GREENPEACE

# BAD INFLUENCE

**How McKinsey–inspired plans lead to rainforest destruction**

# Contents

Indonesia's McKinsey-inspired plan accepts that due to already extensive forest loss in Java and Sumatra, deforestation will shift to other largely forested islands such as parts of Kalimantan. Kalimantan is home to the endangered Bornean orangutan.
© Ardiles Rante / Greenpeace

Plantations for pulp and paper
destroy Indonesia's rainforest.
McKinsey systematically plays
down the environmental impact
of deforestation for plantations.
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# Executive summary

*Rainforest degradation is a major contributor to climate change, being responsible for up to one fifth of global emissions. If climate change is to be tackled, the urgent prevention of deforestation is essential.*

Reducing Emissions from Deforestation and Degradation or REDD schemes are intended to provide tropical forest nations with financial incentives not to destroy or degrade their forests. The concept of REDD has subsequently been expanded to also include financial support for restoration, reforestation and afforestation, making for an expanded mechanism widely known as REDD+.

Despite the world's general failure to agree a deal on climate change at the 15th Conference of Parties to the United Nations Framework Convention on Climate Change at Copenhagen in 2009, donor countries nevertheless did pledge about $3.5 billion to kickstart REDD+. One year later more progress was made with an agreement to establish REDD+ at COP16 in Cancun ('the Cancun Agreement'). Meanwhile, around the world, rainforest nations have been endeavoring to become ready for REDD+ by engaging in national planning around how the scheme would be domestically implemented.

McKinsey & Company is a giant, well-connected global consultancy firm which has been working to position itself as the market leader in REDD+ advice. According to McKinsey:

*'Our clients ... look to us for honest, objective, thoughtful, and experienced advice.'*[1]

The McKinsey 'Climate Desk' has been very successful in becoming known as a leading provider of these services. It has attracted commissions to advise many forest nations on how to draw up national plans for applying for REDD+ funding. It appears most probable that the rainforest nations featured in this report are generally following and implementing the advice provided by McKinsey.

However, when rainforest countries employ McKinsey to apply its trademarked cost curve to their REDD+ prospects, few if any of the resulting plans meet basic standards of accuracy, rigour, utility or ethical acceptability. If implemented in their current form, these plans could actually result in an increase of deforestation and carbon emissions.

This Greenpeace report presents case studies on McKinsey's influence on REDD+ plans for four forest nations – Papua New Guinea (PNG), the Democratic Republic of Congo (DRC), Indonesia and Guyana. Our key findings include that:

- **McKinsey's advice does not, in any example studied by Greenpeace, lead to a cessation of deforestation or forest degradation.** Often it defends destruction by industrial interests on the erroneous grounds that it contributes to economic growth. In DRC, for example, McKinsey legitimises a significant increase in industrial logging, with an increase of at least an additional 10 million hectares given as logging concessions.

- **While McKinsey's cost curve has been extremely influential in government policy decisions, it has a number of fundamental flaws.** These include data deficiencies and dubious baseline calculations, as well as basic mathematical errors and distortions within McKinsey's carbon accounting method. Furthermore, McKinsey's intellectual property rights on some of the data underpinning its cost curve prevent proper scrutiny of its rationale.

- **McKinsey's approach provides an incentive to over-estimate projected future levels of deforestation,** allowing forest nations to claim REDD+ funding for preventing destruction which was unlikely ever to have happened.

- **McKinsey co-authored studies barely acknowledge governance issues within rainforest nations,** such as the sheer scale of monitoring, reporting and verification, capacity-building and governance challenges . This casts further doubt on the value of McKinsey advice.

- **McKinsey-inspired plans not only consistently fail to address the major drivers of deforestation, such as mining and logging, they actually reward the industries and interests that cause it.** For example, in the DRC study, the palm oil industry stands to gain as much as 1bn for the 'relocation' of concessions that have not even been awarded.

- **McKinsey promotes a methodology that effectively encourages its client governments to pursue an industry-orientated development path at whatever cost to wildlife.** In Indonesia for example, the forecast of continuing expansion of pulp and oil palm plantations is a major threat to biodiversity. McKinsey accepts that deforestation will shift to other, still largely forested, islands such as parts of Kalimantan and especially Papua. Kalimantan is home to the endangered Bornean orangutan.

- If followed, McKinsey's advice will lead to an expansion of monoculture plantations into farmland and ecologically important non-forest lands. McKinsey misleadingly classifies these lands as 'marginal' to justify their conversion to plantations. This could have devastating impacts on local ecosystems and wildlife.

- McKinsey – and its cost curve – systematically play down the environmental impact of industrial logging and deforestation for plantations. At the same time, it routinely exaggerates the destructive impact of smallholders and farmers. This leads to plans that advocate large-scale acquisition of local people's lands or settling of subsistence farmers without sufficient attention to their land rights, prior informed consent and compensation.

- McKinsey's advice has produced plans which have been criticised by funding institutions and are unfit for purpose. When rainforest countries employ McKinsey to apply its cost curve to their REDD+ prospects they are at risk of wasting money on advice that may be in violation of safeguards in the Cancun agreement on REDD+ and other decisions of the UNFCC, UN CBD and other international and regional institutions.

**As a matter of urgency:**

McKinsey must publish all the data, assumptions and analysis underlying its cost curve, and not hide behind intellectual property rights to avoid proper scrutiny. It should revise its methodology to include:

- norms in biological carbon accounting,

- the full financial, social and environmental costs associated with abatement options,

- the non carbon value of natural forests ,

- full respect for the safeguards included in the Cancun agreement: protecting forest ecosystems from conversion and degradation, and recognising and implementing indigenous peoples and local communities' rights.

**Rainforest nations** should not commission further work from McKinsey until the above conditions have been met. Those which have worked with McKinsey should revise the resulting plans to address concerns outlined in this report, and make public all advice received so far from the company.

**Donor countries and institutions** should not provide further funding for McKinsey until the above conditions have been met. They should only agree to fund the provision of REDD+ advice where all parties agree to a fully open and transparent tendering process and there is full public disclosure of advice and full participation of local communities

They should focus their attention and incentives on REDD through natural forest protection, rather than any '+' activities. REDD proper provides the greatest mitigation and adaptation benefits. Policies should prioritise ending deforestation where it currently occurs and preventing it from increasing in areas at risk .

In Papua New Guinea local families are resisting the destruction of the rainforest where they live and trying to stop industrial logging companies from digging more roads through their land.
© Sandy Scheltema / Greenpeace

# The story of REDD+

Tropical forests are home to a staggering array of plant, animal and human communities. While covering only about 10% of the total terrestrial surface, they are home to considerably more than 60% of all terrestrial and freshwater biodiversity.[2] 1.6 billion people depend upon forests for their survival.[3] They also play a vital role in stabilising global weather patterns and their degradation is a major contributor to climate change, being responsible for up to one fifth of global emissions.[4] If climate change is to be tackled, therefore, the urgent prevention of further deforestation is essential.

For this reason, and in the absence of an effective global treaty to fight deforestation, many people began to see it as imperative that reduction of emissions from deforestation and degradation of forests was included within the aims of the United Nations Framework Convention on Climate Change (UNFCCC). In essence, REDD (Reducing Emissions from Deforestation and Degradation schemes) contemplates that funding be made available for the developing world to reduce emissions from deforestation and degradation of forests. Later REDD+ emerged as a variant, with the plus sign signifying the potential for funding flows for active enhancement of carbon stocks through programmes of reforestation or afforestation. The publication of a joint proposal by Papua New Guinea and Costa Rica at COP11 of the UNFCCC in 2005 proved to be the turning point for international interest in establishing a REDD scheme and a two year review into the practicalities was initiated. REDD was then formally incorporated within the climate Road Map agreed at COP13 of the UNFCCC in Bali in 2007.[6]

Complex political and methodological challenges meant that the issue had still not been resolved as countries began to negotiate the shape of a new global climate deal in the run up to the ill-fated Copenhagen Conference of 2009.

Nonetheless, momentum for REDD was growing: reducing emissions from deforestation and degradation of forests was commonly described as the low hanging fruit of the UNFCCC negotiations. REDD would aim to provide tropical forest nations with a financial incentive not to destroy or degrade their forests. Rainforest countries saw REDD as a means of accessing some global financial value for their standing forests, whilst rich countries saw it as a relatively cheap and politically acceptable measure to address climate change. As the financial crisis hit and then deepened in 2008/9, it became a mantra that REDD offered supposed win/wins all round.

Two years of intense negotiations between 2007 and 2009 saw rainforest nations and potential donors fight to see their particular preferred blueprint for REDD adopted. As a result, there was a significant expansion of the ground to be covered by REDD, as it moved from being a mechanism for forest protection to a tool for also promoting restoration, reforestation and afforestation, under the new acronym of REDD+.

In parallel, the World Bank continued to play a central role in the development of REDD policy making and implementation through the Forest Carbon Partnership Facility (FCPF) and Forest Investment Programme (FIP). The FCPF aims to prepare forest countries for participation in international carbon markets by supporting REDD readiness activities. It became operational in June 2008. Thirteen countries (Argentina, Costa Rica, the Democratic Republic of Congo, Ghana, Guyana, Indonesia, Kenya, Lao PDR, Mexico, Nepal, Panama, the Republic of Congo and Tanzania) have so far submitted Readiness Preparation Proposals (R-PPs) for the FCPF, setting out potential REDD+ policies and activities, which have been reviewed by ad hoc Technical Advisory Panels and the Participants Committee. The World Bank is conducting due diligence on these proposals with a view to entering into readiness grant agreements of up to $3.6 million to assist these countries in conducting the preparatory work they have proposed.[7] The Forest Investment Program (FIP) is a targeted programme of the Strategic Climate Fund (SCF), which is one of two funds within the framework of the Climate Investment Funds (CIF). The FIP supports developing countries' efforts to reduce deforestation and forest degradation (REDD). The following have been selected to be pilot countries for the FIP: Brazil, Burkina Faso, Democratic Republic of Congo, Ghana, Indonesia, Laos, Mexico and Peru.[8]

As negotiations moved forward, pledges of funding from donor countries grew in size, with $3.5 billion[9] agreed at the UNFCCC COP15 at Copenhagen in 2009. In many cases it was unclear how much of this money was additional and whether it would be disbursed bilaterally or through multilateral institutions and processes. While less than the $25 billion which some estimated was required up to 2015[10] (or a minimum commitment of $10 billion over the next three years that some NGOs were calling for[11]), this was still a considerable amount of money, particularly for rainforest countries struggling with poverty alleviation and development needs. It was certainly enough money to attract the attention of at least one international consultancy firm.

