

Forest Footprint Disclosure Project (FFD) is a special project of the Global Canopy Programme, initiated in 2008. FFD engages with private sector companies to ask them to disclose their current understanding of their 'forest footprint' based on exposure to five key commodities soy, palm oil, timber, cattle products and biofuels – in their operations and/or supply chains. All of these commodities have the potential to be sourced from recently deforested land. FFD goes beyond simple disclosure and acts as a catalyst for investors to really engage with the companies in their portfolios on this issue. In 2012, the Forest Footprint Disclosure Request was sent to 450 international companies, 100 of which responded. This fourth Annual Review describes the findings of the Disclosure Request based the responses of the 100 participating companies and provides some context on the current issues and concerns surrounding forest risk commodities.



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Chairman's Introduction

Andrew W. Mitchell

In June 2012, Brazil announced it had achieved a 76% reduction in its deforestation rate against 1990 levels1 - an incredible achievement and close to their target of an 80% fall by 2020, eight years ahead of schedule. In terms of tonnes of carbon, this equates to a reduction greater than the total achieved by all 30 nations participating in the **EU Emissions Trading Scheme** (EU ETS) over the same period². Further, a recent calculation by Dr Dan Nepstad of the Amazon Environmental Research Institute (IPAM) has shown that, per tonne of carbon saved by preventing deforestation, climate mitigation action in Brazil was 875 times cheaper than efforts to reduce emissions under the EU ETS3.

These two facts clearly demonstrate the scale and value of the opportunity offered by halting deforestation in the fight against climate change. And for those who remain unsure that human-induced climate change presents a risk, the World Bank's report "Turn Down the Heat – Why a 4°C warmer world must be avoided", released at the UN Climate negotiations in Doha, should make for convincing reading⁴.

But of course reducing rampant deforestation, the ultimate purpose of the Forest Footprint Disclosure Project (FFD), is not just about carbon. It is a global imperative in the move towards more responsible and sustainable use of natural capital. This underpins wealth creation in the world economy and the security of water, energy, food and health for millions of people.

Just before Doha, I joined a meeting on curbing deforestation hosted by HRH the Prince of Wales at Clarence House in London. At this meeting, ministers and business leaders spoke of their commitment to tackle deforestation in a new way – by cleaning up the supply chains that drive it. And in June 2012, at the Rio+20 Earth Summit, the Consumer Goods Forum and US Government announced that they would work together to reduce deforestation by promoting sustainable supply chains. These are important developments which could, over time, rid supply chains of unsustainably grown 'forest risk commodities' (beef, soy, palm oil, timber and biofuels), which are responsible for the majority of global deforestation⁵.

FFD is ideally placed to help companies make this vital transition and for them to showcase their progress, but to do this with the urgency needed, FFD must scale up its action too. When the Global Canopy Programme, an NGO I founded in 2001, decided four years ago to launch a disclosure project for forest footprints, we were given marvellous encouragement and support from the Carbon Disclosure Project (CDP). Indeed we modeled our project on theirs. We were delighted therefore to announce in June 2012, with the full support of FFD's principal donor, the UK Government, a merger between FFD and CDP.

This strategic merger will be completed by February 2014, and will result in the world's largest and most comprehensive natural capital disclosure system, covering the climate, water and forests. GCP will then take on a new role as principal advisor on forests to CDP.

Over the next decade, I see the exclusion of deforestation from global supply chains gathering considerable pace, led by far-sighted companies. This action needs also to be embraced by the financial sector,



Andrew W. Mitchell Chairman

whose funds can, often unwittingly, facilitate the erosion of irreplaceable natural capital. The launch of the Natural Capital Declaration⁶ at Rio+20 by the UNEP Finance Initiative, Global Canopy Programme and the Sustainability Study Center of the Brazilian Business School FGV, attracted the endorsement of 40 banks, investors and insurers. This was a firm step in the right direction, as was the commitment by the Government Pension Fund of Norway- the world's largest - to review its portfolio of investments for their impacts on forests from 2012.

It's clear that as the world economy is re-engineered financially, a quiet revolution is also underway in its relationship with the natural capital upon which the corporate and the financial sector depends for their sustainable future. It is not a moment too soon.

For a complete list of references, please see page 60.

Climate, forests and land use change

Dr Gillian Kay

Over the last century, the global average surface temperature rose by 0.75 °C and the decade 2000-2009 was the warmest in the observational record. Global average temperature provides a consistent measure for monitoring purposes, it is scientifically valuable in testing the response to changing greenhouse gases (GHGs) and has been a focal point for policy makers engaged in mitigation negotiations, but it remains a somewhat abstract quantity. While the global average response to increased concentrations of greenhouse gases in the atmosphere is a rise in temperature, regional and local responses to the warming are likely to be much more complex.

Recent extreme events such as droughts, severe storms and heat waves have focused attention on some of the profound and far reaching impacts that weather and climate can have upon natural and human systems. For example, the heat wave in Russia in 2010 had severe impacts on mortality rates and reduced crop yield by ~25%¹, with consequences for the Russian economy and global grain prices. The droughts in Amazonia in 2005/2010, among other impacts, degraded the forest, facilitated the spread of fire and dried up rivers the transport network of the region

Because of the longevity of previously-emitted GHGs in the atmosphere, as well as some inertia within the earth system, there is already a commitment to some climate change into the future regardless of how emissions evolve, making adaptation necessary. If emissions continue, greater global warming may be expected. There is strong impetus to understand how climates around the world may respond to this, what impacts may be felt and how human action may modify both the concentrations of GHGs and their impacts. Increasingly, these questions are being explored at local to regional scales, or in relation to specific sectors such as agriculture or industry.

Forests in the climate system

As the recent droughts have shown, climate has influence over forest health and ecosystem functioning. However, this is not a unidirectional process and it is well established that forests affect the climate system through direct and indirect mechanisms.

At the largest, global scale is the role they play in the terrestrial carbon cycle through the sequestration and storage of carbon³. The clearing of forests and associated

"Recent extreme events such as droughts, severe storms and heat waves have focused attention on some of the profound and far reaching impacts that weather and climate can have upon natural and human systems."

 which had many implications for populations and businesses supported by the functioning of the forest ecosystem². land use change emits GHGs into the atmosphere, and recent estimates are that deforestation accounts for approximately 15% of



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global anthropogenic emissions⁴. Moreover, less forest equates to a reduced carbon sink, thus further enhancing atmospheric concentrations of GHGs.

Forests also interact with the atmosphere to influence the regional water cycle. In Amazonia, the moisture is transported in from the Atlantic Ocean, where it rains and then is returned to the air by the forest through evapotranspiration. As much as 50% of the basin's rainfall is recycled by the forests⁵. Some research has suggested that if around 40% of the Amazon is cleared, it will be unable to generate enough rainfall to sustain itself, leading to a positive feedback loop of more forest loss and less rainfall⁶.

There is a range of drivers of change acting upon the tropical forest ecosystems and hence upon the ecosystem services they generate. Climate and land use change place stress upon the forests, and synergies between these stressors have the potential to drive greater changes.

Climate change and variability

Climate change has the potential to have severe consequences for the world's tropical forests. In Amazonia, some climate and vegetation models project a shift in biome from tropical forest to seasonal forest or savanna by the end of the 21st century driven by regional climate change - increases in temperature and decreases in rainfall – in the absence of direct deforestation7. However, it is important to note that there are large uncertainties in these projections of climate change, particularly in rainfall. Some models produce smaller reductions

2060s¹². It is valuable to understand how climate change may affect event magnitude and frequency, but the extremes of today also give insight into the functioning of the integrated system and may provide lessons in how to minimise impacts and improve resilience.

Land use change

If the threat to forests by climate change is uncertain and distant then the threat by land use change is far more immediate and certain. The magnitude of land use change is unknown, but detailed scenarios of land use change have been

degradation¹⁵. In drought conditions, fires set for forest clearance burn larger areas. Forest fires, drought and logging increase susceptibility to further burning while deforestation and smoke can inhibit rainfall, which exacerbates the heightened fire risk.

In tropical forests, mitigation and adaptation strategies can be unified. Reducing deforestation will help to maintain a more resilient forest under drought conditions, be they associated with a gradually warming and drying climate, climate variability, or local changes brought about by land use change.

For a complete list of references, please see page 60.

"The most pessimistic of these scenarios bring reductions in forest cover of around 40% by the middle of this century."

in the region, while others project increases. In addition, processes such as CO₂ fertilization may be very important but are not well enough understood, particularly for tropical regions. Some experiments have shown that increasing concentrations of atmospheric CO₂ are beneficial to forest productivity, but these benefits are eventually overridden by the negative effects of the climate changes⁹.

Climate varies naturally on a number of time scales and so 'extremes' are naturally occurring events. However, a growing body of research has found that the risk of extremes has already been increased by climate change¹⁰, and is likely to continue in the future¹¹. Droughts in Amazonia tend to be related to tropical Pacific and Atlantic Ocean temperatures. One study estimated that the probability of an Atlantic-related drought like that of 2005 will increase from a 1-in-20 year event to a 9-in-10 year event by the

developed, based on factors such as plans for road building and adherence to limits set through policy decisions. The most pessimistic of these scenarios bring reductions in forest cover of around 40% by the middle of this century¹³.

Deforestation, climate and fire

The effects of land use change may be compounded because a broken forest is more vulnerable to 'edge effects' such as strong winds, and especially forest fires¹⁴. Climate change or variability acting on a region already fragmented by deforestation could have larger effects than on continuous forest.

Forest fragmentation opens up the forest to points of ignition, the majority of which are supplied by human activity. If the conditions in these regions become more suitable for fire ignition and spread, then fire has the potential to play a potent role in further deforestation and

Food Security

Prof Richard Tiffin and Dr Adam Webb

The increased attention that is given to food security is commonly attributed to the dramatic increases in food commodity prices which were experienced in 2008: according to the FAO food price index, in 2008, commodity prices were more than double their average level over the period from 2002-2004. Whilst prices reverted to lower levels in 2009, subsequent increases have seen them return to 2008 levels. The reasons behind these increases are debated and include factors such as stocks being at historically low levels and drought in major grain producing areas. Whilst the debate around the factors which cause particular food price spikes might be unresolved, what is now widely accepted is that the "perfect storm" famously identified by the UK government chief scientist, John Beddington, will threaten the ability of the planet to feed its population as we move through the twenty first century. The perfect storm describes the combination of increasing population, increasing competition for energy and water resources and climate change.

Whilst increasing food production needs to be part of the response to the perfect storm, modern definitions of food security rightly emphasise that simply producing enough food for everyone is only part of the challenge. The definition which has been most widely accepted since it was proposed at the World Food Summit in 1996 is:

"when all people at all times have access to sufficient, healthy safe, nutritious food to maintain a healthy and active life" which leads to the identification of the three dimensions of food security: food availability, food access and food use. Food availability requires that sufficient

quantities of food are available on a consistent basis, food access is delivered when individuals have sufficient resources to obtain appropriate foods for a nutritious diet, and food use recognises that ensuring energy and nutrient intakes are adequate depends in part on factors such as feeding and cooking practices as well as the way in which food is allocated between individuals in a household.

The fact that the world's population is predicted to exceed nine billion in 2050 is well known, but it is important to recognise this growth is not uniform across regions or between the urban and rural sectors. The most significant demographic change over the next forty years is predicted to be a major shift from rural to urban populations in the less developed countries. As populations become more urbanised the composition of the diet is expected to change. Evidence of this is already becoming apparent in FAO food supply data for China, which indicate that cereal consumption has been more-or-less static since the



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feed for livestock. As land is already scarce - in areas where agriculture is a realistic proposition, the rate of land use is at least 70% - this can lead to deforestation, the loss of natural habitats, and an increase in greenhouse gas (GHG) emissions, currently estimated to be more than one billion tonnes annually from land

"[Food security is] when all people at all times have access to sufficient, healthy safe, nutritious food to maintain a healthy and active life."

early nineties but at the same time meat consumption has increased, rising from 30.2 kg/capita/yr in 1992 to 58.2 kg/capita/yr in 2009. While a shift towards an urbanised diet is not necessarily detrimental, increased meat consumption can lead to several negative consequences that must be addressed. Increases in beef consumption have resulted in an increased need for more grazing land, as well as more land for the production of soy, a widespread

use changes. This fact, together with the increasing pressure from alternative land uses, means that there is little or no prospect of increasing the amount of land that is available for food production. This in turn means that we will only be able to feed the growing population by using the existing agricultural land more intensively.

However, intensive use of existing agricultural land also has its



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drawbacks. While deforestation is a key component of GHG emissions related to food security, it is not the sole emitter of GHGs in this area; agricultural production itself contributes to the emissions of greenhouse gases (GHG). For example, the Intergovernmental Panel on Climate Change (IPCC) (2009) estimate that agriculture accounts for 10-12% of total global anthropogenic GHG emissions. These include nitrous oxide (45%), which stems largely from the application of synthetic fertiliser. methane (54%), from enteric fermentation and manure and carbon dioxide (0.6%) from energy use. As a result it is increasingly recognised that traditional methods to increase food production from existing land may not be ideal in the future. This conclusion is strengthened when it is recognised that a lot of the intensification in food production that has occurred in the past has come at the expense of the wider ecosystem. This has led to the concept of sustainable intensification being increasingly emphasised as

the route to ensuring food security. This demands a careful appraisal of the available options in order to identify those where the benefits of increased food production are not achieved at a greater cost in terms of the delivery of other ecosystem services.

While GHG emissions and loss of ecosystem services are key things to address for food security, there

Investment in a range of areas, from smart agriculture to land restoration systems and new methods of food production, is required to meet these challenges in the future. However, such investments must draw upon expertise from a range of backgrounds ranging from biology to social sciences. Structures to pull together such expertise and make it available to other organisations are currently

"Investment in a range of areas from smart agriculture, to land restoration systems and new methods of food production, is required to meet these challenges in the future."

are also other areas that need to be considered. As has been discussed. food security is not only about food availability but also food access and ensuring that people's diet is healthy and nutritious. The tendency for societies to become more urbanised is generally associated with a change in diet that has been termed 'the nutrition transition'. This highlights the fact that guaranteeing nutritious food for a healthy life is not confined to avoiding malnutrition but in some cases will increasingly be concerned with what might be termed over-nutrition. When it is also recognised that many of the health related problems in the developing world are already associated with the quality of the diet, for example vitamin A deficiency is widespread in many parts of the world, the complexity of ensuring the fact that food security extends way beyond just providing sufficient food is apparent.

