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# The commodity crunch: value at risk from deforestation

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CDP Global Forests Report 2013

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20 November 2013



Written on behalf of 184 investors with US\$13 trillion in assets

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## The evolution of CDP's forests program

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CDP's forests program was formerly known as the Forest Footprint Disclosure Project (FFD). In June 2012 CDP and the Global Canopy Programme (GCP) announced an alliance to merge GCP's Forest Footprint Disclosure Project with CDP. This strategic merger brings corporate disclosure on the climate, water and forests under one roof, resulting in the world's largest and most comprehensive natural capital disclosure system, and provides companies and investors with a single, integrated source of information for these interrelated issues.

As part of the transition process, CDP began managing FFD's operations in February 2013, and full integration will take place by February 2014. GCP is working closely with CDP throughout the transition year of 2013, and will continue to act as the prime funder of CDP's forests program until 2014, when it will take on a new role as advisor on forests and forest risk commodities to CDP.

To find out more about the Global Canopy Programme and its work visit:

**[www.globalcanopy.org](http://www.globalcanopy.org)**.

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- ▼ **Over 780 companies globally have been asked to report on deforestation risk through CDP this year;**
  - ▼ **139 companies disclose to CDP to enable effective management of five key forest risk commodities;**
  - ▼ **This is a 39% increase in the number of companies using CDP to communicate their management efforts to investors since last year.**
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CDP is a not-for-profit organization. If you would like to support our vital work on deforestation and forest risk commodities through donations or sponsorship opportunities, please email the Head of CDP's forests program, [james.hulse@cdp.net](mailto:james.hulse@cdp.net).



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To read 2013 company responses in full please go to [www.cdp.net/en-US/Results/Pages/responses.aspx](http://www.cdp.net/en-US/Results/Pages/responses.aspx)

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## CEO Foreword



*As countries around the world seek economic growth, strong employment and safe environments, corporations have a unique responsibility to deliver that growth in a way that uses natural resources wisely. The opportunity is enormous and it is the only growth worth having.*

In September this year the Intergovernmental Panel on Climate Change's fifth assessment report (AR5) confirmed that land use change – predominantly tropical deforestation – contributes significantly to global greenhouse gas emissions. Indeed, research suggests it accounts for some 10-15% of global carbon dioxide emissions – equivalent to the entire transport sector.

Governments are beginning to set targets to reduce deforestation, but are so far failing to meet them. The EU aims to halve gross deforestation by 2020 relative to 2008 levels, but a recent European Commission report showed the EU as one of the top importers of goods causing deforestation (double that of Japan and China combined), responsible for nine million hectares of newly deforested land between 1990 and 2008<sup>1</sup>.

Deforestation rates have been decreasing in recent years, but reports over the last year show that deforestation has doubled in Brazil since 2011 and peatland forest fires in Indonesia caused record breaking smogs in Singapore and Malaysia in June this year.

It is, however, not simply deforestation that is the issue, but the much more complex question of sourcing the agricultural commodities that drive it.

Four commodities – paper/pulp, soy, palm oil and beef – cause the majority of the world's deforestation, yet demand for these continues to rise<sup>2</sup>.

The 'horse meat scandal' in the UK revealed the alarming degree to which companies fail to control their own supply chains. An Ernst & Young report<sup>3</sup> found that, of 50 UK companies, only 48% conduct adequate due diligence on their supply chain, while 30% do none.

Investors are starting to act to reduce risks to their portfolios: this year, the Norwegian Government Pension Fund announced it had withdrawn investment from 23 palm oil companies and two timber companies over deforestation concerns.

Companies too are committing to action: the new Tropical Forest Alliance is a public-private partnership between governments, civil society and the Consumer Goods Forum, whose members have set the ambitious goal of no net deforestation by 2020. Industry commitments to source 100% sustainable palm oil include French and German palm oil industries following the Netherlands, Belgium and the UK.

CDP is already seeing the benefits of adding the forests program to our existing work on climate change and water earlier this year after our merger with the Global Canopy Programme's Forest Footprint Disclosure Project (FFD). We rebranded from the Carbon Disclosure Project to CDP to reflect our broader reach. Now covering 79% of natural capital<sup>4</sup>, we are building the world's largest and most comprehensive natural capital disclosure system for companies and investors.

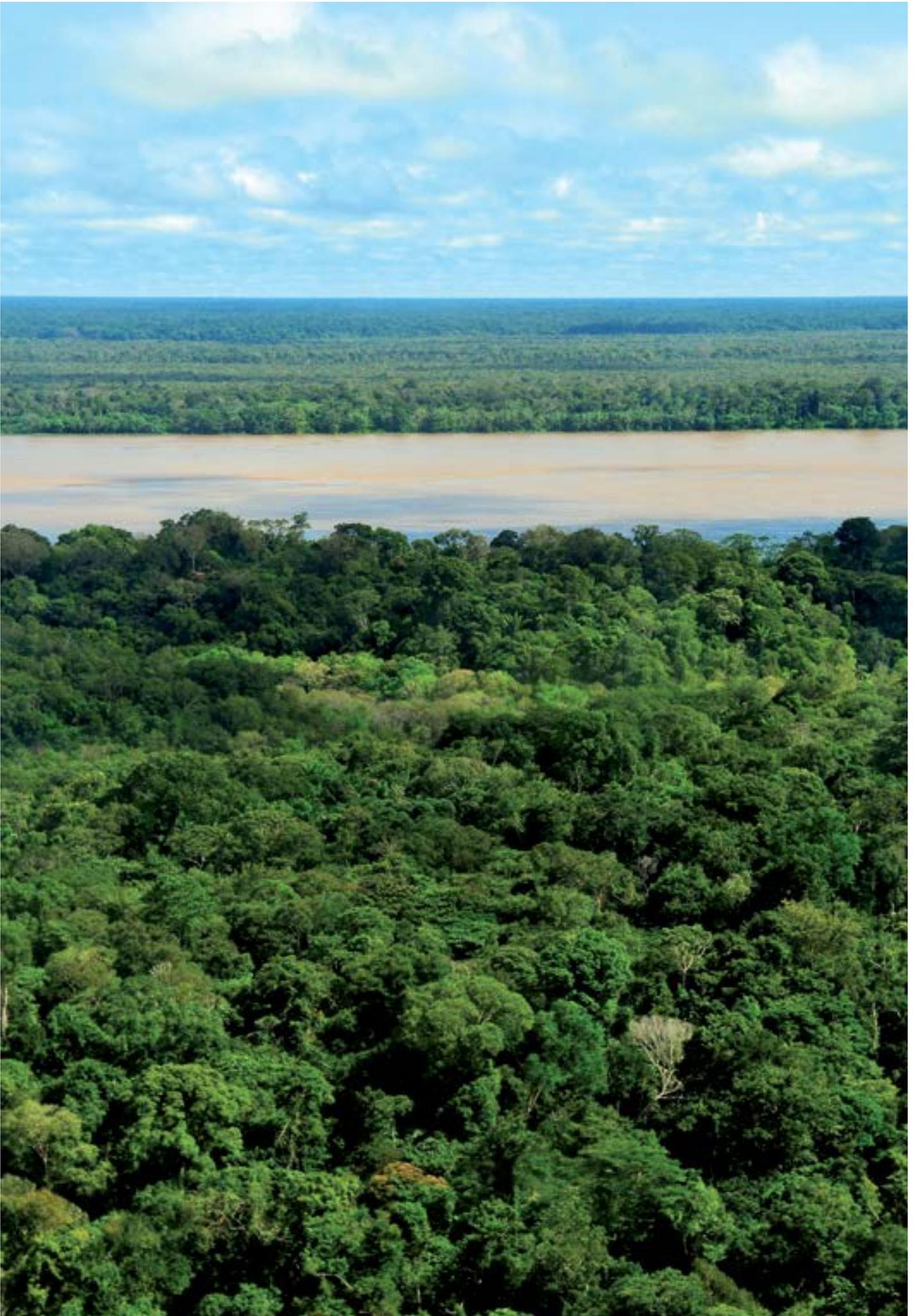
Participation in the forests program has almost quadrupled since its inception in 2009. This year, investor interest has doubled and the number of responding companies has increased by 39%, with their market capitalization exceeding US\$3 trillion. Encouragingly, the quality of disclosure is also improving.

There are, though, significant challenges still to be addressed: not least lack of traceability, challenges with certification and regulatory uncertainty.

Many investors and companies have much to do to understand the risks arising from deforestation and related commodities: not only their contribution to global warming, but the regulatory, reputational and operational risks down the supply chain which have the potential for significant value creation and destruction.

**Paul Simpson**  
CEO CDP

1. [http://ec.europa.eu/environment/forests/impact\\_deforestation.htm](http://ec.europa.eu/environment/forests/impact_deforestation.htm)  
2. <http://www.climateadvisers.com/pdf/Breaking>  
3. <http://www.ey.com/UK/en/Newsroom/News-releases/13-02-15---Less-than-half-of-firms-carry-out-due-diligence-in-their-supply-chain>  
4. Calculation based on findings from: TRUCOST (2013) Natural Capital at Risk: The Top 100 Externalities of Business. [Online]. Available from: [http://www.teeforbusiness.org/js/plugins/filemanager/files/TEEB\\_Final\\_Report\\_v5.pdf](http://www.teeforbusiness.org/js/plugins/filemanager/files/TEEB_Final_Report_v5.pdf)



## Halting deforestation, in a nutshell



*Without real economic incentives, only those businesses facing serious reputational risk have chosen to be in the vanguard of change.*

In July this year the journal Nature reported the discovery of a gene that could help boost the productivity of oil palm plantations by 30%. Aptly named 'SHELL', this gene governs the thickness of the shell of the African oil palm tree, and so the volume of oil contained inside its fruit<sup>1</sup>. Together with its South American cousin, the African oil palm produces some 45% of the world's palm oil. But is this discovery good or bad for forests, much of whose destruction is caused by ever expanding oil palm plantations?

The Malaysian Palm Oil Board believes it will enable growers to increase yields, reducing the need to clear forest for new plantations. An alternative view is that with greater financial yields, investment will increase and the industry will eat up even more forested land.

The same conundrum bedevils the Latin American cattle and soy industries, where productivity improvements are hailed as a panacea for halting deforestation. With production of such 'forest risk commodities' being the most important direct driver of tropical deforestation, the final outcome will spell delight or doom for forests in the coming decades.

Who picks up the tab for transitioning to more sustainable production is the slippery eel of the deforestation debate. For buyers, sourcing sustainably produced commodities usually increases costs. Without real economic incentives, only those businesses facing serious reputational risk have chosen to be in the vanguard of change. Such leadership is to be applauded, but the vast majority of buyers won't get a visit from Greenpeace and will remain outside certification schemes. So what can be done to improve the business case for change?

The big hope, of course, was REDD+ (Reducing Emissions from Deforestation and Degradation), the

proposed international mechanism to pay countries to reduce deforestation. Although they have a history of stalling, REDD+ negotiations this year have progressed relatively well, paving the way for real progress at the next climate conference in Warsaw in November.

REDD+ methodology is probably more advanced than any other stream of the climate talks and appetite among governments to make it happen remains high. And no fossil fuel carbon capture project can match the array of global climate, biodiversity, economic, health and livelihood benefits of not burning old trees, and planting new ones.

What evidence do we have that big incentives could still emerge to reduce deforestation? On July 25th President Obama launched his National Climate Action Plan, specifically referencing REDD+. California's AB32 Global Warming Solutions Act this year moved towards allowing for 2-4% of offsets to be achieved through REDD+, paving the way for the first REDD+ compliance market. (Naysayers, please note that 92% of a California regulated entity's emissions must still be reduced at source). In September the World Bank's Carbon Fund announced a deal with the Costa Rican Government to pay US\$63 million for its forest carbon credits.

To me, most satisfying of all is the news that Chief Almir Surui, after years of difficult negotiations, as well as death threats, has concluded a deal with Brazilian cosmetics giant Natura, in which Natura has purchased 120,000 tons of carbon offsets from the Paiter-Surui Amerindian nation, for the first time providing significant recognition of the ecosystem services their rainforests provide to us all<sup>2</sup>. Funds raised will be used to support the community's 50 year 'Life Plan'.

None of these, however, come close to the US\$17-33

billion estimated in the 2008 Eliasch Review for the annual cost of just halving deforestation emissions by 2030. To achieve this scale, governments need to get real about demand. Big investors want billion dollar opportunities, not small projects with high transaction costs. To achieve this, a massive incentive rock in the investor pond is needed that changes the game significantly, and is not based solely on the elusive carbon market.

I see two things that could make this difference at scale. First, differentiated import taxes to favour 'good' forest risk commodities over 'bad' ones, based on legality and ideally sustainability criteria. Our research shows that such measures need not fall foul of WTO rules<sup>3</sup>. They could create significant incentives for producers by creating market pull for certified sustainable palm oil in major markets such as India, China and the EU.

Secondly, an interim funding mechanism to stimulate demand for REDD+ emissions reductions at the billion dollar scale ahead of 2020, while governments continue to thrash out the full details of a climate agreement and REDD+. A public / private partnership

could create an advanced market commitment to, for example, buy emissions reductions, deliver a floor price, or even provide risk mitigation products for forest and land use based emissions reductions. These kinds of incentives are precisely what many investors have been calling for.

With such mechanisms in place, the business of halting deforestation, transitioning forest risk commodity supply chains towards sustainable production, and safeguarding human livelihoods could, just could, get underway fast enough to keep us below 2 degrees.



**Andrew W. Mitchell**

Director, Global Canopy Programme  
 Founder, Forest Footprint Disclosure Project  
 Global Canopy Programme is the advisor on forests and forest risk commodities to CDP.



Chief Almir Narayamoga Surui

1 [www.nature.com/nature/journal/vaop/ncurrent/full/nature12356.html](http://www.nature.com/nature/journal/vaop/ncurrent/full/nature12356.html)  
 2 [http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page\\_id=9932](http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=9932)  
 3 <http://www.globalcanopy.org/materials/drivers-deforestation-and-wto-rules-conflicts-and-solutions>

## Executive Summary

CDP's forests program acts on behalf of investors to collect information from companies on the operational, reputational and regulatory risks and opportunities, and the value creation and erosion, resulting from their exposure to deforestation, which accounts for 10-15% of global CO<sub>2</sub> emissions – equivalent to the entire transport sector.

Global demand for agricultural commodities is the primary driver of deforestation, as timber is extracted and land is cleared to produce beef, soy, palm oil and biofuels. These 'forest risk commodities' are the building blocks of millions of products traded globally and feature in the supply chains of countless companies. International pressure is mounting to stop deforestation and enlightened governments now see retaining forests as a value resource, which secures the livelihood of millions of people, whilst guaranteeing a stable climate and diverse natural resources for future generations. The loss of natural capital due to land use by the primary production and primary processing sectors is estimated to be costing the global economy US\$1.8 trillion annually<sup>1</sup>. Companies dependent on forest risk commodities, and their shareholders, are at risk from losing the value that access to artificially low-cost resources from the use of recently deforested land brings.

and some high quality first submissions to the program this year, a number of themes have emerged across the responses which are of concern to investors. These include incomplete risk assessments, poor articulation of security of supply and price volatility as operational risks in securing these commodities, a lack of action to build capacity along their supply chains to deliver sustainable commodities and a lack of understanding of climate change risk.

*Smithfield Foods is currently in the process of researching and utilizing resources such as the CDP [forests program] information request to formulate and implement a more specific program related to sustainable supply chain commodity purchases.*

**Smithfield Foods**

*[For] cattle products, the main challenge is to increase the productivity of pastures... to remove the pressure for the opening of new areas by deforestation. The same concept is applicable... to the other commodities...the main challenge will be to feed a world with a growing population and higher purchasing power.*

**Marfrig Alimentos**

The CDP 2013 forests information request was sent to 786 companies on behalf of 184 investors with US\$13 trillion in assets. 139 companies with market capitalization in excess of US\$3 trillion answered this request, spanning a range of industry sectors and 26 different countries. Participation in the program increased by 39% compared to 2012, and has almost quadrupled since the program began in 2009. Companies who disclosed in 2012 improved their score by an average of 27% in 2013 and since 2009, company responses have contained a greater level of detail each year, showing a better understanding of risks and opportunities and implementing more actions to reduce their potential contribution to deforestation.

Although there are some encouraging performance improvements being demonstrated by previous disclosers

The 2013 forests program responses elicited a number of key challenges facing companies across sectors when trying to source sustainable commodities:

- Lack of traceability in global commodity supply chains**  
 Difficulties in tracing back raw materials to a specific source and the complexity and lack of transparency in supply chains are major barriers across most of the sectors and commodities. Companies are asking for help in formulating steps to improve performance and sourcing guidelines as well as developing appropriate key performance indicators for work with supply chains.
- Challenges with certification**  
 Companies point to a need for the demand for certified commodities to reach a 'tipping point' in order to increase quantities and reduce price. Those in the agricultural sector look to larger companies and publicly made commitments for 2015 and 2020 by manufacturers and retailers to steer the trajectory of the market from niche to mainstream. The issue of who pays for certification is still a contentious one.
- Regulatory uncertainty**  
 Legal uncertainty and lack of government action are cited as barriers to the supply of certified commodities, as well as a lack of global agreement on post Kyoto measures for protecting forests, including financial compensation mechanisms.

From these challenges, three key messages emerge for investors and companies to maximize value and minimize business risks:

<sup>1</sup> Calculation based on findings from: TRUCOST (2013) Natural Capital at Risk: The Top 100 Externalities of Business. [Online]. Available from: [http://www.teebforbusiness.org/js/plugins/filemanager/files/TEEB\\_Final\\_Report\\_v5.pdf](http://www.teebforbusiness.org/js/plugins/filemanager/files/TEEB_Final_Report_v5.pdf)

# Key Messages

## 1

Despite growing investor interest and company participation, a number of challenges exist that are slowing the progress of 'deforestation-free' commodities: certification, traceability, cost and regulatory uncertainty.

## 2

Risks associated with deforestation and related climate change are not well articulated beyond the producing companies; nor, surprisingly, are reputational and operational risks, especially given the recent European 'horse meat scandal'.

## 3

There is a big gap between sector leaders and other disclosers; some companies are taking meaningful action to build traceable and sustainable supply chains, but slow uptake by producers and processors is hampering progress.

## Corporate Perspective



*Combating deforestation through sustainably grown crops is one of the most significant ways we can help prevent climate change and biodiversity loss.*

Unilever, along with much of the consumer goods sector, relies heavily on agricultural raw materials such as palm oil, paper and pulp and soy. But unsustainable cultivation of these crops is exacerbating the destruction of remaining tropical rainforests. According to research, deforestation causes 15% of the world's greenhouse gas emissions and thus makes a significant contribution to global climate change, which has huge risks for our business – from the impact of droughts and flooding on our agricultural supply chains to the way water scarcity affects our consumers.

Combating deforestation through sustainably grown crops is one of the most significant ways we can help prevent climate change and biodiversity loss, while also providing benefits for farmers and our consumers.

In the Unilever Sustainable Living Plan, we have targets in place to source 100% of our agricultural raw materials sustainably by 2020, with a strong focus on protecting biodiversity. And Unilever is a key supporter of the goal to achieve zero net deforestation, a commitment we share with the Consumer Goods Forum, which represents over 400 retailers and manufacturers across 70 countries with combined sales of €2.5 trillion.

We believe that to transform any industry involved in cultivation, it is essential to know who the key players are and to understand what role they play in sustainability. This includes all stakeholders in the supply chain (both up and downstream) and the role of both the informal sector and smallholder producers. Focusing on the entire chain will help ensure the reach of sustainable practices becomes relevant to all.

Take our work to sustainably source palm oil. We have set ourselves the target to source all our palm oil from certified, traceable sources for use in all of our products by 2020,

a hugely complex task because of the large volume Unilever purchases and because of the complexity of the supply chain. We also know that if only Unilever sources sustainable palm oil, but the industry does not transform, we will be secure but the problem of deforestation will remain.

This is why Unilever is committed to continued leadership in the transformation of the palm oil sector. We were a founder member of the RSPO and co-chair the Consumer Goods Forum Steering Group on Sustainability and have led the process which resulted in the creation of the Tropical Forest Alliance 2020, a collaboration involving governments, with the goal to eliminate tropical deforestation.

Another focus area is ensuring that small-scale farmers and forest dwellers benefit from forest development – and that the benefits are tangible and measurable. Unilever believes that the best way to engage smallholders is to bring them into the supply chain, as this improves their livelihoods and gives them the incentive to better their practices. We incorporate this philosophy in the Unilever Sustainable Living Plan. We also believe that it is critical to address the protection of the human rights and land rights of indigenous communities within any forest management strategy.

Unilever firmly believes that the only way we can lead the transformation of the industry, stop deforestation and deliver a positive social impact for people and local communities is through constructive dialogue and close co-operation between suppliers, the RSPO, NGOs and other key industry stakeholders.