# Enter McKinsey

This was the context within which the global consultancy firm McKinsey began to position itself, during 2008 and 2009, as the adviser of choice on REDD+ plans. For donor governments and multilateral institutions, McKinsey's brand and its orthodox approach to carbon economics presumably offered reassurances that money would be well spent – or at least would be seen to be well spent. For rainforest countries, employing McKinsey was seen as a way of strengthening their negotiating positions on REDD+. Engaging McKinsey acted as a badge of international credibility to make their plans attractive to donors. At the same time, rainforest countries could be confident that McKinsey's advice would attempt to minimise any disruption to industrial development – including industrial logging and the expansion of plantations – from the implementation of national REDD+ strategies.

In the event, the broader failure of COP15 meant that there could be no final agreement on REDD: but talks on reducing emissions from deforestation progressed considerably, including a draft decision on methodology, and were by far the most advanced issue area discussed at the conference. One year later, at COP16 in Cancun, final agreement was reached by the international community to establish a REDD+ mechanism. Yet in the run up to Cancun, it became increasingly clear that the economic rationale on REDD+ promoted by McKinsey did not stand up to scrutiny – and more worryingly still, nearly all of the plans produced with their advice did not meet basic standards of accuracy, rigour, utility or ethical acceptability.

This scorched land was Sumatran rainforest until PT Tebo Multiagro Corporation burned it down for its plantations.
© Daniel Beltrá / Greenpeace

# What is McKinsey and who does it work for?



MCKINSEY HQ, NEW YORK

With nearly 100 offices in over 50 countries, McKinsey is a global player. ©McKinsey

*'We earn our clients' trust.'*[12]

McKinsey & Company was founded in 1926 by a Chicago accounting professor, James O. McKinsey. Today, McKinsey is a global giant in its industry. Bloomberg Businessweek has crowned McKinsey 'the high priest of high-level consulting.'[13] McKinsey currently claims to serve more than 70% of Fortune magazine's list of 'most admired' companies.[14] It has more than 95 offices in over 50 countries, linked by 'industry and functional practices' that concentrate knowledge and expertise on particular topics or issues.[15] According to McKinsey:

*'Our clients call us when they have something pressing on their minds – whether it is a major strategic or operational need or an organizational challenge. They look to us for honest, objective, thoughtful, and experienced advice.*

*Our clients talk to us when they find themselves under pressure to deliver results. They call us in uncertain times. They talk to us when information is difficult to get and insights are scarce. They call us when they need to make decisions that will have major consequences for their people, their organizations, and the countries in which they operate. They call us when they want a truly global perspective.'*[16]

Observers have noted that the business model of McKinsey functions as a kind of elite club. In 2003, the Guardian reported that McKinsey alumni included CBI director general, Digby Jones, the chairman of the London Stock Exchange, Don Cruickshank, the head of the Financial Services Authority (and then soon to be London School of Economics director), Sir Howard Davies and Tory MPs William Hague and Archie Norman, 'as well as the core of Tony Blair's "blue sky" policy unit', and that it was the preferred first employer of Chelsea Clinton.[17] The McKinsey business model relies on the production of a kind of mystique associated with secrecy and combined with the power of the alumni associated with the brand. McKinsey staff routinely refer to their operation as The Firm.

Another famous McKinsey alumnus is Jeff Skilling, the CEO of Enron who was sentenced to 24 years in federal prison following the company's collapse. Bloomberg Businessweek notes that McKinsey also advised the giant energy trader for nearly 18 years on basic strategy, even sitting in on boardroom presentations to Enron's directors.[18] The article goes on to stress that Enron was 'just one of an unusual number of embarrassing client failures for the elite consulting firm. Besides Enron, there's Swiss-air, Kmart, and Global Crossing – all McKinsey clients that have filed for bankruptcy in relatively short order. And those are just the biggest.'[19]

Most recently, McKinsey's reputation has been called into question after a director was charged with taking part in the largest hedge fund insider-trading scheme ever. Anil Kumar has been placed on indefinite leave after he was charged – along with the founder of hedge fund Galleon Group, Raj Rajaratnam, and four others – for a scheme that prosecutors say generated profits of more than $20 million (£12 million) over several years.[20]

One commentator has traced McKinsey's market success to the publication of In Search of Excellence by McKinsey consultant Tom Peters and colleague Robert Waterman, published in 1982:

*The book, distilling lessons from 43 American companies, was a McKinsey project and the company's best advertisement. It sold five million copies.*

However: of Tom Peters' 43 'excellent' companies, two-thirds were either in trouble or defunct within five years of the publication of In Search of Excellence. But the criticism – that consultants don't hang around long enough to cope with the consequences of their advice – is also their main attraction; by outsourcing the hard decisions, firms are paying consultants to take the heat.[21]

> "We take pride in doing what is right rather than what is right for the profitability of our firm. Our credibility depends on it. Leadership at McKinsey is not about rising above others...

McKinsey has attained the position of market leader in REDD+ advice and forcefully advocates its approach in the countries where it works. According to journalist Clayton Hirst, McKinsey is:

'...the ultimate old boys' network. Its tentacles reach into the boardrooms of Britain's biggest companies and snake through Westminster's corridors of power.... The McKinsey mob just keeps growing. The firm, of course, doesn't use such crude terminology for its former partners; the "alumni network" is its preferred phrase. One source close to McKinsey says: "The alumni are seen as ambassadors to the McKinsey brand. The network isn't openly exploited, but the firm maintains a database of members and holds an annual reception for the alumni.'[22]

As one might expect, there is evidence of these business practices being applied in McKinsey's work on REDD+. One individual involved in an official capacity with a rainforest nation's REDD+ process has told Greenpeace on condition of anonymity that McKinsey uses contacts in one country as sales reps to help it get work in another, while boasting to potential developing country clients of its capacity to connect them with donors and taking full credit for funding deals concluded (Guyana) or international influence attained (PNG) by its existing clients.[23] Once its foot is in the door, the company works to maximise its influence.

McKinsey states: 'We take an overall, independent, and fact-based view of a client's performance. We rely on facts because they provide clarity and align people. Facts are the global management language. We work with facts to provide credible recommendations.'[24] The claim to strict objectivity is not reflected in McKinsey's advice on REDD+ which is heavily reliant on a set of distinctly subjective policy preferences. Put simply, with McKinsey advice you don't get dispassionate analysis of transparent data so much as the advocacy of a particular – and literally patented – policy view of

the world that will result in further business going in the direction of The Firm.

In the Democratic Republic of Congo (DRC) McKinsey itself proposed as part of its output the inclusion of a list of key REDD+ measures to be adopted.[25] This element did not feature in the terms of reference for the contract, but the resultant 14 programmes now form a key part of the country's Readiness Preparation Plan for REDD+.[26] In Indonesia, McKinsey advocated afforestation right from its first presentation,[27] and saw the policy adopted by the National Council for Climate Change.[28] In the confidential proposal, 'Institutional capability building for low carbon growth', prepared by McKinsey for the Indonesian government there is 'a heavy emphasis on coaching of local government officials, DNPI [Indonesian National Climate Change Council] secondees and institutional partners'.[29]

According to one observer, McKinsey remained 'highly influential' within Papua New Guinea's (PNG) Office of Climate Change and Development (OCCD) as recently as November 2010, with questions raised at Technical Working Group meetings being 'mostly answered ... by McKinsey representatives'.[30] There is even evidence that McKinsey may be responsible for mentoring staff in the recently established OCCD.[31] The same observer notes that Sebastian Schienle, a McKinsey representative stationed permanently in PNG, was even part of the PNG delegation in Cancun.

Yet at the same time, McKinsey plays down responsibility for most of the documents on which it works. Despite extensive evidence for its having played a major part in the studies considered in this briefing, it is invariably credited merely with providing data, analysis or technical support. That this is McKinsey's decision is suggested by the comment in its DRC project proposal that it will not publish a report under its own name, so as to ensure national ownership of the results.[32] The exception is the 'Pathways to a low carbon economy' report for Brazil, notably less controversial than the other studies discussed here.[33]

# REDD+: McKinsey's influence in key countries[34]

## Democratic Republic of the Congo (DRC)

McKinsey was commissioned to produce a study of DRC's REDD+ potential in late 2009. It produced its report after just five weeks, and although it is credited only with technical collaboration on the study, there are grounds to believe that the published document is mainly McKinsey's work.[35] Early in 2010, the DRC released its Readiness Preparation Proposal for REDD, which provisionally adopted all of McKinsey's proposals.

The DRC is one of the nine initial UN-REDD Programme pilot countries, and has been given direct funding to help launch its REDD+ process. In addition to REDD+ readiness funding received from the World Bank's Forest Carbon Partnership Facility (FCPF) and the UN, in 2010 support of up to $20 million for pilot projects was being considered by the Congo Basin Forest Fund, funded by Norway and the UK.[36] No information is available on funding promised for the actual implementation of the strategy.

McKinsey received $300,000 for its work, paid for by a Multi-Donor Trust Fund (now closed) overseen by the World Bank and funded by the UK, France, Belgium, Germany, Luxembourg and the EU.[37] McKinsey appears to have been appointed by direct agreement rather than through an open tendering process.[38]

One of the major problems with the DRC study is that it clearly attempts to both obscure the role of industrial logging in destroying rainforests and to ensure a future for the logging industry at the expense of small-scale farming. Far from reducing and eventually eliminating deforestation, it proposes a significant increase in concessions.

The McKinsey co-authored DRC study underplays the role of logging in deforestation, and simultaneously overestimates the likely expansion of the logging sector in the future, allowing companies to misleadingly claim that they have reduced their efforts when compared to what would have happened without REDD+ intervention.[39] The overall effect is to support business as usual for logging companies – whilst efforts to reduce emissions are directed at subsistence farmers because their activity does not contribute to GDP growth – regardless of its social and cultural value.