It is therefore clear that addressing the food security challenge is a multifaceted undertaking. being developed and should be commended. This will ensure that the latest and most comprehensive information is accessible when making investments, and will further help to guarantee that the economic and social considerations for food security are met at the same time as the science and technology considerations.

If we halt deforestation, will the world starve?

Dr Sonja Vermeulen

Making sure that we will continue to have enough to eat is at the heart of our shared ambitions to mitigate climate change. The United Nations Framework Convention on Climate Change (UNFCCC), the convention that has guided us through the highs and lows of 18 rounds of annual negotiations, states upfront that the reasons to stabilise emissions are threefold: "to allow ecosystems to adapt naturally", "to enable economic development to proceed in a sustainable manner" and "to ensure that food production is not threatened". At the same time we hear again and again that no reductions in emissions can possibly be expected from agriculture otherwise how could we grow enough to feed nine billion people in 2050?

Science tells us that agricultural practices directly emit 5,100 to 6,100 megatonnes of carbon dioxide equivalent (Mt CO₂e) per year – which is 10-12% of total global emissions. But agriculture also drives deforestation; current estimates are that about 80% of deforestation is due to agriculture. The size of these indirect agricultural emissions is uncertain,

yet another 5%, meaning that food production releases as much as 29% of our global emissions. Plainly we cannot make any serious dent in our emissions without the agriculture and food sectors doing their share. And much of that share must be through reducing deforestation.

What does that mean for food security, both now and for the future nine billion? Let's dub this the Kyoto conundrum: if we don't mitigate in the agricultural sector, including putting a brake on agriculture's huge contribution to deforestation. then future food production will be threatened and there will be massive food price hikes; but if we do mitigate in the agricultural sector, agricultural production will become much more expensive and there will be massive food price hikes. There are no wins here. It is a lose-lose conundrum, and one in which poor people, who are most susceptible to deficiencies in calories and nutrition. and who spend the greatest proportions of their incomes on food, lose the most.

But does this doomed Catch-22 stand up to closer scientific scrutiny? More specifically, what do we know

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but may well be as much again as direct emissions, doubling agricultural emissions to a total of 12,700 Mt CO₂e, or 24% of total global emissions annually. The food chain – processing, refrigeration, transport, retail, use of food in the home and waste disposal – adds

about the relationships between deforestation and food security? Historically, experience shows that rising prices of agricultural commodities do in general increase rates of deforestation, by magnifying incentives for expansion of farmland. The trickier question is



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causality in the other direction: if we avoid deforestation, are there impacts on food prices? For a start, the soy moratorium in Brazil offers a real-life example of how reduced deforestation is not correlated with commodity prices. Some further interesting insights come from three recent studies that tackle this question via thought experiments, using computer models to play out different policy scenarios at the global level.

The first, by Uwe Schneider and colleagues, looks at four different future scenarios for global development, which include restrictions on deforestation. The main finding here is that constraints on deforestation drive up the prices of water resources and land, but actually have little impact on global food production, or on food prices. This is because changes in land use, land management and international trade are able to compensate for the price effects of avoided deforestation. In this thought experiment, deforestation

does not have much impact either on how much people eat or on the balance of plant and animal products in their diets.

The second study, by Alla Golub and colleagues, paints a slightly more complex picture. These authors model the impacts of a global carbon tax, roughly equivalent to a universal carbon market, as payments go to providers of the

in worldwide GDP over the same period. For wealthier households, this translates into a falling share of income spent on food. But poorer households in poorer regions do not reap the benefits. For them, food expenditure takes up an ever greater portion of household income.

What conclusions can we draw from these studies about how reducing deforestation might affect hunger?

"We cannot make any serious dent in our emissions without the agriculture and food sectors doing their share."

carbon credits. They investigate different scenarios that allow exemptions or rebates for poorer countries. The first message is that exemptions lead to leakage: deforestation that would have happened in one country is simply shifted elsewhere. If there is a truly global carbon tax at a price high enough to eliminate deforestation, the impacts on incomes and food consumption are generally positive for land-owning households, who can gain both from carbon prices and from farm product prices. On the other hand, food consumption among the large and growing number of landless, unskilled labour households of the world deteriorates.

The third thought experiment is the most troubling at first sight. By John Reilly and colleagues, it again considers multiple scenarios, one of which is the same as Golub's global carbon tax on all sectors, including both energy and land-use. Food prices under this scenario rise by 80% by 2100 compared to a "no policy" world, due both to the direct costs of mitigating emissions and to the rising costs of land. This bad news is offset by a fivefold increase

Models are only as good as their assumptions, so we should look for qualitative generalisations rather than firm numerical predictions. All three point to a minimal impact on the affordability of food for more affluent consumers. Those who are likely to feel the pinch are the consumers at the "bottom of the pyramid", who already struggle in many cases to eat well, in terms of both nutrition and pleasure.

This is by no means a valid excuse for arguing that deforestation should continue unabated in order to reduce food prices for the poor. The solution must be found rather in providing the economic opportunities for poorer consumers to achieve better incomes and access better diets. Both the public and private sectors have abundant scope to act positively, from creating job opportunities at decent wages to providing "safety nets" such as health insurance and income support for the needy. Hand in hand, social and environmental innovation can provide a world with forests and without hunger.

How are governments addressing deforestation at the international level?

Dr Nathalie Walker

The growing global population, diet shifts and economic development are increasing demand for products sourced from forests, and for agricultural products which are driving forest clearance¹. Export markets are becoming increasingly important as drivers of deforestation². Successfully tackling these drivers, while encouraging deforestation-free production, needs action from both the private sector, which produces and trades forest risk commodities, and from governments of producer and consumer countries³. Multinational companies are well placed to act at the international level, but for governments, international agreements are proving more challenging and consensus can take years to reach.

There are several international forums which address forests and forest risk commodities. most notably the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC, which currently has 195 participating countries, is one of three Rio Conventions established following the 1992 Rio Earth Summit. The role that protecting forests plays in mitigating climate change is explained by Dr Gillian Kay on page 6 and the UNFCCC is a key mechanism that offers opportunities to catalyse increased financing, and collaborative actions to reduce deforestation.

In 2005, the governments of several forest-rich countries, including Papua New Guinea and Costa Rica, formally requested that, for the first time, the UNFCCC incorporate ways to stimulate action to reduce emissions from deforestation. With broad recognition that deforestation is a major source of greenhouse gas emissions, a working group was

set up. At its 2007 meeting in Bali, the UNFCCC Conference of the Parties (COP) agreed on the "Bali Action Plan", which calls for "policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries" to be addressed⁴.

Since 2007, there has been a plan of work to design technical rules through which "Reducing Emissions from Deforestation and Forest Degradation" (REDD) can be incorporated into a new international climate treaty under the UNFCCC. Subsidiary bodies hold meetings throughout the year to tackle the scientific, technical and implementation issues that will form the basis for such a treaty, which is planned to be agreed in 2015.

The REDD negotiations have made steady progress each year since 2007 on many technical aspects. The COP and its subsidiary bodies operate on consensus, which means that, despite negotiations that often run throughout the night during the two-week long COP, they can run out of time to reach agreement. 2012 was the first year in which there was no progress on REDD,



Dr Nathalie WalkerForest Footprint Disclosure

because there was no agreement on the issues under negotiation forest monitoring and verification of emissions reductions - and more time will be given to them in upcoming sessions.

One of the ongoing issues being considered under the UNFCCC concerns the drivers of deforestation. In the Cancun Agreements negotiated at the COP in 2010, all countries were encouraged "to find effective ways to reduce the human pressure on





forests that results in greenhouse gas emissions, including actions to address drivers of deforestation", but no details were provided on how to do this⁵. In early 2012, Parties and Observers to the Convention were requested to submit guidance on how to address drivers of deforestation. A number of countries, including Costa Rica, the Democratic Republic of Congo, Norway, Papua New Guinea, Switzerland and the United States pointed to the role that the private sector can play in addressing key drivers6. Suggestions include making links with private sector initiatives to address deforestation (such as the Consumer Goods Forum's Zero Net Deforestation commitment), promoting certification systems and inviting the private sector to attend workshops. There are concerns that measures to address the international drivers of deforestation could impact trade in timber and agricultural commodities. These concerns and the above recommendations will be considered over the coming year.

While a new international climate treaty which incorporates REDD is years away, many countries are taking action now. There are already international mechanisms which currently provide funds for REDD, including the UN-REDD Programme, initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions to the consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how turn this support into effective actions and private initiative of the Consumer Goods for ways and the consumer

which are supporting "REDD-readiness" among many forest-rich nations. Individual countries have also provided support, most notably Norway, which has pledged one billion dollars to both Brazil and Indonesia to reduce their national deforestation rates and is also supporting other countries including Guyana.

A number of governments have announced their intention to work with the private sector to address the drivers of deforestation. In June 2012 at the Rio+20 Earth Summit, the US Government and Consumer Goods Forum announced that they would work together to reduce deforestation by promoting sustainable supply chains7. In November 2012, the governments of Australia, Germany, Norway, the United Kingdom and United States released a joint statement on the urgency of tackling deforestation and resolved to "support efforts to transform the supply chains of the commodities that put pressure on the forest", stating that they "welcome the commitments and initiative of the Consumer Goods Forum in this regard, and stand ready to contribute in various ways"8. The challenge now is how to turn this support into effective action, so that public and private initiatives

The Journey

Christoph Harwood

As the planet comes under intense pressure from the ever-increasing demand of mankind, from time to time an area of concern is identified. Initially a scientist or NGO tries to share their concerns. Later somebody in the finance sector - an analyst, investor or fund manager - might recognise that there are financial implications. Finally, legislation leads to the problem being removed or correctly priced. This is when the "externality" has become "internalised", moving from a theoretical P&L to directly impacting company valuations. That process - from identification of an environmental issue to financial impact - is what we are calling The Journey.

To understand this in detail, we looked at four case studies - CO₂ 1. emissions, REACH chemicals, access to medicine, and mountain 2. top removal - to understand their *Journeys* and what this means for deforestation. Out of this work came 3. four key lessons:

- Expect the unexpected –
 industry experts and finance
 analysts reviewed the carbon
 price and the European
 Emission Trading System
 when it was introduced, but it
 was actually regulations and
 subsidies that had more impact.
 The growth in renewables has
 been more important than the
 trading price of CO_a.
- Don't expect consistency from the affected industries - they tell governments that the costs will undermine their ability to operate, but tell investors not to worry. Some, ahead of the game, welcome the change whilst those caught out resist change.
- Politics matters Nelson Mandela's intervention in the

- access to medicine debate was game changing.
- Impact of the "lending" banks the finance sector does try to be ahead of regulation, often led by SRI teams. However, it is the lending banks that have more impact than the asset owners and managers.

All this can take a long time. Climate change was first raised as an issue in the 1950s, the IPCC was set up in 1988 and here we are in 2013 wondering whether Kyoto will survive.

A lot has to happen for *The Journey* to be complete and very few have made it to the end. We identified seven stages:

- 1. An issue is identified by a scientist or NGO.
- 2. A large NGO takes up the issue, perhaps taking it on from a smaller specialist NGO.
- Industry pushes back, although some, well placed for changes, encourage the new ideas.
- 4. Government begins to draw up policy. It can formulate this in a number of ways: by putting a price on the externality or rationing its availability so that the market sets the price, by supporting alternatives, by changing the market's buying requirements, or by just regulating.
- Industry at this stage intensifies its lobbying, publicly and behind doors. Some support the changes, others do not.
- Regulation is applied which can be locally driven or catalysed by international agreement.
- Regulations are enforced, or not. One of the interesting developments is the creation and enforcement of regulations in one country on another.



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Different parts of the finance sector will take an interest in these issues at different stages. The SRI world usually identifies issues early on, whilst the mainstream requires more certainty on valuation impacts. There might be some interest during the lobbying stages, but it is only when regulation is enforced that valuations are affected. With less than 10% of funds invested sustainably and with nearly 40% of the UK market in passive investments, there is only so much that can be done by asset managers.

It is clear that corporates see a limited role for the finance sector in their progress to becoming more sustainable. Nike positions the sector in its "Road to Zero System Map" as merely a provider of capital. Companies trying to deliver sustainability strategies echo this, advising that they do not get questions from analysts on the sustainability of their operations. So where are we in the deforestation journey? It is complex, given

the economic drivers behind the commodities taken from the forests: timber, including pulp and paper, of its journey. Whilst NGOs are vocal and have had success with moving companies towards using paper and

"It is clear that deforestation is still at an early stage of its journey. Whilst NGOs are vocal and have had success with moving companies towards using paper and other commodities from sustainable sources, the opportunity for regulation is resisted by companies on the ground and recognition of material impact seems to be further down the road."

biomass and charcoal for steel making, or commodities produced on purposely deforested land: soy, palm oil and cattle. It is a complex world requiring international agreements, where there is no one international body focusing on forests and so they have to come under the umbrella of other bodies such as UNFCCC or CBD.

There are a few areas for optimism. FLEGT and the Lacey Act make it illegal to import timber into the EU and USA respectively if it has been

other commodities from sustainable sources, the opportunity for regulation is resisted by companies on the ground and recognition of material impact seems to be further down the road.

The research into the *Journey*, however, did open up some new ideas into how FFD might increase the pace.

Firstly, FFD can help investors understand the resilience of commodity supply chains. Secondly,

CDP has demonstrated that reporting on CO₂ is not a burden and adds value, so much so that the UK government has now mandated it for all listed companies. One day companies will also be mandated on reporting how they manage their exposure to deforestation and other natural capital risks. FFD disclosers will demonstrate that this is not a heavy burden. In the meantime, raising the need for resilience as well as sustainability in the supply chain, working with buyers of forest risk commodities and helping the lending banks reduce their exposure to deforestation, can all help in The Journey ahead.

"FFD can help investors understand the resilience of commodity supply chains."

illegally produced in another country. Dutch and British governments are pushing for the use of sustainable palm oil and the SRI finance sector is taking increased interest, with broker reports beginning to touch on deforestation. Proxy resolutions in the USA are encouraging companies to improve their policies and disclose to FFD.

However, it is clear that deforestation is still at an early stage

as part of CDP, FFD can use their supply chain experience to influence CO₂ usage, working with existing and new disclosing corporates so they demand that sustainable forest risk commodities are integrated into their supply chains. Finally, FFD can encourage banks to recognise their risks in lending to companies involved in deforestation and the damage that they are doing.