**Gail Klintworth**  
Chief Sustainability Officer, Unilever

## Seeing the wood for the trees: investor action on deforestation



*While the Government Pension Fund of Norway is leading the way, many investors are becoming more active in their engagement.*

Deforestation continues to raise its profile among investors, with the number of signatories to CDP's forests program more than doubling from 77 in 2012, to 184, with US\$13 trillion in assets, in 2013. Investor focus remains on timber products and palm oil, due to their high profile and recognized certification schemes, though the European 'horse meat scandal' this year alerted many investors to the complexity of commodity supply chains and the risks of fraud and reputational damage.

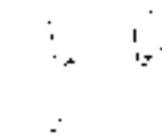
Action by investors is increasing too. The Government Pension Fund of Norway led the way by introducing a deforestation policy last year. Their policy states that 'when assessing companies that are exposed to risks related to tropical deforestation, [we consider] the following questions:

- Does the company disclose information on its tropical forest footprint, how it monitors its impact on tropical forests over time, and its assessment of whether it poses a risk to its business operations?
- Has the company, or its suppliers, committed to achieve compliance with international standards for sustainable production of agricultural commodities, or sustainable forest management?
- Does the company report on the implementation of its commitments to reduce tropical deforestation?'

It is clear that disclosure to CDP's forests program can assist companies in meeting these expectations. The consequences of not doing so are equally clear: this year, the Fund announced it had divested from 23 palm oil companies 'because their long-term business model was deemed unsustainable'.

While the Government Pension Fund of Norway is leading the way, many investors are becoming more active in their engagement. In the US, nine shareholder resolutions were filed this year on palm oil against companies such as Starbucks and Estée Lauder. Six of these resolutions were successful in getting the companies to address the request, usually to implement a sustainable palm oil sourcing policy. Thomas P. DiNapoli, Comptroller for the State of New York, commented that 'shareholder value is enhanced when companies take steps to address the risks associated with environmental practices that promote climate change.'

Deforestation is not just a risk to companies and shareholder value, it is also a risk to investor reputations. For several years we have seen criticism of HSBC's financing of companies in South East Asia who are associated with deforestation, while a new report was recently released by the World Development Movement which highlighted not just the companies involved in mining in Borneo which has caused rainforest destruction, but also the banks which have financed them. This increasing focus by NGOs on the ultimate source of finance to companies should cause all investors to look hard at their investment policies and portfolios.



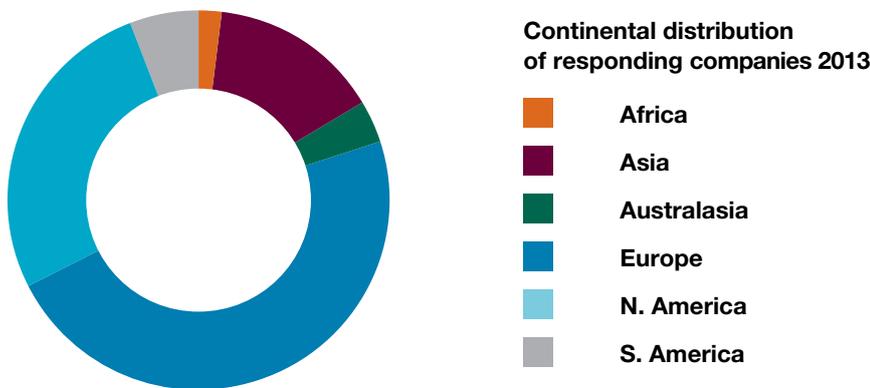
**James Hulse**  
Head of Investor Initiatives, CDP

## Key Findings

### 2013 Overview

139 companies, with market capitalization in excess of US\$3 trillion, responded to CDP’s request for information on management of deforestation risk in their operations and supply chains, an increase of 39% from last year. The majority of responding companies are consumer-facing (60%) with business-to-business and producer companies making up a smaller proportion of the responses (31% and 9% respectively). Responses came from companies registered in 26 different countries, with a twelve-fold increase in the number of Japanese companies disclosing and our first Indian-based discloser.

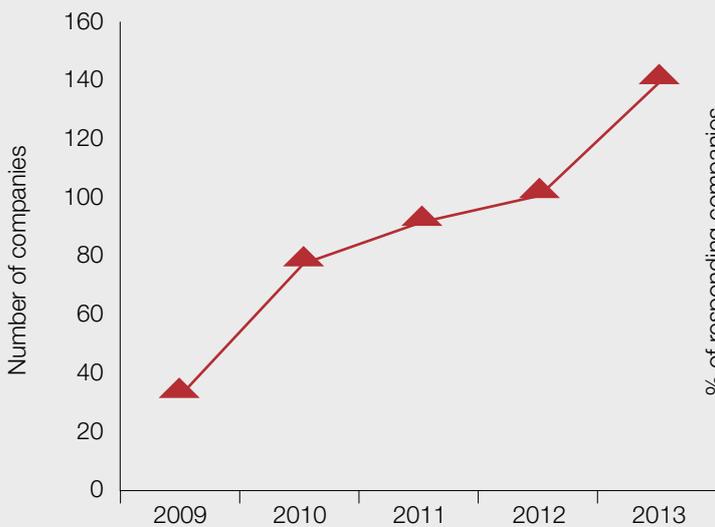
While we are pleased to have received 52 new disclosers to the program this year, it is also encouraging to see that many of our previous disclosers have improved their performance score compared to last year. Companies who disclosed in 2012 improved their score by an average of 27% in 2013, showing better understanding of risks and opportunities and implementing more actions to reduce their potential contribution to deforestation.



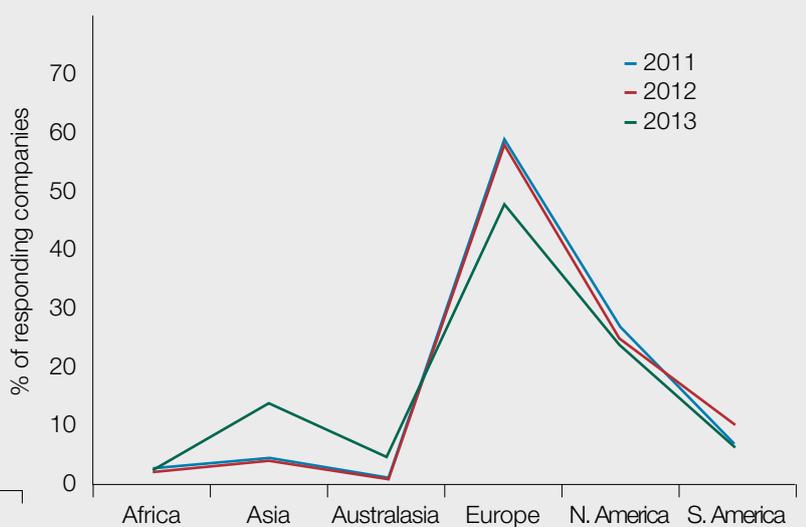
### Forests program: the last five years

Participation has almost quadrupled since the program began in 2009 (see Figure 1) and the last three years alone have seen almost a 50% increase in the number of countries in which participating companies are registered.

**Figure 1:** Number of responding companies 2009-2013



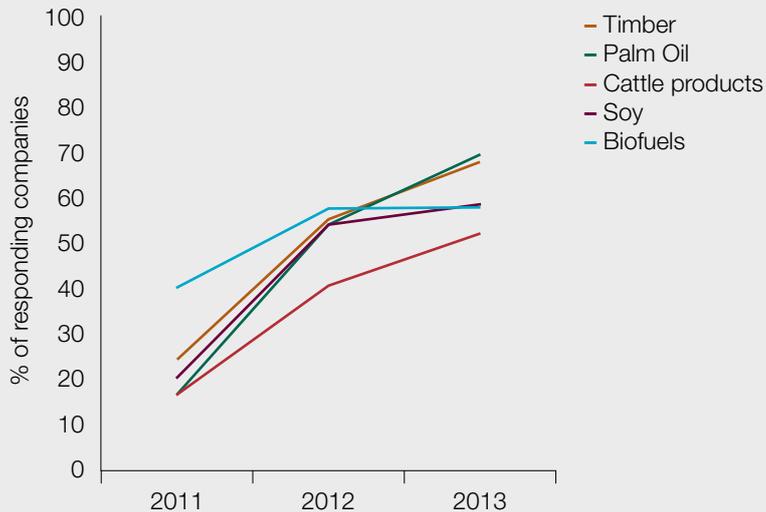
**Figure 2:** Continental composition of responding companies 2011-2013



Furthermore, the composition of continents in which disclosing companies are registered has changed since 2011 (see Figure 2) with companies registered in the Asian continent taking a greater proportion of the total number disclosing in the 2013 forests information request.

Companies have been providing a greater level of detail in their disclosure year on year. The percentage of companies who disclose consumption data (for those who have it available) has increased each year since 2011 for every commodity (see Figure 3).

**Figure 3:** Percentage of companies disclosing consumption data (where available) since 2011



Participation for the fourth year running in the [forests program] is educating our risk assessment process through making BA increasingly aware of the commodities we use, where they are sourced from and the wider implications (including risk).

British Airways



### 2013 sector leaders

Each year, we identify sector leaders from the company responses to the information request. Sector leaders have generally achieved the following:

- Completed a full risk assessment of the forest risk commodities and identified which products contain them;
- Worked beyond their first tier of suppliers to identify country of origin and, where possible, traced down their supply chain to identify exact location of origin;
- Specified third-party certified commodities where available;
- Set targets for 100% third-party certified material or alternative solutions for deforestation;
- Engaged their supply chain to build capacity and educate suppliers;
- Engaged with their customers to create demand and

differentiate their product; and

- Understood and articulated risks and opportunities around the use of these commodities.

Leaders are identified solely on the basis of the information contained in their responses to the questions in the 2013 information request. Our questionnaire, guidance and scoring methodology documents are all publicly available from [www.cdp.net](http://www.cdp.net). The 2013 leaders by sector are listed in Table 1. The average percentage difference in scores between leaders and the rest of their sector is almost 50%, reflecting the disparity between the efforts and understanding of the issues by leading companies and companies at much earlier stages in their journey. The program's move towards more public disclosures, together with best practice guidance which will be completed in the coming months, will hopefully begin to narrow this gap by fast-tracking companies' understanding of the issues and potential solutions.

**Table 1:** 2013 CDP forests program sector leaders

Industry sector	Company
Agricultural Products	New Britain Palm Oil
Consumer Durables & Apparel	PrimeAsia Leather Corporation
Food & Staples Retailing	J Sainsbury
Hotels, Restaurants & Leisure	McDonald's Corporation
Household & Personal Products	Kimberly-Clark Corporation
Industrials & Autos	Brambles
Materials	UPM-Kymmene Corporation
Media	Reed Elsevier Group
Packaged Foods & Meats / Brewers and Soft Drinks	Unilever
Retailing	Marks and Spencer Group
Transportation	FedEx Corporation

## Key Findings - continued

*While regulations are being strengthened against illegal logging [elsewhere]... given the fact that no domestic legal regulations exist in Japan, it is believed that there could possibly be an increase in raw materials derived from illegal logging... The company is aware of the need to... establish traceability.*

**Dai Nippon Printing Co.**

Over 70% of responses to the 2013 forests information request were 'whole company' rather than 'partial' disclosures and many companies chose to make their response available to the public this year, demonstrating a good level of transparency on these issues amongst our disclosers. However, a number of themes have emerged across the responses which are of concern to investors:

- There are still a number of companies that have only partially completed a risk assessment process to understand where their exposure to forest risk commodities is found. Clearly, companies cannot manage their risk if they have not calculated it comprehensively.
- Very few companies cited security of supply and price volatility as operational risks in securing these commodities, which is surprising given recent extreme weather events, the increase in biofuels as a competing use and commodity price spikes.
- While growers understand and acknowledge risks and current impacts of climate change on their ability to supply these commodities, most of their customers assert that there are no risks from climate change. Although this may be partly because of the diversity of suppliers in different locations for many of the commodities, it is also possible that buyers have not understood the impacts which are already being felt by their suppliers. There was almost no response to the various supply chain disasters in the past year such as the 'horse meat' beef scandal in Europe. Many companies are assuming that full traceability of their raw materials can be assured by their first tier suppliers, which we have seen can be a critical error. Furthermore, only one company cited fraud as a risk. Where there is such heavy reliance on certification schemes, the opportunity for criminals to fraudulently create documentation is one which should be seriously considered by companies.
- It is clear that there is a huge co-dependency between sectors along the value chain, yet there are many companies who have not articulated any actions to build capacity along their supply chains to deliver

sustainable commodities, which may ultimately jeopardize some of the high profile sustainability commitments at the retailing and branded products end of the value chain.

- Finally, most companies make no direct mention of investor risk, although some disclosers have highlighted that their access to finance is partly dependent on ensuring a sustainable supply of these commodities and other companies have a goal to be included in sustainable stock exchange indices to ensure the broadest possible set of shareholders.

### Key challenges

The 2013 responses elicited a number of key challenges facing companies across sectors when trying to source commodities sustainably:

#### 1. Lack of traceability in global commodity supply chains

- Difficulties in tracing back raw materials to a specific source and the complexity and lack of transparency in supply chains are major barriers across most of the sectors and forest risk commodities. CDP hopes to address some of these issues by highlighting the availability of traceability tools and by collating and disseminating best practice on sustainable commodity use as well as information and analysis for companies on where deforestation is occurring.
- Companies also ask for help in formulating steps to improve performance as well as sourcing guidelines and guidance on appropriate key performance indicators for work with supply chains. There is significant need for increased consultancy expertise in this area.
- Retailing companies in particular recognize the need to build longer term relationships with suppliers, using strategic sourcing rather than tactical buying as a way to guarantee long-term supply and traceability of sustainable materials.

#### 2. Challenges with certification

- Availability and a stable supply of certified raw materials and commodities are key challenges highlighted by the majority of sectors. In many cases this is putting security of supply at risk and leading to potential for price increases. Solutions to how to expand, promote and motivate certification in new geographical areas including Africa, Latin America and Asia (where the share of certified forests is small) are recognized by companies in the materials sector as key to making progress.
- Growers and producers highlight a lack of demand for certified commodities and the slow take up of their supply as a key challenge. There appears to be reluctance by customers and consumers to buy certified commodities due to premium prices, a lack of awareness of sustainability issues and a lack of recognition of inherent benefits of using sustainable products. Movement away from 'virtual' sustainable certificates to segregated certified supply chains is recommended by some companies as a way to help

raise demand, though other companies regard the costs of doing so as currently unacceptable.

- Companies point to a need for the demand for certified commodities to reach a 'tipping point', increasing quantities and reducing price. Those in the agricultural sector look to larger companies and publicly made commitments for 2015 and 2020 by manufacturers and retailers to steer the trajectory of the market from niche to mainstream. Alignment and action by a critical mass of companies, governments and NGO partners is key to achieving these aims.
- Small and medium growers in particular are struggling with the administrative burden and the high costs of third-party certification and are unwilling to invest in the cost of certification without secure and visible financial rewards. There is a clear need for financial compensation mechanisms and incentives to avoid deforestation, together with well-resourced certification bodies who actively engage across the whole supply chain. The consumer durables and apparel sector needs a sustainable leather certification system due to the difficulties of traceability beyond slaughterhouses, though it is encouraging to see companies' use of alternative strategies to ensure traceability and sustainability in the absence of such a scheme.

### 3. Regulatory uncertainty

- Legal uncertainty and lack of government action are cited as barriers to the supply of certified commodities, as well as a lack of global agreement on post Kyoto measures for protecting forests including financial compensation mechanisms.
- Better enforcement of national and international laws, regulation on land use and land use changes and local monitoring, particularly in sourcing countries, is fundamental to solving forest risk commodity issues.

# 24%

of responses on soy specified 3rd party certification (compared to more than 80% for palm oil)

# 43%

of responses on palm oil set a target to reach 100% 3rd party certified material within 2 years (compared to just 16% for timber)

### Key messages

1. **Despite growing investor interest and company participation, a number of challenges exist that are slowing the progress of 'deforestation-free' commodities: certification, traceability, cost and regulatory uncertainty.**
2. **Risks associated with deforestation and related climate change are not well articulated; nor, surprisingly, are reputational and operational risks, especially given the recent European 'horse meat scandal'.**
3. **There is a big gap between sector leaders and other disclosers; some companies are taking meaningful action to build traceable and sustainable supply chains, but slow uptake by producers and processors is hampering progress.**

On the pages that follow, we have provided an overview of the results by industry sector. The charts show the percentage of maximum available points per section of the 2013 forests information request for two data series: 1) the sector response average, and 2) the response average of all 2013 responding companies.

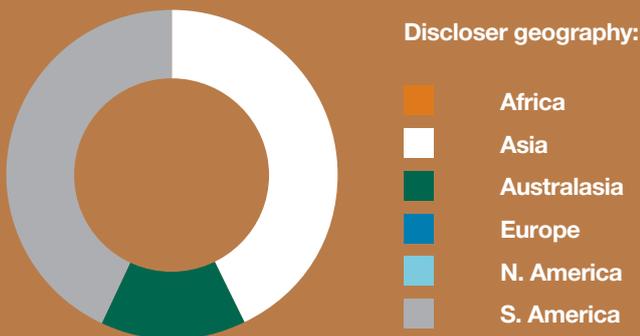
## Agricultural Products

# 40%

% increase in participation (2012/2013)

# 14.3%

Response rate



**Sector leader:**

New Britain Palm Oil

**Most improved:**

Agropalma

This sector includes companies working directly with producers on the ground. They are particularly vulnerable to the operational risks resulting from climate change, as well as being subject to demands from further up the supply chain. Companies disclose across all of the commodities but are limited in geography. The number of Asian companies disclosing this year more than doubled relative to 2012.

### Key sector themes

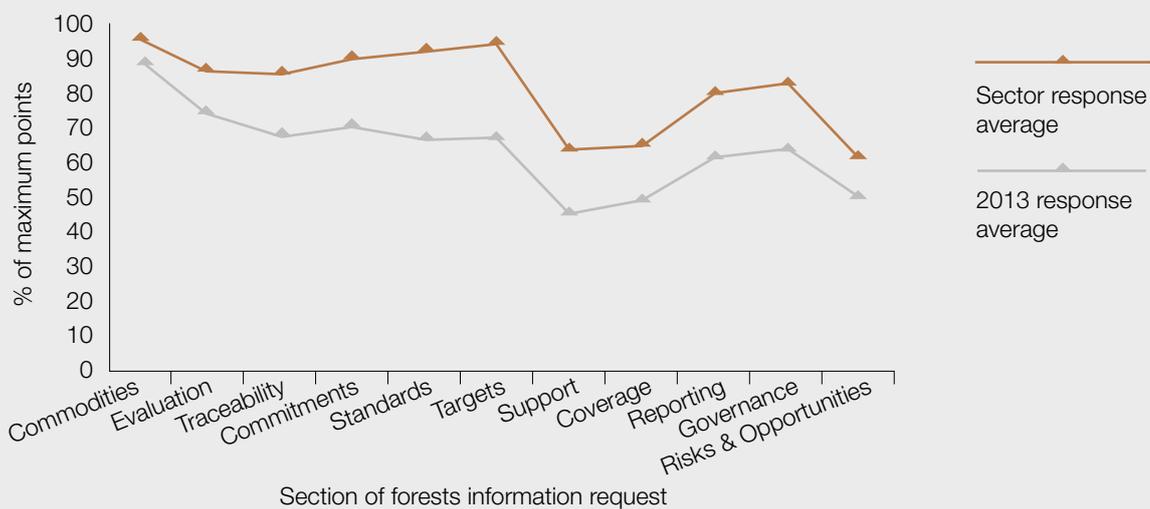
- Companies in this sector are producers, 'close to the ground' and significantly have provided the best articulation of climate change impacts and operational risks associated with deforestation.
- The disclosing companies in this sector generally see sustainability as an opportunity rather than a burden.
- It is noticeable that disclosing companies which are customers of disclosers in this sector, e.g. packaged foods companies, generally had higher scores in the 'traceability' section of the questionnaire due to the systems employed by disclosers in the agricultural products sector.
- New Britain Palm Oil and Agropalma deserve special mention for leading the way in creating a segregated palm oil supply.

*One area of note is increasing productivity of the palms through the breeding programs in order to maximise yield and reduce the need for land.*

New Britain Palm Oil

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Agropalma	Brazil		✓	Full	Palm oil
Grupo André Maggi	Brazil	✓	✓	Full	Timber, Cattle products, Soy, Biofuels
Grupo JD	Brazil		✓	Partial	Cattle products, Soy
IOI Group	Malaysia	✓	✓	Full	Palm oil
New Britain Palm Oil	Papua New Guinea		✓	Full	Palm oil, Cattle products
Olam International	Singapore			Partial	Timber
Wilmar International	Singapore			Partial	Palm oil, Biofuels

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



The sector performed above the 2013 response average in all areas of the disclosure, with particularly well-articulated responses in the risks and opportunities section. In this section, the agricultural products sector received the highest scores relative to all other sectors, achieving 61% of the maximum available points on average, compared to a 2013 response average of 50%. High scores were also achieved in the commitments (91%), standards (92%), and targets (94%) sections, reflecting the high proportion of certified facilities.