### Measures in the McKinsey co-authored DRC study include:

- A significant increase in industrial logging, with an increase of at least an additional 10 million hectares given as logging concessions;[40]

- An argument that effectively states that companies should be paid (at a rate of $2 to 2.5 per tonne of $CO_2e$)[41] for doubling or trebling existing logging rates. The business as usual scenario for industrial logging forecasts an increase in logging yield from 3-5m³/hectares to 15m³/hectares by 2030,[42] then suggests that restricting the increase in yield to 10m³/hectares is an emissions reduction;[43]

- A billion euros in subsidies[44] to the intensive farming industry (mostly palm oil for export) to divert plantation establishment outside of existing dense rainforest;[45]

- The settling of subsistence farmers without consideration for community lifestyle and traditions and without reference to indigenous peoples.[46]

On 29th January 2011, the DRC's Environment, Nature Conservation and Tourism Minister, José Endundo, announced that he would legalise logging titles in 15 million hectares of rainforest and proposed that the government lift the country's moratorium on new logging concessions,[47] which would open up an additional 10 million hectares of forest to exploitation. McKinsey's advice has legitimised government policy.

## Guyana

Guyana is a UN-REDD partner country but receives no funding for its national REDD+ programme. It published its approach to pursuing external funding to avoid deforestation in December 2008. McKinsey was credited with 'independent fact based assessment' for this document, but circumstantial evidence suggests it was largely McKinsey's work.[48] McKinsey received £313,000 from the UK Department for International Development for REDD+ work done on behalf of the Guyanese Government supposedly between June 2008 and March 2009.[49]

In addition to the FCPF, a number of donors have been, or are to be, approached for assistance with Guyana's REDD+ preparation and implementation, but apart from small contributions from Conservation International and the German Development Bank, the only funding agreed has been from Norway, which has committed support of up to $250 million by 2015. The funding is supposed to be conditional on 'Guyana's success in limiting greenhouse gas emissions from deforestation and forest degradation'[50] but the basis for defining this process has been controversial.[51]

Guyana's approach involves the country being paid to retain its standing forests on the basis of their 'economic value to the nation' were they cleared almost entirely for timber, agriculture and development at a hypothetical rate, which is actually far above that ever seen in the country. This rate (4.3% deforestation per year) would be around 20 times the government's estimated current deforestation rate of 0.1-0.3%.[52] The approach is explained as appropriate to Guyana's status as a high forest cover, low deforestation country.[53]

## Measures in Guyana's plan include:

- Almost no measures to address the existing drivers of deforestation in Guyana. In fact logging would be allowed to increase by 20 times its current rate;[54]

- Use of REDD+ funding to facilitate 'higher value agricultural development', including biofuel production in 'unique and fragile' Savannah ecosystems and wildlife rich wetlands;[55]

- Use of REDD+ funding to construct the Amaila Falls Hydro-Electricity Project. A recent study suggests considerable impact on forests from clearance through to building the plant and its access road: 750,000 tonnes(t) of biomass are to be cleared from the dam site[56] and the access route will include 110km of a minimum 8m wide road cut through primary forest.[57] 750,000t biomass is equivalent to 1.3Mt $CO_2$ emissions.[58]

## *Papua New Guinea (PNG)*

In 2010 Papua New Guinea published three documents relating to its national climate change REDD+. Though McKinsey is credited only with data and analysis for the first two documents, and not at all for the third, there is strong evidence for McKinsey being largely responsible for all three.[59]

PNG is one of the nine UN-REDD Programme pilot countries and receives direct support for its national programme, which 'aims at initiating the quick start phase of readiness support for REDD+'.[60] In addition to funding of $6.4 million from UN agencies, PNG has received or been promised funding from Australia (up to $3 million), Japan (¥700 million) and the EU (unspecified).[61] No information is available on any donor commitments for

the actual implementation of PNG's REDD+ programme. A financial plan for interim funding requirements is being developed.[62]

We have no information on who has paid for McKinsey's work in PNG.

## The documents on which McKinsey worked advocate policies including:

- Continuation of large-scale commercial logging under a so-called reduced impact regime,[63] yet a moratorium on new logging concessions is explicitly rejected;[64]

- No measures to address mining, despite its role as a major driver of deforestation;

- Major agricultural intensification affecting subsistence farmers;[65]

- Afforestation and plantation on pasture and other non-forest land, likely to impact on areas with very high value to wildlife.[66]

## *Indonesia*

Indonesia is one of the initial UN-REDD Programme pilot countries and receives direct support for its national programme.[67] Indonesia has also been selected as a World Bank Forest Investment Programme (FIP) pilot country. At the Copenhagen conference in December 2009, President Yudhoyono pledged Indonesia to reduce overall emissions by 26% by 2020 using domestic funding only, while aiming to increase that figure to 41% with help of international funding.[68]

As of May 2010 (the most recent figures available), Indonesia had received or been pledged FCPF and UN-REDD funding totalling $9.2 million (the UN-REDD contribution of $5.6 million being funded by Norway[69]), and $80 million from FIP to address drivers

of deforestation and 'facilitate progress towards performance-based payments for emissions reduction'.[70] Other funding for that period included $64.4 million from Australia and $30 million from Germany for 'Measures on Reporting and Verification', work towards a reference emission level and other preparation work.[71] According to a 2009 source, the UK, Japan and Norway have also promised funding for capacity building of Measurement Reporting and Verification (MRV)[72], REDD+ markets and fund distribution.[73]

The Norwegian money was paid direct to McKinsey and was not subject to a competitive tendering process as McKinsey was already active in Indonesia in September 2009 when the funding was agreed.[74]

Greenpeace has also seen two McKinsey reports for the Indonesian government: Detailed project overview (Phase 3): Implementation support for Central Kalimantan, from February 2010 and Detailed project overview (Phase 3): Institutional capacity building for low carbon growth. McKinsey charges approximately $3.6 million[75] and $6.1 million[76] respectively for capacity building.

The cost curve for Indonesia contains flawed assumptions, which significantly bias the final outcome to protect the interests of industrial forestry and agri-business. The cost of reducing emission from limiting plantation expansion into natural forests is set as high as possible, by assuming that there are no alternative locations possible – nearly $30/tonne $CO_2$e or $20,000/ha.[77,78] In contrast, the forecast costs of reducing emissions from smallholder agriculture are minimised to include only the monetised value for production[79] – a figure of $1/tonne $CO_2$e[80]– which clearly recognises neither the transaction costs nor, more importantly, the wider social, environmental and cultural impacts of such an intervention.

The effect is to make it seem 30 times cheaper to displace a small farmer than to challenge the incursion of new plantations into natural forests.

Meanwhile, the logging industry is declared off-limits. Discussing what it calls 'sustainable forest management', the cost curve report claims that: 'The alternative – stopping logging altogether – would have the same effect on emission reductions [as sustainable forest management], but has a much higher opportunity cost and would not allow Indonesia to further develop its forest products industry.'[81] McKinsey does not explain the assumptions behind this statement, but its implication – that logging must continue and that this will not compromise emission reductions – is central to the proposals in the plan.

## Measures proposed in Indonesia include:

- An additional 10 million hectares of afforestation and reforestation via plantations with a lack of clarity as to whether industrial plantations are to replace natural forests;[82]

- The payment of large sums of money, effectively compensation,[83] to divert establishment of pulp and palm oil plantations from forested land when improvements to productivity could mean only a marginal increase of new land area would be needed to meet government targets for production expansion;[84]

- Effectively subsidising increased greenhouse gas emissions by proposing that the definition of 'forest' will be more than 30% canopy cover. According to the joint Indonesia National Development Planning Agency–UN-REDD draft National REDD+ Strategy[85], 10% canopy cover (the FAO threshold for definition of forests) would be classified as 'high carbon'.