2012 Timelines

Introduction

Extreme weather events across the world in 2012 resulted in the worst global harvest in years, depleting food reserves and contributing to a hike in global food prices and prompting renewed debate over the 'food vs. fuel' dilemma. In August, the UN Food and Agriculture Organization (FAO) called for the suspension of US ethanol quotas in response to the impact of the worst US droughts in more than half a century.

Legislative progress continued in 2012 with the Australian Senate passing the Illegal Logging Prohibition Bill, joining the United States and European Union in action against the global trade in illegal timber. In Europe, application of the EU Timber Regulation begins in March 2013 and companies involved in the trade of timber products are gearing up for the 2013 deadline.

Certification, while not the endgame in itself for preventing deforestation, does play an important role in the journey towards sustainably produced commodities and 2012 saw some advances in this area. For example, sustainability standards for cattle products – beef and leather, which have traditionally lagged behind the other commodities - advanced in 2012 with the certification of the first ranches under the Sustainable Agriculture Network (SAN) standards in the Brazilian Amazon. In the biofuels sector, the Roundtable for Sustainable Biofuels (RSB) agreed to recognise farm operations certified by the SAN standards and FSC-certified biomass.

Corporate activity to combat deforestation continued in 2012. A number of sustainability

announcements were made by global corporations, for example Unilever, who reached its target of 100% certified sustainable palm oil ahead of schedule (covered by GreenPalm Certificates) and set a new target for 2020 to buy all their palm oil from traceable sources. Despite criticism over the strength of the agreements coming out of Rio+20 and the UNCCC in Doha, a number of corporate pledges and strategic partnerships were announced. The governments of Australia, Germany, Norway, the UK and the US resolved to support efforts to tackle deforestation of supply chains of forest risk commodities. Although there has been some significant progress on the corporate sustainability landscape in 2012, some companies found themselves at the centre of negative NGO campaigns, especially in the pulp and paper sector.

Commodity news highlights in 2012

For biofuels, the big news story of 2012 was the European Commission's proposed changes to the EU's Renewable Energy Directive (RED), which will limit the use of crop-based biofuels to 5% of total EU transport energy by 2020, reflecting significant and growing concerns from scientific evidence which indicates that emissions from indirect land-use change can vary substantially between feedstocks and can negate the greenhouse gas savings of biofuels compared to the fossil fuels they replace.

The Soy Moratorium on deforestation in soybean production in the Brazilian Amazon biome, was extended until January 1st 2014. Since its introduction in 2006, soybean production has increased while annual deforestation in the Amazon has fallen to record lows.

The palm oil industry's growing demand for large tracts of land – notably forest areas in African countries – has led to rising concern over the environmental impacts of unsustainable production and the social impacts resulting from land grabs.

2012 also saw the formation of the Global Roundtable on Sustainable Beef (GRSB).

Overall, 2012 has seen some progress towards sustainable and traceable forest risk commodities. Despite this, the demand for many of the certified sustainable commodities has as yet failed to keep pace with production. FFD hopes that 2013 will see the uptake of more certified sustainable product in companies' supply chains and the beginning of a real shift from future targets to immediate action on the issue of deforestation risk.

2012 Timeline

Cattle Products



JANUARY

Analysts reported that JBS was on the takeover trail, with rumours of interest in Goias Verde Alimentos. The company denied the rumours, stating its ambitions to increase its presence in Brazil's dairy market instead, which it sees as offering significant new opportunities.

FEBRUARY

The Global Roundtable for Sustainable Beef (GRSB) was formed. Founding members include AllFlex, Aliança da Terra, Cargill, Elanco, GTPS (Grupo de Trabalho da Pecuaria Sustentavel), JBS, McDonald's, Merck Animal Health, National Wildlife Federation, Rainforest Alliance, Roundtable for Sustainable Beef Australia, Solidaridad, The Nature Conservancy, Wal-Mart and WWF.

The Dutch Ministry of Foreign Affairs committed two million Euros in financial support to GRSB. The funding will support producer sustainability initiatives in the beef supply chain, and it will be focused on activity in developing countries.

MARCH

A new academic study from Bowman et al. (2012), suggested that pro-intensification policies in the Brazilian livestock sector will only halt deforestation if they are accompanied by actions to remove the incentives to clear forest for pasture, which discourage land speculation and increase accountability for land management practices.

APRIL

A high-level consultation for a Global Livestock Agenda for 2020, co-hosted by the World Bank and International Livestock Research Institute (ILRI), was held in Nairobi, Kenya. The main outcome was a joint communiqué by eight international and regional organisations to form an alliance to develop and implement a global agenda to improve environmental protection, human health and social equity in the livestock sector.

MAY

Four ranches in Mato Grosso, Brazil became the first globally to earn Rainforest Alliance certification for sustainable cattle production. The ranches, which all belong to the group Fazendas São Marcelo Ltda., cover a total area of 32,000 hectares, including a 13,000 hectare reserve in the Amazon. About 60,000 cattle graze on the ranches' sustainably managed pastures. The standards, developed by the Sustainable Agriculture Network (SAN) in response to rainforest destruction resulting from cattle farming, promote the humane treatment of livestock, the conservation of natural resources and the rights and well-being of workers. IMAFLORA, the SAN representative in Brazil, carried out the certification. IMAFLORA promotes the cattle certification programme in Brazil in collaboration with other local NGOs (including Amigos de Terra), government agencies and international NGOs, including the US-based National Wildlife Federation (NWF).

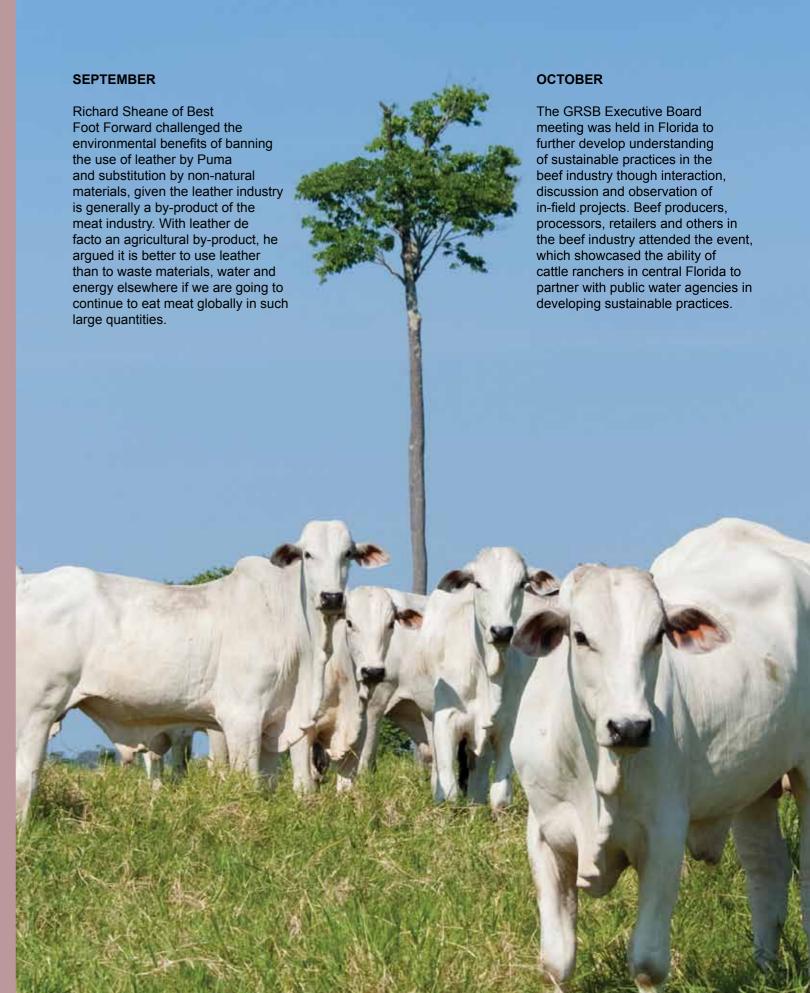
Greenpeace published the 'JBS' Scorecard Failed' report, claiming that JBS continues to purchase cattle from Brazilian ranches that clear rainforest areas, occupy indigenous lands and use slave labour, in spite of earlier agreements not to do so.

JUNE

Tesco confirmed it had cancelled its contract with JBS in response to earlier Greenpeace claims that beef sold in the supermarket could be traced back to cattle raised on illegally deforested areas of the Amazon. Meanwhile, Greenpeace removed the 'JBS Scorecard' report from its website after JBS took out a legal injunction, but the NGO stated it was standing by the original conclusions of the report.

JULY

Chief executive of sportswear brand Puma, Jochen Zeitz, announced that future plans will include stopping using leather in its footwear and football boots because it is so damaging to the environment. Speaking to the Financial Times at the UN Rio+20 earth summit, Jochen Zeitz said that the company would have to look at alternative materials to meet its environmental policy commitments.





JANUARY

In late December 2011, NGOs and all Dutch trade sectors in the value chain for soy created a Soy Initiative to transition toward responsible soy, supported by seven million Euros of investment shared 50:50 by industry and the Dutch government-funded Sustainable Trade Initiative (IDH). This money will be invested to enable growers in South America, as well as other supply chain parties, to implement the necessary improvements for achieving Roundtable on Responsible Soy (RTRS) certification.

An academic study by Macedo et al. (2012) found that between 2006 and 2010, while agricultural production, including soy, was higher than ever, there was a decline in Amazon deforestation in the Brazilian state of Mato Grosso. This appears to demonstrate that strong market and government policies to prevent deforestation do not need to negatively impact agricultural productivity. The impact of the expansion of neighbouring areas is hotly debated.

APRIL

Soybean yields are particularly vulnerable to weather. In Latin American countries, all of whom depend on commodity exports for significant parts of their export earnings, extreme weather conditions were experienced throughout 2012, which upset crop production and depressed potential yields. In Argentina, heavy rains delayed sovbean planting, raising concerns for future production. In contrast, Rio Grande de Sul in Brazil suffered from a lack of rain which impacted soybean production. In a season marked by crop losses, drought conditions were reflected in the low productivity of soybean crops.

MAY

The seventh annual international conference of the RTRS (RT7) was held in London. UK, the first to take place in a European country. The conference, themed 'Next Steps for Responsible Soy', was aimed at emphasising the need for RTRS to evolve into the mainstream standard for responsible soy. Commitments were made by EU and UK supermarkets, including Marks & Spencer, Waitrose, Sainsbury's, Asda, Co-operative Food, Ahold, Coop and Migros to source certified responsible soy for own brand products. The state-linked Chinese Soybean Industry Association (CSIA) also announced its intention to work with its 750 member organisations towards meeting the RTRS standards. It was confirmed that almost 300,000 tonnes of RTRS certified soy have been sold since June 2011, when RTRS announced an annual target of five million tonnes of responsible soy to be produced and sold by 2015.

The first 10 audit reports of soy companies certified by the RTRS were reviewed by GM Freeze, Friends of the Earth and Corporate Europe Observatory who claimed that the certification standards have failed to achieve any significant social or environmental benefit, with no evidence of protection against deforestation, reduced use of pesticides, or any benefits being felt by small farmers in the areas certified.

A report by Pacheco (2012) of the trends associated with commercial agricultural expansion in South America by the Centre for International Forestry Research (CIFOR) highlighted the association of soybean and palm oil expansion with food, feed and biofuel markets, focusing on their economic, social and environmental implications.

It was argued that the outcomes of soy and oil palm expansion are still under debate, and the authors recommended a more detailed analysis to devise pathways that can improve distribution of social and economic benefits while at the same time reducing carbon emissions.

A Nature Conservancy Report on Brazilian sustainable soy, "Soybeans: good agricultural practices and socioenvironmental certification – Towards Sustainability", outlined 35 separate initiatives and projects as examples of progress, most of which were instigated by Brazilian companies.

JUNE

KPMG stated that there is a business case for soy producers in Brazil and Argentina to comply with the RTRS criteria for responsible soy farming. Commissioned by IDH, in collaboration with the International Finance Corporation (IFC), WWF and the Netherlands Development Institution FMO, their report showed that medium and large producers can expect a positive return on their compliance investments after three years. Concerns were raised, however, that the initial investment was too high for small producers and external investment may be required.

Independent body GMP+ International and RTRS agreed on the main points of co-operation regarding the certification of the supply chain of responsible soy. RTRS will link to an already internationally operating GMP+ Feed Safety Assurance Scheme, with over 11,800 certified companies in 65 countries, making it easier to distribute RTRS soy to consumers through a controlled supply chain, while GMP+ will gain links to an international scheme based on multi-stakeholder support. Most importantly, feed companies in the

supply chain will benefit from reduced costs and the possibility of multiple certifications, although the Chain of Custody implications need further work.

In Curuguaty, Paraguay, six police officers and 11 farmers were killed when clashes broke out during the forced eviction of peasants occupying a disputed soy farm. One week later, the Paraguayan Senate ousted President Fernando Lugo for "mismanagement" of the land conflict.

JULY

The first Indian smallholders to be certified for Responsible Soy by the RTRS were announced, a result of investments made by the Dutch Cheese maker, CONO, and the dairy cooperative, Friesland Campina. Friesland Campina support a number of soy farm programmes in Brazil and India, and CONO participated in the Soy Producer Support Initiative (SOYPSI), an international program for environmentally friendly soy cultivation.

A report 'Factory-Fed Fish', from US-based Food and Water Watch, highlighted the use of soy in fish feed stocks and links to the American Soy Association and agribusiness giants Cargill and Monsanto in the development of offshore fish farming legislation.

AUGUST

Soy prices reached a record high of \$622/ton, following a drought in the US Midwest.

Solidaridad announced their intention to start working with large soy farms in China towards the first responsibly produced soy in China. The project, approved under the Farmer Support Programme, aims to demonstrate the benefits of responsible soy to the industry, relevant ministries, soy processing companies and industry farmers. It will start working with two large soy farms that cover a total area of 50,000 ha of soy and employ 3,000 workers.

SEPTEMBER

A European Soy event "Challenges and opportunities for supermarkets" was hosted in Zurich, Switzerland by the Soy Network Switzerland. Led by supermarkets Coop and Migros and supported by the Swiss government institution for international cooperation (SECO), the event was attended by a variety of participants from sectors involved in soy. One of the main conclusions of the meeting was the need for a joint action plan in order to transform the market.