### Challenges for the sector

- A range of key barriers and challenges to achieving sustainable commodity use are highlighted by growers, producers and processors in the palm oil and soy industries.
- Demand for certified sustainable palm oil (CSPO) has yet to reach a 'tipping point', with the result that prices are still high and volumes low. We expect that, as publicly made commitments by retailers and manufacturers for 2015 and 2020 take effect, the 'tipping point' will be reached and associated economies of scale will help to mainstream sustainable commodity use. A move away from 'virtual' sustainable palm oil to the use of physically traceable palm oil is key to driving demand through the whole supply chain.
- A lack of transparency and traceability in many commodity supply chains remains a key barrier for companies. Resolution of these complexities will require collaborative, multi-sector efforts from industry players along the entire supply chain, together with governments and civil society.
- Legal uncertainties in environmental legislation and a lack of government action to foster sustainable commodity use are cited as holding back environmental progress in the soy chain. Definitive environmental legislation is advocated by disclosers in this sector.



*NBPOL has recently joined the POIG (Palm Oil Innovation Group) led by Greenpeace and WWF to actively promote innovation in the sector.*

**New Britain Palm Oil**

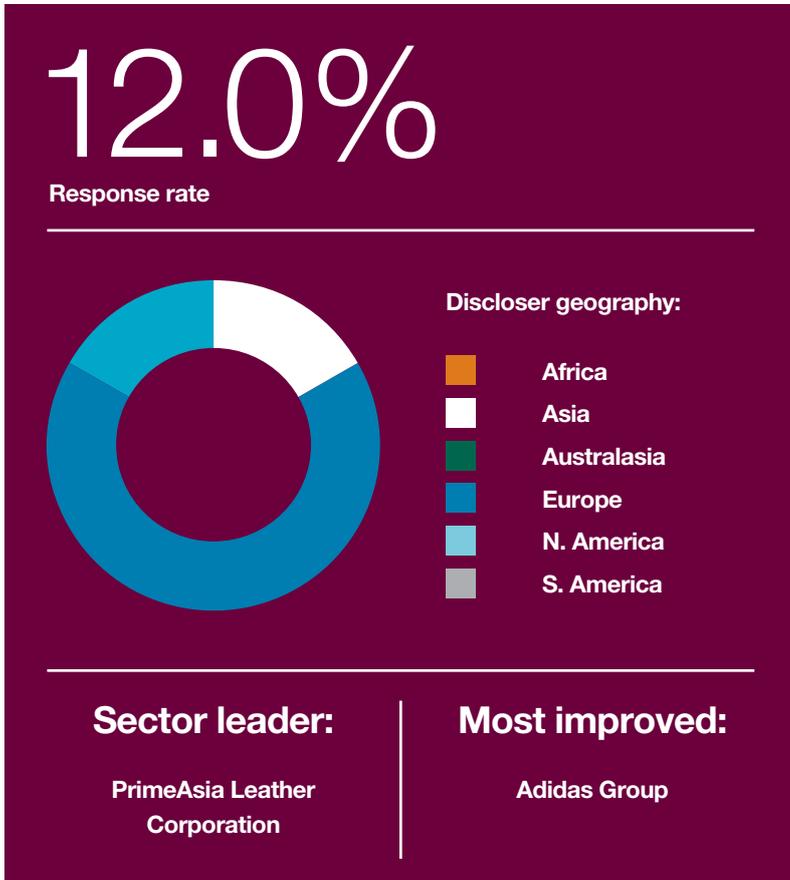


*We understand that [it] is more sustainable [to] include smallholders in our core business and [to] support them to get a good level of social performance than just [to] put them aside of our supply chain.*

**Agropalma**



## Consumer Durables & Apparel



Disclosing companies are typically based in developed countries and have material risks associated with leather apparel and timber-based packaging. Companies have direct consumer contact or have business-to-business relationships; high reputational stakes present both risks and opportunities to this sector.

### Key sector themes

- It is clear that finding responsible sourcing options for leather is still a big problem for companies in this sector; many are unclear about what sustainable leather looks like in practice. An update on progress towards beef and leather certification can be found on page 19.
- A number of suppliers are increasingly providing solutions to the problems associated with sourcing sustainable leather, which manufacturers seem to be largely unaware of. Closer co-operation across the value chain through multi-stakeholder forums such as the Leather Working Group would reduce the costs associated with sustainable materials in this sector.

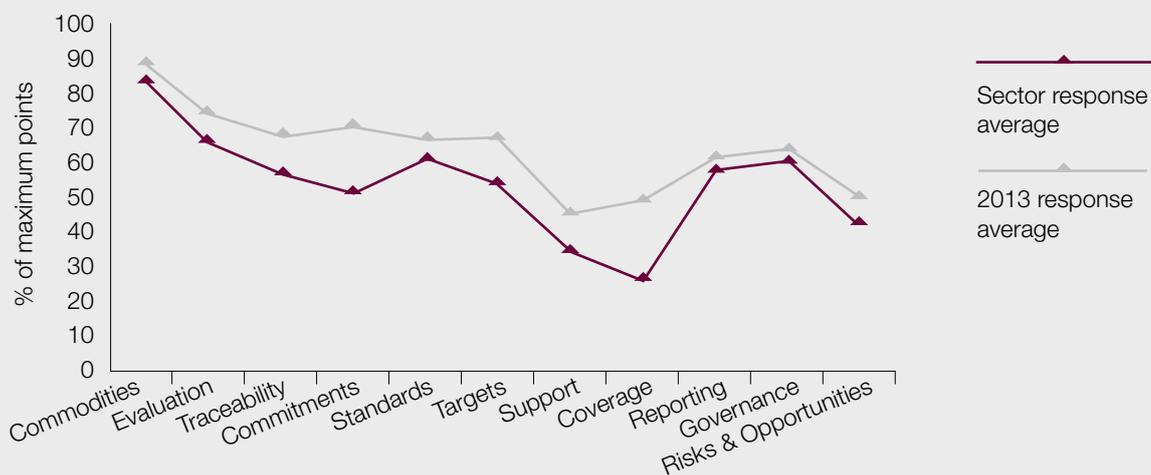
### Challenges for the sector

- The complexity of supply chains and the traceability of components back to raw materials are clear barriers for many companies in this sector. Traceability and lack of a certification scheme for leather are major issues and the initiation of a sustainable leather certification system may be one helpful solution.
- Cost continues to be the most important factor in decision making for customers. Businesses are trying to persuade their customers to push sustainability to the top of their material selection and evaluation matrices. Indicator-based tools that enable companies to evaluate material types, products, facilities and processes based on a range of environmental and product design choices are a welcome support for companies. Such tools, still being developed, are helpful for companies in organising a vast array of information and making the right choices for the environment.



Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Adidas Group	Germany	✓	✓	Full	Timber, Cattle products
Burberry Group	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products
C & J Clark International	United Kingdom	✓	✓	Full	Timber, Cattle products
Moët Hennessy Louis Vuitton	France	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
NIKE	USA	✓	✓	Full	Timber, Cattle products
PrimeAsia Leather Corporation	Taiwan	✓	✓	Full	Timber, Cattle products

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Difficulties in achieving full traceability and the lack of certification standards for leather are evident in this sector's performance. On average, companies received 51% of maximum available points in the commitments section, as compared to the 2013 response average of 70%, and also performed below the 2013 response average in the coverage section, which analyses commodity consumption data. However, the sector performed relatively well in the evaluation section, which concerns company risk assessment processes, as well as in the reporting and governance sections, indicating a willingness and motivation to take the first steps towards responsible sourcing of leather and cattle products.

## Update on beef and leather certification

**Dr. Nathalie Walker, National Wildlife Federation**

Following a high-profile campaign by Greenpeace in 2009, Brazil's three largest meatpackers signed an agreement with Greenpeace not to buy from ranches with post-2009 deforestation. The meatpackers have also signed agreements with the Public Prosecutors (called Terms of Adjustment of Conduct), which require them to purchase cattle only from registered properties without illegal deforestation. In order to comply with these agreements, the meatpackers have developed mapping and deforestation monitoring systems, through which they can reject suppliers with recent deforestation or which encroach upon protected areas.

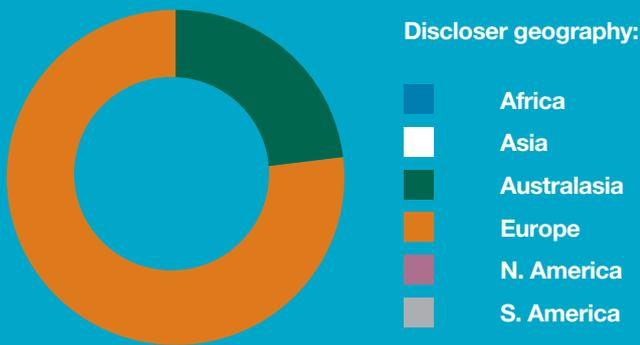
This year has seen action in several Amazon states by the Federal Prosecutors to reduce deforestation in cattle supply chains. In March, the Association of Brazilian Supermarkets signed a commitment not to source from ranches with deforestation or slave labor. Twenty-six slaughterhouses were threatened with heavy fines in April, for purchasing from ranches with illegal deforestation. These measures have led large beef retailers to take steps to monitor their beef sourcing. Walmart, one of the top three supermarkets in Brazil, has developed a system that allows it to assign an environmental risk to each ranch in its supply chain and plans to be able to trace all of its beef by 2015.

An approach that offers not only traceability to ranches with no recent deforestation but also third-party verification of environmental and animal welfare standards is Rainforest Alliance certification. The Sustainable Agriculture Network (SAN) standards are international, and involve a multi-stakeholder consultation process to ensure they represent best practices for sustainable production. Products from certified operations can carry the Rainforest Alliance seal. The SAN cattle standards require ranches to have had no habitat clearance since 2005 and include provisions to ensure sustainable pasture management and good animal welfare. The world's first ranches to become certified were in Mato Grosso, Brazil, owned by Grupo JD. The first certified beef was sold by the Carrefour Group in Brazil and the first leather by the Gucci Group.

## Food & Staples Retailing

# 17.1%

Response rate



**Sector leader:**

J Sainsbury

**Most improved:**

Jerónimo Martins

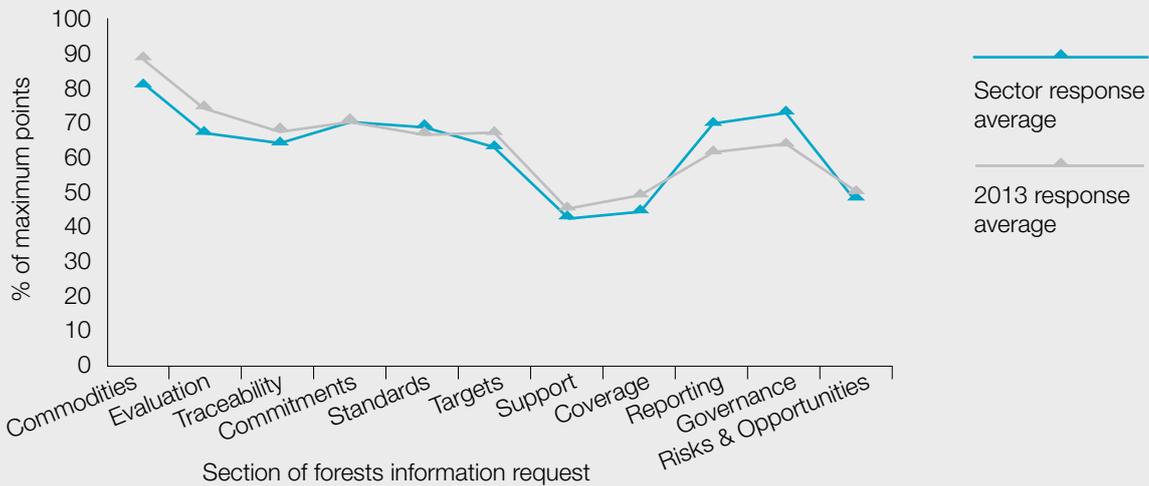
Palm oil, soy and beef are present in many food products and staples, either directly as ingredients or indirectly as animal feed. Combined with packaging, this sector has the most comprehensive coverage of commodities. Since companies in this sector are recognizable consumer brands from Western Europe and Australia, they are often the focus of NGO attention.

### Key sector themes

- Leading companies in this sector are continuing to make progress in sourcing sustainable commodities, although there is still a heavy European focus in participants.
- With the exception of one company, all companies in this sector are disclosing only on their own-branded products for which they have direct control.
- Companies in this sector are generally heavily involved with multi-stakeholder initiatives related to sustainability. It is important for companies in this sector to be aware of the work that the Consumer Goods Forum is doing and to help influence solutions to sourcing deforestation-free commodities.
- The level of work done with suppliers reported in this sector was variable and many of the risks reported by disclosers further up the supply chain were not acknowledged by those in this sector.
- It appears that this sector has not fully taken on board the implications of the 'horse meat scandal' in Europe earlier this year which is surprising and worrying from an investor viewpoint.
- Some companies in the sector have reported that they have a segregated supply of sustainable palm oil for some product lines which is to be commended and we encourage other retailers to follow suit.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Boots UK	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
Carrefour Group	France	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
Delhaize Group	Belgium			Partial	Timber, Palm oil, Cattle products, Soy
J Sainsbury	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
Jerónimo Martins	Portugal		✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
Kesko Corporation	Finland		✓	Full	Timber, Palm oil, Cattle products, Soy
Koninklijke Ahold	Netherlands	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
Metcash	Australia			Full	Timber, Palm oil, Cattle products, Soy, Biofuels
MIGROS Genossenschafts Bund	Switzerland	✓	✓	Partial	Timber, Palm oil, Cattle products, Soy, Biofuels
Tesco UK	United Kingdom	✓	✓	Partial	Timber, Palm oil, Cattle products, Soy
Wesfarmers	Australia	✓	✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
Wm Morrison Supermarkets	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
Woolworths Limited	Australia			Full	Timber, Palm oil, Cattle products, Biofuels

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Sector performance on average was close to the 2013 response average in most sections, but slightly above average in reporting and governance. The issue of sustainable sourcing of forest risk commodities has been incorporated at board level in many of the reporting companies, as is also evidenced in their heavy involvement in multi-stakeholder groups and their correspondingly good performance in the standards section. It should be noted that many food and staples retailers only reported on own-brand products.

**Challenges for the sector**

- A wide range of challenges and barriers are highlighted by the companies in this sector. Limited consumer demand, a lack of ready supply of segregated certified sustainable palm oil, uninformed suppliers (many of them small and medium enterprises), transparency in supply chains and difficulty in implementing full traceability procedures are but a few examples.
- The complexity and administrative burdens of certification schemes and lack of comprehensive standards for all commodities are challenges raised by companies in this sector.
- Disclosing companies called on governments in producing nations to better enforce regulation on land use and land use changes; a lack of consistency is a major barrier for a number of companies.
- We would continue to challenge and encourage the retail sector to demonstrate active work with their own supply base on using physical certified materials.



*When temperature levels go over 30°C, soybean yields fall steeply... some studies suggest that by 2070, the area suitable for soy plantations could drop by 60% compared to the current production areas, because of water deficiency and more intense summers. If soy yields decrease, this is likely to have an impact on our ability to purchase products containing soy. The risk level may change as the effects of climate change increase.*

**Tesco UK**



*Customers expect the business to cease using palm oil, without understanding the land requirements to match that volume of palm oil with another crop source.*

**Woolworths Limited**



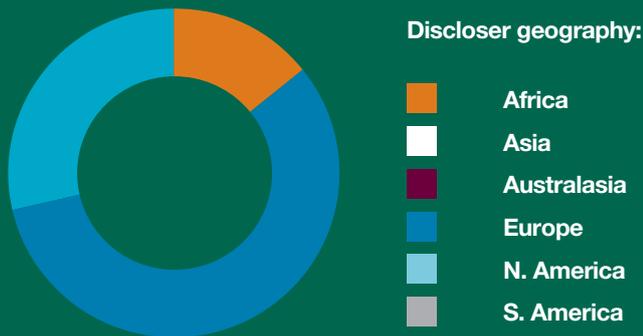
## Hotels, Restaurants & Leisure

# 40%

% increase in participation (2012/2013)

# 7.8%

Response rate



**Sector leader:**

McDonald's Corporation

**Most improved:**

Alesea of Mexico

This sector consists primarily of European and North American companies. The disclosures cover a broad range of commodities due to the food ingredients in their operations. There are opportunities for companies in this sector that perform well to communicate their progress to an increasingly aware consumer base.

### Key sector themes

- Although we have seen a significant increase in participation compared to previous years, the number of disclosing companies remains low. We welcome the participation of McDonald's Corporation, given its influence in this sector, and congratulate it on leading the sector in its first year of disclosure.
- There is a surprising lack of knowledge about where companies' exposure to deforestation risk is to be found.
- Significant risks to brands, particularly in restaurants, have not been articulated clearly which is surprising given the high profile scares around traceability this year.
- If traceability of these commodities has not been established, there are implications far beyond deforestation, including Health and Safety, GMO and fraud.
- There are significant opportunities for companies performing well in this sector to communicate their global stewardship to consumers.



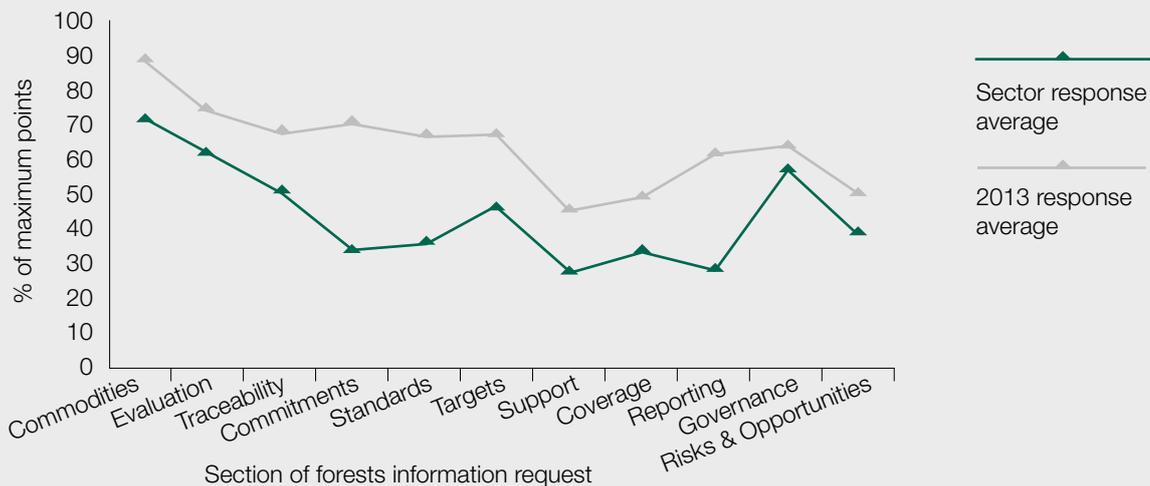
*We are focusing on the environmental and socio-economic risks of globally sourced raw materials to prioritise our work in this area, not the value in terms of our overall spend.*

Whitbread Group



Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Alesea of Mexico	Mexico		✓	Partial	<b>Cattle products</b>
Compass Group	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Cattle products</b>
McDonald's Corporation	USA			Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
Millennium & Copthorne Hotels	United Kingdom	✓		Partial	<b>Timber, Palm oil, Cattle products, Soy</b>
Sodexo	France	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
Sun International	South Africa			Full	<b>Timber, Cattle products</b>
Whitbread Group	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy</b>

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Sector performance was highly variable, and on average this sector is at an early stage of the journey towards sustainable sourcing of forest risk commodities, performing well below the 2013 response average across all sections of the information request. While the sector scored close to the 2013 response average in the governance section (achieving 57% of maximum available points), indicating that there is some level of oversight of commodity related risks, it is apparent based on the relatively poor performance in the traceability (50%), commitments (35%), and standards (37%) sections that many reporting companies are not actively involved in multi-stakeholder groups and thus have little understanding of their exposure to deforestation risk or the available standards to minimize it.

#### Challenges for the sector

- Companies recognize the need to engage teams and suppliers by raising awareness and training them on critical sustainability issues in order to make progress on forest risk commodity issues.
- Companies ask for common, standardized and credible reporting systems and metrics, help with formulating steps to improve performance and approaches and sourcing guidelines and guidance on appropriate key performance indicators for work with supply chains.
- Sourcing and availability of certified sustainable materials, at the right price and quantity required, are highlighted as a real barrier for business. Companies anticipate that increases in the availability of these commodities and falling costs are likely to make a big difference in the management of forest risk commodity issues.
- There is a call for more credible, accessible, broadly accepted and tiered standards that put producers on the path of continuous improvement.
- Greater collaboration between NGOs and standards systems, and within the industry value chain, is welcomed.