# McKINSEY & REDD+

**McKinsey's bad influence on national plans to reduce emissions from deforestation and degradation**

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## KEY COUNTRY CASE STUDIES

**GUYANA**

**DEMOCRATIC REPUBLIC OF THE CONGO**

**INDONESIA**

**PAPUA NEW GUINEA**

## COPENHAGEN COP15

## DONOR COUNTRIES

**BELGIUM**

**GERMANY**

**BRITAIN**

**EUROPEAN UNION**

**NORWAY**

**AUSTRALIA**

**JAPAN**

**LUXEMBOURG**

**FRANCE**

**USA**

**UN REDD+**

**WORLD BANK FCPF / FIP**

## LEGEND

**McK** McKinsey advice

**McK** McKinsey-inspired plan (latest version)

MONEY
PLEDGED

KEY COUNTRY
CASE STUDIES

CANCUN
COP16

POTENTIAL
OUTCOMES

GUYANA

DEMOCRATIC
REPUBLIC
OF THE CONGO

INDONESIA

PAPUA NEW
GUINEA

SOCIAL IMPACTS:
MCKINSEY RECOMMENDS
RESETTLING SUBSISTENCE
FARMERS

© Will Rose / Greenpeace

DEFORESTATION:
MCKINSEY RECOMMENDS
EXPANDING THE LOGGING
INDUSTRY

© Jiro Ose / Greenpeace

PLANTATIONS:
MCKINSEY RECOMMENDS
EXPANDING MONOCULTURE
FARMING
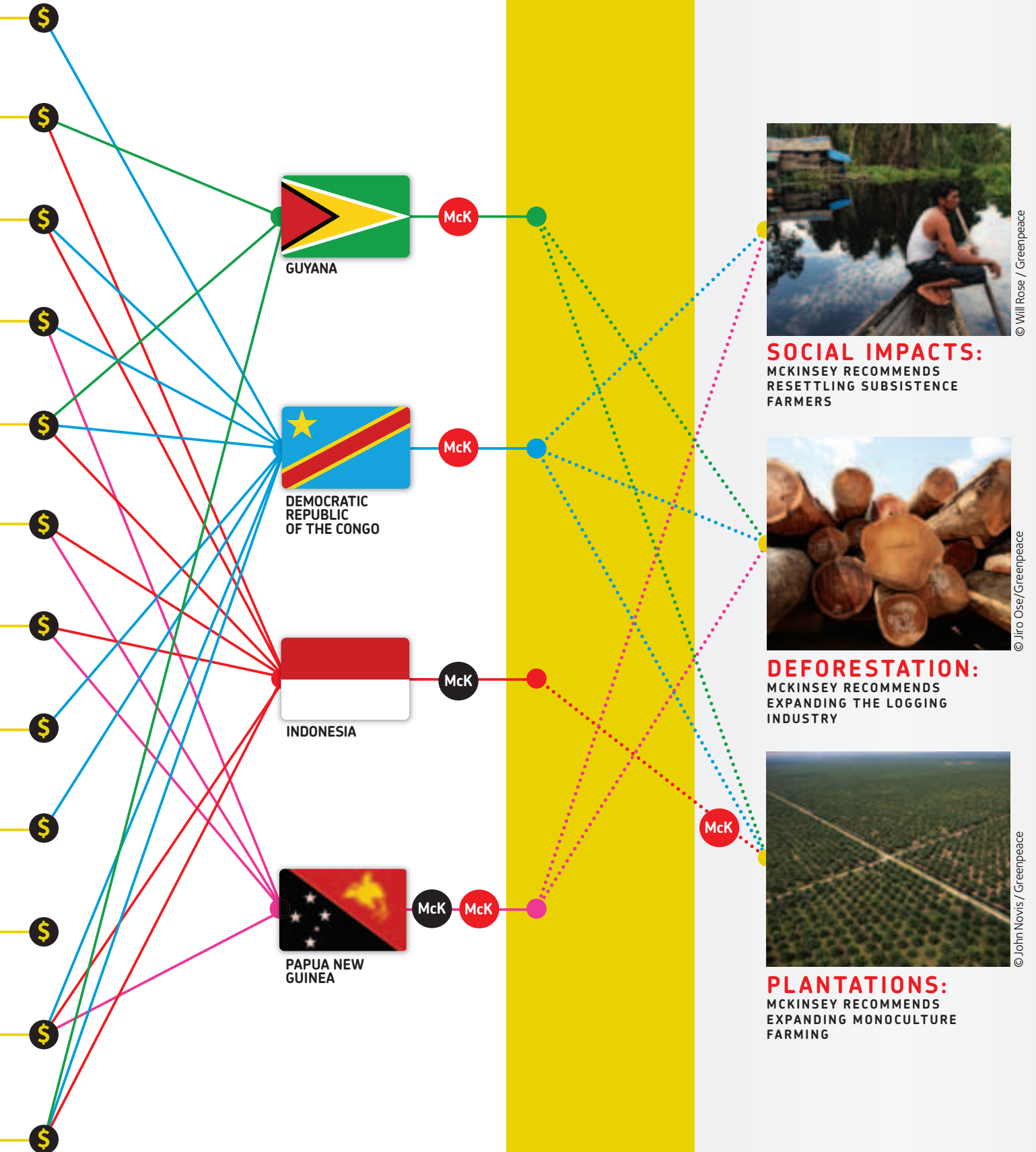
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'The apparent simplicity and straightfowardness of the graphic MAC curve with its summary and presentation of a great deal of complex numeric data in an easily-digestible form, often lead to these caveats being over-looked, so that excessive confidence is placed in the curves and the ranking of carbon abatement measures that [McKinsey] suggest.'

Paul Ekins, Fabian Kesicki, Andrew Z.P. Smith Marginal Abatement Cost Curves: a call for caution, Energy Institute, April 2011

Industrial-scale forest destruction is killing swathes of animals, plants and ecosystems, wrecking livelihoods and releasing huge amounts of greenhouse gases into the atmosphere. McKinsey's bad influence on REDD+ plans is likely to increase the devastating impacts in Indonesia, pictured, and other rainforest nations.
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# The McKinsey MAC curve: an optical illusion

McKinsey has risen to prominence within the climate change and REDD+ spheres through its global greenhouse gas abatement cost curve, which the company conceived in 2007 and updated in 2009. The so-called 'McKinsey curve' has been extremely influential in setting the terms of the debate for international carbon reduction regimes and other marginal abatement cost (MAC) curves inspired by the McKinsey model have since become hugely influential in carbon abatement policy. They are a simple way of ordering and presenting different options for reducing emissions and typically look like a succession of rising steps, each one a different potential measure, its height representing its cost, and its width representing the amount of carbon abatement it could deliver.

The cost curve approach to carbon reduction has many immediate attractions, not least that it allows policymakers to focus on the least expensive measures first and to get an idea of the total cost of a given level of emission reduction. But as with many simple presentations of a complex reality, MAC curves can disguise significant dangers; in particular, where there are flaws in underlying assumptions about comparative costs.

This is especially true when it comes to costing the measures in REDD+. For example, if the true costs of displacing local subsistence farming are underestimated – as this report argues they are – by ignoring transaction costs and wider social and environmental impacts, whilst the costs of addressing industrial logging are overestimated (for example by exaggerating the economic value of logging to the economy), and these assumptions are *built-into the cost curve*, then every policy decision flowing from the use of the curve will tend to favour logging interests over those of small-scale farmers. The result will not just be socially destructive, but may prove impossible to implement, economically irrational, and ineffective in reducing emissions.

McKinsey claims to 'rely on facts because they provide clarity and align people', but it is entirely unwilling to transparently disclose the data and assumptions relied upon in its calculations.[86] Due to the company's stringent application of intellectual property rights on its data, the outside world has no way of knowing how McKinsey arrives at the different cost estimates attributed to various abatement measures.[87] The potential victims of a REDD+ policy which displaces local farming will thus never have access to the reasoning behind why this policy was deemed cheap in the first place, let alone considered acceptable.

The use of projected emissions raises another set of thorny issues. McKinsey cost curves typically work on assumptions about what a country's emissions will be in 2020 or 2030, so it is necessary to calculate, based on current trends, what emissions are likely to be at that date before the abatement potential and the associated compensation for REDD+ action can be calculated. This introduces a clear incentive to inflate projections in order to be paid more for not actually producing emissions. The dangers of this approach are clearly illustrated in the case studies in this report, in particular the projections for logging yield in the DRC and PNG, which result directly from McKinsey advice.

Cost curves for REDD+ are not able, and do not seek, to integrate the web of social and environmental values associated with tropical forests beyond their carbon sequestration and storage potential. MAC curves treat tropical forests like a carbon abatement technology, rather than recognising them as some of the world's most complex living systems, supporting a staggering variety of biodiversity, as well as being of great economic and cultural importance to humans.

It is this basic lack of understanding – along with some rather fundamental mistakes in biological carbon accounting – which too often seduce policymakers away from measures to protect natural forests in favour of plantations and industrial scale logging, for example. Until these flaws are addressed, the use of the MAC curve in forest policy making will remain at best misleading, and at worst dangerous.
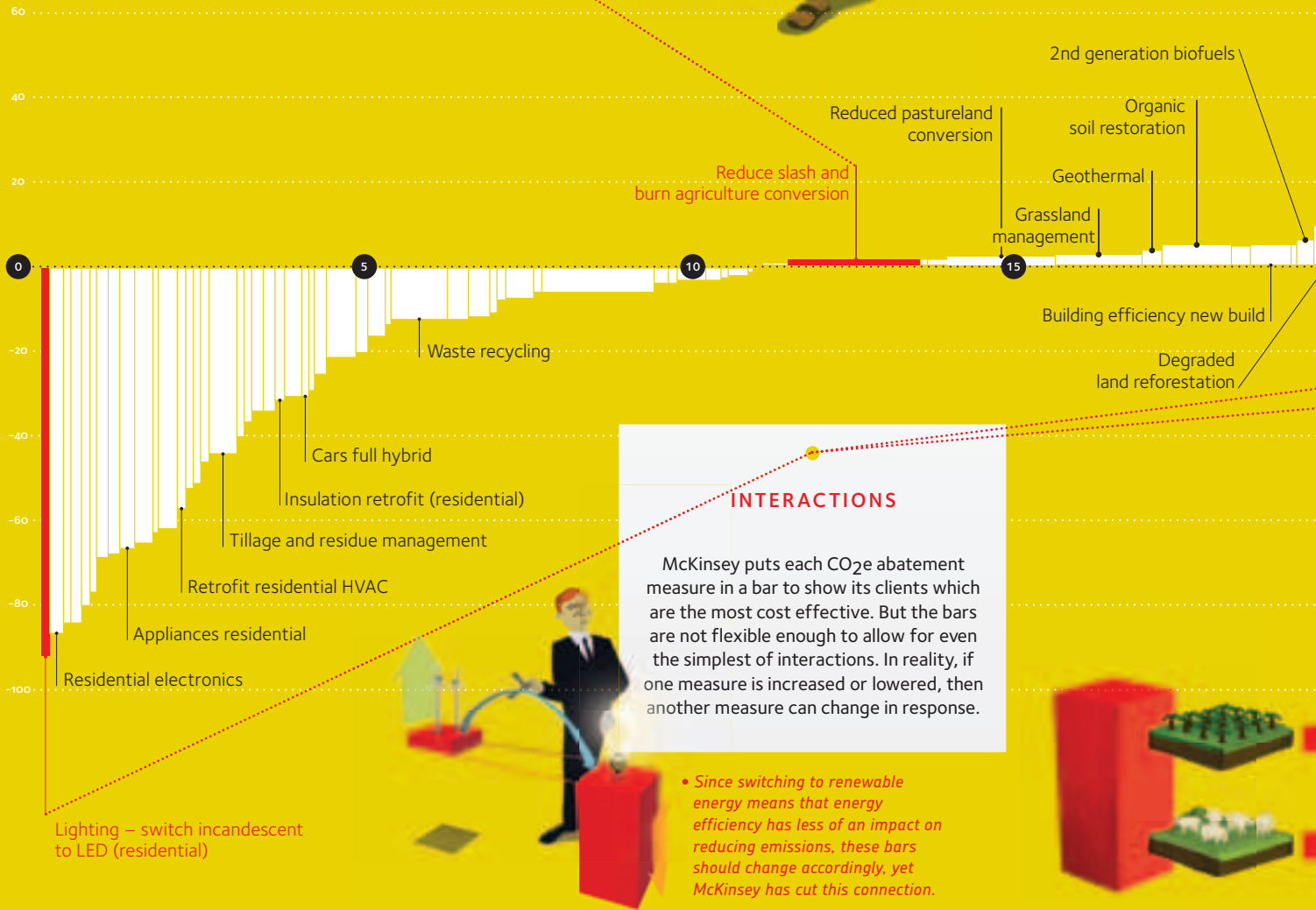
# UNBELIEVABLE

Global consultancy firm, McKinsey's, cost curve has been extremely influential in setting the terms of the debate for international carbon reduction regimes.

McKinsey advises rainforest nation governments on reducing emissions from deforestation. Yet it keeps most of its assumptions commercially confidential. Since these flawed cost curves are at the heart of its advice, **HOW CAN THE REDD+ PLANS McKINSEY INSPIRES BE TRUSTED?**

## McKinsey's MARGINAL ABATEMENT COST CURVE

### Abatement cost € per tCO₂e

## FALSE ECONOMY

The height of each bar shows how much CO₂e abatement measures cost. But these costs are misleading because only the missed opportunity costs get included, and **McKINSEY EXCLUDES CERTAIN SIGNIFICANT COSTS FOR REDD+** such as transaction, implementation, monitoring and legal.