OCTOBER

The Brazilian Soy Moratorium, an agreement between the Brazilian Association of Vegetable Oil Industries (ABIOVE), the Brazilian National Association of Grain Exporters (ANEC), Greenpeace and other civil society organisations to eliminate deforestation in the production chain, was extended until January 1st 2014. In 2006, these industry groups agreed not to buy soy from any farms with new deforestation in the Brazilian Amazon biome. Throughout these years soybean production increased, and is still rising, while annual deforestation in the Amazon fell by record numbers, highlighting the importance of the agreement. The identification of soy on newly cleared land in the Amazon biome and a change in Brazil's Forest Code were cited as reasons for the need to extend the moratorium for another year.

DECEMBER

More than twice the volume and area of RTRS certified soy was produced in 2012 compared with 2011, and the number of certified producers increased from 10 to 19.

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Palm Oil



JANUARY

The President of Liberia, Ellen Johnson Sirleaf, intervened to end a long standing dispute between the citizens of Grand Cape Mount County and the palm oil company Sime Darby Plantations Liberia. This dispute is not isolated, as palm oil plantations are becoming more common in West Africa and conflict over FPIC (Free and Prior Informed Consent) is one of the challenges of expansion.

FEBRUARY

Plantation developer Asian Plantations reported that it is finding 'quality opportunities' increasingly difficult to locate in Malaysia due to declining land availability. Malaysia's rules on forest conversion, which are stricter than other palm-producing nations, are a contributing factor in the availability of land for new plantations locally. This means the company will have to adjust its timeframe to meet a target of achieving a 45,000 hectare landbank promised to investors by the end of 2012.

MARCH

New Britain Palm Oil announced that it is investing heavily in producing bakery products in the UK made from sustainable palm oil, in order to dramatically increase the volume and variety that is available to UK food manufacturers. A large proportion (25-30%) of UK palm oil is consumed by the baked goods sector and this offers an opportunity to improve the UK's profile as a whole.

APRIL

The Roundtable on Sustainable Palm Oil (RSPO) signed a Memorandum of Understanding with PT Perkebunan Nusantara III Persero, an Indonesian oil palm plantation company, and the Sustainable Trade Initiative (IDH), a Dutch initiative working on sustainable commodities to assist independent small holders to increase sustainability. IDH will provide 'match funding' to the investment made by the palm oil company and/or the RSPO. This shows how progressive plantation companies can leverage civil society interest in helping their smallholder hinterland.

MAY

The Belgian association of compound feed manufacturers (BEMEFA) joined the Belgian Alliance for Sustainable Palm Oil. This expands the country-wide Alliance, which has a target that by 2015 all food containing palm oil intended for the Belgian market must meet the principles and criteria of the RSPO.

JUNE

Greenpeace released its 'Frying the Forest' report which linked Indian companies including Britannia, Godrej and Ruchi Soya to rainforest destruction in Indonesia through their use of palm oil. India is one of the biggest consumers of palm oil globally and Greenpeace formally called on Indian companies to commit to sourcing sustainable palm oil not linked to deforestation.

Unilever, the world's largest single purchaser of palm oil, announced it is ahead of schedule with regards to its palm oil targets with 90% of the palm oil in its products covered by GreenPalm certificates, the RSPO's off-setting scheme. In light of its progress to date, and in recognition that certificates are not the same as using physical CSPO (Certified Sustainable Palm Oil), Unilever announced that it will have 100% CSPO in its products by 2020.

A vear since the RSPO launched its own trademark, it was announced that only 61 RSPO Trademark licenses across 13 countries have been issued. The trademark connects the production and distribution of sustainable palm oil across the value chain and, importantly, aims to raise awareness about sustainable palm oil among consumers. This is a low take-up from the nearly 1000 members of the RSPO in 2012. Later RSPO announced that six million tonnes of CSPO was available to purchase.

JULY

Retailer PT Carrefour Indonesia launched Indonesia's first RSPOcertified and labelled cooking oil. Indonesia, as well as being one of the world's biggest producers of palm oil, is also a major consumer. Palm oil is widely used as cooking oil in the Asian continent and is important for nutrition in the region. Carrefour announced that it is in discussions with other Asian countries to export this cooking oil to other markets including Malaysia, India and China.

OCTOBER

An academic study by Kimberly et al. (2012) reported that the carbon emissions impacts of the palm oil industry in Indonesia alone could reach 558 million metric tons of CO₂ by 2020 – more than the national emissions of Canada. Emissions arise from land conversion, both from biodiversity loss and contribution deforestation and conversion of peat- to climate change. The aim was rich lands for palm oil plantations.

The UK Government published a national statement on palm oil pledging to use 100% certified sustainable palm oil in its own food procurement by the end of 2015, covering all food bought in by central government and catering services. There was criticism that this initiative did not go far enough in setting specific time-bound commitments for UK industry as a whole. Nevertheless, this step does send a positive message to producers of palm who need clear signals that the demand for sustainable palm oil is increasing.

NOVEMBER

300% 'fat tax' on palm oil. The proposal was made on the grounds of health, as palm oil is high in saturated fats, as well as the environmental issues associated with some of its production, including to encourage manufacturers to reformulate their products with a different vegetable oil. This initiative may have unintended consequences in the long term regarding land use, since oil palm is the highest yielding vegetable oil and is the most land efficient. Criticism followed from a number of industry groups, arguing that the tax is discriminatory as it will greatly reduce the competitiveness of the tropical oil. It still requires approval by the French National Assembly.

The French Senate approved a

The RSPO's Principles & Criteria (P&Cs) opened for global consultation for the first time in their 10 years in operation. Key issues

are around development on peat and clearance of high carbon forested areas. A group of leading scientists called for measures to ensure the safety of high conservation forests and peatlands. These issues are critical to the credibility of RSPO if certified palm oil is to be truly sustainable and no longer lead to destruction of high value habitat, contributing to dangerous climate change.

Herakles Farms' 73.000 hectare palm oil development in Cameroon was at the centre of campaigning as NGOs claimed that forest had been cleared illegally to establish the plantation in a 'biodiversity hotspot'. The opposition to the development was both local and international. Greenpeace called for the Cameroon government to stop the forest clearance and end the project. It wants better standards to be put in place for land allocation and development of palm plantations in order to prevent social conflict, disruption of livelihoods and destruction of forest.



Biofuels



JANUARY

Lufthansa concluded its six month biofuels trial with the first transatlantic flight between Frankfurt and Washington DC to use biofuel, following 1,187 biofuel flights between Frankfurt and Hamburg. Using a 50/50 blend of regular fuel and biosynthetic kerosene in one engine is claimed to have saved 1,471 tonnes of CO₂ emissions. The trial ended after stocks of certified biofuel were exhausted and no other reliable supplies were identified.

A three year study by Anseeuw et al., (2012) of large land acquisitions over the period 2000-2010 found that food supply is not the main focus: 78% of the 71 million hectares of deals referenced were procured for agricultural production, of which three-quarters were intended for biofuels. This high proportion of land being acquired for biofuels is due to anticipated profitability and the study concluded that rural communities' resource rights and livelihoods are being jeopardised by the model of largescale land acquisition.

FEBRUARY

The North Coast Environmental Council in Australia raised concerns over new plans to use native forest waste to fuel power stations eligible for renewable energy credits. There is growing concern that credits will subsidise unsustainable practices leading to more clear felling if forest managers can decide what constitutes 'waste'.

The US Environmental Protection Agency made a preliminary decision that biodiesel produced from palm oil will not qualify as a renewable fuel under the Renewable Fuel Standard (RFS) program, as it does not meet the 20% lifecycle greenhouse gas reduction threshold required to qualify under the scheme. Indonesian and Malaysian palm oil growers criticised the decision, claiming that data used for analysis was out-of-date and contesting the projected high deforestation rates in both countries.

The Roundtable on Sustainable Biofuels (RSB) certified their first operator, Shoalhaven Starches Ltd., of the Manildra Group of Companies, in New South Wales, Australia, which uses a by-product of wheat processing to produce ethanol. This early certification demonstrated that wastes and residues can be an important fraction of biofuel feedstocks, reducing the pressure on land and especially forests.

MARCH

An EU event, 'Carbon Emissions from Bioenergy', was held to discuss sustainability issues linked to biomass for energy and the impact on the climate for 2020 and beyond. It concluded with recommendations for a shift in bioenergy policies to focus on additional biomass sources, full accounting of all emissions and a greater focus on energy production from by-products of biomass, waste and residues.

APRIL

A Guardian article about the EU's renewable energy targets and EU 2020 carbon targets highlighted the threat of biomass from wood. EU member states' national action plans claim biomass energy will provide around half of the EU's target of 20% of energy from renewable sources by 2020. Wood is considered by the EU as 'carbon neutral', but due to the time lag between the carbon debt when a tree is felled and the carbon credit when a new tree has grown to absorb the same amount of carbon, biomass may actually increase atmospheric CO₂ concentrations in the interim.

MAY

The Roundtable on Sustainable Biofuels article entitled "Ensuring Biofuels Deliver on Their Promise of Sustainability" was featured in the May 2012 G8 publication from Camp David.

JUNE

RSB announced it will recognise farm operations certified by the Sustainable Agriculture Network (SAN) standard, implemented by the Rainforest Alliance.

JULY

The RSPO Task Group on the Renewable Energy Directive (RED) re-submitted the RSPO-RED application to the EU. A final decision accepting the RSPO certified material for RED was announced later in 2012.

AUGUST

United Airlines joined the Sustainable Aviation Fuel Users Group (SAFUG), an industry working group that aims to accelerate the development and commercialisation of aviation biofuels. Group members include Air France, British Airways and Boeing and represent around 32% of commercial aviation fuel demand.

Oxfam warned that rising prices for corn, soy and wheat threaten millions more people in developing countries with hunger. The charity called for the reduction in the use of food crops for biofuels, echoing recent proposals by other experts, including the head of the International Food Policy Research Institute.

The UN's Food and Agriculture Organisation (FAO) called for a suspension of US ethanol quotas in response to the impact of the worst US droughts in more than half a century on corn supplies and prices. Under the Renewable Fuel Standard (RFA), 40% of the corn harvest must be used to make ethanol, a quota which the UN says could contribute to a global food crisis.

SEPTEMBER

Lufthansa signed a collaboration agreement with Australian-based Algae Tec to build a large-scale algae-to-aviation biofuels production facility in Europe. Algae Tec say that their technology captures CO₂ from nearby industrial sources and uses it to produce algae-based crude oil.

OCTOBER

The European Commission released a proposal to make significant changes to the EU's biofuel policy through amending the Renewable Energy Directive (RED). It will limit the use of crop-based biofuels to 5% of total EU transport energy by 2020, with the aim of stimulating the development of alternative, second generation biofuels from non-food feedstock, and it will introduce a reporting obligation on emissions from indirect land use change (ILUC). ILUC emissions will not be taken into account when determining whether biofuels meet minimum greenhouse gas saving thresholds, which means that suppliers will not be held accountable for the indirect emissions which biofuels cause by displacing food production into new areas.

Oxfam claimed that land acquired for biofuels over the past decade could have produced food for one billion people. The charity called on the World Bank to stop backing foreign investors who acquire land for biofuels that could be used to produce food.

A Convention on Biological Diversity (CBD) report reviewing the major policy issues surrounding biofuels and biodiversity highlighted the complexities of the subject, noting the opportunities for biofuels to contribute to sustainable development and emphasising the risks for energy security and greenhouse gas emissions if biofuel benefits remain unproven.

Two subsidiaries of Maple Energy PLC received the RSB sustainability certification, producing sugarcane ethanol in Piura, Peru, without displacing crops or highly biodiverse

natural habitat. This certification demonstrates that sustainable biofuels can be efficiently and economically produced at a large scale while adhering to ambitious social and environmental standards.

NOVEMBER

The first biofuels feedstock producer to receive the RSB sustainability certification in North America was Global Clean Energy Holdings, with three extensive jatropha farms in the Yucatan Peninsula of Mexico, restoring productivity to abandoned farmland.

DECEMBER

RSB recognised Forest Stewardship Council (FSC) certification of sustainably produced biomass. This will ensure that biomass included in liquid fuel and power supply chains with the RSB label will adhere to rigorous forest management requirements, including wildlife, water and soil conservation.

2012 Timeline

Timber



A coalition of NGOs expressed their concern over the number of 'Private Use Permits' (PUPs) for logging issued by the Liberian Forestry Development Authority. The coalition reported that 25 PUPs covering nearly 700,000 hectares of forest had been issued making them soon to be the main producers of logs in the country. Liberia recently signed a Voluntary Partnership Agreement (VPA) with the EU and the coalition fears that the PUPs will undermine the VPA process before it is ratified, since they make it possible to circumvent legal controls.

MARCH

A WWF-US report targeted Asia Pulp and Paper (APP) for the destruction of natural forest in Indonesia for the manufacture of toilet tissue. Companies and consumers were advised to avoid Paseo and Livi branded tissue products, for which APP reportedly supplied the fibre, until such a time that the products are reformulated to ensure they are not linked to any further natural forest clearing. The NGOs urged customers to look for products that are 100% FSC-certified or 100% recycled.

Safeway announced a commitment to source paper products responsibly, using FSC and Rainforest Alliance certification. The announcement came following high profile campaigns by NGOs on the provenance of tissue paper used in the personal care sector.

Ten Indonesian forest concessions in Kalimantan, totalling more than half a million hectares, joined The Borneo Initiative (TBI), which commits them to achieving FSC certification for their forest management.

APRIL

Stora Enso featured in a new documentary film 'Red Forest Hotel', highlighting issues with the company's eucalyptus plantations in China. The film noted the lack of accountability for such large scale plantation projects in China today and their impact on local villages of water table changes and loss of forest amenity, which has lead to violent clashes locally. This criticism has lead to internal reviews from a company that is recognised as having high sustainability standards in its European operations.

The Environmental Investigation
Agency (EIA) petitioned the US
government to prosecute Peru, as
a party under the Lacey Act, due
to the impact of Peru's Free Trade
Agreement legislation on trade, as
they have evidence of shipments of
illegal timber coming into the US from
Peru through this mechanism.

Asia Pulp and Paper lost one of its investors, Skagen Funds from Norway, following its review of the holding, where a mismatch between its ethical guidelines and their aim of providing their customers with 'the best possible risk adjusted return' was cited.

MAY

A number of companies, including US Airways, stopped using the Sustainable Forestry Initiative (SFI) label on its products due to ongoing NGO campaigning about the standard. This follows a trend of companies distancing themselves from SFI after a report published two years ago by NGO ForestEthics criticised the initiative for inadequate standards to protect forests.