*As beef is our largest spend, it is our top sustainability priority. Our standard prohibiting the use of beef produced within the Amazon Biome applies to all suppliers sourcing beef from Brazil (<6% of beef we source globally). We have no approved slaughterhouses located within the Biome and are working with our suppliers to pilot geospatial mapping and audits to verify compliance with this policy back to the last farm.*

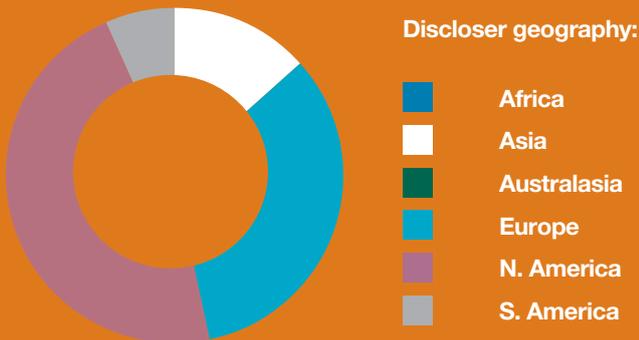
**McDonald's Corporation**



## Household & Personal Products

# 37.5%

Response rate



**Sector leader:**

Kimberly-Clark Corporation

**Most improved:**

KAO Corporation

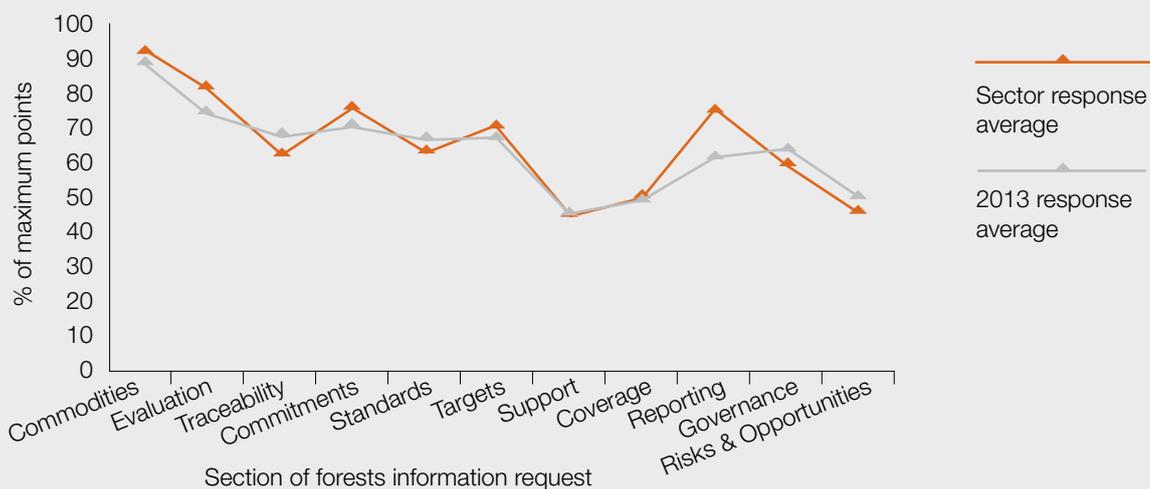
This sector is dominated by North American and European companies whose products often contain derivatives of palm oil and are encased in timber-based packaging. Each product typically contains relatively small quantities of the commodities but with complex supply chains and as consumer-facing companies there are many risks and opportunities surrounding procurement. This sector has the highest response rate in CDP's 2013 forests information request.

### Key sector themes

- Approaches to the problems of sourcing sustainable commodities vary significantly in this sector. Most companies regard the commodities as being immaterial in terms of spend; some companies have therefore decided to ensure they are fully certified in order to eliminate reputational and regulatory risk, whereas others have decided simply to ignore the problem.
- Sourcing of certified sustainable palm oil-based derivatives continues to present a problem for companies in this sector. Mass balance certified derivatives are improving the situation but transparency and knowledge of their availability is mixed among supplier companies.
- There is a continuing issue with sourcing certified sustainable palm kernel oil-based derivatives. Until more physical certified ingredients become available, companies can use GreenPalm to fill this gap. However, not all companies appear to be using this option as an interim sustainability measure, for which there seems to be little excuse.
- Despite this, we are starting to see segregated supplies of CSPO being used in product lines in this sector which is encouraging and should be commended.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Avon Products	USA	✓	✓	Full	Timber, Palm oil
Colgate Palmolive Co.	USA		✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
Earth Friendly Products	USA	✓	✓	Full	Timber
Henkel AG & Co.	Germany	✓	✓	Full	Timber, Palm oil
Johnson & Johnson	USA	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
KAO Corporation	Japan		✓	Full	Timber, Palm oil
Kimberly-Clark Corporation	USA	✓	✓	Full	Timber
Kimberly-Clark de México	Mexico		✓	Full	Timber
L'Oréal	France	✓	✓	Full	Timber, Palm oil, Soy
Natura Cosméticos	Brazil	✓	✓	Full	Timber, Palm oil, Biofuels
Oriflame Cosmetics	Sweden		✓	Full	Timber, Palm oil
PZ Cussons	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products
Reckitt Benckiser	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products
The Hain Celestial Group	USA			Partial	Timber, Palm oil, Soy
Uni-Charm Corporation	Japan			Partial	Timber

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Sector performance was variable, driven partially by the different approaches to the issue of sustainable sourcing of forest risk commodities taken by companies in this sector. The sector performed above the 2013 response average in the commitments (77% of maximum available points) and reporting (76%) sections, but performed below average most notably in the traceability section (62%). Since many companies regard forest risk commodities in their product lines as immaterial in terms of spend, sustainable sourcing is not considered a top priority in many supply chains. Others have approached this issue by ensuring procurement of commodities which are fully certified, although they are largely reliant on the credibility of the certification schemes. It should also be noted that some sector leaders are pushing the boundaries of best practice and are developing products that go beyond using certified materials to drive change in this sector's procurement and production.

#### Challenges for the sector

- A key challenge cited by companies is how to ensure use of certified commodities while at the same time maintaining product competitiveness. While companies report that they find certification standards and schemes useful, the compatibility of multiple existing standards is seen as a barrier.
- Many companies argue that simpler certification schemes and acceleration of the audit, approval and certification of palm plantations as well as widespread adoption of existing certification schemes across all industries are likely to increase the supply of sustainable commodities. A lack of standard industry certification schemes for certain commodities such as tallow is cited as a challenge for some companies in this sector.
- Relatively low levels of traceability within commodity markets, especially for complex supply chains with multiple actors for chemically processed derivatives, is highlighted as an obstacle for the sector. Being fully informed about the source and exact composition of materials sourced is a noted problem as transparency remains limited, as well as the difficulties in managing the practicalities of understanding continuously changing complex supply chains.

- There is recognition that wider engagement of upstream suppliers is necessary to support the growth of certified sustainable commodities and to provide supply chain traceability, if unsustainable social and environmental supply chain practices are to be eliminated.



*Whereas 100% of the wood fiber that Kimberly-Clark uses is sourced from certified suppliers, only 10% of the world's forest lands are currently certified. Thus, one challenge is to increase the availability of certified forest lands globally.*

**Kimberly-Clark Corporation**



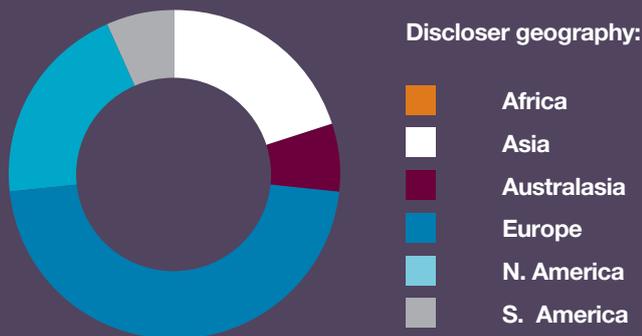
## Industrials & Autos

# 150%

% increase in participation (2012/2013)

# 25.4%

Response rate



**Sector leader:**

**Brambles**

**Most improved:**

**Kingspan Group  
and Skanska**

The commodities most disclosed by companies in this sector are timber, used across the whole sector, and leather in the car industry. This brings the potential for brand damage given increasing NGO focus, together with growing regulatory risk. This sector has seen a big percentage increase in participation since 2012 with new disclosers in 2013 dominated by business-to-business companies. There has also been the notable addition of three Japanese firms.

### Key sector themes

#### Capital goods

- Many of the companies in this sector are largely dependent on specifications from their customers but there is clearly a growing interest in the Building Research Establishment Environmental Assessment Method (BREEAM) standard and a growing demand for sustainable materials.
- Companies in this sector who work on a project basis often have no company-wide policy related to the sustainability of these commodities but there is a growing awareness of the business opportunities associated with providing sustainable options in this space.

#### Commercial and professional services

- There was a wide variance in this sector's submissions.
- Companies are heavily reliant on the credibility of the certification schemes they specify.
- There is an increasing demand for certified products and a focus on post-consumer recycling. Traceability is still a big issue for post-consumer recycling and uncertified material.

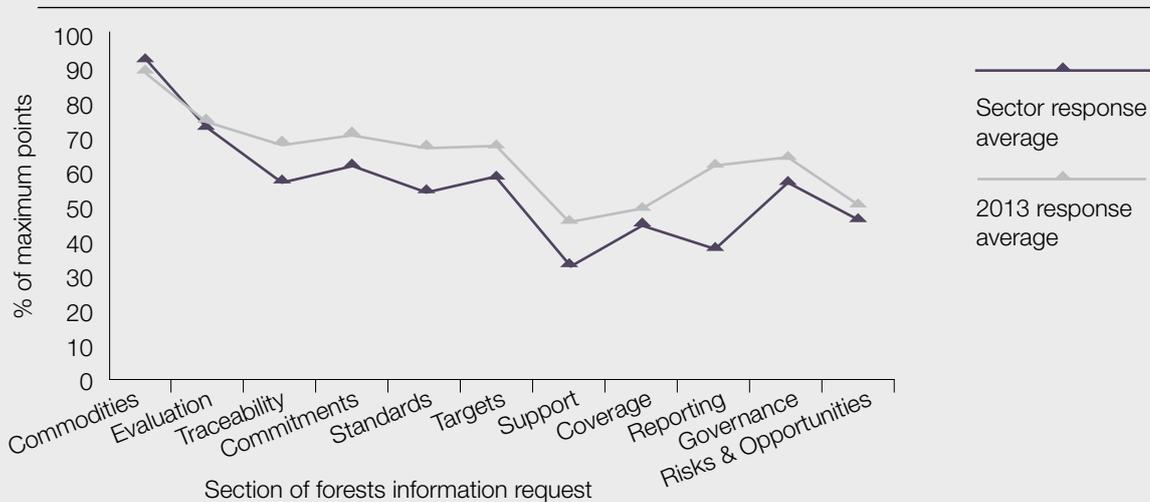
#### Autos

- Fiat should be commended on an excellent first disclosure. We hope to see greater participation next year from car manufacturers.
- For companies in this sector there is enormous value in the brand, particularly for luxury vehicles. Despite this, there was almost no acknowledgement of reputational

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
BMW	Germany	✓	✓	Full	<b>Timber, Cattle products</b>
Brambles	Australia			Partial	<b>Timber</b>
Bunzl	United Kingdom			Partial	<b>Timber</b>
Dai Nippon Printing Co.	Japan			Full	<b>Timber</b>
Fiat	Italy			Full	<b>Timber, Cattle products</b>
Ilha Pura Empreendimentos Imobiliarios	Brazil			Full	<b>Timber, Soy, Biofuels</b>
Johnson Controls	USA			Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
Kingspan Group	Ireland	✓	✓	Full	<b>Timber</b>
Saint-Gobain	France	✓	✓	Partial	<b>Timber</b>
Skanska	Sweden	✓	✓	Full	<b>Timber, Biofuels</b>

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Stanley Black & Decker	USA			Partial	<b>Timber</b>
Taisei Corporation	Japan			Partial	<b>Timber, Biofuels</b>
Toppan Printing Co.	Japan			Full	<b>Timber</b>
Transcontinental	Canada			Full	<b>Timber, Soy</b>
Travis Perkins	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Given its diverse make-up, sector performance in the industrials and autos sector was highly variable and results were driven by multiple factors specific to each sub-sector. The sector performed well in the evaluation section, concerning company risk assessment processes, with an average of 72% of maximum available points as compared to the 75% achieved on average by all responding companies for 2013. However, the sector performed below the 2013 response average in the risks and opportunities section, indicating a lack of practical awareness of the potential impacts of reputational, regulatory and operational risks associated with sourcing forest risk commodities. Given that the sector is largely driven by customer demand for sustainability, it is surprising that on average companies performed quite poorly in the reporting section (39% as compared to the 2013 response average of 62%), indicating that not many companies report on their deforestation risk or progress against any commodity-specific policies in the public domain.

risks. This is surprising given NGO campaigns on the origin of leather (e.g. Greenpeace's 2009 'Slaughtering the Amazon') and on the use of charcoal by the auto industry (Greenpeace's 2012 'Driving Destruction in the Amazon').

- Luxury brands in particular could learn from companies in the consumer durables and apparel sector with regards to their approach on the sustainable sourcing of leather.

#### Challenges for the sector

- While customers of capital goods companies express interest in certified products, economic pressures continue to guide them to buy primarily on price in the short-term. Ensuring material is sustainable while remaining commercially competitive is therefore a major challenge for this sector.
- Availability of certified timber sources and difficulty in tracing the origin of timber is a barrier for the capital

goods sector. This is a common finding across most sectors surveyed. Traceability of the entire printing paper supply chain and proactive information disclosure by paper companies would be a significant step towards achieving sustainable commodity use.

- Companies need a level playing field in terms of both legislative requirements in the global market place and greater awareness of sustainability issues within enforcement agencies. Companies are keen that the risks associated with forest risk commodities become much more visible to investors, that investors become better informed about them and see the great need and importance of addressing the current and future issues.
- The high cost of forestry certification is one barrier thought to be holding back supply of sustainable products, especially from small-holders who cannot afford to make the change to certified sustainable fiber production. Respondents anticipate that by making certification more accessible, responsible forestry and sustainable supply will grow.

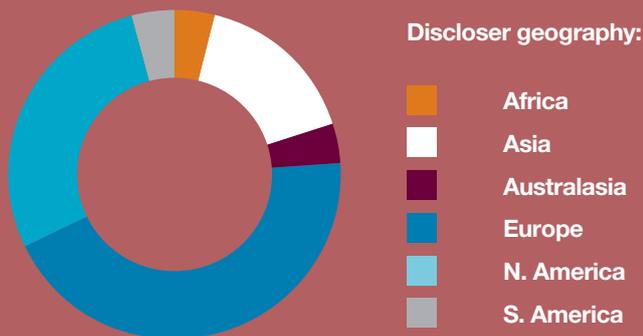
## Materials

# 32%

% increase in participation (2012/2013)

# 31.6%

Response rate



**Sector leader:**

UPM-Kymmene Corporation

**Most improved:**

SCA

Companies disclosing in this sector deal in forest products and report almost exclusively on timber. A few Scandinavian companies are timber producers themselves whilst the remainder are business-to-business companies that process the timber into products. These companies are widely geographically spread and key risks for the sector are consistency of supply and the increasing regulation surrounding illegal timber.

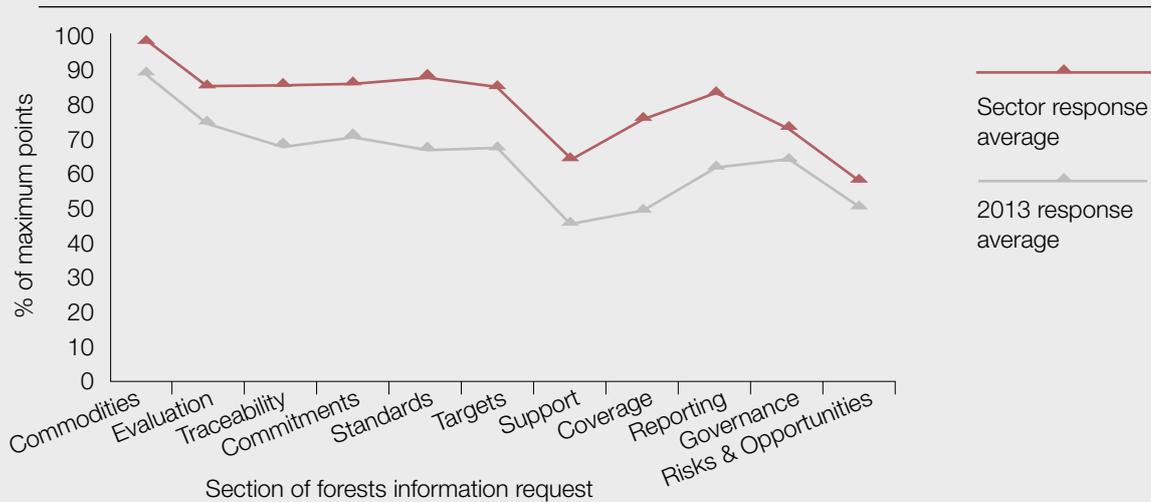
### Key sector themes

- We have seen participation in this sector grow again this year, in particular from the Americas and Japan. It is clear that there are different challenges for companies working in different geographies when it comes to the sustainability of their products.
- There are issues with the availability of certified material. The level of global certification does not appear to be growing to meet the regulatory demands of key consuming markets such as the US, Europe and Australia.
- This sector is doing some of the best work on capacity building, with many citing group certification schemes and assistance for smallholders as examples.
- The sector has received considerable stakeholder scrutiny this year, not only from certification auditors and NGOs but also from investors. In October, the Norwegian Government Pension Fund divested from timber company WTK Holdings and forest management firm Ta Ann Holdings on the basis that those companies are posing a risk to the environment through their operations.
- This sector has identified the opportunities associated with sustainable raw materials not only at sector level, but at the individual company level. Some sector participants are diversifying into bio-based materials and bio-energy.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Ahlstrom Corporation	Finland		✓	Full	Timber
Amcor	Australia			Full	Timber
Catalyst Paper Corporation	Canada	✓	✓	Full	Timber
Dalhoff Larsen & Horneman A/S	Denmark	✓	✓	Full	Timber
Danzer	Switzerland	✓	✓	Full	Timber
Domtar Corporation	Canada	✓	✓	Partial	Timber
Evergreen Packaging Group	USA	✓	✓	Full	Timber
Holmen	Sweden	✓	✓	Partial	Timber, Biofuels
International Paper Co.	USA	✓	✓	Partial	Timber
Klabin	Brazil			Full	Timber
MeadWestvaco Corporation	USA			Partial	Timber
Metsä Board Corporation	Finland		✓	Full	Timber
Mondi	United Kingdom	✓	✓	Full	Timber

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Nippon Paper Group	Japan			Full	Timber
Oji Holdings Corporation	Japan			Partial	Timber
Rengo Co.	Japan			Full	Timber
Resolute Forest Products	Canada			Full	Timber
Sappi	South Africa	✓	✓	Full	Timber
SCA	Sweden	✓	✓	Full	Timber
Smurfit Kappa Group	Ireland			Full	Timber
Stora Enso	Finland	✓	✓	Full	Timber
Sveaskog	Sweden			Full	Timber, Biofuels
The Andhra Pradesh Paper Mills	India			Partial	Timber
UPM-Kymmene Corporation	Finland	✓	✓	Full	Timber
Weyerhaeuser Co.	USA	✓	✓	Full	Timber

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



The sector performed well above the 2013 response average in all sections, with particularly high performance in the support section, concerning capacity building in the supply chain. In this section, companies achieved scores on average of 64% of maximum available points, versus the 2013 response average of 45%. As the main commodity reported on in this sector was timber, it is not surprising that this sector also performed particularly well in the standards section, achieving 89% of maximum available points, more than any other sector. Companies in this sector participate in well-established initiatives and third-party certification schemes, impacting their overall performance in the information request significantly.

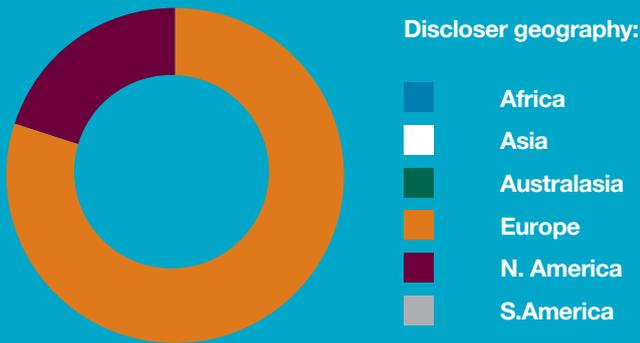
### Challenges for the sector

- A continuous and stable supply of certified commodities has yet to be established and pressure and competition for wood/timber resources from other potential uses continues to rise.
- Companies ask for certification to be simple and affordable. Mutual recognition of forest certification schemes and alignment of criteria for FSC, PEFC and SFI is requested by many companies.
- Recognition of the value of sustainable wood/timber by policymakers, customers and consumers will be necessary if real progress is to be made in increasing sustainable commodity use.
- Improved governance and enforcement of national and international laws, particularly in sourcing countries, is fundamental to addressing wood and timber sustainability issues. Companies that have already created a competitive advantage for themselves through managing sustainability risks are requesting higher demands from legislators, NGO's and investors.