• *Reducing slash and burn agriculture, for example, could mean subsistence farmers' livelihoods are threatened, yet this bar doesn't include the financial cost, not to mention the social cost, of permanently settling them.*

60

40

20

2nd generation biofuels

Reduced pastureland conversion

Organic soil restoration

Reduce slash and burn agriculture conversion

Geothermal

Grassland management

0

5

10

15

Building efficiency new build

-20

Waste recycling

Degraded land reforestation

Cars full hybrid

-40

Insulation retrofit (residential)

## INTERACTIONS

McKinsey puts each CO₂e abatement measure in a bar to show its clients which are the most cost effective. But the bars are not flexible enough to allow for even the simplest of interactions. In reality, if one measure is increased or lowered, then another measure can change in response.

Tillage and residue management

-60

Retrofit residential HVAC

-80

Appliances residential

Residential electronics

-100

• *Since switching to renewable energy means that energy efficiency has less of an impact on reducing emissions, these bars should change accordingly, yet McKinsey has cut this connection.*

Lighting – switch incandescent to LED (residential)

*Since McKinsey's assumptions are not available for public scrutiny, this cost curve has been redrawn for illustrative purposes without using original data.*

## INCREDIBLE

McKinsey's secrecy means that the scientific community and policymakers can't see or challenge the assumptions behind how McKinsey arrives at different cost estimates or emission savings. **McKINSEY'S WORK IS NOT OPEN TO PUBLIC SCRUTINY.**

## SNAPSHOT

McKinsey's cost curves only focus on one year, usually 2030. But even where it's possible to predict costs, the curve doesn't show the trends over a period of time. **McKINSEY'S CURVE IGNORES DEVELOPMENTS BEFORE AND AFTER 2030 THAT MIGHT BE IMPORTANT.**
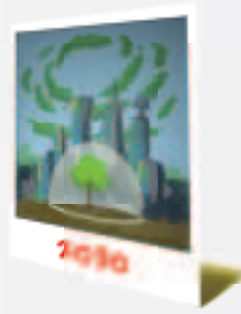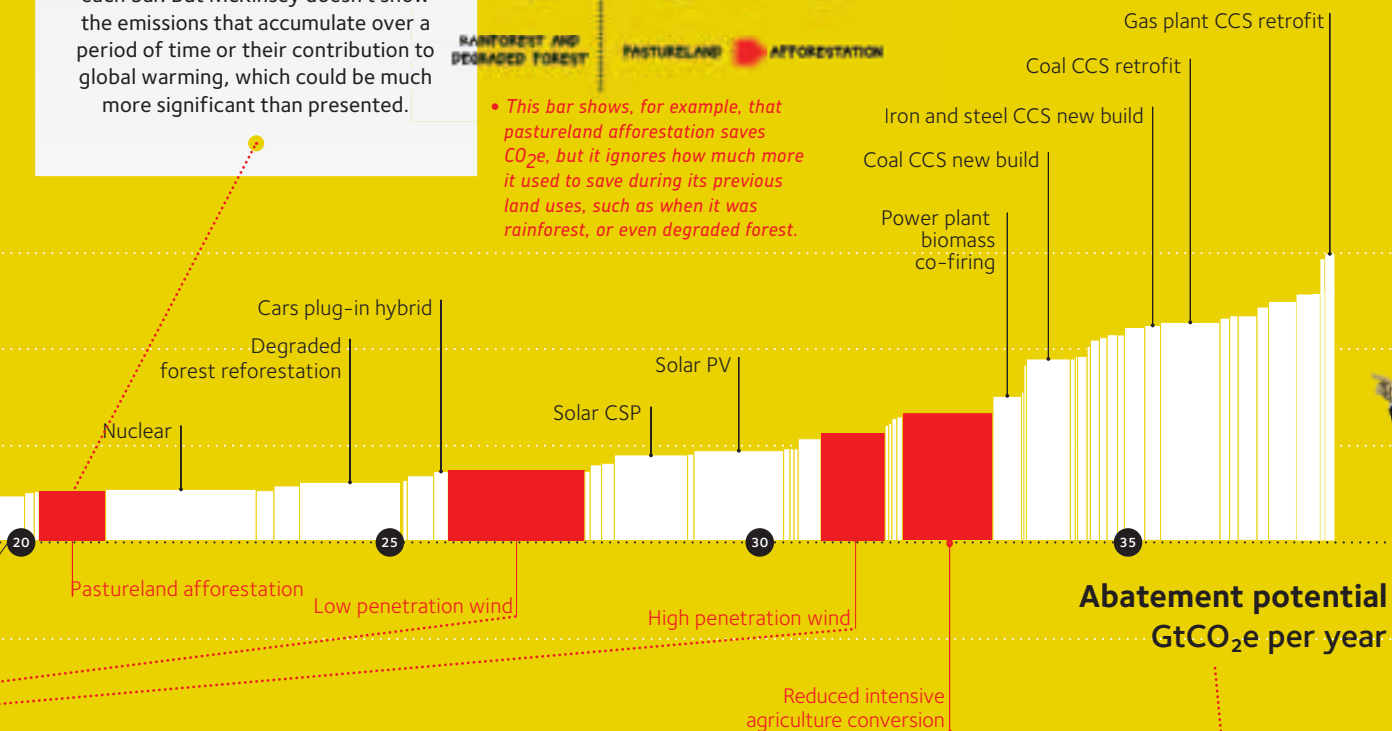
### LOST EMISSIONS

McKinsey cost curves predicts $CO_2e$ saving potential for each abatement measure in 2030, shown by the width of each bar. But McKinsey doesn't show the emissions that accumulate over a period of time or their contribution to global warming, which could be much more significant than presented.

*RAINFOREST AND DEGRADED FOREST*   *PASTURELAND*   *AFFORESTATION*

*• This bar shows, for example, that pastureland afforestation saves $CO_2e$, but it ignores how much more it used to save during its previous land uses, such as when it was rainforest, or even degraded forest.*

Gas plant CCS retrofit

Coal CCS retrofit

Iron and steel CCS new build

Coal CCS new build

Power plant biomass co-firing

Cars plug-in hybrid

Degraded forest reforestation

Solar PV

Solar CSP

Nuclear

20   25   30   35

Pastureland afforestation

Low penetration wind

High penetration wind

**Abatement potential GtCO$_2$e per year**

Reduced intensive agriculture conversion

### FALSE SENSE OF CERTAINTY

McKinsey presents forest-related future abatement costs as certainties. But since margins of error can be greater than cost differentials between measures, it's not realistic to predict which will be cheaper. Costs may vary for REDD+ abatement measures due to location, land use change, policy and market forces.

*•There's no way of knowing precisely what commodities will cost in 2030. McKinsey's cost curve does not reflect the range of uncertainty.*

### MISSING BENEFITS

The x axis shows the potential $CO_2e$ savings via the width of each measure, but doesn't factor in any additional benefits or costs. These missing benefits and costs, beyond carbon emissions, ought to be influencing REDD+ plans, and also have implications for other policy areas.

*• Reducing intensive agriculture conversion, for example, doesn't include the widely different opportunity costs associated with different types of farming in different locations.*
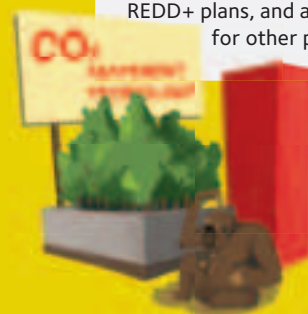
*• Rainforests provide food, shelter, livelihoods and medicine for the people and animals that live there; these are just some of the beneficial values that McKinsey doesn't count.*

Pristine forest in Indonesia could be slashed
and burned to make way for plantations.
© Daniel Beltrá / Greenpeace



The forest, animals and people that lived on this land in
Pundu, Kalimantan, Indonesia have been uprooted to allow
for this monocultural oil palm plantation and its processing
plant. Most of the carbon that was stored in the tropical
forests' trees and soil has entered the atmosphere.
© Daniel Beltrá / Greenpeace

# What's wrong with McKinsey's method?

## 1. Forest carbon: inarticulate or inept?

Measuring carbon accurately, with clear and verifiable methodology, is critical to the success of REDD+ programmes. However, forest carbon accounting systems are complex, controversial and still a matter for debate. This makes it particularly important that REDD+ plans show exactly how they have calculated any emissions savings, so that they can be assessed independently and verified.

Yet McKinsey keeps most of the workings of its cost curve commercially confidential, this means that its calculations of forest carbon savings are hidden and therefore can't be verified. Each potential action, such as preventing logging, or planting trees, is given a cost per tonne of carbon saved and assessed for its total abatement potential – but there is almost no indication of how these results were reached. Many of the assumptions and calculations underpinning the results of the cost curve are concealed as if in the workings of a black box.

**There is evidence of major problems with the cost curve carbon accounting methodology:**

### a. Carbon stocks and flows in plantations

McKinsey co-authored studies focus almost exclusively on carbon flows (emissions and absorption), usually given at two static points in time – today's current emissions and net flows in 2030.[88] They do not describe how this carbon stock – ie carbon stored in forests and soils – might change over time. This makes interpreting the figures given for 'reforestation and afforestation' (ie plantations) particularly difficult.

It is not made clear anywhere whether the existing carbon stock of land targeted for plantations has been taken into account. For example, the DRC study recommends afforestation on 'shrubby savannahs or forest-savannah mosaic'[89] – but without data on the carbon which is already stored in these ecosystems, it is impossible to calculate whether putting plantations on them will actually reduce emissions – or by how much. Yet the same report gives emissions from logging as net figures – that is, assuming regrowth of trees which will in turn reduce the overall impact on emissions. The result of these two approaches taken together, is likely to exaggerate the emission reduction potential of plantations, and minimise the negative impacts of logging – resulting in an inevitable bias in the kinds of solutions proposed in the plan.

The same DRC study shows similar distortions. Its agroforestry case study shows carbon sequestration by a plantation equivalent to around 150 tonnes of carbon stored per hectare.[90] This figure is around the same amount of carbon sequestered by untouched primary forests in the region [91] despite the fact that the plantations are described as being harvested for fuelwood and construction. This is grossly unrealistic.