SEPTEMBER

The Forest Trust (TFT) announced that they will be working with Asia Pulp and Paper on monitoring APP's new sustainability program. TFT have previously worked with Nestlé and Golden Agri Resources following high profile NGO campaigns. NGO reaction was generally "wait and see" as other initiatives by APP have failed to deliver the promised results.

NOVEMBER

The NGOs Global Witness and Bank Track released a report that implicates HSBC in providing financial services to resource companies claimed to be destroying rainforests and abusing human rights in Malaysia.

A coalition of 60 environmental and social NGOs wrote to banks and financial institutions asking them to avoid investments in pulp and paper mills that have been associated with forest destruction and human rights abuses in Indonesia. This followed the announcement that APP planned to open a second pulp mill in Riau.

The Ministry of Environment and Forestry in Myanmar announced that the country will suspend its wood log exports from April 2014. The move will attempt to eradicate wood log smuggling and destruction of forest in the country.

Australian company Independent Timbers and Stevedoring (IT&S) was reported to have reached agreements with regional officials on approximately two million hectares of land with customary ownership in Papua New Guinea. Much of this land is reported to be natural forest. This example of Special Agricultural and Business Leases being offered by the government to large scale business





Results of the Disclosure Request 2012

Introduction

In 2012, FFD saw yet another increase in participation in the project, with one hundred companies completing the Disclosure Request. The growth in the number of respondents and increase in geographic participation is warmly welcomed, particularly in the Emerging and Asian markets. The extent of participation by major brand owners is also an encouraging sign, especially new companies with globally significant consumption levels joining the disclosure process. Again there is slow take-up in the producing sectors; oil and gas and agricultural production sectors continue to be under-represented.

The co-dependency on sectors within the value chain continues to be starkly displayed, as good intent in specification from the retail sector fails to be translated into changes in behaviour in other areas. In the context of the global economic situation, price sensitivity continues to be a barrier to the take-up of more sustainable sourcing options. Short-term gain threatens to eclipse the long term risk to climate security from commodities with a deforestation risk. The global policy context supports this depressing prevailing trend.

Those that pioneer and do invest in building capacity, through development of the global Roundtables and more significantly in training and supporting their supply base, are therefore to be congratulated. Our sector leaders continue to show genuine leadership and strategic foresight.

The challenges of integrating sustainability into core business practice is best demonstrated in the timber value chain, where the legislative demand for legality as a minimum requirement for those entering many markets is driving companies to buy certified feedstocks. These are developments which will hopefully reward those upstream players that have invested in improved supply lines.

The pages that follow provide an overview of results by industry sector for the responses received to our 2012 Disclosure Request. Leaders in each sector have been identified by FFD solely on the basis of the information contained in the company's responses to the questions in the Disclosure Request; FFD does not collate information from any other sources. We do this to ensure a consistent

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Environmental Consulting

scoring process and to avoid misrepresenting companies by interpreting on their behalf. The scoring methodology is available on the FFD website (www. forestdisclosure.com).

At this time, FFD does not carry out verification of the responses that participants send to us. However, companies that misrepresent their response to FFD are putting their reputation at risk. We are reliant on the financial institutions that are signatories to the project (see page 56) to take FFD's information and incorporate it into their engagement and assessment procedures to act as a safeguard, and we ask for feedback from those meetings where appropriate.

On the sector pages that follow, we have adopted the use of some conventions to make them easier to read and these are explained in the key to the left.

Results of the Disclosure Request 2012 Sector Leaders

The 2012 FFD sector leaders share a common commitment to innovation and ensuring security of supply for their future. They lead because their vision is wider than just their own operations; most have participated in, or in many cases actively created and led, collaborative activity. In doing so, they are leveraging their own significant impacts to collectively address the global challenges we face.

Leadership consists of moving beyond the immediate supply chain to engagement upstream and being prepared to spend time and money on finding solutions to problems wherever they are found in the world.

The gap between leaders and their sector peers in these difficult times appears to be rising, with an average of 16% difference in scores between winner and runner up across all sectors. There are a few sectors with really significant variances - Industrials, Construction & Autos and Utilities - where active corporate social responsibility in procurement appears not to be the norm.

In the most improved category, FFD were again pleased to see some companies with significant improvements, including Boots UK, Next, Kingspan PLC and Whitbread Group PLC. We look forward to their continued development in responsible operations and supply.

Leaders by Sector

Agricultural Products

New Britain Palm Oil Ltd

Food and Staples Retailing **Sainsbury's Supermarkets Ltd**

General Retailers

Marks and Spencer plc

Industrials, Construction & Autos

Dalhoff Larsen & Horneman (DLH A/S)

Media
British Sky Broadcasting

Oil & Gas Greenergy International Ltd.

Packaged Foods & Meats

Marfrig Group and Unilever

Paper & Forest Products Mondi PLC

Personal Products & Household Products L'Oréal

Textiles, Apparel & Luxury Goods PrimeAsia Leather Corporation

Travel & Leisure **British Airways**

Utilities **Drax Group**

Tables Key

Non Disclosers

- * Did not disclose, but did engage
- ** Disclosed in 2011

Scopes Covered

- 1 Physical Operations
- 2 Supply Chain Management
- 3 Impact of Customer Activities

Commodities Covered



Cattle Products



Palm Oil



Suy



Γimber



Biofuels

Agricultural Products

Sector Leader: New Britain Palm Oil Ltd

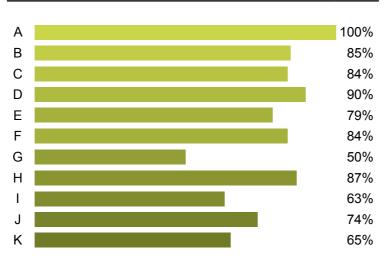
Take-up of disclosure has increased in Latin America and Asia, which is to be welcomed. However, engagement in disclosure by the agriculture production sector continues to be slow. 2012 respondents come from those companies with long standing commitments to investing in sustainability and setting collaborative standards. It is notable that many members of Commodity Roundtables are not disclosing the real substance of their strategy to the financial community. FFD calls on asset owners to engage companies in demonstrating exactly how they exercise due diligence to support their membership statements.

Producers continue to express concern about the willingness of consuming markets to support sustainability improvements financially. This is evidenced by a poor take-up of premium priced third-party-certified products, while certified producers experience problems finding mutually acceptable price points. The price premium sought for these certified raw materials also varies widely, especially between physical materials and the offset Book and Claim systems.

Lack of clarity and transparency on the premiums is a major issue for end users. There is resentment towards the expectations of some producers that the rest of the value chain should fund their entire sustainability investment programs through product prices. This is a block to implementation and, given the upward price trends for most commodities since the Commodity Roundtables were established, it raises the question as to why this additional revenue has not been invested in performance improvement to reduce charges to the wider value chain.

There is a hidden danger that confidence in Roundtable processes could be undermined by the high number of disputes. Within the RSPO, for example, local communities are appealing against producer members and there is a debate about new production on peat areas under the revision to the Principles and Criteria which is being discussed. Both issues have the potential to erode trust in the RSPO which will impact all companies in the process, including our leading edge disclosing companies.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



- A Profile of Materials Bought In (By Commodity)
- B Risk Assessment
- C Review of Your Supply Chain
- D Public Commitments by Forest Risk Commodity
- E Strategy Development
- F Managing for Performance Improvement
- G Sustainable Supply Chain Development & Support
- H Scope and Coverage
- I Public Reporting
- J Governance Process
- K Identifying Risks and Opportunities

Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Agropalma S.A. BRA		A CONTRACTOR OF THE CONTRACTOR	1
Grupo André Maggi. BRA	✓	(2) (5) (6) (0)	1, 2
Grupo JD. BRA		8 6	1, 2
IOI Group. MAL	✓	**	1
New Britain Palm Oil Ltd. UK			1, 2, 3

Sector Leader: New Britain Palm Oil Ltd

"For New Britain Palm Oil Ltd (NBPOL) it is fundamental that any development achieves an optimal balance between social development, conservation and agriculture. It is also vital that carbon accountability be embedded into an agricultural company's thinking and guide all its actions. By excluding from conversion those areas that store large amounts of carbon, we will significantly reduce greenhouse gas emissions and preserve the natural infrastructure that supports our business. In maintaining these commitments, transparency needs to be achieved at all levels. The Forest Footprint Disclosure is singularly important in the provision of impartial assurance, preservation of transparency and in communicating a company's performance to a wider stakeholder audience."

Nick Thompson CEO



Companies that did not complete Disclosure Request 2012

Anglo-Eastern Plantations. UK

Arantes Alimentos Ltda. BRA Archer-Daniels-Midland Company. USA Astra Agro Lestari. INDO Bakrie Sumatera Plantations. INDO Bunge Limited. USA California Oils Corporation. USA Camellia. UK Cargill Inc. USA China Agri-Industries Holdings Ltd. HK First Resources Ltd. SP Frigorífico Mercosul. BRA Genting Plantations Berhad. MAL Golden Agri-Resources Limited, SI * Hap Seng Plantations Holdings Berhad. MAL* Heilongjiang Agriculture Co Ltd. PRC Kuala Lumpur Kepong Berhad. MAL Kulim (Malaysia) Berhad. MAL London Sumatra Indonesia. INDO Louis Dreyfus Corporation. FRA M.P. Evans Group, UK Nutreco NV. NETH Perkebunan Nusantara li PT. INDO PT Musim Mas. INDO R.E.A. Holdings. UK * Sampoerna Agro. INDO Seaboard Corp. USA SIPEF NV. BELG Socfinasia SA. LUX Tradewinds Plantation Bhd. MAL United International Enterprises Ltd. BAH United Plantations Berhad, MAL Vicentin SAIC, ARG Wilmar International Ltd. SI

Food and Staples Retailing

Sector Leader: Sainsbury's Supermarkets Ltd

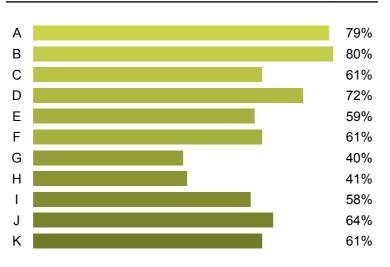
Participation in this sector continues to grow geographically. Action on timber and palm is universal, with soy, beef and biofuels more patchy. Retailers are in general pooling their resources to create a consistent response to standards setting, especially through their participation in the Roundtables, and by working together, companies are reducing the cost of addressing these commodity challenges. For those Roundtable members who choose not to disclose, a higher degree of stakeholder scrutiny seems inevitable in these circumstances.

This combined response has the advantage of giving a consistent message on the desire for certified material to the producer and trade communities, but it does makes it harder to differentiate between individual companies' strategies and level of real investment in achieving control of their own value chain.

There is little sign that this approach in addressing the imbalance in the Roundtable processes between the different parts of the value chain is working. Producers continue to ask for greater market pull and do not understand the obstacles to take-up in the markets. Achieving any public commitment to purchasing certified material requires systemic behavioural change from many other sectors and at present this is difficult to achieve quickly. FFD will be challenging the retailer sector to show how they are actively working with their own supply base on implementing use of physical certified materials.

Most organisations continue to make reference to 2015 targets, but with a 2% premium on the use of GreenPalm now, it is difficult to justify less than 100% coverage of companies' consumption by offsetting, given that palm oil prices have dropped around 25% from their summer peaks. For 2013, FFD hopes to see universal coverage of palm footprints through offsetting and active engagement in managing Mass Balance materials.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Boots UK. UK	✓	270	2
Carrefour Group. FRA	✓	27000	2
Coop Genossenschaft. CH	✓	270	1, 2
Jerónimo Martins. PL		27000	1, 2
Kesko Corporation. FIN		8 6 6	2
Metro Group. GER	✓	2 * * * * * * * * * * * * * * * * * * *	1, 2
MIGROS - Federation of Migros Cooperatives. CH	✓	> • • • • • • • • • • • • • • • • • • •	1, 2
Royal Ahold. NETH	✓	270	1, 2
Sainsbury's Supermarkets Ltd. UK	✓	2 * 6 6 6	2
Tesco UK. UK	✓	2 * * * * * * * * * * * * * * * * * * *	1, 2
Wesfarmers Limited. AU	✓	27000	1, 2
Wm Morrison Supermarkets PLC. UK	✓	26600	1, 2

Sector Leader: Sainsbury's Supermarkets Ltd

"Sainsbury's is delighted to be FFD sector leader for Food & Staples Retailing in 2012. As part of our 20x20 Sustainability Plan Sainsbury's is aiming that all our own brand products do not contribute to global deforestation and that we are the leading 'tree friendly' retailer planting new trees at home and abroad. Ultimately, procuring sustainable commodities is essential for our reputation, for guaranteeing continuity of supply and to the long-term success of our business. Looking forward, the key focus for this year is to continue the progress we have made on converting products to sustainable palm oil and to connect the demand for sustainable soya to actual physical supply."

Judith Batchelar Director of Sainsbury's Brand

Companies that did not complete Disclosure Request 2012

AEON Co Ltd. JA Axfood AB, SWE Big C Supercenter PCL. THAI BJ's Wholesale Club Inc. USA Booker Group. UK Casino Guichard-Perrachon. FRA China Resources Enterprise Ltd. HK Colruyt SA. BELG Controladora Comercial Mexicana. MX Costco Wholesale Corporation, USA Cremonini S.p.A. ITA CVS Caremark Corporation. USA Dairy Farm International Holdings Ltd. HK Delhaize Group, BELG * Edeka Zentrale AG & Co. GER George Weston Limited. CAN Greggs. UK Groupe Auchan SA. FRA Grupo Comercial Chedraui. MX * Grupo Pao de Acucar. BRA Kroger Co. USA Lianhua Supermarket Holdings Ltd. PRC Mitsubishi Shokuhin Co Ltd. JA Olam International Limited. SI * Organizacion Soriana, MX Pick n' Pay Stores Limited. SAF President Chain Store Corp. TAI Raia Drogasil SA. BRA Rallye SA. FRA Safeway Inc. USA * Shoppers Drug Mart Corp. CAN Spar Group Limited, SAF Sumber Alfaria Trijaya. INDO * Supervalu Inc. USA Sysco Corporation. USA United Natural Foods Inc. USA UNY Co Ltd. JA Walgreens Company. USA Wal-Mart de Mexico. MX * Wal-Mart Stores Inc. USA Whole Foods Market Inc. USA * Woolworths Limited, AU Woolworths Holdings Limited, SAF Wumart Stores Inc. PRC

General Retailers

Sector Leader: Marks and Spencer plc

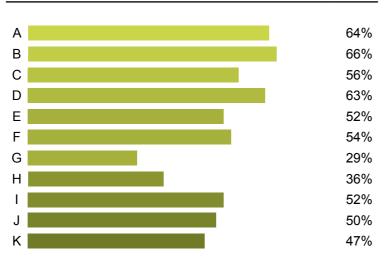
In the General Retailers section, the regional differences are quite marked. North American companies are generally still grappling with timber issues, especially around packaging, although there have been some good commitments on palm. In other regions, noticeably Europe, a wider number of commodities are seen to be material and substantial commitments are being made to use sustainability as a differentiator.