## Media

# 14.7%

Response rate



**Sector leader:**

Reed Elsevier Group

**Most improved:**

The Walt Disney Company

A sector dominated by UK companies, the media's primary use of commodities is paper for publications. These companies often own very high profile brands and there is considerable potential for reputational damage.

### Key sector themes

- We are delighted to welcome Pearson as a new participant this year. We would also like to commend British Sky Broadcasting Group for its full and thorough disclosure of all possible exposure to deforestation risk; it is an interesting example of what can be done.
- Disclosers are tackling sustainability issues through both certification schemes and increased use of post-consumer recycled material.
- There appears to be an increasing amount of certified material being used to produce newsprint and magazines. La Stampa newspaper (owned by Fiat and cited in their CDP 2013 forests response) is produced using 100% post-consumer recycled or FSC certified material, which is a good example of what can be done in this sector.
- The sector is obviously grappling with the potential business disruption and opportunities from digital media.

### Challenges for the sector

- Keeping to sustainability commitments in difficult economic times is a key challenge for companies. Even in a strong economic environment, higher procurement costs for sustainable commodities act as a real barrier to buyers.
- Common challenges faced by media companies are not dissimilar to those faced by other sectors. Availability of sustainably sourced products to meet business needs, traceability of supply chains and credibility of forest certification systems are major issues.
- Collaboration and partnerships between organisations, such as The Publishers' Database for Responsible Environmental Paper Sourcing (PREPS), are recognized as key ways to help achieve sustainable commodity use.



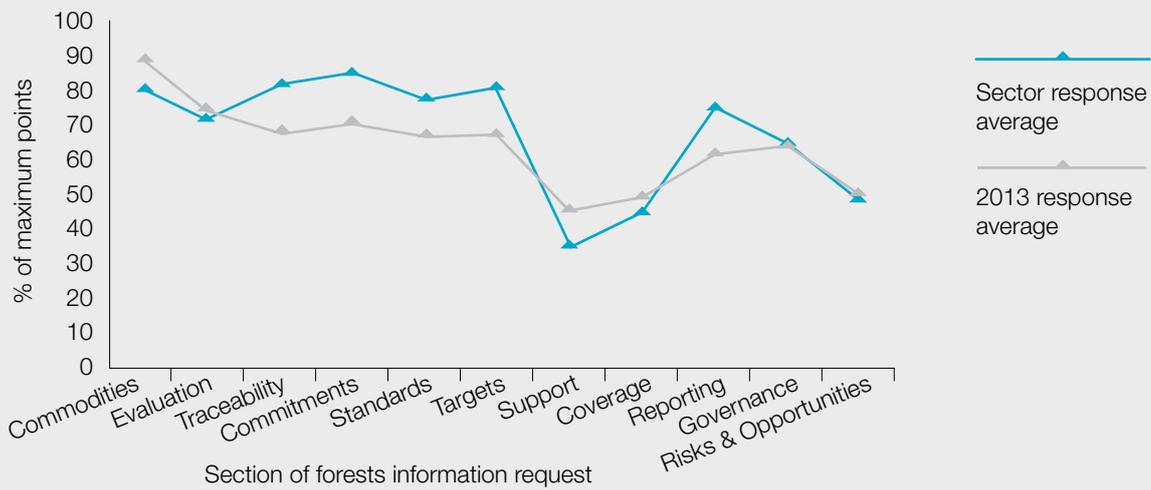
*Collaboration between many organisations is a way to reduce the costs of compliance and best practice.*

Reed Elsevier Group



Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
British Sky Broadcasting Group	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products, Soy, Biofuels
News UK	United Kingdom	✓	✓	Full	Timber
Pearson	United Kingdom			Full	Timber
Reed Elsevier Group	United Kingdom	✓	✓	Full	Timber
The Walt Disney Company	USA	✓	✓	Full	Timber

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



The sector performed above the 2013 response average in many sections, including traceability and standards. In the traceability section, companies achieved an average of 82% of maximum available points, compared with the 2013 response average of 68%. Many companies in this sector are increasingly using certified material in production, which is evidenced in the above average performance of this sector in the traceability as well as the commitments, standards, and targets sections. In the targets section, which covers procurement targets and internal programs to achieve them as well as targets for achieving 100% certification, companies in this sector achieved 81% on average, versus a 2013 response average of 69%.



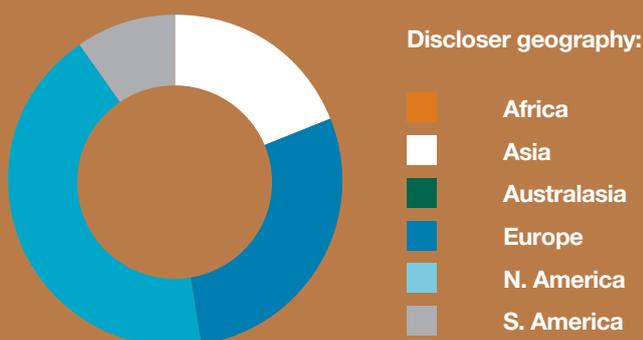
## Packaged Foods, Meats / Brewers & Soft Drinks

# 75%

% increase in participation (2012/2013)

# 14.5%

Response rate



**Sector leader:**

Unilever

**Most improved:**

Cranswick

This sector covers the production of a variety of food and drink products and therefore responders cover the full range of the supply chain, different geographies and report on different commodities. The complexity of supply chains has the potential to create traceability issues, as evidenced by the 'horse meat scandal' in Europe earlier this year.

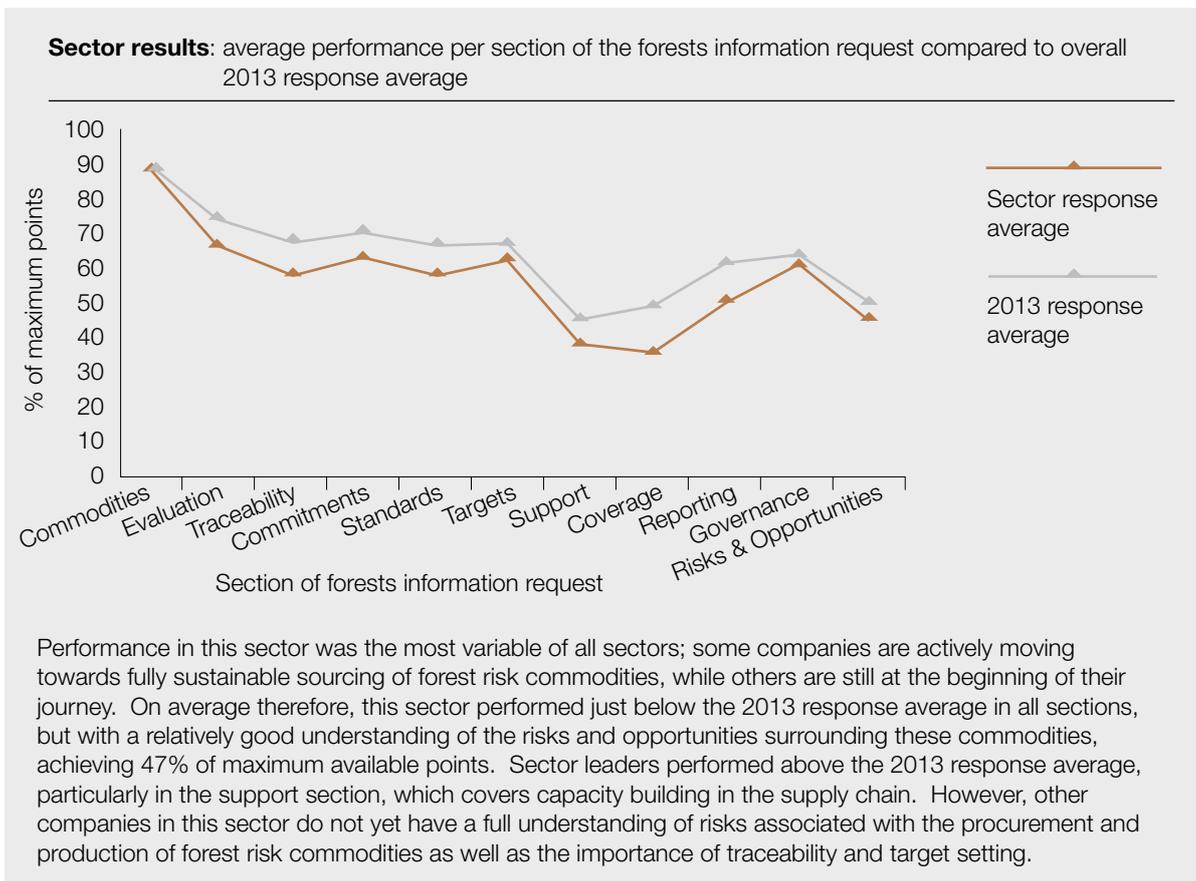
### Key sector themes

- We welcome 11 new disclosers in this sector including several from the US and Japan.
- There is an obvious divide between the performance of the leaders in this sector and other disclosers. The best in class in this sector are comprehensively working with their suppliers in order to increase capacity to provide sustainable commodities.
- It appears that many of the challenges cited by those in the retail sector come from a lack of engagement from some of the players in this sector. Retailers are increasingly strengthening targets and traceability requirements and this is a business opportunity and a potential risk for the companies in this sector.
- Participation from the major global trading companies, so influential in the global food chain and an integral part of so many supply chains, is still notably absent.
- With the acknowledged challenges of global food security, increasing consumption and climate change on food production, disclosure from those companies controlling a large percentage of global trade would be welcome, since addressing the challenges will need the capacity of the full value chain.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Associated British Foods	United Kingdom			Full	<b>Palm oil, Soy</b>
B&G Foods	USA			Partial	<b>Palm oil, Cattle products, Soy</b>
Cranswick	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Soy</b>
Danone	France		✓	Full	<b>Timber, Palm oil, Soy</b>
Greencore Group	Ireland			Partial	<b>Timber, Palm oil, Cattle products</b>
Grupo Bimbo	Mexico		✓	Partial	<b>Timber, Palm oil, Soy</b>
JBS	Brazil	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
Kellogg Company	USA			Full	<b>Timber, Palm oil, Soy</b>
Kirin Holdings Co.	Japan			Partial	<b>Timber, Palm oil</b>
Maple Leaf Foods	Canada			Full	<b>Soy</b>
Marfrig Alimentos	Brazil	✓	✓	Partial	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
McCormick & Co.	USA			Full	<b>Soy</b>

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Nestlé	Switzerland	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy</b>
Nippon Meat Packers	Japan			Partial	<b>Cattle products</b>
PepsiCo	USA	✓	✓	Full	<b>Timber, Palm oil</b>
Shiseido Co.	Japan			Full	<b>Palm oil</b>
Smithfield Foods	USA			Full	<b>Timber</b>
Stonyfield Farm	USA			Full	<b>Timber, Palm oil, Soy Biofuels</b>
SunOpta	Canada			Full	<b>Timber, Palm oil, Soy</b>
Unilever	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy</b>
Wimm-Bill-Dann Foods*	Russia			N/A*	<b>N/A*</b>

\* See Another



#### Challenges for the sector

- There are issues in this sector around industry commitment, lack of reporting on progress and the uncertainty of payback from sustainability investments.
- Availability of tools, lack of information and analysis of where deforestation is occurring, as well as poor dissemination of best practice, are further obstacles.
- While companies acknowledge difficulties in tracing materials back to source, there is a clear perception within this sector that implementing segregated supply chains is an inefficient and costly solution to the problem.
- Alignment and action by a critical mass of companies, governments and NGO partners, together with engagement and education of medium size companies, smallholders and buyers are seen as key to raising commitments and improving supply chain traceability.
- Strong government policy on land use changes, incentives for growers and strong, credible and recognized certification programmes will be necessary to drive real progress.

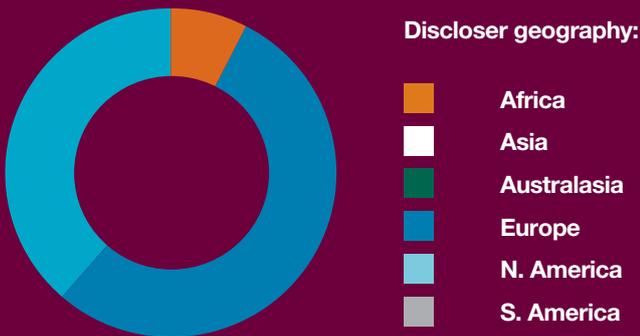
## Retailing

# 44%

% increase in participation (2012/2013)

# 16.9%

Response rate



**Sector leader:**

Marks and Spencer Group

**Most improved:**

Office Depot

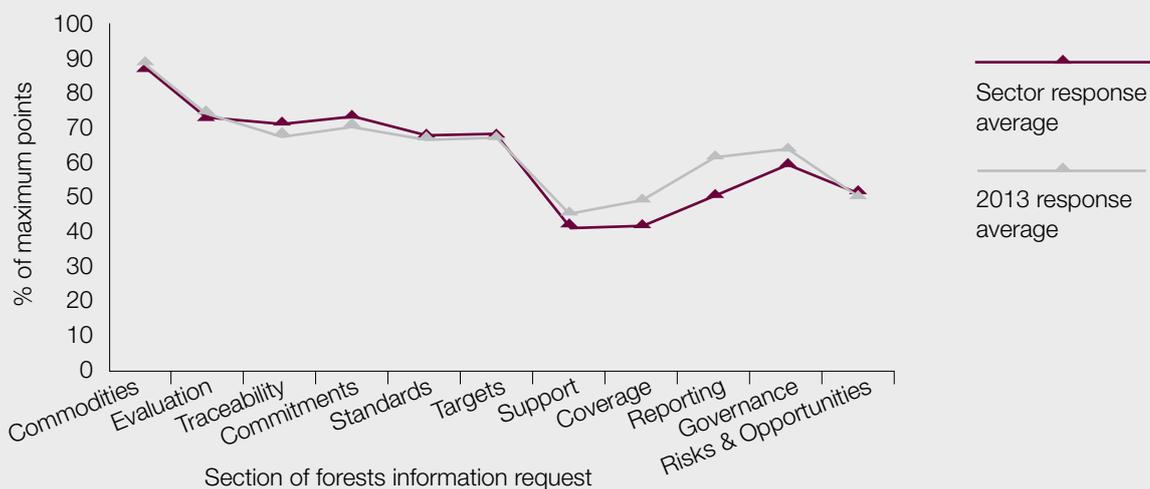
These are a range of businesses selling directly to public consumers. The companies typically supply a diverse range of products, each with a different composition of commodities, creating a complex set of supply chains. The disclosures are principally from Europe and North America.

### Key sector themes

- The companies in this sector are facing some different challenges compared to other sectors. At this end of the value chain, there is dependency on best practice being implemented elsewhere to address the challenges of commodity supply chain sustainability. Due to the complex and lengthy supply chains these commodities usually have, retailers have often played a key role in building and supporting processes such as the global multi-stakeholder roundtables.
- Leaders in this sector are often driving implementation of these standards and certification systems, particularly by investing in the capacity of their supply chain.
- However, there is a big discrepancy between the leaders and other companies in this sector. While the leaders are trying to make their products sustainable and create consumer demand for them, laggards are using lack of consumer demand as an excuse for inaction.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Best Buy Co.	USA	✓	✓	Partial	Timber
Christian Dior	France		✓	Full	Timber, Palm oil, Cattle products, Soy
Coop Genossenschaft	Switzerland	✓	✓	Partial	Timber, Palm oil, Cattle products, Soy
Inditex Group	Spain			Full	Timber, Cattle products
Kingfisher	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products
Lowe's Companies	USA	✓	✓	Partial	Timber
Marks and Spencer Group	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
METRO	Germany	✓	✓	Full	Timber, Palm oil, Cattle products, Soy
Next	United Kingdom	✓	✓	Full	Timber, Palm oil, Cattle products
Office Depot	USA	✓	✓	Partial	Timber
RONA	Canada			Partial	Timber
Williams-Sonoma	USA			Partial	Timber
Woolworths Holdings	South Africa			Partial	Timber, Palm oil, Cattle products, Soy, Biofuels

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Sector performance was aligned with the 2013 response average, as many companies in this sector depend on the actions of suppliers further up the value chain. The performance gap between sector leaders and laggards is apparent in this sector, especially around certification standards and sustainable procurement. While retail sector leaders drive certification standards, many companies use the lack of consumer demand for sustainable products as an excuse for inactivity, negatively impacting performance in the reporting and governance sections. In traceability, companies scored on average 72% of maximum available points (versus the 2013 response average of 75%), while in reporting they achieved only 50% (versus the 2013 response average of 62%).

### Challenges for the sector

- A lack of widespread availability of certified sustainable commodities and the high cost of raw materials is a real barrier for retailing companies. Leading companies note the need to build longer term relationships with suppliers, using strategic sourcing rather than cost-based procurement as a way to guarantee long-term supply of sustainable materials.
- Low consumer demand for sustainable commodities due to their high price and a lack of customer awareness are further challenges for the sector.
- A lack of transparency and traceability in supply chains is a major issue for companies.
- The actions that could make the greatest difference to a company's management of these issues include working with suppliers, sharing best practice, educating customers and the implementation of widely adopted supply chain certification standards.



*An inability to procure sufficient quantities of the right material undermines our operational efficiency, product development and competitiveness.*

**Marks and Spencer Group**



*If permanent deforestation or widespread degradation occurs, in current or future sourcing regions, we could face supply constraints in one of our primary product categories.*

**Office Depot**



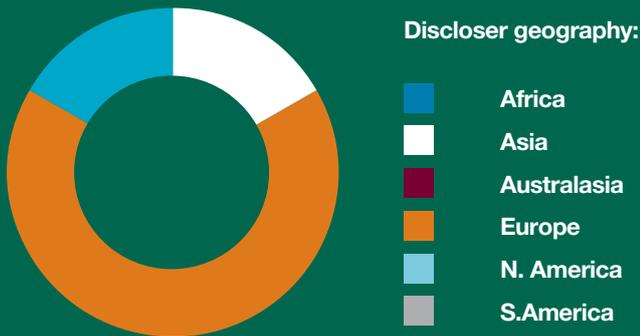
## Transportation

# 200%

% increase in participation (2012/2013)

# 14.3%

Response rate



**Sector leader:**

FedEx Corporation

**Most improved:**

Eurostar International

This sector is commonly overlooked in terms of forest risk commodities but has seen the greatest percentage increase in participation since 2012. In addition to using biofuels and packaging, these businesses often have catering operations. The companies have limited visibility and influence over their supply chains but often face considerable reputational risks.

### Key sector themes

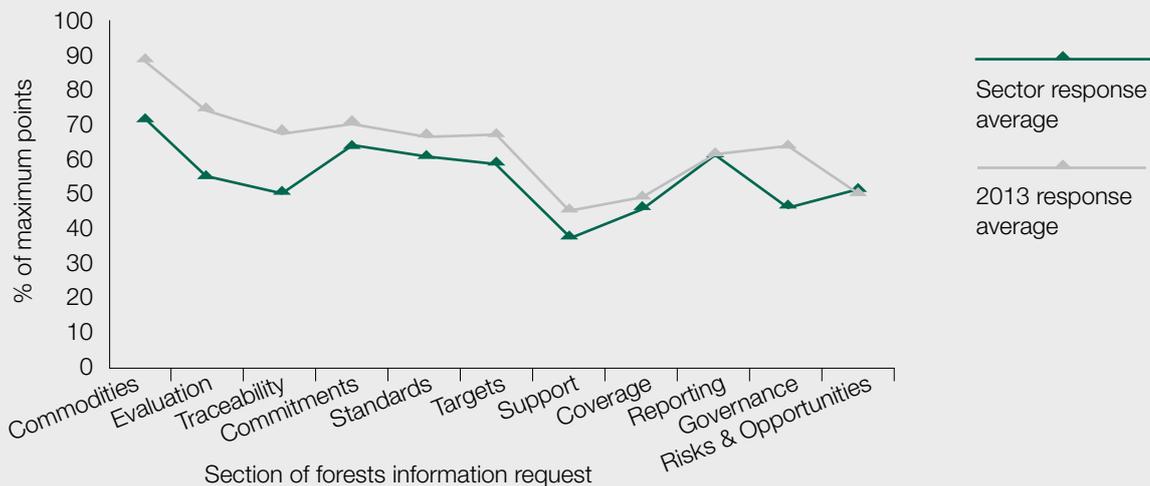
- We welcome a number of new companies in this sector: Deutsche Post, FedEx Corporation, Nankai Electric Railway Co. and Scandinavian Airlines (SAS).
- There are a number of different issues being addressed by the companies in this sector, ranging from biofuels to food service.
- Companies are heavily dependent on suppliers but often have little visibility beyond the first tier.
- We would encourage the formation of an airline group similar to The Sustainable Aviation Fuel Users Group (SAFUG) to work together on providing sustainable catering given the number of passengers being flown (and fed) everyday on commercial flights (airlines fly 3 billion passengers annually for business or pleasure, IATA 2013).