### b. Unrealistic precision

The McKinsey cost curve generates predictions with unrealistic precision. For example, a fact sheet on the Indonesia cost curve gives emissions reduction estimates in 2030 to two decimal places. This level of precision obviously gives an exaggerated picture of the reliability of the estimates.[92]

**The numerous errors and biases suggest that McKinsey lack an understanding of the fundamentals of carbon accounting. The confusion of net and gross emissions, the neglect of effects on carbon stocks and, most importantly, the persistent failure to display a robust and transparent carbon accounting methodology seriously undermine the documents' credibility.**

# PLANTATIONS: ROOT AND BRANCH CONFUSION

*Indonesian Government documents confuse different plantation types and consider commercial plantations as 'carbon sequestration' and 'sink enhancement'.*

The DRC, PNG and Indonesia studies rely heavily on plantations, usually referred to in the reports based on McKinsey's advice as 'afforestation and reforestation'. Although these plans do not explicitly advocate replacing natural forest with plantations, using plantations in the emissions abatement figures acts to mask ongoing deforestation.

Each of the cost curve reports bases its predictions on what it calls 'conservation'[93] plantations or 'afforestation aiming to sequester carbon',[94] that is, plantations not intended for harvest. Such plantations have no economic use other than to attract REDD+ credits. These plans would pay developing countries to hand over large areas of what may be biodiverse and useful land to ineffective plantations, while continuing to cut down natural forest.

There is also the possibility that the McKinsey-inspired plans could lead to REDD+ funding supporting pulpwood and oil palm plantations, which do not sequester significant amounts of carbon.[95] Greenpeace has previously noted that Indonesian government documents confuse different plantation types and consider commercial plantations as 'carbon sequestration' and 'sink enhancement'.[96] This possibility is admitted in the Indonesia and PNG cost curve reports. For example, it is suggested for PNG that if reforestation included forestry plantations, this would require 'further research/analysis … to calculate the abatement potential'.[97] The possibility of REDD+ funding going to commercial plantations is not ruled out.

Although not one of the principal case studies considered in this report, McKinsey's advice to the government of Brazil is illustrative here. McKinsey's report suggests that both 'commercial forestry operations' such as 'pulp production' and 'reforestation using native species…not for commercial use'[98] could form part of REDD+ plantation programmes.

## 2. Data deficiencies: inadequate or absent?

It is not only McKinsey's secrecy that is troubling: in some instances the so-called data that McKinsey has used to produce recommendations may simply not exist.

In the DRC study, for example, a table is given showing confidence in individual emissions factors.[99] The table reveals that illegal logging and fuelwood factors have been reached despite there being 'no exact data available'. It is unclear what assumptions have been made or analysis done in the absence of this data. The conclusions on industrial logging are also highly suspect, due to the lack of governance, control and law enforcement, and the level of corruption in the DRC logging sector.

In the development scenario set out for Guyana, meanwhile, evidence-based planning is largely abandoned in favour of speculation. The Low Carbon Development Strategy suggests extensive agricultural and forestry development, including on large areas of land which are almost certainly unsuitable for such activity. A Guyanese forest expert, Janette Bulkan, has commented on the 'extreme infertility of most of [Guyana's] forest-covered hinterland soils'[100] which makes them 'much less likely to be convertible to financially-profitable, ecologically-sustainable agriculture than in neighbouring Brazil'.

With a similar disregard for basic data or evidence to support its assumptions and proposals, PNG's Interim Action Plan proposes that measures to increase yields and market access in subsistence and smallholder agriculture would save 9-15 megatonnes of $CO_2e$ per year by 2030,[101] but admits that 'the abatement effect of these measures is unproven'.

Elsewhere, data from countries in different continents is used to attempt to construct arguments in support of McKinsey's favoured REDD+ interventions. The PNG report, the Climate Compatible Development Strategy, cites evidence from African countries in support of proposals for 'agricultural extension', ignoring the different ecological and cultural conditions affecting PNG farmers.[102] The document claims that 'Technical appendices containing this data and analysis are available on request from the Department of Environment and Conservation'[103] but Greenpeace requests for these appendices have been unsuccessful.

These examples suggest these reports are not based on hard evidence. They present possibilities as if they were firm policy plans, backed by inadequate, if not absent, data.
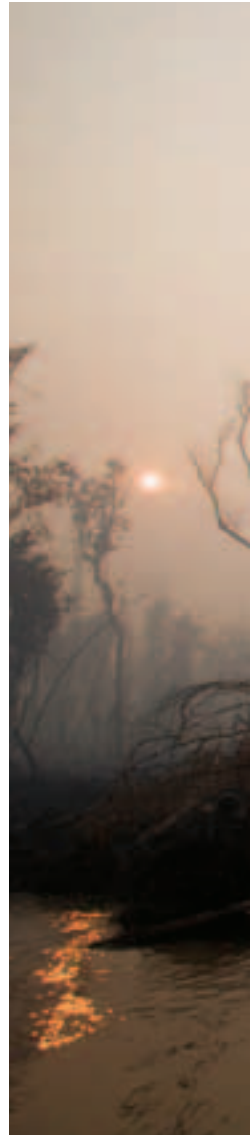
Palm oil companies regularly flout environmental laws in order to expand plantations. McKinsey-inspired plans could lead to REDD+ funding that supports oil palm plantations.
© Natalie Behring / Greenpeace

# 3. Baseline calculations: manipulating assumptions

Baselines are central to most REDD+ plans – because these envisage payments being made on the basis of emissions reductions achieved against some form of projected future level – and, of course, what level will determine how much a country can expect to receive in rewards.

McKinsey's calculations therefore start from a baseline assumption about what carbon emissions will be in any given country at any given time. But, curiously, none of the McKinsey analyses use current or past emissions levels as this baseline. Instead, the DRC, PNG and Indonesia studies use projected business as usual baselines derived from assumptions of what *might* happen in 2030 without REDD+ intervention. This allows McKinsey to claim that REDD+ will reduce emissions which haven't yet happened and which may never happen, regardless of REDD+ intervention.

In the DRC report, for example, the business as usual scenario for industrial logging forecasts an increase in logging yield from 3-5m$^3$/hectares to 15m$^3$/hectares[108] by 2030, then suggests that restricting the increase in yield to 10m$^3$/hectares[109] is an emissions reduction. It is effectively argued from this that companies should be paid (at a rate of $2 to 2.5 per tonne of $CO_2$e)[110] for doubling or trebling existing extraction rates.

PNG's 'Interim Action Plan' suggests a 2% year-on-year increase in logging yield up to 2030.[111] This is in stark contrast to an Overseas Development Institute report predicting that PNG risks running out of easily accessible timber resources if it continues to pursue the current levels of export.[112] If McKinsey's baseline were accepted, the PNG government would be able to claim REDD+ credits for emissions reductions which actually resulted from an unavoidable decline in resources: payments for trees not being cut down which are not there.

In Indonesia the business as usual cost curve predictions claim that 'government plans for increasing pulp and palm oil production will require 11-15million hectares of currently forested areas to be converted',[113] which conveniently allows the Indonesian government to claim emissions reductions by putting forward inflated plans and then cancelling them. In reality, recent work by Greenpeace has shown how pulp and palm oil production could meet government output targets – without expanding the existing plantation area – by implementing best practice to improve yields, combined with preventing expansion into forest areas.[114] Guyana's 'Low Carbon Development Strategy', meanwhile, calculates the value of 'lost' emissions based on the 'economic value to the nation' of a theoretical scenario of 'economically rational deforestation' at 4.3% per year [115] which even the authors and the Guyanese government admit will not actually take place in practice.

## 4. Favouring industrial interests: skewed perspectives

McKinsey co-authored studies repeatedly use tricks of data presentation to protect or promote industrial logging and large-scale agricultural interests at the expense of subsistence farming. The methodology of the cost curve contains implicit assumptions on the relative value of different activities, particularly logging, industrial agriculture and subsistence or smallholder agriculture. The overall effect is that the potential emissions savings from targeting small-scale agriculture are repeatedly overestimated, and their costs underestimated, in comparison to tackling the commercial drivers of deforestation.

The country reports for Indonesia, the DRC and PNG, for example, base their calculations of the cost of emissions reduction from avoiding deforestation and degradation on a theoretical 'opportunity cost to the nation' which excludes 'transaction, communication and information costs,' [116] that is, the cost of implementing an emissions reduction programme. This tends to misrepresent the costs and desirability of different emissions reduction options. In DRC, McKinsey is actually very explicit in equating the abatement cost to 'the reduction of profit margin incurred by the company'.[117] As the World Bank review of the DRC's R-PP argues, '[Transaction and implementation costs] can significantly increase costs, reduce the emissions

reduction potential, and add to the time it takes to implement a REDD+ strategy.' [118]

This is particularly important for programmes relating to smallholder or subsistence agriculture and fuelwood collection, where implementation costs are likely to be very high. The failure to include the costs and difficulties of communication with large numbers of people in remote areas, added to the failure to account for the value of non-monetised land uses, means that the financial and social cost of programmes tends to be underestimated and their potential effectiveness overestimated.

In contrast, forecast emissions reductions from reduced plantation expansion are costed at the theoretical opportunity cost based on the value of lost production. In this instance the maximum opportunity cost – nearly \$30/tonne $CO_2$e or \$20,000/ha[119] – is based on an assumption that plantations will not be established at all if they are not on forested land,[120] despite admitting that much expansion could be relocated to non-forest land much more cheaply.[121] In effect, the cost of reducing plantation expansion is inflated while the cost of reducing smallholder expansion is minimised until it is virtually meaningless.

The partial use of the concept of opportunity cost also skews the cost curve's priorities. While the REDD levers (smallholder agriculture and plantation development) are based on opportunity cost – defined

# CAN McKINSEY ADD UP?

*'We earn our clients' trust. We do this through our consistently superior service, our professional conduct, and our complete commitment. Each one of us is responsible for earning and keeping our clients' trust with our individual behavior and the quality of our work.'[104]*

McKinsey

In addition to the examples of McKinsey's reliance on absent or manipulated figures, McKinsey co-authored studies are full of simple mathematical errors and inconsistencies.

In the DRC report, for example, the proportion by area of forest degradation attributed to 'urban growth/industry' is 55% (12-13 million hectares). But the area attributed to fuelwood, one sub-component of 'urban growth/industry', is 58% for the same area (12-13 million hectares).

In the Guyana report, the total area of Guyana's forest is given both as 15 million hectares[105] and as 16.3 million hectares.[106]

In the Indonesia report the molecular weight of $CO_2$, by referring to Indonesia's rainforest as having 'total carbon storage of 15 gigatonnes (Gt) above ground, which is equivalent to 60Gt$CO_2$e if completely emitted'.[107] One tonne of carbon converts to 3.66 tonnes of $CO_2$. 15Gt of carbon make roughly 55Gt of $CO_2$.