Beyond our leaders' achievements, sourcing standards for palm, beef, soy and biofuels are less evident, even though those commodities have been declared as material.

The growth of national and regional legislation on legality of timber is making the availability of certified feedstocks and product choices an issue in some operational locations, particularly China. The companies' strategies for securing sufficient materials to meet their needs are not always clear.

With timber, the certification scheme of choice is FSC given its widespread acceptance by civil society. Currently FSC are focusing on removing any threat of fraud and that will increase the costs of compliance for its chain of custody standard, meaning that end users in the sector may well have to invest in their value chains to incentivise vendors and suppliers to maintain their certifications when these changes bite in coming years.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Comm Cover	nodities ed	Scopes Covered
Best Buy Co., Inc. USA	✓			1
Kingfisher. UK	✓		6	2
Lowe's Companies, Inc. USA	✓	2		1, 2, 3
Marks and Spencer plc. UK	✓			1, 2
Next. UK	✓		6	2
Office Depot. USA	✓			2

Sector Leader: Marks and Spencer plc

"Being positioned as sector leader every year since the Forest Footprint Disclosure Project began is an honour and reflects the consistent effort M&S employs to improve management of forest risk commodities. Of course we remain focused on tackling the many challenges that remain, for example the absence of true traceability in mainstream leather supply chains, and are committed to collaboration with FFD alongside industry, academic and NGO partners to develop solutions to these challenges. This partnership approach is as essential now as it was in 2009 when Forest Footprint Disclosure was introduced."

Fiona Wheatley M&S Plan A Sustainable Development Manager Raw Material

Companies that did not complete Disclosure Request 2012

Almacenes Exito SA. Colombia

Amazon.com. Inc. USA Barnes & Noble Inc. USA David Jones Ltd. AU Debenhams. UK Dillards Inc. USA Dollar General Corp. USA Earth Presents. USA ** El Puerto de Liverpool SA. MX Family Dollar Stores Inc. USA GNC Holdings Inc. USA Grupo Palacio de Hierro. MX Hallmark Cards Inc. USA Home Depot Inc. USA Home Product Center PCL. THAI Home Retail Group. UK IKEA AB. SWE * J.C. Penney Company Inc. USA JD Group Ltd. SAF John Lewis, UK Kohl's Corporation, USA Limited Brands Inc. USA Macy's Inc. USA Masco Corporation. USA Mattel Inc. USA N Brown Group. UK* OfficeMax Inc. USA PPR. FRA Sears Holdings Corporation. USA Staples Inc. USA Target Corporation. USA WH Smith. UK** Williams Sonoma Inc. USA

Industrials, Construction & Autos

Sector Leader: Dalhoff Larsen & Horneman (DLH A/S)

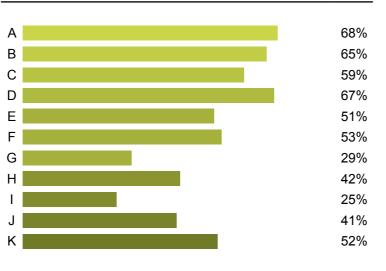
The widening of participation, with the addition of another company from the auto sector, is warmly welcomed. However, this sector needs mainstream participation as it continues to be dominated by companies with long standing commitments to sustainability or those who use their profile as a core business differentiator.

Asking how companies in this sector address security of supply for their raw materials is key for us. Investors should be asking questions about companies' capacity to generate value in the long term without a strategic response. Some companies do indeed have strong supply chains, particularly in Europe; others are actively engaged in building them, such as DLH who have invested in building FSC supply in tropical grades. Those without a strategic approach will face significant competition for materials, depending on their location of operations.

With timber, the certification scheme of choice is FSC given its widespread acceptance by civil society. Currently FSC's efforts are focusing on removing any threat of fraud and that will increase the costs of compliance for its chain of custody standard; meaning that end users in the sector may well have to invest in their value chains to incentivise vendors and suppliers to maintain their certifications when these changes bite in coming years.

With leather, efforts continue to build transparent supply chains. This year progress has been slow, with problems in Brazil caused by the long debate on legality in the Forest Code debate, making on-the-ground progress difficult as ranchers and farmers waited to hear how the law would impact on their legal status and set-aside requirements.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Disclosed in 2011	-		Scopes Covered
✓	2	6	1, 3
√		©	2
✓		©	2
	2	6	2
✓			2
✓		6	1, 2
✓		000	2
		in 2011 Covere	in 2011 Covered √

Sector Leader: Dalhoff Larsen & Horneman (DLH A/S)

"We are honored to be recognized as a sector leader for a third year in a row. We take managing our impact on the world's forests very seriously and do our utmost to collect information on the origin of the timber we source. This year our efforts have focused on implementing an improved version of our due diligence system, which helps us manage our forest footprint even better. Promoting sustainable forest management is a key element of DLH's environmental policy. We believe that sustainable management of the world's forests is the best and most effective way to reduce the global forest footprint and we would like to acknowledge FFD's work to improve the understanding of business impact on forests."

Peter K. Kristensen Vice-President, CSR & Environment

Companies that did not complete Disclosure Request 2012

Armstrong World Industries Inc. USA Balfour Beatty. UK* Barito Pacific, INDO Bollore, FRA Boral Ltd. AU Bunzl. UK* Carillion, UK Citic Pacific Limited. HK Croda International. UK Dai Nippon Printing Co Ltd. JA Daimler AG. GER Desarrolladora Homex. MX* Eagle Ottawa Leather Co. USA FedEx Corp. USA* Fiat S.p.A. ITA Ford Motor Company. USA General Motors Co. USA Honda Motor Co Ltd. JA Hutchison Whampoa. HK IJM Corporation Berhad. MAL Jardine Matheson Holdings Limited, HK Porsche Automobil Holding SE. GER Renault SA. FRA Rexam. UK RR Donnelley & Sons Co. USA Sime Darby Berhad. MAL** Toppan Printing Co Ltd. JA Toyota Motor Corporation. JA United Parcel Service Inc. USA Volkswagen AG, GER Volvo AB. SWE Wolseley. UK

Media

Sector Leader: British Sky Broadcasting

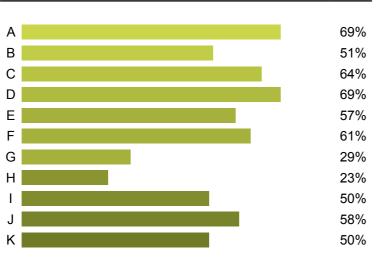
Participation in this sector continues to be restricted to a small number of opinion formers. The extension of Walt Disney's timber procurement standards, which gained so much publicity this year, has again thrown the spotlight on its competitors' lack of progress on these issues.

We note that the challenging times experienced by News International have not deflected their CSR team from this year's submission and they are to be congratulated.

With the stable trend in raw material prices and increases in the supply of certified grades, there are opportunities to increase sustainability of supply without major cost implications and it would be good to see a higher level of performance in coming years.

The participation of the wider media industry in disclosure, at a time of widespread concern about the future of non-digital media, should be an opportunity to promote to consumers the wider societal benefits of paper-based media.

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Companies that did not complete Disclosure Request 2012

APN News & Media Limited. AU

Axel Springer AG. GER*
Bertelsmann SE & Company. GER*
Daily Mail & General Trust. UK
Fairfax Media Ltd. AU
Pearson. UK
Sanoma Oyj. FIN
Singapore Press Holdings Limited. SI
Tamedia AG. CH
Time Warner Inc. USA
Transcontinental Inc. CAN



Sector Leader: British Sky Broadcasting

"At Sky, we're delighted to be rated the leading company in the Forest Footprint Disclosure (FFD) Project for the media sector this year. Taking part in the FFD Project keeps on challenging us in our work with our suppliers so that we improve the way we source the products we use in our business day to day that come from the rainforest. It's also a great fit with Sky Rainforest Rescue, our partnership with WWF, working on the ground to help local farmers find new market opportunities for products from the rainforest instead of deforesting their land."

Fiona Ball Head of Environment & Engagement



Oil & Gas

Sector Leader: Greenergy International Ltd

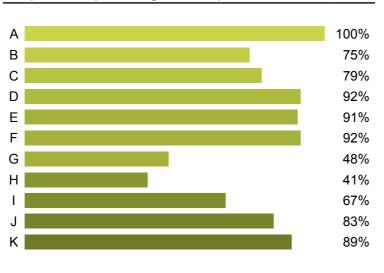
With the debate about use of food-grade feedstocks for biofuel and sustainable supply for bio-energy having rarely been out of the headlines this year, this sector has been under considerable scrutiny. Those companies responding to FFD continue to demonstrate responsibility, offering market differentiation underpinned by sophisticated feedstock control systems.

The lack of engagement from any of the major oil and energy companies globally, with the commendable exception of BP, continues to be shameful, especially when public and financial community interest in their performance continues to be so high. With the alternatives to bio-based fuels such as deepwater or fracking operations so problematic, both environmentally and socially, and with many companies having commitments to use of non-food grade materials, the lack of response is difficult to justify.

This year's changes to the EU legislative framework for use of edible oils will reduce the attractiveness of palm and soy longer term, while increasing the likelihood of cellulose-based oils being used. Therefore the material feedstock selection process in the sector needs to learn from the experience of other sectors in ensuring that traceability and sourcing standards for wood-based materials are built in from day one.

The reuse of materials as feedstocks for biofuel or energy is an important aspect of developing the circular economy. It is equally important to make transparent those companies which are making real efforts to communicate their commitment to food security and land efficiency.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Greenergy International Ltd. UK	✓	(1, 2, 3
Neste Oil. FIN	✓	2 • • • •	1, 2
Piedmont Biofuels. USA	✓	(1

Companies that did not complete Disclosure Request 2012

Adani Enterprises Ltd. IND BP. UK * Chevron. USA ConocoPhillips. USA Exxon Mobil. USA Petrobras. BRA Royal Dutch Shell. NETH Total. FRA Valero Energy. USA

Sector Leader: Greenergy International Ltd

"Like other oil companies, we blend biofuel into our petrol and diesel to meet our biofuel supply obligations. We seek to minimize our impact on forest commodities by manufacturing our own biofuel from food industry wastes. Where we need to use crop-based biofuels, we choose to disclose their origin on our website and on BioCarbon Tracker. By making available detailed information about our biofuel supply, we correct inaccurate assumptions and manage reputational risk."

Tamara Earley
Managing Director



Packaged Foods & Meats

Sector Leaders: Marfrig Group and Unilever

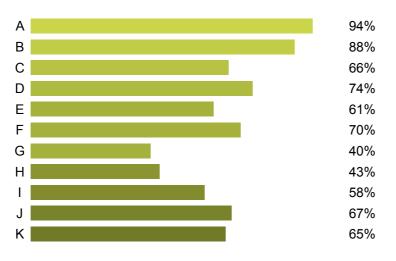
The extension of participation into new markets in this sector, together with the addition of the global reach of the iconic Heinz brand, are warmly welcomed.

The performance in this sector does however, vary widely; this is in part dependent on product ranges and their formulations, which drive dependency on particular commodities. It also seems to vary according to their proximity to consumers or retailers who are more aware of environmental issues. Perhaps the business case is easier to make if it is more tangible?

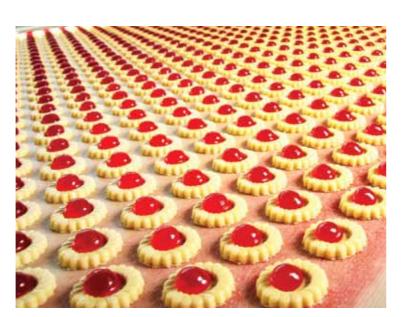
This year's sector leaders both exemplify the challenges in this sector, with Marfrig and Unilever covering a large number of commodities. Marfrig's challenge is operating in a country with an evolving political response to supply chain responsibility, while Unilever, with its global reach and 100 strategically important commodities, shares many of the same information challenges. Both companies have a great deal of complexity to manage and are showing leadership in change and information management.

The growth of corporate collaboration systems is particularly marked in this sector, with the Consumer Goods Forum (CGF) and the Roundtables having a good take-up. FFD looks forward to other members of the CGF, with its zero deforestation commitment, coming forward in 2013.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Bimbo, S.A. De C.V. MX		* * * *	2
Cranswick Plc. UK	✓		1, 2
DuPont Nutrition & Health. USA		* *	1, 2, 3
Groupe Danone. FRA		27900 0	2
HJ Heinz Company. USA		27600	1, 2
InterNatural Foods. USA	✓	**	2
JBS S/A. BRA	✓	(2)	1, 2
Justin's. USA	✓	**	2
Marfrig Group. BRA	✓	27900	1, 2
Nestlé SA. CH	✓	2 4 6 6	1, 2
PepsiCo, Inc. USA	✓	2	2
Unilever. NETH	✓	8 6 6	2
	<u> </u>	·	

Sector Leader: Marfrig Group

"Building on the environmental, social, economic, technological, value chain and product dimensions, the Marfrig Group has furthered its sustainability strategy. Participation in the FFD has been very important to determine the guidelines and make us search for continuous improvements to our management system. In the 2011 report, we were highlighted as the most evolved company and now, in this report, we are proud to rank as the Leader of the Sector, which shows our evolution has been consistent and solid."

Clever Pirola Avila Director of Sustainability

Sector Leader: Unilever

"Unilever is honoured to be recognised as sector leader for the second year. We applaud the work of the Forest Footprint Disclosure Project in driving more companies to embed the right sustainable practices in their supply chains. We wish to thank all of our partners for their support in 2012. Delivering our 100% certified sustainable palm oil target 3 years ahead of our original schedule is an achievement of which we, our suppliers and our NGO partners can all be very proud. Moving to traceable supply and making progress across all key agricultural resources is our intent, and we look forward to continue working in partnership to achieve this."