*Suppliers to our caterers have reported multiple requests for information for BA's forest footprint report and we are seeing many more suppliers advising of new positions/targets on palm oil in particular.*

British Airways

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
British Airways	United Kingdom	✓	✓	Full	<b>Timber, Palm oil, Cattle products, Soy, Biofuels</b>
Deutsche Post	Germany			Full	<b>Timber, Biofuels</b>
Eurostar International	United Kingdom	✓	✓	Partial	<b>Timber, Cattle products</b>
FedEx Corporation	USA			Partial	<b>Timber</b>
Nankai Electric Railway Co.	Japan			Full	<b>Timber</b>
SAS	Sweden			Partial	<b>Biofuels</b>

**Sector results:** average performance per section of the forests information request compared to overall 2013 response average



Performance data in this sector was highly variable. Sector performance was closely aligned with the 2013 response averages, except for comparatively poor performance in the governance, traceability, and commitments sections. In the governance section, companies received an average of 46% of maximum available points, versus the 2013 response average of 64%, indicating a lack of board level recognition and management of deforestation risk. Relatively poor performance in the traceability section, where companies achieved an average of 52% of maximum available points, indicates a lack of visibility beyond the first tier. However, the sector achieved 61% of maximum available points in the reporting section, indicating a willingness for transparency concerning commodity use.

### Challenges for the sector

- Encouragingly, companies voice their firm belief that implementing change to reduce their impact on deforestation is the right thing to do for reputation, longer term commercial benefits and for the environment.
- The single largest barrier cited by company suppliers is identifying cost-effective sources of commodities that are certified sustainable. Achieving full traceability of source products, especially food ingredients far down a supply chain, is an unsolved problem in this sector.
- There are challenges in meeting the volume of biofuels demanded by industry. For biofuels to be viable for commercial use, companies highlight the need for them to be widely available in the majority of countries, at commercially attractive prices and acceptable to all company stakeholders.
- A relative lack of retail customer demand for responsibly sourced forest-based products is also cited, especially with the added barrier of price premiums for certified products.



*We also make [CDP's forests program] part of a company-wide database system which is due to be launched in the autumn which will collect, analyse and identify gaps in data sent by our suppliers. This is to allow us to better understand the potential impact on global deforestation through products used by BA so we can make educated and informed decisions on how best to reduce this risk.*

**British Airways**



## Energy

The energy sector is increasingly looking to biofuels as an alternative energy source. This creates considerable pressure on other commodities, such as palm oil and timber.

### Key sector themes

- Participation from companies in this sector remains very low. Both of the submissions in this sector, however, are extremely strong and both companies should be congratulated.
- The companies responding to CDP's forests program continue to demonstrate responsibility, offering market differentiation underpinned by sophisticated feedstock control systems.
- There is potential for significant disruption in the security of supply and price of some of the forest risk commodities due to their increasing use in biomass and fuels, which is not generally acknowledged by companies outside this sector.
- Neste Oil have not taken the 'book and claim' approach to palm oil, as many other companies have, but instead became the world's largest buyer of fully traceable, segregated RSPO-certified palm oil in 2012.
- Greenergy International has taken the approach of developing standards for certain bio-materials where previously there were none. It developed the world's first audit standard for the production of sugarcane in Brazil in collaboration with local experts on agricultural, environmental and social sustainability. Furthermore, it has developed a similar process for verification of waste biofuels, developing the industry's first used cooking oil verification programme.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Greenergy International	United Kingdom	✓	✓	Full	<b>Biofuels</b>
Neste Oil	Finland	✓	✓	Full	<b>Palm oil, Cattle products, Soy, Biofuels</b>

### Challenges for the sector

- Policy uncertainty has hampered the efforts of companies in the sector and policy stability is necessary for companies to invest in long-term solutions.
- In addition, a movement beyond virtual certification or 'book and claim' certificates will be needed to achieve real progress in driving sustainable commodity use throughout the value chain.
- The re-use of materials as feedstocks for biofuel or energy is an important aspect of developing the circular economy. It is equally important to highlight those companies which are making real efforts to communicate their commitment to food security and land efficiency.



*With physical mixing of products we are dependent on chemical tests to verify the quality of the products we buy. With chemical properties being affected during storage and processing, we are liable to fraudulent substitution of our products, logistical disruptions and failure of supply chain.*

**Greenergy International**



*Neste Oil is working actively in the work groups of RSPO (e.g. peat, greenhouse gas, communications and claims), is a member of RSB, ISCC and RTRS, and engage with its raw materials suppliers. The co-operation includes e.g. facilitating supplier sustainability audits, consulting with the management system development, and auditing the suppliers (2nd and 3rd party audits).*

**Neste Oil**



*Sustainability performance is included as a Key Performance Indicator in Board and Executive management team reports and is included in Performance Related Pay criteria for several of the sustainability and trading teams.*

**Greenergy International**



## Utilities

Utility companies are increasingly incorporating biomass from wood feedstocks into their energy mix. Companies in this sector face increasing regulatory and operational risks that could affect security of supply.

### Key sector themes

- Both of the companies who disclosed in this sector are long-term disclosers on forest risk commodities and for that they should be commended.
- Drax Group is at the forefront of trying to create a sustainable and secure supply chain around biomass, including forming its own international wood pellet group.
- The lack of participation from other consumers of wood-based feedstocks is particularly disappointing given the efforts being made to establish sustainability criteria both for producers and buyers in the industry. As this system matures, we look forward to more communication to investors on how a low carbon aspiration is being delivered in practice.

### Challenges for the sector

- Traceability of commodity products and the ability of suppliers to provide detailed sourcing information are cited as key barriers for the sector.
- A policy vacuum is reported to exist for the sector in the UK concerning the lack of future requirements being communicated. The bioenergy sector needs regulatory clarity and consistency, together with consistent application of certification, labeling and standards.

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Drax Group	United Kingdom	✓	✓	Full	Timber
National Grid	United Kingdom	✓	✓	Full	Timber, Biofuels



*The Drax sustainability contracting and sustainability process is being adopted by others who have recognised its forward-looking characteristics. This improves the reputation of Drax, its contracting capability and also therefore its credibility in wider discussions with stakeholders.*

Drax Group



## Other Responding Companies

Responses to 2013 information request	Country	Disclosed in		Response	Commodities covered in response
		2011	2012		
Quanta Computer	Taiwan			Full	Timber
Hewlett-Packard Co.	USA			Full	Timber, Cattle products, Soy

## Appendix I - Commodity timelines

### i. 2013 Timber timeline

#### FEBRUARY

Asia Pulp and Paper (APP) launched a Forest Conservation Policy announcing an immediate moratorium on deforestation in its Indonesian concessions. The Forest Trust will use the moratorium to designate the High Carbon Stock (HCS) and High Conservation Value (HCV) forest to be protected<sup>1</sup>.

#### MARCH

The European Union Timber Regulation (EUTR, No. 995/2010) came into force, prohibiting the placement of illegally-sourced timber onto the EU market. It requires 'due diligence' from operators and traders who first place timber on the EU market and record-keeping to maintain traceability in the supply chain<sup>2</sup>.

Decisions made at a conference in Bangkok mean that almost all rosewood and ebony species are now listed by the Convention on International Trade of Endangered Species (CITES)<sup>3</sup>.

A Greenpeace report 'Cut it Out' evaluated the efforts of the Democratic Republic of Congo (DRC) to clean up its timber industry. Whilst a moratorium on new industrial permits has been implemented, logging is documented to continue through artisanal permits. Identified issues include lack of transparency and the disregard for legal enforcement. The report concluded that companies looking to comply with EU timber legislation should not source from the DRC<sup>4</sup>.

#### APRIL

Illegal timber operations in the Russian Far East were highlighted by a World Wildlife Fund (WWF) report. Exports to China of Mongolian oak, a valuable hardwood species, exceeded the licensed harvest by 2-4 times during the period 2004-2011<sup>5</sup>.

#### MAY

Eyes on the Forest reported breaches of APP's deforestation moratorium by two of its suppliers. APP has since tightened its protocols and made public those breaches identified<sup>6</sup>.

Asia Pacific Resources International Limited (APRIL) announced a \$7 million ecosystem restoration project in Indonesia's Riau province. It was met with mixed responses from the NGO sector due to APRIL's alleged involvement in a number of local timber corruption cases<sup>7</sup>.

Indonesia's President extended the country's moratorium on deforestation for another two years. It aims to protect peat land and primary forest whilst the country strives towards its commodity targets, including doubling palm oil production by 2020<sup>8</sup>.

Australia's Illegal Logging Prohibition Amendment Regulation 2013 was registered as a legislative instrument after coming into effect at the end of 2012. The requirements will come into force two years after commencement<sup>9</sup>.

The Forest Stewardship Council (FSC) revoked all certification issued to Danzer. This followed a Greenpeace complaint over human rights abuses in the DRC by Danzer's former subsidiary "Siforco"<sup>10</sup>.

#### JUNE

The Indonesian government announced its intention to begin burning seized illegal timber instead of allowing it to enter the market. This is intended to strengthen its timber certification scheme<sup>11</sup>.

The FSC suspended all association with APRIL. APRIL had previously notified the FSC of their withdrawal from FSC Chain of Custody certification after a number of NGOs complained it had violated the FSC's Policy of Association<sup>12</sup>.

## JULY

The Indonesian House of Representatives endorsed a bill to eradicate deforestation. It increases existing provisions for jail sentences and fines for illegal loggers. An amendment to the bill specified 'organized illegal activities' to prevent indigenous peoples from being arbitrarily punished. However, NGOs remain concerned that the bill may encourage corruption amongst those officials issuing logging permits<sup>13</sup>.

The United Nations Environment Programme (UNEP) and the International Criminal Police Organization's (INTERPOL) "Operation Lead" reported its progress towards increasing the capacity of participating countries to tackle illegal logging. In the first stage of the project over 200 suspects were arrested and US\$48 million worth of timber was seized<sup>14</sup>.

## AUGUST

World Resources International reported that large investments into the Chinese construction and housing sectors drove a 30% increase in demand for timber imports in the second quarter relative to last year<sup>15</sup>.

## SEPTEMBER

The EU released a new Forestry Strategy to replace the existing strategy from 1998. It focuses on ecosystem services and sets out objectives for 2020, including being able to 'ensure and demonstrate' that all forests are managed according to 'sustainable management principles'. The strategy received a mixed reception from NGOs and was criticized for "being neither a clear strategy, nor an action plan"<sup>16</sup>.

The Indonesian Forestry sector was recognized to have made significant progress towards Sustainable Forestry Management with the presentation of an Environmental Achievement Award to The Borneo Initiative. This marks

progress from ten years ago when Indonesia had the highest rate of deforestation in the world<sup>17</sup>.

Indonesia and the EU signed a Voluntary Partnership Agreement (VPA) regulating Indonesia's timber exports to the EU. These trade agreements demonstrate efforts by both parties to export only verified legal timber to the European market. Indonesia expects to issue Forest Law Enforcement, Governance and Trade (FLEGT) licensed timber once the agreement is ratified and Indonesia's legality assurance system meets the standards it set out in the VPA, as confirmed by an independent audit. EU VPA negotiations have also started this year with Thailand and Côte d'Ivoire<sup>18</sup>.

A Global Witness report was published connecting Japanese companies with illegal logging and human rights abuses in Sarawak, Borneo. Japan is the largest importer of timber from Sarawak but unlike Europe, the US and Australia, it is yet to introduce any legislation on illegal timber imports. The report recommends regulatory action and the suspension of imports from Sarawak unless they can be independently audited as legal<sup>19</sup>.

## OCTOBER

The Norwegian Government Pension Fund with assets of \$760 billion has divested from two Malaysian timber companies, WTK Holdings Berhad and Ta Ann Holdings Berhad. The decision followed recommendations from its Council of Ethics which found the companies to have unacceptable levels of risk of forest destruction<sup>20</sup>.

## Appendix I - Commodity timelines

### ii. 2013 Palm oil timeline

#### JANUARY

The Malaysian government announced its intention to create a new certification scheme for responsibly produced Malaysian palm oil. The Indonesian government is also working to establish its own government-endorsed scheme, raising the prospect of multiple certification schemes for palm oil<sup>1</sup>.

#### FEBRUARY

A World Wildlife Fund report, 'Palm Oil Market and Sustainability in India', spelt out India's role as the world's largest consumer and importer of palm oil and called on Indian companies and governments to support sustainability in the sector<sup>2</sup>.

#### MARCH

The Norwegian Government Pension Fund announced it withdrew investment from 23 palm oil companies, including a number of Roundtable for Sustainable Palm Oil (RSPO) members, over concerns about unsustainable palm oil production<sup>3</sup>.

#### APRIL

The Indonesian palm oil industry supported a new 'compensation' mechanism whereby palm oil companies can swap High Carbon Stock (HCS) and High Conservation Value (HCV) forest for the equivalent area of non-forested lands from the national forest estate, where permitted by law<sup>4</sup>.

The RSPO endorsed revised standards for sustainable palm oil at its General Assembly, including prohibiting planting on peatland. Many stakeholders expressed disappointment that concerns around performance standards for greenhouse gases (GHGs) and pesticides were not addressed<sup>5</sup>.

#### MAY

Indonesian palm oil giant Duta Palma was evicted from the RSPO for violating key sustainability principles. This followed a Greenpeace report, 'Dirty Business', which claimed Duta Palma had cleared forested peatland outside of its registered concessions and within an area covered by Indonesia's moratorium on deforestation<sup>6</sup>.

Work at Herakles Farm's 73,000 hectare palm oil development in Cameroon was suspended pending a government review. A request for the size of the plantation to be reduced to 20,000 hectares was submitted by several government ministries<sup>7</sup>.

#### JUNE

Forest fires broke out on Sumatra, Indonesia, generating one of the worst months for air quality since 2001. Winds carried the haze to Malaysia and Singapore. Both governments and NGOs claimed that many of the fires were on concessions owned by or supplying some of the world's biggest agri-business groups<sup>8</sup>.

Analysis by Greenpeace of the Indonesian government's revised forest moratorium map highlighted that more than 10 million hectares of primary forests and around 32 million hectares of secondary forests still do not have any legal protection<sup>9</sup>.

The Palm Oil Innovation Group (POIG) was launched. The members consist of international NGOs and palm oil producing companies who are leading the way on socio-environmental issues. POIG members committed to reinforcing and improving the RSPO Principles and Criteria<sup>10</sup>.

## JULY

A mapping tool based on NASA satellite data showed the majority of forest fires in Indonesia in June were located in deforested peatlands and scrub, consistent with reports from the World Resources Institute and Eyes on the Forest<sup>11</sup>.

Scientists identified a gene called 'Shell' that regulates yields from the oil palm tree. Manipulation of this gene may enable breeders to boost palm oil yields by nearly one third<sup>12</sup>.

## AUGUST

Consumer groups Palm Oil Investigations and Palm Oil Consumers Action issued a joint statement which called into question the value of GreenPalm certificates. The main criticism made was that, although companies are buying GreenPalm certificates to support sustainable palm oil production, this does not necessarily mean they are addressing their own palm oil supply chains or creating demand for traceable sustainable palm oil back to source<sup>13</sup>.

## SEPTEMBER

A Greenpeace report, 'Certifying Destruction', claimed that the palm oil industry was the single largest cause of deforestation in Indonesia between 2009-2011, accounting for a quarter of the country's forest loss<sup>14</sup>.

At the first European RSPO Summit, Europe was urged to take the lead on sustainable palm oil uptake. French and German palm oil industries and users announced national pledges to source 100% sustainable palm oil following similar commitments from the Netherlands, Belgium and the UK. The German Forum for Sustainable Palm Oil and the French Alliance for Sustainable Palm Oil aim to use certified sustainable palm oil (CSPO) from 2015<sup>15</sup>.

The Malaysian Palm Oil NGO Coalition were reported to be apprehensive over rumors that key players plan to exit the RSPO. The Coalition also expressed concern that the requirements of the new Malaysian certification scheme are too weak<sup>16</sup>.

## OCTOBER

A Greenpeace report investigated the effect of palm oil expansion on Sumatran Tiger habitat and focused on Wilmar International. It alleged that some of the company's third party suppliers are linked to peatland fires and illegal plantations<sup>17</sup>.

## Appendix I - Commodity timelines

### iii. 2013 Cattle products timeline

#### JANUARY

Tests carried out by the Food Safety Authority of Ireland found traces of horse DNA in the beef burgers of five UK retailers, sparking the 'horse meat scandal'. Retailers removed from sale those products in question and many issued public apologies. Investigations to identify the offending suppliers highlighted the lack of traceability in many supply chains<sup>1</sup>.

#### FEBRUARY

A report published by Ernst & Young in response to the 'horse meat scandal' found that out of 50 UK companies only 48% are conducting due diligence on their supply chain. 30% admitted to not carrying out any checks at all<sup>2</sup>.

McDonald's Corporation launched a new app in Australia to enable customers to see where their food comes from. 'TrackMyMacca's' uses recognition technology to identify the food purchased and GPS to identify the location and time. This information is matched to McDonald's Corporation's supply chain data to provide tailored information<sup>3</sup>.

Whitbread pledged to trace its products from 'field to fork' after having its beef products implicated in the 'horse meat scandal'. The owner of Beefeater and Costa Coffee now requires certification from its meat suppliers and is implementing independent batch testing of its food<sup>4</sup>.

The US beef industry, headed by the National Cattleman's Beef Association, published results from the most comprehensive entire lifecycle sustainability assessment of the livestock sector. They examined the inputs and outputs required to produce beef in the 1970s, 2005 and 2011. Over the last six years they estimate that overall sustainability increased by 5% due to a number of efficiency improvements including better irrigation systems and packaging processes. The assessment was certified by the National Standards Foundation<sup>5</sup>.

#### MARCH

At a high-profile event during Paris Fashion Week, the Gucci Group released a new range of 'zero-deforestation' bags, each of which is made from the world's first Rainforest Alliance certified leather and comes with a passport detailing its journey from the cattle ranch. This followed a campaign launched by Greenpeace in 2009 to clean up the fashion industry<sup>6</sup>.

The Brazilian Association of Supermarkets, representing 2,800 members, signed an agreement with the Federal Public Prosecutor's Office not to source meat from unknown origins. The agreement is aimed at strengthening the Brazilian certification scheme for cattle production<sup>7</sup>.

#### APRIL

The Nature Conservancy, the Marfrig Group and Walmart Brazil formed a collaboration to help beef cattle ranchers improve the sustainability of their operations. They jointly invested the equivalent of over US\$240,000 in technical information and support targeted at 20 ranchers in the state of Pará. This will help the ranches adhere to the Forest Code and adopt best practice, increasing the availability of beef from assured origin<sup>8</sup>.

Brazil threatened 26 companies with fines for sourcing 55,699 cattle from illegally deforested areas over the first nine months of 2012. The fines would amount to US\$282 million and resulted from an investigation into companies that refused to sign a responsible sourcing agreement<sup>9</sup>.

#### MAY

The UK's All-Parliamentary Group on Beef and Lamb produced a report on the carbon emissions of the two livestock sectors. The report describes environmental sustainability and food security as a trade-off and questions the widespread notion that these sectors produce high carbon emissions. In particular it argues

that research often overlooks the sector's contribution to biodiversity and creation of carbon sinks. The report's findings were contested by groups such as the World Wildlife Fund (WWF) who argued that the report ignored clear scientific evidence for the contribution of the livestock sectors to global greenhouse gas (GHG) emissions<sup>10</sup>.

## JUNE

The Carrefour Group sold the first Rainforest Alliance certified beef in 13 of its São Paulo hypermarkets. The beef is supplied by Marfrig Group whose operations from its Tangará da Serra production unit are the first to have ever received Rainforest Alliance certification<sup>11</sup>.

Increasing demand for beef from the Chinese market has been reported by Reuters as Chinese firms rush to take over foreign meat producers. A number of food safety scares in the country have driven a move away from local, cheap meats, increasing the appeal of imports<sup>12</sup>.