Above left: Industrial logging: acres of stockpiles of timber at an Asia Pulp and Paper (APP) mill in Perawang, Indonesia, on what used to be rainforest.
© Daniel Beltrá / Greenpeace

Above right: Subsistence farming: a local fisherman on a boat sets his nets in a bee farming area in Semangit, West Kalimantan, Indonesia.
© Vinai Dithajohn / Greenpeace

here as the theoretical cost to the economy of foregone activity – other levers, such as fire reduction or reforestation, are costed on the basis of implementation costs. The two methods are clearly incompatible, yet the cost curve attempts to compare them.

The overall effect of this skewed perspective is to emphasise programmes targeting the poorest and least powerful members of society and the least-understood drivers of deforestation, while deterring actions which target large commercial drivers, which are made to appear relatively more expensive. This is much more than a technical flaw – it is a systematic bias with far-reaching social consequences.

## 5. Monitoring and capacity: unwarranted optimism

The DRC study notes two key levers for REDD+ implementation – 'participation enablers', including basic monitoring systems that allow for credible measurement, reporting and verification (MRV) of REDD+ activities and a revenue sharing system, and 'policy enablers' requiring rapid legal and institutional reform.[122] Given the glacial pace of timber sector reform in the country,[123] the woeful lack of forest governance,[124] the sector-wide corruption[125] and the failure to distribute a share of existing logging revenues,[126] this seems rather optimistic.

The sheer scale of the monitoring, reporting and verification, and of the capacity-building and governance challenges in many rainforest countries, is barely acknowledged in the studies produced with McKinsey advice. The neglect or disregard of these issues casts further doubt on the value of its advice.

For example, during a presentation of the DRC REDD+ plan, the environment minister admitted that 'in the Congo today, implementing REDD would be impossible given the limited capacity of the country to absorb the investments necessary'.[127] But there is little indication that the cost curve methodology takes account of such issues of practical capacity, even in monetary terms, let alone in terms of the relative practicality of different levers. Indeed the DRC study seems blissfully unaware of the scale of the challenges: it talks of 'finalising' institutional reform[128] as if this system was more or less ready to go, and blithely notes in one sentence the need to provide MRV bodies with adequate financial and human resources.[129]

Much the same criticisms apply to the MRV plans in Papua New Guinea's UN-REDD National Joint Programme Document, with which McKinsey was apparently involved, which were denounced as 'highly unlikely to achieve the necessary precision' and 'likely untenable' by the programme's independent technical review – carried out by the World Bank.[130]

# The impact of McKinsey's advice

## 1. Failing to address the real drivers of deforestation

In addition to distracting attention from the commercial and industrial drivers of deforestation, McKinsey's co-authored country reports often simply do not include measures to reduce or halt destructive activities.

In Guyana, for example, there are no new proposals to address the major driver of deforestation in that country: mining. This section of the country's Low Carbon Development Strategy website features the following Q&A:

Q: Will the Strategy require mining and forestry to stop?

A: Mining and forestry activities will not be required to stop. However, they will be required to strictly comply with standards set by our Mining, Forestry and Environmental Laws and the Low Carbon Development Strategy.[132]

In other words, Guyana's plan would only address deforestation drivers by enforcement of existing regulation.

While mining is also acknowledged as a significant driver of deforestation in the PNG[133] and DRC studies,[134] stopping or reducing mining is not included in their mitigation proposals. It is judged too expensive in the DRC[135] and in PNG it is simply omitted from the cost curve.[137] In the PNG Interim Action Plan mining is acknowledged as a significant source of emissions 'includ[ing] forest dieback from Ok Tedi spill'[138] – a reference to a copper mine whose toxic waste has contaminated some 1,300km$^2$ of south-west PNG.[139] However, the cost curve methodology does not include non-monetised externalised costs such as environmental damage or non-monetised, non-carbon benefits of forests. This acts in favour of the mining industry by overestimating its value, thus allowing it to continue business as usual.

The DRC and PNG studies do make some effort to address other drivers of deforestation, but only within a stated policy context of choosing abatement levers which have the minimum impact on business as usual in the affected sectors. The PNG views forests primarily in terms of their value for other uses. The PNG's 'Climate Compatible Development Strategy' describes this approach:

*'For every driver of deforestation and degradation there are multiple abatement options, including full abatement by stopping an activity, or partial abatement by reducing the carbon intensity of the activity. In this report, our approach has been to analyse abatement measures that are broadly compatible with the continued development of the sector in question.'[140]*

Indonesia's cost curve report is oddly quiet over development on non-forested peatlands. The report lists fire prevention, water management and peatland rehabilitation as the preferred levers for peat emissions abatement.[140] This suggests that expansion of plantations on peatland, with accompanying emissions resulting from drainage, disturbance and compression of peat, would be permitted to continue.

When combined with carbon accounting methodologies and projected baselines which systematically favour action to displace small-scale farmers over action to address the impacts of industrial logging or plantations, it is no wonder that McKinsey-influenced REDD+ are a source of comfort and reassurance to many forest-destroying industries.

## 2. Paying the polluter

McKinsey co-authored reports not only consistently fail to address the major drivers of deforestation they actually reward the industries and interests which cause it. For example:

In the DRC: If logging intensity did not increase above 5m$^3$/hectares (the upper bound of current estimates) between now and 2030, McKinsey's plans would net around €750 million in 'compensation' over that period.[141] The palm oil industry stands to gain as much as €1 billion for the 'relocation' of concessions that have not even been awarded yet.[142]

In Indonesia: The forecast cost of oil palm and pulp plantation displacement per year by 2030 is $11 billion[143], effectively compensation for halting expansion into forest which never needed to happen.

In Guyana: The Amaila Falls Hydro-Electricity

*'[We] bring innovations in management practice to clients... Our clients need new insight.'[131]*

McKinsey

*McKinsey co-authored reports not only consistently fail to address the major drivers of deforestation they actually reward the industries and interests which cause it.*
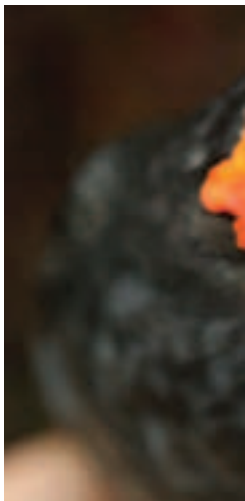
Top: This industrial logging company's sawmill in Cameroon belongs to Societe d'Exploitations Forestieres et Agricoles du Cameroun (SEFAC) one of several forestry companies operating in Cameroon. SEFAC is guilty of major violations of local forestry legislation and an arrogant disregard for the rights of local people.
© Kate Davison / Greenpeace

Middle: Dense rainforest was cleared to make way for this open-pit gold mine in Papua New Guinea.
© Glen Barry / Greenpeace

Bottom: Instead of forest, this palm oil factory is surrounded by palm oil plantations in Riau Province, Indonesia.
© Oka Budhi / Greenpeace

Project is one of the main projects to be funded by REDD+ income under the Low Carbon Development Strategy (LCDS).[144] A recent study suggests considerable impact on forests from clearance to build the plant and its access road: 750,000 tonnes of biomass are to be cleared from the dam site[145] and the access route will include 110km of minimum 8m wide road cut through primary forest.[146] 750,000t biomass is equivalent to 1.3Mt $CO_2$ emissions,[147] while the road may facilitate 'Unplanned settlement, logging and forest fires'.[148] Up to $60 million of Norway's REDD+ funding – intended to reduce emissions from deforestation – may in fact be spent on the construction of this dam.[149]

## 3. Impacting on natural forests

The McKinsey-inspired plans for PNG, the DRC, Indonesia and Guyana do not aim to stop clearance of natural forest, nor even propose zero deforestation as a long-term aspiration. These are plans designed to maximise (supposedly) cheap emissions reductions in the land use sectors of developing countries, NOT plans to protect carbon- and wildlife-rich natural forests.

The DRC study relies heavily on plantations to cancel out emissions from ongoing deforestation and degradation.[150] In PNG, deforestation for agriculture leases[151] and degradation from logging are predicted to continue.

In Indonesia's cost curve report, it is possible to quantify the area of forest forecast to be cleared in 2030 as around 285,000hectares.[152] Indonesia's plan uses an estimate for current annual deforestation of around 1.1 million hectares:[153] postulating a straight-line decrease in deforestation over 20 years to 2030 this suggests forecast natural forest loss of 13.9 million hectares – even under full implementation of the plan. In Guyana, there are almost no measures designed to reduce deforestation rates – with money instead focussed on agricultural intensification and dam construction.

The bias towards targeting smallholder agriculture before industrial drivers of deforestation would mean that initial efforts to prevent deforestation and degradation would focus on the least understood, least effective and hardest to monitor areas, leaving industrial drivers largely untouched and making effective prevention of deforestation less likely.

By contrast, McKinsey's cost curve report for Brazil does aim for zero deforestation by 2030.[154] But – crucially – this report was written after the Brazilian government had already set a deforestation target. Here, McKinsey's advice simply followed the commendable policy decision already made by the Brazilian government, but it is an example that The Firm has opted not to follow in the provision of its advice elsewhere in the world. In this respect, McKinsey's advice clearly falls short of international best practice in the sphere.

# Forests:
# more
# than just
# carbon

Plants, animals, insects and people depend on the tropical forests in countries that are being misled by McKinsey's advice.
Clockwise from top right; Local family © Philip Reynaers / Greenpeace , Young flying dragon © Wolfgang Pekny / Greenpeace, Melipotes honeyeater © Steven Richards / Conservation International / Greenpeace
Black stag beetle © Takeshi Mizukoshi / Greenpeace, Red capped Mangabey © Kate Davison / Greenpeace
Young Sumatran elephant © Daniel Beltrá / Greenpeace, Tropical forest © Takeshi Mizukoshi.

# 1. Threatening natural habitats and wildlife

The REDD+ documents on which McKinsey has worked say little about the potential biodiversity impacts of their proposals. The measures proposed in these documents could have serious negative consequences for natural ecosystems and the global benefits they provide. McKinsey promotes a methodology that effectively encourages its client governments to pursue an industry-orientated development path at whatever cost to wildlife or local communities. For example, its project proposal to support the development of PNG's climate change plans summarises a wide range of variables to be considered but does not suggest a need to even assess the impacts on the wildlife of the forests.[155] For McKinsey, a rainforest is just a store of carbon, waiting to be turned into money.