Gail Klintworth
Chief Sustainability Officer

Companies that did not complete Disclosure Request 2012

AarhusKarlshamn AB. SWE

Aryzta AG. CH

Associated British Foods. UK Barry Callebaut AG. SW BRF-Brasil Foods SA. BRA Britannia Industries Limited, IND Campbell Soup Company. USA Charoen Pokphand Foods PCL. THAI China Mengniu Dairy Company Ltd. HK China Yurun Food Group Ltd. PRC ConAgra Foods Inc. USA CSM NV. NETH Dairy Crest Group. UK Dean Foods Company. USA * Del Monte Foods Company, USA Fraser & Neave Limited, MAL Fuji Oil Co Ltd. JA General Mills Inc. USA Goodman Fielder Limited, AU Grupo Bafar. MX Grupo Herdez. MX Grupo Modelo. MX Hershev Company, USA Hormel Foods. USA Indofood Agri Resources Ltd. SI Indofood Sukses Makmur, INDO Inner Mongolia Yili Industrial Group Co Ltd. PRC J.M. Smucker Company. USA J-Oil Mills Inc. JA Kellogg Company. USA * Kerry Group. IRE Kikkoman Corp. JA Kraft Foods Group Inc. USA Lindt & Spruengli AG. CH Lotte Confectionery Co Ltd. KS Maple Leaf Foods Inc. CAN Mars Inc. USA Mayora Indah. INDO McCain Foods Ltd. USA Mead Johnson Nutrition Company. USA Molinos Rio de la Plata SA. ARG Nippon Meat Packers Inc. JA Orion Corp. KS Pilgrim's Pride Corporation, USA Pinnacle Foods Corporation, USA Premier Foods PLC. UK Ruchi Soya Industries Limited. IN San Miguel Pure Foods Co Inc. PH Sinar Mas Agro Resources & Technology. INDO* Smithfield Foods Inc. USA Stonyfield Farm Inc. USA Tiger Brands Ltd. SAF Tingyi (Cayman Islands) Holding Corporation. PRC Tyson Foods Inc. USA Uni-President China Holdings Ltd. TAI United Biscuits Holdings Ltd. UK Want Want China Holdings Limited. PRC

Paper & Forest Products

Sector Leaders: Mondi PLC

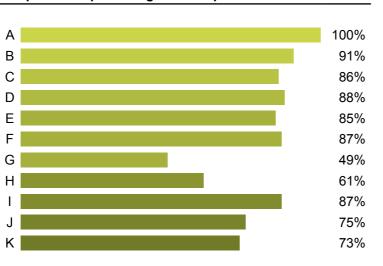
The level of participation across this sector continues to grow, especially in Scandinavia. Given the difficult times the paper and board industry are undergoing, as the industry restructures in response to changes in global demand patterns, this commitment is to be welcomed.

Considerable NGO activity continues to be directed at this sector. The continued expansion of mills in Asia is being publicly questioned, given the lack of availability of third-party certified feedstocks in the region, and has generated significant campaigns which target the financial sector.

The global recession and higher energy prices continue to undermine the economics of some sector participants. While others are using this as an opportunity to emphasise their sustainability credentials to diversify into bio-based materials and new segments like bio-energy.

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.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



- A Profile of Materials Bought In (By Commodity)
- B Risk Assessment
- C Review of Your Supply Chain
- D Public Commitments by Forest Risk Commodity
- E Strategy Development
- F Managing for Performance Improvement
- G Sustainable Supply Chain Development & Support
- H Scope and Coverage
- I Public Reporting
- J Governance Process
- K Identifying Risks and Opportunities



Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Ahlstrom Corporation. FIN		©	2
Arauco. CHL	✓	6	1, 2
Asia Pulp & Paper Group, Indonesia. SI	✓	6	1, 2
Catalyst Paper Corporation Ltd. CAN	✓	6	1, 2
DanzerGroup. CH	✓		1, 2, 3
Domtar. CAN	✓	©	1, 2
Evergreen Packaging. USA	✓	©	2
Fibria. BRA	✓	6	1, 2
Holmen. SWE	✓	6	1, 2
International Paper. USA	✓	©	1
International Paper. BRA		©	1
Metsä Board Corporation. FIN		6	1, 2
Mondi PLC. SAF	✓	©	1, 2
PaperlinX. UK	✓	©	2
Sappi. SAF	✓	6	1, 2, 3
SCA Skog. SWE	✓	©	1, 2, 3
Stora Enso Oyj. FIN	✓	©	1
UPM-Kymmene Corporation. FIN	✓	©	1, 2
Weyerhaeuser Company. USA	✓	6	1, 2

Sector Leader: Mondi PLC

"At Mondi, we believe in responsible, sustainable forestry. This means balancing growing demand for forestry goods and services with enhanced ecological and social values to meet the needs of our business and our customers. To secure continuous access to sustainable and credible sources of fibre, it is therefore in our interests to ensure that we support the requirements of responsible forestry practice, from the management of our own forests and the procurement of wood and fibre, through the supply chain. We ensure FSC certification for all our owned and leased forests and we use chain of custody at all processing operations to ensure legality and sustainable wood sourcing."

Uwe Fölster Head of Sustainable Development

Companies that did not complete Disclosure Request 2012

Asia Pacific Resources International Holdings Ltd. SI

Billerud Aktiebolag. SWE Boise Inc. USA Canfor Corporation. CAN China Resources and Transportation Group Ltd. HK Cikel Group. BRA Columbia Forest Products Inc. USA DS Smith. UK Empresas CMPC, CHL Georgia-Pacific LLC. USA Glatfelter, USA Graphic Packaging Holding Company. USA Ence Energia y Celulosa. SP * Hokuetsu Kishu Paper Co Ltd. JA Jaya Tiasa Holdings Berhad. MAL Klabin. BRA Lee & Man Paper Manufacturing Ltd. HK Louisiana-Pacific Corporation. USA Mayr-Melnhof Karton. AV MCC Meili Paper Industry Co Ltd. PRC MeadWestvaco Corporation, USA Nine Dragons Paper Holdings Ltd. HK Nippon Paper Group Inc. JA Oji Holdings Corporation. JA Packaging Corporation of America. USA Plum Creek Timber Company Inc. USA Portucel Empresa Produtora de Pasta e Papel. PL Rayonier Inc. USA Rengo Co Ltd. JA Resolute Forest Products. CAN Rock-Tenn Company, USA * Samling Global Ltd. HK Schweitzer-Mauduit International Inc. USA Semapa-Sociedade de Investimento e Gestao. PL Shandong Chenming Paper Holdings Limited. PRC Sonoco Products Company. USA Suzano Papel e Celulose. BRA Sveaskog. SWE Ta Ann Holdings Berhad. MAL Vicwood Group, HK

West Fraser Timber Co Ltd. CAN

Yueyang Paper Co Ltd. PRC

Personal Products & Household Products

Sector Leader: L'Oréal

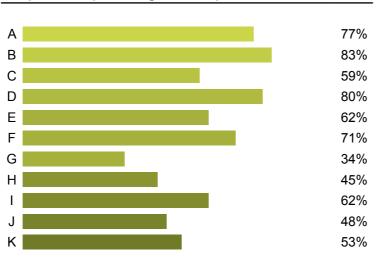
Personal and Household Products has been one of this year's most dynamic sectors with new entrants ranging from large multinationals to regional and smaller operations. The ongoing consumer and NGO campaigning on raw material sources continues. Companies who are in command of their supply chains benefit from reputational security and potentially new communication opportunities.

Timber and palm are the key commodities in use in this sector but there are some significant users of beef-based tallow. Recent announcements by Kimberly-Clark about their trial of substitute fibre sources, using bamboo as a fast growing alternative, highlight an interesting strategic response to the challenge of how the industry will continue to grow with a finite amount of available land for feedstocks without threatening food security.

The lack of readily available certified palm oil-based derivatives continues to be an issue, but the availability of Mass Balance certified derivatives is slowly improving the situation, although transparency and knowledge of availability within supplying companies continues to be mixed. Palm kernel oil-based derivatives continue to be difficult to source and the GreenPalm market has expanded to fill the gap until more physical certified ingredients become available. Disclosing companies continue to be some of the few organisations covering 100% of their consumption with GreenPalm offsets.

This sector has been very active in demonstrating leadership in the extent of its scope of operations, covering not only commodities used in product formulation but also packaging and marketing materials.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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- J Governance Process
- K Identifying Risks and Opportunities

Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
Avon Products, Inc. USA	✓	*	1, 2, 3
Colgate Palmolive Co. USA		2 • • • • • • • • • • • • • • • • • • •	2
Earth Friendly Products. USA	✓	6	2, 3
Henkel AG & Co. KGaA. GER	✓	* 60	2
Johnson & Johnson. USA	✓	\$ \$ \$ \$ \$	2
Kao Corporation. JA		(4)	1, 2
Kimberly-Clark Corporation. USA	✓	6	2
Kimberly-Clark de México. MX		©	2
L'Oréal. FRA	✓	* 6	1, 2, 3
Natura Cosméticos S.A. BRA	✓		1, 2, 3
Oriflame Cosmetics SA. SWE		* *	2
PZ Cussons. UK	✓	8 6	2
Reckitt Benckiser Group plc. UK	✓	8 6	1, 2

Companies that did not complete Disclosure Request 2012

Aaron's Inc. USA
Bed Bath & Beyond Inc. USA
Beiersdorf AG. GER
Clorox Company. USA
Estee Lauder Companies Inc. USA
Godrej Consumer Products Limited. IND *
Herbalife Ltd. USA
LG Household & Health Care Ltd. KS
Procter & Gamble Company. USA
Revlon Inc. USA
Sally Beauty Holdings Inc. USA
SC Johnson & Son Inc. USA
Seventh Generation Inc. USA*
Steinhoff International Holdings Ltd. SAF
Ulta Salon Cosmetics & Fragrance Inc. USA

Sector Leader: L'Oréal

"L'Oréal is honoured to be once again nominated as a sector leader of the FFD for its leading practices in managing forest resources. As the world leader in beauty, L'Oréal's commitment is at the highest level: More than ever, it is crucial to protect forests in emerging nations. Forests that represent an authentic natural capital for humanity today, and for future generations to come. Recognizing our leading role, next steps is to promote best practices along the value chain and encourage our suppliers to measure and disclose their forest impact throughout the CDP/FFD merge."

Alexandra Palt
Director, CSR & Sustainability



Textiles, Apparel & Luxury Goods

Sector Leader: PrimeAsia Leather Corporation

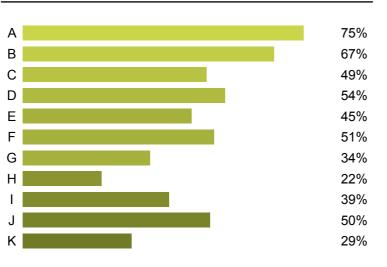
FFD welcomes the wider participation in this sector and the increase in its geographic reach. Finding responsible supply options for companies in the Textiles, Apparel & Luxury Goods sector continues to be challenging as the evolution of traceability and certification systems is still immature.

FFD supports the work undertaken by our disclosing companies to build capacity in the leather industry to locate feedstocks from growing farm to tannery.

We salute those leaders who have proved it is possible to ensure traceability of their feedstocks and are supporting the extension of the Leather Working Group certification system upstream.

In coming years we hope that non-luxury brands will take-up the challenge to engage with the sourcing challenges of leather in their value chains, and we look to the finance industry to present this issue as part of corporate engagement given the reputational risks.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
adidas AG. GER	✓		1, 2
Burberry Group. UK	✓		1, 2
C & J Clark International Ltd. UK	✓		1, 2
Christian Dior sa. FRA		2 * 60	1, 2
Curtume Viposa S/A Ind. e Com. LTDA. BRA		2	2
GUCCI. NETH		(2)	2
Moet Hennessy Louis Vuitton S.A. FRA	✓	270	1, 2
Nike Inc. USA	✓	(2)	2
PrimeAsia Leather Corporation. USA/TAI	✓	(2)	2
Timberland. USA	✓		1, 2

Sector Leader: PrimeAsia Leather Corporation

"PrimeAsia's commitment to the environment guides us to create the highest quality leather with the lowest lifecycle footprint through innovation and engagement of employees, customers, suppliers, and the communities in which we operate. In 2012, PrimeAsia set ambitious five year thirty percent energy, water, and waste reduction goals. To collect benchmark data, all PrimeAsia leathers were carbon and water foot-printed. Innovative engineering projects including solar hot water, biomass boilers, energy-efficiency, and re-using waste will continue to be implemented. PrimeAsia also understands the need to collaborate with the supply chain, and in 2012 had suppliers answer the first of annual sustainability questionnaires detailing their own environmental policies and actions."

Sarah Swenson Environmental Manager

Companies that did not complete Disclosure Request 2012

Coach, Inc. USA
Compagnie Financiere Richemont SA. CH
Columbia Sportswear Company. USA
Deckers Outdoor Corporation. USA
Fossil Inc. USA
Gap Inc. USA
Geox S.p.A. ITA
Haining China Leather Market Co Ltd. PRC
Hennes & Mauritz AB. SWE

Hermes International. FRA

Inditex. SP

Jones Group Inc. USA Levi Strauss & Company. USA

Mulberry Group. UK

Nordstrom Inc. USA Patagonia Inc. USA

Prada S.p.A. HK

Puma SE. GER

PVH Corp. USA Ralph Lauren Corporation. USA

VF Corporation, USA

Wolverine World Wide Inc. USA

Travel & Leisure

Sector Leader: British Airways

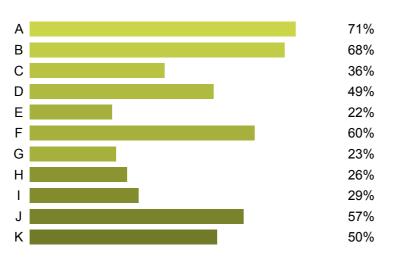
The inclusion of Alsea of Mexico in this sector is warmly welcomed, building FFD's global perspective and our food service coverage.

With commodity and food inflation growing in significance, building traceability and security of supply are big issues for this sector. The dependency of the companies on growers, producers, traders and the food industry to provide them with information is clear.

With the development of corporate commitments in other sectors, a positive response also offers opportunities for travel and food service brands to meet customer needs and differentiate their operations.

Given the intrinsic relationship between travel, biodiversity and an interest in other cultures, there are significant opportunities for companies performing well in this sector to communicate their global stewardship to consumers.