## AUGUST

The first synthetic burger was cultured in a petri dish and served up to food critics. The muscle fibers were grown from cow stem cells in a process that lasted three months. Dr. Mark Post, who led the work, acknowledged there is still progress to be made in improving the efficiency of the cell-growing process and on improving the taste using fat cells. The research was funded by Sergey Brin, co-founder of Google, who hopes synthetic meat will improve livestock welfare<sup>13</sup>.

## SEPTEMBER

A report produced by the United Nations Food and Agriculture Organization showed that livestock supply chains account for 14.5% of all anthropogenic GHG emissions. It estimates that these could feasibly be

reduced by 30% simply by wider uptake of best practice and existing technologies. The cattle sector was found to account for 65% of these emissions but also to have the greatest potential for reductions<sup>14</sup>.

Meat produced under a new certification scheme went on sale in Australia. The 'Pasture-fed Cattle Assurance System' (PCAS) certifies that cattle are pasture- and not grain-fed<sup>15</sup>.

## Appendix I - Commodity timelines

### iv. 2013 Soy timeline

#### JANUARY

Two years on from the initiation of the Roundtable on Responsible Soy Association's (RTRS) Standard, the landmark of 1 million tons of certified soy was reached. The Association aims to reach five times that volume by 2015, but this remains small relative to the 240 million tonnes of soy produced each year<sup>1</sup>.

#### MARCH

A new RTRS Brazilian Task Force met to discuss the adoption of certified soy. It prioritized increasing awareness of RTRS certification and focusing on the demand for, not just the supply of, RTRS soy within Brazil<sup>2</sup>.

#### APRIL

Increases in the number of soy disease outbreaks were reported. Asian soybean rust, a serious fungal disease that spread to the Western Hemisphere in 2001, increased by 73% in the latest Brazilian harvest<sup>3</sup>.

Raisioagro, a feed company, became the first Finnish company to buy sustainable soy, having purchased 10,000 tons worth of responsible soy credits from a Brazilian farmer<sup>4</sup>.

Chinese officials were reported by the ProTerra Foundation to be showing an interest in sourcing millions of tons of non-genetically modified (non-GMO), sustainable soy. China is the world's largest importer of soy beans with imports of 59 million tonnes in 2012/13. Its increasingly affluent population has growing concerns about food safety<sup>5</sup>.

#### MAY

In recognition of Chinese demand for soy beans, RTRS's annual forum (RT8) was held in Beijing. Decisions were made to ban the use of certain pesticides by 2017. The World Wildlife Fund (WWF) also used the forum to criticize purchasers for not driving demand for sustainable soy: only 40% of the RTRS-certified soy produced last year was actually purchased<sup>6</sup>.

Supermarkets across Europe, including Lidl and the REWE Group, signed the Brussels Soy Declaration declaring their support for non-GMO soy. This was in reaction to a declaration by four British retailers that they would no longer demand non-GMO feed for the production of eggs and poultry, citing constraints on supply<sup>7</sup>.

#### JUNE

A paper published in PLOS ONE investigated the yields of four key food crops. Soy yields were found to be increasing by 1.3% per year, significantly less than the 2.4% per year required to meet the projected needs of the global population in 2050. This brings into question whether intensification alone is sufficient<sup>8</sup>.

#### JULY

A mapping project was initiated by the RTRS to identify areas of High Conservation Value in Paraguay that are not suitable for sustainable soy production. This followed the success of a similar project in Brazil<sup>9</sup>.

Field trials were initiated in Bolivia to understand the local context for RTRS certification. Every soy-producing country is encouraged by the RTRS to undergo this process to develop a National Interpretation of the RTRS Standard<sup>10</sup>.

## SEPTEMBER

The Brazilian Panel on Climate Change produced a report projecting the local climatic changes expected in the coming century. With average temperatures expected to be 3-6% higher and rainfall patterns changing, it predicted lower productivity and more crop disease outbreaks<sup>11</sup>.

The RTRS published a new standard: RTRS Production Standard version 2.0. Public consultation fed into the 'Use of Pesticides Working Group' to revise those chemicals permitted under the new standard<sup>12</sup>.

### v. 2013 Biofuels timeline

#### JANUARY

Research published by the Centre of Economic Research at ETH investigated the indirect land use change (ILUC) resulting from sugarcane production. Sugarcane expansion in São Paulo was found to be positively correlated with deforestation in the Amazon, processes thought to be linked through the displacement of cattle ranching<sup>1</sup>.

Client Earth and Birdlife initiated legal action against the European Commission. The Commission was scheduled to release a report on the 'carbon debt' of biomass used for energy generation (i.e. the gap between burning the biomass and the uptake of CO<sub>2</sub> by new vegetation growth) in September 2012 to support decision making. The NGOs took the continued delay of the report to imply a refusal to publish the results, a breach of EU law<sup>2</sup>.

#### MARCH

The UK government has an obligation to meet the EU 2020 renewables target of 10% renewables by 2020. A committee of UK MPs passed an amendment to the Renewables Obligation to include subsidies for bioliquids, including palm oil. This has led to concern amongst NGOs that the policy may cause the displacement of other land uses into the rainforest: ILUC is not currently taken into account in the sustainability criteria<sup>3</sup>.

At its annual meeting, the Roundtable on Sustainable Biofuels (RSB) adopted two new policies: 1) to use the Low Risk of Indirect Impact Biofuels (LIIB) approach to provide incentives for biofuels produced under conditions that avoid risk of ILUC; and 2) to recognize the Forest Stewardship Council (FSC) certification as aligned to the RSB standard. With the latter decision, a simplified certification process is now available for woody residues from FSC certified forestry operations to meet RSB certification. This will increase the volume of sustainable woody biomass that can enter the biofuels market<sup>4</sup>.

#### APRIL

The Roundtable on Sustainable Biofuels changed its name to the 'Roundtable on Sustainable Biomaterials' in order to widen the scope of its environmental and social safeguards to include biomass used for additional products, such as bio-plastics for packaging<sup>5</sup>.

Chatham House produced a report detailing the issues that arise with increasing biofuel use in the UK: biofuels are expected to constitute 5% of transport fuel in the UK in 2013/14 and their use is likely to increase to meet the EU 2020 targets. In the absence of safeguards on ILUC or food security in the EU sustainability criteria, the report concludes that increases in biofuel use are not sustainable and are not a cost-effective means to reduce emissions<sup>6</sup>.

The UN Economic Commission for Europe and the UN Food and Agriculture Organization published the findings of an enquiry revealing that wood biomass is the largest source of renewable energy in the region, accounting for 3.4% of total primary energy supply. Wood directly sourced from forests accounts for 34.1% of this consumption and 48% is consumed by the industrial sector<sup>7</sup>.

A report by the International Institute for Sustainable Development (IISD) revealed EU biofuel subsidies cost €5.5-6.9 billion in 2011. The rationale behind this is questioned in light of the uncertainties surrounding greenhouse gas (GHG) savings<sup>8</sup>.

The Sustainable Aviation Fuel Users Group (SAFUG) released a statement aimed at policy makers strongly in favor of including safeguards against ILUC in biofuel policies. They recommend use of the LIIB approach, as adopted earlier by the RSB. It emphasized the need for such safeguards to be broadly implemented regardless of the country of origin or country of use<sup>9</sup>.

## MAY

A paper published in Geophysical Research Papers modelled the expansion of sugarcane plantations into the Brazilian cerrado over the next 5 years. Whilst expansion is not found to have a significant effect on the overall climate, the model revealed significant local and seasonal temperature and precipitation effects during the growing season, principally due to the resultant changes in land surface reflectivity (albedo)<sup>10</sup>.

## JUNE

A study published in 'Global Change Biology: Bioenergy' looked at the carbon emissions created when disturbing mineral soils by intensive forest management practices. This is not usually included in calculations of the impact of forest biomass in place of fossil fuels; the report recommends re-evaluating these calculations<sup>11</sup>.

Permission for another combined heat and power station in Grangemouth, Scotland sparked reservations about the growth of energy from biomass from the NGO FERN<sup>12</sup>.

## JULY

The International Institute for Sustainable Development (IISD) published a study revealing that imports of palm oil into Europe for biofuels increased more than three-fold from 2006-2012, accounting for 80% of the overall increase<sup>13</sup>.

## AUGUST

UK's Department for Energy and Climate Change (DECC) published draft biomass sustainability criteria to come into force in 2015. Currently power from biomass must emit 60% less GHGs than fossil fuels, a figure that will be tightened to 72% in 2020 and 75% from 2025.

It will also give the government the power to remove subsidies under the Renewables Obligation to those producers not meeting the standards. However, many NGOs claim the new criteria do not go far enough to ensure sustainability, for example by not accounting for ILUC<sup>14</sup>.

A leaked draft document proposing EU biomass sustainability criteria was met with strong criticism from NGOs including FERN. The Commission has been working to set EU-wide biomass criteria which, unlike for biofuels, are currently set at a national level. The criteria were criticized for not taking into account ILUC or carbon debt, leading them to be weaker than draft biofuels legislation<sup>15</sup>.

## SEPTEMBER

The EU Parliament passed legislation to accompany the Renewable Energy Directive. The original Directive aims to have 10% renewable transport fuels by 2020. The new legislation imposes a 6% cap for the contribution of first generation biofuels to that target. This was more than the 5.5% cap recommended by the Environment Committee but less than the caps advocated by industry lobbying groups. It also mandated that ILUC would be taken into consideration from 2020<sup>16</sup>.

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## Appendix II - Non-responding companies

Company name	Country	Company name	Country	Company name	Country
<b>Agricultural Products</b>					
Arantes Alimentos	Brazil	Salvatore Ferragamo	Italy	Sumber Alfaria Trijaya	Indonesia
Archer Daniels Midland	USA	Stella International Holdings	Hong Kong	Sun Art Retail Group	Hong Kong
Astra Agro Lestari	Indonesia	Steven Madden	USA	SuperValu	USA
Bakrie Sumatera Plantations	Indonesia	TOD'S	Italy	Sysco Corporation	USA
Barry Callebaut	Belgium	Vera Bradley	USA	The Co-Operative	United Kingdom
Bukit Darah	Sri Lanka	VF Corporation	USA	The Spar Group	South Africa
Bunge	USA	VN Tiong Liong Industrial Co.	Vietnam	Tiger Brands	South Africa
BW Plantation	Indonesia	Wolverine World Wide	USA	Uny Co.	Japan
California Oils Corporation	USA	Yue Yuen Industrial	Hong Kong	Waitrose	United Kingdom
Cargill	USA	Zhejiang Aokang Shoes Co.	China	Wal Mart de Mexico	Mexico
China Agri-Industries Holdings	China	<b>Diversified Consumer Services</b>			
Chocoladefabriken Lindt & Sprüngli	Switzerland	Dignity	United Kingdom	Walmart Chile	Chile
DuPont Nutrition & Health	USA	<b>Energy</b>			
Felda Global Ventures	Malaysia	BP	United Kingdom	Wal-Mart Stores	USA
First Resources	Singapore	Chevron Corporation	USA	Whole Foods Market	USA
Genting Plantations	Malaysia	ConocoPhillips	USA	Wumart Stores	China
Golden Agri-Resources	Singapore	Exxon Mobil Corporation	USA	X5 Retail Group	Russia
Hap Seng Plantations Holdings	Malaysia	GS Holdings	South Korea	Yamato Holdings Co.	Japan
Keck Seng (Malaysia)	Malaysia	Petróleo Brasileiro (Petrobras)	Brazil	<b>Health Care</b>	
Kuala Lumpur Kepong	Malaysia	Piedmont Biofuels	USA	Green Cross	South Korea
Kulim Malaysia	Malaysia	Royal Dutch Shell	Netherlands	Kobayashi Pharmaceutical Co.	Japan
Louis Dreyfus	France	Total	France	Yuhan Corporation	South Korea
M.P. Evans Group	United Kingdom	Valero Energy Corporation	USA	<b>Hotels, Restaurants &amp; Leisure</b>	
Musim Mas	Indonesia	<b>Financials</b>			
Nutreco Holding	Netherlands	Alliance Global Group	Philippines	Accor	France
Perkebunan Nusantara	Indonesia	Boustead Holdings	Malaysia	Arcos Dorados Holdings	Argentina
PP London Sumatra Indonesia	Indonesia	Potlatch Corporation	USA	Autogrill Spa	Italy
PPB Group	Malaysia	Rayonier	USA	Bloomin' Brands	USA
R.E.A Holdings	United Kingdom	<b>Food &amp; Staples Retailing</b>			
Sampoerna Agro	Indonesia	Aeon Co.	Japan	Bob Evans Farms	USA
Sarawak Oil Palms	Malaysia	Alimentation Couche-Tard	Canada	Buffalo Wild Wings	USA
Sipef	Belgium	Almacenes Éxito	Colombia	Café de Coral Holdings	Hong Kong
SLC Agricola	Brazil	Arcs Co.	Japan	Carnival Corporation	United Kingdom
Socfin	Luxembourg	Axfood	Sweden	Cedar Fair	USA
Tradewinds Plantation	Malaysia	Big C Supercenter	Thailand	Central Plaza Hotel	Thailand
TSH Resources	Malaysia	Bim Birleşik Magazalar	Turkey	Cheesecake Factory Bakery	USA
United International Enterprises	Denmark	BJ's Wholesale Club	USA	Chipotle Mexican Grill	USA
United Malacca	Malaysia	Booker Group	United Kingdom	Choice Hotels International	USA
United Plantations	Malaysia	Casino Guichard-Perrachon	France	Cracker Barrel Old Country Store	USA
Universal Robina	Philippines	Cencosud	Chile	Crown	Australia
Vicentin	Argentina	China Resources Enterprise	China	Darden Restaurants	USA
<b>Consumer Durables &amp; Apparel</b>					
Aaron's	USA	Cia. Brasileira de Distribuicao (CBD)	Brazil	DineEquity	USA
Alpargatas	Brazil	Grupo Pao de Acucar	Belgium	Domino's Pizza	USA
Anta Sports Products	Hong Kong	Colruyt	Belgium	Dominos Pizza Group	United Kingdom
Asics Corporation	Japan	Controladora Comercial Mexicana	Mexico	Dunkin' Brands Group	USA
Bed Bath & Beyond	USA	Costco Wholesale Corporation	USA	Echo Entertainment Group	Australia
Coach	USA	CP ALL	Thailand	Formosa International Hotels	Taiwan
Columbia Sportswear	USA	CVS Caremark Corporation	USA	Galaxy Entertainment Group	Hong Kong
Compagnie Financière Richemont	Switzerland	Dairy Farm International Holdings	Hong Kong	Genting	Malaysia
Curtume Viposa	Brazil	Edeka Zentrale	Germany	Genting Hong Kong	Hong Kong
Daphne International Holdings	China	E-Mart Co.	South Korea	Genting Malaysia	Malaysia
Deckers Outdoor Corporation	USA	George Weston	Canada	Genting Singapore	Singapore
Desarrolladora Homex	Mexico	Greggs	United Kingdom	GKL	South Korea
Duratex	Brazil	Groupe Auchan	France	Greene King	United Kingdom
Fortune Brands	USA	Grupo Comercial Chedraui	Mexico	Hilton Worldwide	USA
Fossil	USA	Gruppo Cremonini	Italy	Home Inns & Hotels Management	China
Geox	Italy	Izumi Co.	Japan	Hongkong & Shanghai Hotels	Hong Kong
G-III Apparel Group	USA	J & J Snack Foods	USA	Hotel Shilla Co.	South Korea
Grendene	Brazil	Kroger	USA	Hyatt Hotels	USA
Gucci Group	Italy	Lianhua Supermarket Holdings Co.	China	Indian Hotels Co.	India
Hermes International	France	Loblaw Companies	Canada	Intercontinental Hotels Group	United Kingdom
Hugo Boss	Germany	Magnit	Russia	Jack in the Box	USA
JD Group	South Africa	Massmart Holdings	South Africa	Jollibee Foods	Philippines
Jones Apparel Group	USA	Metro	Canada	Jubilant Foodworks	India
Levi Strauss & Co.	USA	Pick 'n Pay Stores	South Africa	Kangwon Land	South Korea
LG Fashion	South Korea	Pinnacle Foods Group	USA	KFC Holdings (Malaysia)	Malaysia
Mohawk Industries	USA	Post Holdings	USA	Kuwait Food Co.	Kuwait
Mulberry Group	United Kingdom	President Chain Store Corporation	Taiwan	Las Vegas Sands Corporation	USA
Patagonia	USA	PriceSmart	USA	Mandarin Oriental International	Hong Kong
Polo Ralph Lauren Corporation	USA	Puregold Price Club	Philippines	Marriott International	USA
Pou Chen Corporation	Taiwan	Raia Drogasil	Brazil	Marston's	United Kingdom
PPR	France	Rallye	France	Mattel	USA
Prada	Italy	Safeway	USA	Melco Crown Entertainment	Hong Kong
PVH Corporation	USA	Seven & I Holdings Co.	Japan	Melia Hotels International	Spain
		Shoppers Drug Mart Corporation	Canada	MGM China Holdings	China
		Standard Food Corporation	Taiwan	MGM Resorts International	USA
				Minor International	Thailand
				Mitchells & Butlers	United Kingdom
				NH Hoteles	Spain
				Oishi Group	Thailand

Company name	Country	Company name	Country	Company name	Country
Oriental Land Co.	Japan	China Southern Airlines Co.	China	Columbia Forest Products	USA
Orient-Express Hotels	Bermuda	CJ	South Korea	CRH	Ireland
Panera Bread Co.	USA	Combodge (Cie)	France	Croda International	United Kingdom
Papa John's International	USA	Daimler	Germany	Daio Paper Corporation	Japan
Paradise Co.	South Korea	Delta Air Lines	USA	DS Smith	United Kingdom
Restaurant Group	United Kingdom	Deutsche Lufthansa	Germany	Empresas CMPC	Chile
Royal Caribbean Cruises	USA	Doosan Corporation	South Korea	FIBRIA Celulose	Brazil
Ryman Hospitality Properties	USA	Dr. Ing. h. c. F. Porsche	Germany	Fletcher Building	New Zealand
Sands China	Hong Kong	Eagle Ottawa	Canada	Georgia-Pacific	USA
Shanghai Jinjiang International Hotels Development Co.	China	easyJet	United Kingdom	Glatfelter Airlaid	Canada
Shangri-La Asia	Hong Kong	Faurecia	France	Glencore International	Switzerland
Shenzen Overseas Chinese Town Holdings	China	Ford Motor Co.	USA	Graphic Packaging	USA
Six Flags Entertainment Corporation	USA	General Motors Co.	USA	Hallmark Cards	USA
SJM Holdings	Hong Kong	Global Service Vigilancia e Seguran	Brazil	Hokuetsu Kishu Paper Co.	Japan
Sky City Entertainment Group	New Zealand	Gol Linhas Aereas Inteligentes	Brazil	Huhtamäki	Finland
Starbucks Corporation	USA	Grupo Aeromexico	Mexico	Indah Kiat Pulp & Paper Corporation	Indonesia
Starwood Hotels & Resorts Worldwide	USA	Hatch Consultoria e Gerenciamento de Empreendimentos	Brazil	Jaya Tiasa	Malaysia
Texas Roundhouse	USA	Henniges Automotive	USA	Kapstone Paper And Packaging	USA
Tim Hortons	Canada	Honda Motor Co.	Japan	Koninklijke DSM	Netherlands
Tsogo Sun Holdings	South Africa	Hutchison Whampoa	Hong Kong	Lee & Man Paper Manufacturing	Hong Kong
TUI Travel	United Kingdom	Hyundai Motor	South Korea	Louisiana-Pacific	USA
Wendy's International	USA	Iberian Airlines	United Kingdom	Mayr-Melnhof Karton Aktiengesellschaft	Austria
Wetherspoon	United Kingdom	IJM Corporation	Malaysia	Nine Dragons Paper Industries	Hong Kong
Wyndham Worldwide Corporation	USA	Japan Airlines Corporation	Japan	Norbord	Canada
Wynn Macau	USA	Jardine Matheson	Hong Kong	Packaging Corporation Of America	USA
Yum! Brands	USA	Jetblue Airways Corporation	USA	PaperlinX	Australia
Zensho Holdings Co.	Japan	JG Summit Holdings	Philippines	Plum Creek Timber Co.	USA
<b>Household &amp; Personal Products</b>		Korean Air	South Korea	Portucel Empresa Produtora	Portugal
AmorePacific Corporation	South Korea	Lear	USA	Rexam	United Kingdom
AmorePacific Group	South Korea	Malaysia Airlines	Malaysia	RockTenn	USA
Beiersdorf	Germany	Masco Corporation	USA	Samling Global	Hong Kong
Church & Dwight Co.	USA	Nissan Motor Co.	Japan	Schweitzer-Mauduit International	USA
Clorox Co.	USA	Noble Group	Hong Kong	Shandong Chenming Paper Holdings	China
Dabur India	India	OfficeMax	USA	Shantou Dongfeng Printing Co.	China
Elizabeth Arden	USA	Oriental Holdings	Malaysia	Siam Cement	Thailand
Emami	India	PSA Peugeot Citroen	France	Sonoco Products Co.	USA
Estee Lauder Companies	USA	Qantas Airways	Australia	Stella-Jones	Canada
Godrej Consumer Products	India	Renault	France	Suzano Pulp and Paper	Brazil
Hengan Intl Group	Hong Kong	RR Donnelley & Sons Co.	USA	Ta Ann Holdings	Malaysia
Herbalife	Cayman Islands	Ryanair Holding	Ireland	West Fraser Timber Co.	Canada
Hypermarches	Brazil	Semapa - Sociedade de Investimento e Gestao	Portugal	YFY	Taiwan
KOSE Corporation	Japan	Sime Darby	Malaysia	Yueyang Paper	China
LG Household & Health Care	South Korea	Singapore Airlines	Singapore	<b>Media</b>	
Lion Corporation	Japan	Southwest Airlines Co.	USA	Anhui Xinhua Media Co.	China
Marico	India	Takata Corporation	Japan	APN News & Media	Australia
Mead Johnson Nutrition Co.	USA	Thai Airways International	Thailand	Axel Springer	Germany
Nu Skin Enterprises	USA	TNT Express	Netherlands	Bertelsmann	Germany
Pola Orbis Holdings	Japan	Toppan Forms Co.	Japan	Caxton and CTP Publishers and Printers	South Africa
Procter & Gamble Co.	USA	Toyota Boshoku Corporation	Japan	China South Publishing & Media Group	China
Revlon	USA	Toyota Motor Corporation	Japan	Daily Mail & General Trust	United Kingdom
S.C. Johnson & Son	USA	Turk Hava Yollari	Turkey	Euromoney Institutional Investor	United Kingdom
Seventh Generation	USA	United Continental Holdings	USA	Fairfax Media	Australia
Vinda International Holdings	Hong Kong	UPS	USA	Gannett Co.	USA
<b>Industrials &amp; Autos</b>		US Airways	USA	Informa	United Kingdom
Acciona	Spain	Virgin Atlantic Airways	United Kingdom	Jiangsu Phoenix Publishing & Media Corporation	China
Adani Enterprises	India	Visteon	USA	John Wiley & Sons	USA
Aeroflot	Russia	Volkswagen	Germany	Lagardere S. C. A.	France
Air Berlin & Co. Luftverkehrs	Germany	Volvo	Sweden	McGraw-Hill Companies	USA
Air Canada	Canada	Wolseley	United Kingdom	Meredith Corporation	USA
Air China	China	<b>Information Technology</b>		Naspers	South Africa
Air France - KLM	France	Xilinx	USA	New York Times Co.	USA
Alaska Air Group	USA	<b>Materials</b>		News Corporation	USA
All Nippon Airways Co.	Japan	Asia Pacific Resources International Limited (APRIL)	Singapore	Sanoma	Finland
AMR Corporation	USA	Asia Pulp & Paper	Singapore	Schibsted ASA	Norway
Armstrong World Industries	USA	Barito Pacific	Indonesia	Seven West Media	Australia
Asiana Airlines	South Korea	BASF	Germany	Singapore Press Holdings	Singapore
Astra International	Indonesia	Boise Packaging & Newsprint	USA	Tamedia	Switzerland
Audi	Germany	Boral	Australia	Time Warner	USA
Balfour Beatty	United Kingdom	Canfor Corporation	Canada	Valassis Communications	USA
Bidvest Group	South Africa	Celulosa Arauco y Constitucion	Chile	Washington Post Co.	USA
Carillion	United Kingdom	China Resources and Transport Group	Hong Kong	Wolters Kluwer	Netherlands
Cathay Pacific Airways	Hong Kong	Cikel	Brazil		
China Airlines	Taiwan	Cleawater Paper	USA		
China Eastern Airlines Co.	China				

