watch web platform democratizes satellite forest imagery, providing high-resolution, close-to-real-time pictures of forest cover across the globe. This enables any individual to learn—and specifically, to visualize spatially—where oil palm plantations and pavement are replacing

¹⁸² “Investors Secure Groundbreaking Corporate Commitments to Protect Forests, Reduce Carbon Emissions,” Aug. 14, 2014. CERES. <http://www.ceres.org/press/press-releases/investors-secure-groundbreaking-corporate-commitments-to-protect-forests-reduce-carbon-emissions>.

¹⁸³ “Who We Are,” n.d. CONSUMER GOODS FORUM, <http://www.theconsumergoodsforum.com/about-the-forum>.

¹⁸⁴ “Public-Private Co-Finance Initiative,” n.d. FOREST TRENDS. <http://www.forest-trends.org/program.php?id=323>.

¹⁸⁵ Ryan Grenoble, June 10, 2013. “Rainforest Connection’ Aims to Use Cell Phones to Stop Deforestation,” HUFFINGTON POST, http://www.huffingtonpost.com/2013/06/10/rainforest-connection-cell-phone-deforestation_n_3416288.html.

¹⁸⁶ “Amazon Deforestation ‘Halted’ after Key Arrests,” Sept. 11, 2014. VIEWS TIMES. <http://www.viewstimes.com/technology/amazon-deforestation-halted-after-key-arrests-4277>.

canopy cover. The platform is also testing a beta version that provides users with an analytical tool to “analyze forest loss in your supply chain.”¹⁸⁷ Users can even upload their own shapefiles and do GIS analysis using Global Forest Watch maps. In other words, if a company’s stakeholders—including customers, NGOs, and even concerned individuals—know where it sources fiber, they can determine for themselves, without relying on occasional NGO investigations or journalist reports, whether those areas have experienced forest conversion.

¹⁸⁷ The website is available here: <http://commodities.globalforestwatch.org>.