Sector average scores for each section of the Disclosure Request as a percentage of total points available



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Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
ALSEA Group. MX		E	2
British Airways. UK	✓	27000	2
Compass Group PLC. UK	✓	270	2
Eurostar International Ltd. UK	✓	2790	1, 2
Sodexo. FRA	✓	27000	2
TUI Travel PLC. UK	✓		1, 2
Whitbread Group Plc. UK	✓	2770	1, 2, 3
			-, =, •

Sector Leader: British Airways

"We are incredibly proud to have achieved sector leader status; we believe the FFD contributes to the fulfilment of our corporate vision to lead the airline industry in responsible behaviour; it also demonstrates our comprehensive and widespread approach to addressing climate change where we work closely with our service partners, to ensure our principles apply throughout the supply chain. In the coming year we will extend the scope of our report to achieve wider footprint coverage and also we will set specific objectives with our service partners to improve accuracy of data and to extend the volume of certified products."

Alessandra Cuzzoli
Environment Executive

Companies that did not complete Disclosure Request 2012

Accor SA. FRA

Air France KLM. FRA**

Brinker International Inc. USA Burger King Holdings Inc. USA Carnival. USA Chipotle Mexican Grill Inc. USA Darden Restaurants Inc. USA Delta Air Lines Inc. USA Deutsche Lufthansa AG. GER Domino's Pizza Group, UK Dunkin' Brands Group Inc. USA easyJet. UK Gondola Holdings Ltd. UK Grupo Aeromexico, MX Hilton Group. USA Hyatt Hotels Corp. USA Iberian Airlines. SP Indian Hotels Company Ltd. IND InterContinental Hotels Group. UK JD Wetherspoon. UK JetBlue Airways Corporation, USA Marriott International Inc. UK McDonald's Corporation. USA MGM Resorts International. USA Millennium & Copthorne Hotels. UK** Mitchells & Butlers. UK NH Hoteles SA. SP Restaurant Group. UK Royal Caribbean Cruises Ltd. USA Ryanair Holdings. IRE Shangri-La Asia Limited. HK Southwest Airlines Co. USA* Starbucks Corporation. USA Starwood Hotels & Resorts Worldwide Inc. USA* Tim Hortons Inc. USA United Continental Holdings Inc. USA US Airways Group Inc. USA Virgin Atlantic Airways Ltd. UK Wendy's Company. USA Wyndham Worldwide Corporation. USA Wynn Resorts Ltd. USA Yum! Brands Inc. USA

Utilities

Sector Leader: Drax Group

The sustainability of feedstocks for the sector continue to be under scrutiny. Drax Group's feedstock plans made headlines due to their potential impact on the UK's reclaimed timber market, bringing the future role of bio-energy into the spotlight.

The lack of participation from other consumers of wood-based feedstocks is therefore particularly disappointing, especially 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.



Sector Leader: Drax Group

"Drax is very proud of being recognised again by FFD as the leader in the utilities sector. We are committed to an extensive programme of increasing the amount of biomass we use and believe it to be a prerequisite that any biomass used should be sustainable. This not only makes sense from a business perspective, that is longevity of feedstock supplies, but it is also essential for environmental, economic and social reasons. We intend to remain at the forefront of the introduction of credible standards for solid biomass procurement, anticipating that the experience gained will be beneficial as clarity evolves in the regulations for the definition of sustainability standards and associated methodologies."

Dr Nigel Burdett Head of Environment

Companies that completed Disclosure Request 2012	Disclosed in 2011	Commodities Covered	Scopes Covered
American Electric Power. USA	✓		1, 2, 3
Drax Group. UK	✓		2
National Grid plc. UK	√		1, 2

Companies that did not complete Disclosure Request 2012

Acciona SA. SP Enel Green Power S.p.A. ITA GDF Suez. FRA Vattenfall AB. SWE



Forest Footprint Disclosure: The End and the Beginning

James Hulse

In 2008, our Chairman Andrew Mitchell attended a Carbon Disclosure Project (CDP) climate change report launch and identified a need to educate business and investors about the risks associated with deforestation, which accounts for around 15% of the world's greenhouse gas emissions. As CDP was about to launch its water program, it was agreed that the Global Canopy Programme would set up and run a Forest Footprint Disclosure Project with CDP's assistance, and so FFD was born and launched its first request cycle in 2009.

The first four years of FFD have seen the project reach 100 disclosing companies, backed by more than 165 endorsing investors managing around 12 trillion dollars. Given that it was started with one full time member of staff and still had only four full time members at the end of 2012, this is an impressive achievement and we thank everyone who has been involved in the project so far.

Earlier this year, CDP and GCP announced an alliance that will see GCP's FFD merge with CDP over two years. This strategic merger by CDP and GCP will bring corporate disclosure on carbon and the

source of information for these interrelated issues. This 'return to the mother ship' has been met with unanimously positive reaction from companies, investors and other stakeholders.

A transition process has already begun and CDP will operate FFD from February 2013, leading to full integration by February 2014. GCP will continue to act as the prime funder of the project until 2014, when it will take on a new role as advisor on forests to CDP.

Our work has contributed to greater awareness of the issues around deforestation and the link to commodities, and a number of companies have introduced or changed procurement policies as a direct consequence of our feedback and investor pressure. Nonetheless, companies are constantly pushing back on the increasing reporting burden and we are aware of the time that they devote to completing disclosure requests. In many cases, however, the burden is not the actual reporting, but rather the work that needs to be done to access and collate the data needed. While we have some sympathy for this, the information we are seeking on behalf of our endorsing investors is crucial to enable them

"Creating a holistic natural capital disclosure platform will help to facilitate natural capital accounting and provide stakeholders with a much clearer picture of how companies impact and are impacted by the environment."

climate, water and forests under one roof, resulting in the world's largest and most comprehensive natural capital disclosure system, and will provide companies and investors with a single, integrated to make informed decisions about their investments. If a company pushed back on health and safety information - arguing that it was too much effort to establish what the policies were and whether they



James Hulse
Director
Forest Footprint Disclosure

were being complied with in every site and besides which, it wasn't material - there would be an uproar from all stakeholders, and yet this is a similar argument to those we hear on commodity supply chains every year.

While much of what we are asking for is voluntary disclosure, over the last four years we have seen some notable shifts in the legislative landscape. The multilateral negotiations of the United Nations have introduced drivers of deforestation as a key element of negotiations, in response to a growing awareness that supplyside measures are not sufficient to counter the financial influence of global commodity markets. Laws have been created in the US and Europe to try to prevent the import of illegal timber, and to prosecute those companies who are responsible. Biofuels regulations have included sustainability criteria for the first time, via certification schemes. The first certified sustainable soy has been produced and the first cattle ranches certified, while sustainable

palm oil has risen to over 10% of the world's supply, although demand has so far failed to keep pace.

So where do we see the project heading as it moves into CDP? Initially, our major focus will be on integrating the project into CDP's systems and making sure that stakeholders are presented with an improved interface to enable them to input or access information more easily. We believe that the size and established reputation of CDP will enable us to scale up the project dramatically, which should create additional pressure on companies to disclose.

There are opportunities to combine carbon, water and forests programs to create a more comprehensive approach to measuring an organisation's full natural capital impact, or potentially an environmental P&L for all disclosing companies. This could satisfy the market demand

as investors gain a clearer insight into the sustainability of a company's business model and indeed their licence to operate. Amalgamated data can also be presented in different formats - in sector-specific modules for example - which may enable more informed decision-making for both companies and their investors.

In conclusion, we believe that the merger will enable FFD to increase its influence enormously, while making disclosure simpler and quicker for companies. Creating a holistic natural capital disclosure platform will help to facilitate natural capital accounting and provide stakeholders with a much clearer picture of how companies impact and are impacted by the environment. We hope that this will encourage companies and their investors to recognise the material value of natural capital and the risks to business of ignoring it. This in turn will drive companies to internalise

"We believe that the merger will enable FFD to increase its influence enormously, while making disclosure simpler and quicker for companies."

for natural capital accounting and for integrated reporting, giving stakeholders a clear idea of the environmental issues which a company faces and how well it is managing them. Companies have been effective in using the insights from carbon, water and forest data to reduce their emissions and manage related risks. One of the major challenges we face is how to make information more relevant and material to investors, to enable them to make investment decisions as a consequence. Combining forest data with carbon and water is likely to be a big step forward on this path,

the costs associated with their use of natural capital, stimulating the transition to good corporate stewardship that is needed to ensure our natural resources are used responsibly, and to ensure corporate value is protected, not eroded.

Signatories

FFD would like to thank the following financial institutions that have endorsed the project, each of whom has indicated their commitment to understanding deforestation risk in their potential investments and many of whom have been very supportive of FFD's activities over the past year.

- Active Earth Investment Management
- Advanced Investment Partners
- Amundi Group
- Antera Gestão de Recursos S.A.
- APG Asset Management
- Arisaig Partners
- Avaron Asset Management AS
- Aviva
- Aviva Investors
- AXA IM
- Banco Nacional de Desenvolvimento Economico e Social (BNDES)
- Banesprev Fundo Banespa de Seguridade Social
- Bank Sarasin & Co. Ltd
- Banque Degroof
- Bank Vontobel
- Blom Investment Bank
- Blumenthal Foundation
- Boston Common Asset Management, LLC
- British Airways Pension
- CAI Corporate Assets International AG
- California State Teachers'
 Retirement System CalSTRS
- Calvert Investments, Inc.
- Caser Pensiones EGFP
- Catholic Super
- Cbus Superannuation Fund
- Central Finance Board of the Methodist Church
- The Children's Investment Fund Management (UK) LLP
- Christian Brothers Investment Services
- Christian Super
- Christopher Reynolds Foundation
- The Clean Yield Group
- ClearBridge Advisors
- Climate Change Capital
- Colonial First State Global Asset Management

- CommInsure
- Compton Foundation, Inc.
- Connecticut Retirement Plans And Trust Funds
- Conser Invest
- The Cooperative Asset Management
- Cyrte Investments
- Delta Lloyd Asset Management
- Development Bank of Japan Inc.
- Dexia Asset Management
- Domini Social Investments LLCDoughty Hanson & Co
- EBG (Environmental Business
- Group) Capital
- Ecclesiastical Investment Management
- 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
- The Environmental Investment Partnership LLP
- F&C Investments
- Fédéris Gestion d'Actifs
- Financiere de l'Echiquier
- First Affirmative Financial Network
- First Commercial Bank
- First State Investments
- FRANKFURT-TRUST Investment Gesellschaft mbH
- Friends Fiduciary Corporation
- Fundação Forluminas de Seguridade Social – FORLUZ
- General Equity Group AG
- Generation Investment Management
- German Equity Trust AG
- Global Forestry Capital S.a.r.l.
- Good Growth Institut für globale
- Green Century Capital ManagementGroupe Investissement
- Responsable Inc.
- Groupe OFI AM
- Harbour Asset Management
- Hazel Capital

- Henderson Global Investors
- Hermes Equity Ownership Services
- 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
- Investec Asset Management
- The Joseph Rowntree Charitable Trust
- JPMorgan Chase & Co.
- Kaiser Ritter Partner Privatbank AG (Schweiz)
- Kleinwort Benson Investors
- KPA Pension
- Legal & General Investment Management
- The Local Authority Pension Fund Forum (LAPFF)
- Local Government Super
- London Pensions Fund Authority
- Marc J. Lane Investment Management, Inc.
- Matrix Asset Management Inc.
- Mistra, Foundation for Strategic Environmental Research
- MMI Holdings Ltd
- Mn Services
- Monega Kapitalanlagegesellschaft mbH
- Mongeral Aegon Seguros e Previdência S.A.
- Mutual Insurance Company Pension-Fennia
- The Nathan Cummings Foundation
- National Australia Bank
- National Grid UK Pension Scheme
- National Pensions Reserve Fund of Ireland
- Natural Investments LLC
- Nelson Capital Management LLC
- New Amsterdam Partners

- New Forests
- The New School
- Newton Investment Management Limited
- Norges Bank Investment Management
- Northward Capital
- Northwest & Ethical Investments L.P.
- OceanRock Investments
- Oppenheim & Co Limited
- Opplysningsvesenets fond
- Pax World Management LLCPensioenfonds Vervoer
- Pensionsmyndigheten
- PGGM Investments - Pictet & Cie
- Pinstripe Management GmbH
- Portfolio 21 Investments
- The Presbyterian Church in Canada
- Psagot Investment House Ltd
- Rathbone Greenbank Investments
- River Twice Capital Advisors, LLCRobeco
- Royal London Asset Management
- RPMI Railpen Investments
- SAM (Sustainable Asset Management AG)
- Santander Brasil Asset Management
- Sarasin & Partners LLPSchroders
- Scottish Widows Investment Partnership
- SNS Asset Management
- Solaris Investment Management Limited
- Sonen Capital LLC
- Soprise! LLP
- Spring Water Asset Management LLC
- Statewide Superannuation
- Storebrand
- Strathclyde Pension Fund
- Sustainable Development Capital LLP
- Sustainable Insight Capital ManagementThe Sustainability Group
- Svenska Kvrkan. Church of Sweden
- Swift Foundation
- Sycomore Asset Management
- TD Asset Management

- Threadneedle
- Trillium Asset Management Corporation
- Triodos Bank
- Tri-State Coalition for ResponsibleInvestment
- Union Investment Privatfonds GmbH
- Veris Wealth Partners
- VicSuper
- Walden Asset Management
- WHEB Asset Management
- Zevin Asset ManagementZurich Cantonal Bank
- 3Sisters Sustainable Management LLC

If you represent an investment institution and would be interested in finding out more about how you can become a signatory to the project please contact: emanuele.fanelli@cdproject.net

or marc.fox@cdproject.net



Acknowledgements

FFD would like to acknowledge the members of its Steering Committee for their invaluable support throughout the four years of the FFD project. All the members of the Steering Committee volunteered their guidance, support and commitment and their efforts are reflected in the success of the project to date, for which we are extremely grateful.

FFD Steering Committee

- Carbon Disclosure Project
- Department for International Development
- FTSE Company
- Global Canopy Programme
- Hermes Equity Ownership Services
- Marksman Consulting
- The Prince's Charities International Sustainability Unit
- Strategic Environmental Consulting
- UNEP Finance Initiative
- WWF-UK
- UN PRI (observer status)

Donors

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Laing Foundation and The Climate
and Land Use Alliance for their
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Partners

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Staff

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