## Appendix II - Non-responding companies

Company name	Country	Company name	Country	Company name	Country
<b>Packaged Foods, Meats / Brewers &amp; Soft Drinks</b>					
Aarhuskarlskhamn	Sweden	Mewah International	Singapore	Hyundai Department Store	South Korea
Adecoagro	Luxembourg	MHP	United Kingdom	Hyundai Green Food	South Korea
Ajinomoto Co.	Japan	Mitsubishi Shokuhin Co.	Japan	IKEA	Sweden
Alicorp	Peru	Molinos Rio de la Plata	Argentina	Isetan Mitsukoshi Holdings	Japan
Almarai Company	Saudi Arabia	Mondelez International	USA	jcpenny	USA
Anheuser Busch InBev	Belgium	Monster Beverage Corporation	USA	John Lewis	United Kingdom
Arca Continental	Mexico	Nichirei Corporation	Japan	Kohl's Corporation	USA
Aryzta	Switzerland	Nisshin Foods Holdings Co.	Japan	LAWSON	Japan
Avi	South Africa	Nisshin Seifun Group	Japan	Limited Brands	USA
BINGGRAE Co.	South Korea	Nong Shim	South Korea	L'Occitane International	Luxembourg
BRF	Brazil	Orkla	Norway	Lojas Americanas	Brazil
Britannia Industries	India	Osem Investments	Israel	Lojas Renner	Brazil
Britvic	United Kingdom	Parmalat Spa	Italy	Lotte Shopping	South Korea
Bumitama Agri	Indonesia	Petra Foods	Singapore	Lumber Liquidators Holdings	USA
Calbee	Japan	Pilgrims Pride	USA	Macy's	USA
Campbell Soup Co.	USA	Pioneer Foods	South Africa	Marisa Lojas	Brazil
Canada Bread	Canada	Premier Foods	United Kingdom	Men's Wearhouse	USA
Charoen Pokphand Foods	Thailand	QI Resources	Malaysia	Mitra Adiperkasa	Indonesia
China Foods	Hong Kong	Raisio	Finland	N Brown Group	United Kingdom
China Mengniu Dairy Co.	Hong Kong	Ruchi Soya	Indonesia	Nordstrom	USA
China Yurun Food Group	Hong Kong	Salim Ivomas Pratama	Indonesia	Organizacion Soriana	Mexico
Chuying Agro-pastoral Co.	China	San Miguel Pure Foods Co.	Philippines	Petsmart	USA
CJ Cheiljedang	South Korea	Sanderson Farms	USA	S.A.C.I. Falabella	Chile
Cloetta	Sweden	Saputo	Canada	Sa Sa International Holdings	Hong Kong
Coca-Cola Amatil	Australia	Savola Al-Azizia United Co.	Saudi Arabia	Sally Beauty Holdings	USA
Coca-Cola Enterprises	USA	Seaboard Corporation	USA	Sears Holdings Corporation	USA
Coca-Cola Femsab Sab-Ser I	Mexico	Sinar Mas Agro Resources and Technology	Indonesia	Shinsegae	South Korea
COCA-COLA İÇECEK	Turkey	Snyder's-Lance	USA	Staples	USA
Coca-Cola West Co.	Japan	Strauss Group	Israel	Steinhoff International Holdings	South Africa
ConAgra Foods	USA	Thai President Foods Public Co.	Thailand	Swatch Group	Switzerland
CSM	Netherlands	The Coca-Cola Co.	USA	Target Corporation	USA
Dairy Crest Group	United Kingdom	The Hershey Co.	USA	The Home Depot	USA
Dean Foods Co.	USA	The J.M. Smucker Co.	USA	TJX Companies	USA
Del Monte Foods	USA	Tingyi (Cayman Islands) Holdings	Hong Kong	Ulta Salon Cosmetics & Fragrance	USA
Dr Pepper Snapple Group	USA	Tootsie Roll	USA	Urban Outfitters	USA
Ebro Foods	Spain	Toyo Suisan Kaisha	Japan	Vitamin Shoppe	USA
Emmi	Switzerland	TreeHouse Foods	USA	WH Smith	United Kingdom
Ezaki Glico Co.	Japan	Tyson Foods	USA	<b>Tobacco</b>	
Femsab - Fomento Economico Mexicano	Mexico	Ulker Biskuvi Sanayi	Turkey	Altria Group	USA
Flowers Foods	USA	Uni-president Enterprises	Taiwan	British American Tobacco	United Kingdom
Fraser and Neave	Singapore	United Biscuits	United Kingdom	Gudang Garam	Indonesia
Fuji Oil Co.	Japan	V V Food & Beverage Co.	China	Hanjaya Mandala Sampoerna	Indonesia
Fujian Sunner Development Co.	China	Vietnam Dairy Products	Vietnam	Imperial Tobacco Group	United Kingdom
General Mills	USA	Want Want China Holdings	Hong Kong	ITC	India
Glanbia	Ireland	Whitewave Foods	USA	Japan Tobacco	Japan
Gloria	Peru	Yakult Honsha Co.	Japan	KT&G	South Korea
Goodman Fielder	Australia	Yamazaki Baking Co.	Japan	Lorillard	USA
Grupo Bafar	Mexico	Yeo Hiap Seng	Singapore	Philip Morris International	USA
Grupo Herdez	Mexico	<b>Retailing</b>		Reynolds American	USA
Grupo Nutresa	Colombia	Amazon.com	USA	Souza Cruz	Brazil
H.J. Heinz Co.	USA	Ann	USA	Swedish Match	Sweden
Hillshire Brands Co.	USA	Aoyama Trading Co.	Japan	<b>Utilities</b>	
Hormel Foods	USA	Barnes & Noble	USA	American Electric Power Company	USA
House Foods Corporation	Japan	David Jones	Australia	Enel Green Power	Italy
Indofood Agri Resources	Singapore	Debenhams	United Kingdom	GDF Suez	France
Indofood Sukses Mak	Indonesia	Dicks Sporting Goods	USA	Northland Power	Canada
Industrias Bachoco	Mexico	Dillard's	USA		
Inner Mongolia Yili Industrial Group	China	Dollar General Corporation	USA		
InterNatural Foods	USA	Don Quijote Co.	Japan		
Itoham Foods	Japan	Douglas Holding	Germany		
J-Oil Mills	Japan	DSW	USA		
Justin's	USA	El Puerto de Liverpool	Mexico		
Kent Gida Maddeleri Sanayii	Turkey	Family Dollar Stores	USA		
Kerry Group	Ireland	FamilyMart Co.	Japan		
Kewpie Corporation	Japan	Foot Locker	USA		
Kikkoman Corporation	Japan	Francesca's Holdings Corporation	USA		
Kraft Foods	USA	Giordano International	Hong Kong		
Lotte Chilsung	South Korea	GNC Holdings	USA		
Lotte Confectionery Co.	South Korea	Golden Eagle Retail Group	Hong Kong		
Lotus Bakeries	Netherlands	Grupo Palacio de Hierro	Mexico		
M Dias Branco	Brazil	Guess ?	USA		
Mars	United Kingdom	H&M Hennes & Mauritz	Sweden		
Mayora Indah	Indonesia	Haining China Leather Market Co.	China		
McCain Foods USA	USA	Home Product Center	Thailand		
Meiji Holdings Co.	Japan	Home Retail Group	United Kingdom		



## Investor signatories

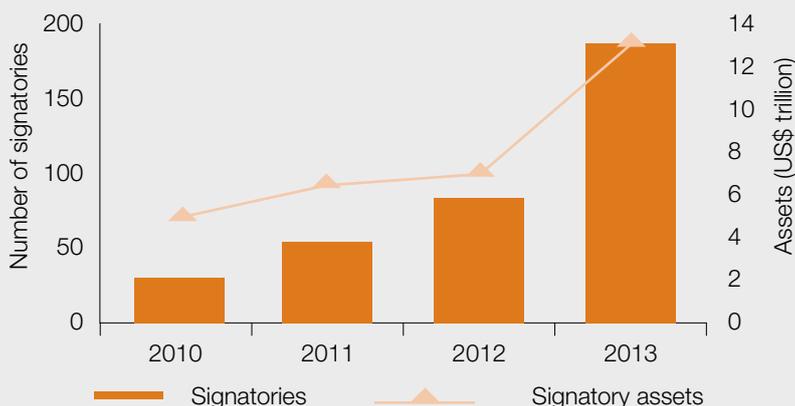
**184 financial institutions with assets of nearly US\$13 trillion were signatories to the CDP 2013 forests information request dated February 1st 2013**

3Sisters Sustainable Management LLC
Active Earth Investment Management
Advanced Investment Partners
Amundi
Antera Gestão de Recursos S.A.
APG
Arisaig Partners Asia Pte Ltd
Australian Ethical Investment
Avaron Asset Management AS
Aviva Investors
Aviva plc
AXA Investment Managers
Banco Nacional de Desenvolvimento Econômico e Social - BNDES
Banesprev - Fundo Banespa de Seguridade Social
Bank Vontobel AG
Banque Degroof
BASF Sociedade de Previdência Complementar
Blom Bank SAL
Blumenthal Foundation
Boston Common Asset Management, LLC
British Airways Pension Investment Management Limited
CAI Corporate Assets International AG
California State Teachers' Retirement System
Calvert Investment Management, Inc.
Caser Pensiones
Catholic Super
Cbus Superannuation Fund
CCLA Investment Management Ltd
Central Finance Board of the Methodist Church
Christian Brothers Investment Services
Christian Super
Christopher Reynolds Foundation
Church Investor Group South Africa
Clean Yield Asset Management
ClearBridge Advisors
Climate Change Capital Group Ltd
CM-CIC Asset Management
Colonial First State Global Asset Management
Commlnure
Compton Foundation
Connecticut Retirement Plans and Trust Funds
Conser Invest
Cyrte Investments B.V.
Delta Lloyd Asset Management
Development Bank of Japan Inc.
Dexia Asset Management
Domini Social Investments LLC
Doughty Hanson & Co.

EBG Capital
Ecclesiastical Investment Management Ltd.
EEA Group Ltd
Eko
Environment Agency Active Pension fund
Erik Penser Fondkommission
Erste Asset Management
Ethos Foundation
Etica Sgr
Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers
F&C Investments
Fédérés Gestion d'Actifs
Financiere de l'Echiquier
FIPECq - Fundação de Previdência Complementar dos Empregados e Servidores da FINEP, do IPEA, do CNPq
First Affirmative Financial Network, LLC
First Bank
First State Investments
Forluz - Fundação Forluminas de Seguridade Social - FORLUZ
FRANKFURT-TRUST Investment-Gesellschaft mbH
Friends Fiduciary Corporation
General Equity Group AG
Generation Investment Management
German Equity Trust AG
Global Forestry Capital SARL
GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH
Greater Manchester Pension Fund
Green Century Capital Management
Groupe Investissement Responsable Inc.
GROUPE OFI AM
Grupo Santander Brasil
Harbour Asset Management
Hazel Capital LLP
Henderson Global Investors
Hermes Fund Managers - BUT Hermes EOS for Carbon Action
HESTA Super
Ilmarinen Mutual Pension Insurance Company
Impax Asset Management
Inflection Point Capital Management
Insight Investment Management (Global) Ltd
Instituto Infraero de Seguridade Social - INFRAPREV
Interfaith Center on Corporate Responsibility
Invesco Perpetual Uk Smaller Companies Trust
Investec Asset Management
Jessie Smith Noyes Foundation
Kaiser Ritter Partner Privatbank AG
Kleinwort Benson Investors
KPA Pension
Legal & General Investment Management
Local Authority Pension Fund Forum
Local Government Super
London Pensions Fund Authority
Making Dreams a Reality Financial Planning
Marc J. Lane Investment Management, Inc.
Matrix Asset Management
Mistra, Foundation for Strategic Environmental Research

Mn Services
Momentum Manager of Managers (Pty) Limited
Momentum Manager of Managers (Pty) Ltd
Monega Kapitalanlagegesellschaft mbH
Mongeral Aegon Seguros e Previdência S/A
Mutual Insurance Company Pension-Fennia
Nathan Cummings Foundation, The
National Australia Bank Limited
National Grid UK Pension Scheme
National Pensions Reserve Fund of Ireland
Natural Investments LLC
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Neuberger Berman
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New Forests
Newton Investment Management Limited
Norges Bank Investment Management
Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)
Northward Capital Pty Ltd
OceanRock Investments
Oppenheim & Co. Limited
Opplysningsvesenets fond (The Norwegian Church Endowment)
Panahpur
Pax World Funds
Pensioenfonds Vervoer
PGGM Vermogensbeheer
Pictet Asset Management SA
Pinstripe Management GmbH
Portfolio 21 Investments
Psagot Investment House Ltd
Rathbones / Rathbone Greenbank Investments
Real Grandeza Fundação de Previdência e Assistência Social
River Twice Capital Advisors, LLC
RLAM
Robeco
RobecoSAM AG
Rockefeller Asset Management - NB see Notes for C.A. name
RPMI Railpen Investments
Sarasin & Cie AG
Sarasin & Partners
Schroders
Scottish Widows Investment Partnership
Servite Friars
Shinkin Asset Management Co., Ltd
SNS Asset Management
Solaris Investment Management Limited
Sompo Japan Insurance Inc.
Sonen Capital
Soprise! Impact Fund
Spring Water Asset Management
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### Signatories & Signatory Assets 2010-2013





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 P.59 Cattle in Colombia's eastern plains or Llanos - Neil Palmer, CIAT

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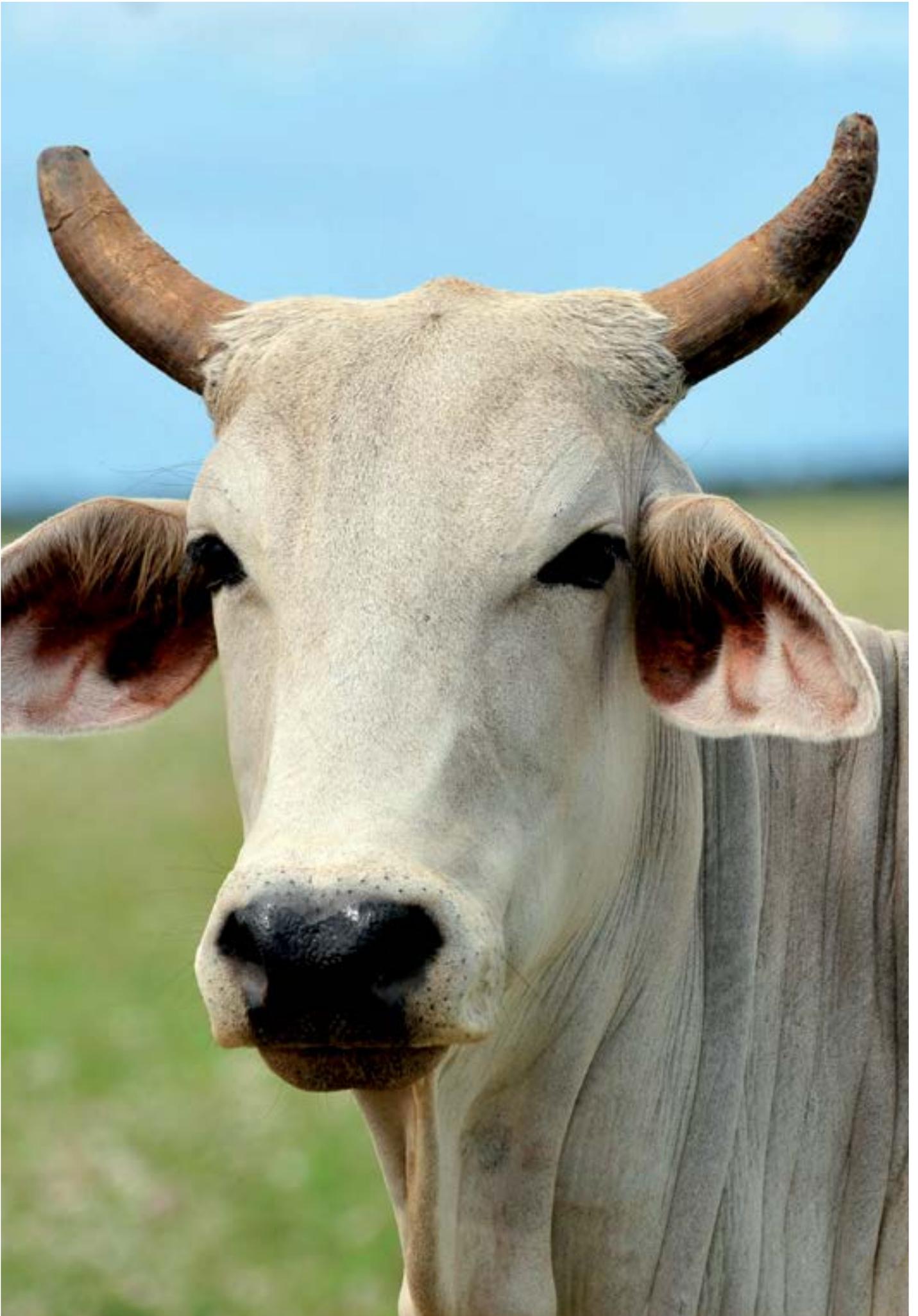


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