In Indonesia, the forecast continuing expansion of pulp and oil palm plantations is a major threat to biodiversity. Chillingly, the report accepts that due to already extensive forest loss in Java and Sumatra 'deforestation will shift to other, still largely forested islands such as parts of Kalimantan and especially Papua'.[156] Kalimantan is home to the endangered Bornean orangutan[157] while Papua is 'perhaps the biologically richest and most diverse collection of ecosystems in the Tropical Pacific region' with almost half of Indonesia's total biodiversity.[158]

Extensive reforestation (or conversion to plantation) of 'degraded' forest and commercial replanting of former plantations are advocated in the DRC (4 million hectares reforestation, 1.6 million hectares replantation),[159] Indonesia[160] and PNG[161] without reference to any need for biodiversity safeguards; indeed, monoculture is suggested as an option for sequestration reforestation in PNG.[162] Scientists and researchers have noted that logged Southeast Asian forest described as 'degraded' often retains significant biodiversity.[163]

Yet another threat to biodiversity posed by McKinsey's approach is their repeated legitimisation of large-scale land use change of non-forest habitats. The DRC study proposes to establish plantations for sequestration on 30% of the country's shrubby savannah and savannah-forest mosaic habitats (7 million hectares) and to 'relocate' up to 3 million hectares of as yet unawarded intensive agriculture (eg palm oil) concessions to similar habitats.[164] While the DRC has some savannah-type areas of little biodiversity value, the loss of nearly half the country's savannah habitat would be likely to affect more biodiverse areas such as the miombo savannah woodland in the south, a habitat type of 'outstanding international importance for the conservation of plants and birds'.[165] The study repeatedly describes

savannah as 'marginal zones' in what may be a deliberate attempt to belittle its importance. Strategic use of language is certainly part of the McKinsey toolbox. One McKinsey consultant told Greenpeace in a face to face meeting that McKinsey had attempted to define the 'common language for stakeholders to speak with' as part of its work on REDD+.

Similar measures for PNG are again expressed in loaded language: afforestation is proposed for 'marginal' land,[166] which is not defined, while a proposal to establish all new oil palm plantation on non-forest land specifies that the land in question will be 'degraded lands (e.g., pasture land, grassland)'[167] suggesting a dubious equivalence between grassland and degraded habitat. The Indonesia cost curve document proposes afforesting or reforesting for sequestration 10 million hectares of 'degraded non-forested and forested land', and establishing new pulp and palm oil plantations 'on already degraded or deforested areas'.[168] Here too, no definition of 'degraded' is provided.

In reality, in both countries grasslands are often the habitat for an abundance of wildlife. The Trans Fly lowland savannah and grasslands (shared between Indonesia and PNG) for example, host a number of endemic mammals and birds,[169] while PNG's Central Highlands grasslands, already subject to at least one afforestation project,[170] have very high plant diversity.[171]

Finally, Guyana's LCDS includes proposals to spend REDD+ income on infrastructure and drainage to facilitate 'higher value agricultural development'[172] of the Intermediate Savannahs, described even by the pro-government Guyana Chronicle as 'a unique and fragile eco-zone',[173] and the Canje Basin, one of a number of coastal river basins characterised as 'fragile and vulnerable neotropical wildlife resources'[174] and acknowledged by the Agriculture Minister to be 'virgin lands'.[175] McKinsey's involvement in this policy is compounded by its production of a 2008 study on agricultural export potential, cited by the government in a recent brochure soliciting investment in the development of both areas.[176]

Some of the documents considered do propose conservation measures, such as the unexplained 'potential conservation payment' shown on the PNG cost curve as a dotted line attached to some abatement levers,[177] or the 50% increase in protected areas included among the DRC proposals.[178] However, these either reflect pre-existing national targets or are so vague as to suggest they have been included solely to legitimise the prevailing pro-industry approach.

There is an assumption that commercial agriculture is an aspiration for the people who live in forests, but forests already offer shelter, food, medicine and livelihoods to the people that live there.

Above: Felling a tree to make a canoe in Lake Murray, PNG. © Fiona Morris / Greenpeace

Right: Carrying a Baka (pygmy) baby through dense Congo forest. © Kate Davison / Greenpeace

Below: An ex-resident of one of the 700 houses destroyed for the community's resistance of an acacia plantation in Indonesia. © Ardiles Rante / Greenpeace

Bottom: Orang Rimba (Kubu) women cooking in forest destroyed by Asia Pulp & Paper for plantations, Sumatra. © Daniel Beltrá / Greenpeace

*The contrast between the intolerance of shifting agriculture and the laissez-faire approach to logging is reflected in the downplaying or ignoring of industry's social impacts.*

## 2. Social impacts

McKinsey's abstract view of REDD+ actions as simply a source of carbon market revenue without real world impacts is all too evident in the treatment of the wider social value of forests.

Perhaps the most glaring example is the attitude to traditional agriculture based on shifting cultivation. Notwithstanding academic evidence that its contribution to degradation or deforestation may be trivial or non-existent,[179] subsistence-level shifting cultivation is held up with unrestrained zeal as one of the key drivers of deforestation. The assumption – made explicit in the DRC study – is that commercial agriculture is a desirable norm to which forest dwellers would obviously want to 'evolve', if only circumstances would permit.[180] There is no mention of people's right to free, prior and informed consent or how forest people who do not wish to comply with these plans will be dealt with. At its worst this could represent the mass displacement of people and human rights abuses.

The proposals in PNG, meanwhile, give with one hand and take away with the other, holding out the prospect of intensification bringing increased rural incomes and food security[181] while concluding that increased yields would enable some land currently used for subsistence to be 'freed up for reforestation through natural regrowth'[182] – in other words diminishing the land area at indigenous farmers' disposal, rather than empowering them to grow a profitable surplus without increasing their land take. The assumption that increased productivitiy frees up land, known as the Borlaug hypothesis, has itself been questioned by some.[183]

The contrast between the intolerance of shifting agriculture and the laissez-faire approach to logging and other destructive industries is reflected in the downplaying or ignoring of industry's social impacts. The PNG 'Climate-compatible development' study thus enthuses that forest communities will 'continue to benefit from the roads and public services that are established through commercial logging'[184] – despite the findings of official review teams that logging royalties (often not paid in full) and jobs created (generally poorly paid) contribute little to local welfare, and that companies fail to fulfil agreements to provide infrastructure.[185]

Beyond the forest, the ubiquitous proposals for so-called afforestation, plantation establishment or commercial agriculture in grassland or savannah threaten social as much as ecological damage since they ignore the existence of people who depend on these lands. In PNG, for example, the only indication of any compensation for those who lose pasture to oil palm is a passing reference to an unexplained 'community benefit payment' on which 'further discussion is needed,' while those who lose land to sequestration plantations are not even promised this.[186]

McKinsey's indifference to consultation is emblematic of its wider disengagement from the effects of the measures it proposes. Yet what might be seen as naïveté becomes culpable when it assists injustice and oppression. The DRC government's breach of its promise to distribute logging revenues to the local level has already been noted[187] in the section on McKinsey's monitoring and capacity on p19. In PNG, failure to curb logging, and proposals for large-scale plantation and 'afforestation', threaten to combine with new legislation depriving communities of the right to appeal or receive compensation when land is taken for projects 'in the national interest', to unleash a wave of dispossession.[188] In Guyana the stated rights of Amerindian communities to profit from the LCDS[189] are undermined by the government's heel-dragging over as-yet untitled land (which is not eligible for payments)[190] and its co-opting and manipulation of several of the supposedly representative indigenous bodies.[191] The leader of one resolutely independent Amerindian body that has criticised the LCDS process has apparently received death threats.[192]

# McKinsey advice: unfit for purpose

A hut in a totally deforested area in a PT IFA – Block Pasir Mayang logging concession. This kind of land clearance not only contributes to global warming but is devastating for wildlife in the area which includes endangered tigers.
© Daniel Beltrá / Greenpeace

It is clear that when rainforest countries employ McKinsey to apply its methodologies to their REDD+ prospects, they are in danger of wasting money on advice that harms their own interests and threatens the biosphere. A failure to insist on adequate safeguards for biodiversity or the rights of forest-dwelling peoples, or indeed to provide a realistic assessment of the technical and economic feasibility of proposals, does not merely threaten harmful consequences for the client country, but actually jeopardises the whole future of its REDD+ plan, and arguably the credibility of the REDD+ concept. Such failure may also be in violation of the Cancun agreement on REDD+ and other decisions of the UNFCCC, UN CBD and other international and regional institutions.

The governments of the UK, Norway and others have funded McKinsey's work in the countries considered by this report, sometimes without any kind of competitive tendering and with no effective control over performance.[194] A number of donors have also committed funds to other aspects of these countries' REDD+ preparations. However, the international institutions concerned with REDD+ are becoming increasingly critical of the shortcomings of plans prepared with McKinsey's advice.

In PNG, 'Climate-Compatible Development's' rejection[195] of the possibility of stopping logging entirely, despite the acknowledged huge emission savings that would result, and its successor's failure to mention even the partial restriction that it proposed as possibly worth considering,[196] exemplify the pro-industry bias that persists through the documents on which McKinsey has worked. Unsurprisingly, the UN-REDD secretariat has questioned the sincerity of PNG's approach and called on the PNG government to enact a moratorium on new timber and agricultural leases as a sign of commitment.[197] Meanwhile, the Independent Technical Review of the UN-REDD National Joint Programme document doubts whether the abatement measures proposed in the forthcoming third draft of 'Climate-compatible development' (reduced impact logging, sustainable forest management, reforestation, 'relocating' plantations to degraded land and intensifying agriculture) 'are in fact additional or achievable'.[198] This scepticism from UN-REDD is an instance of real reputational damage done to the PNG programme by adhering to the pro-business approach advocated by McKinsey.

Criticism has also been levelled at McKinsey-inspired aspects of the DRC's plan. The FCPF Technical Advisory Panel review has questioned the usefulness of a cost curve that excludes transaction and implementation costs, and has criticised the plan for basing its reference

scenario on a projected business as usual approach, against UNFCCC recommendations[199] and calls for this approach to be reviewed in light of lack of quantitative data and lack of agreement over 'adjusted scenarios'.[200]

It may be assumed that similar scepticism is beginning to permeate bilateral donors, though they tend not to make public pronouncements on the subject. But with the exception of Norway, no individual donor country is yet recorded as having committed to funding final implementation of any of the national REDD+ plans discussed. Whether they will do so must now be an open question.

It is also clear that in some cases rainforest countries themselves are beginning to acknowledge McKinsey's shortcomings and develop more credible REDD+ plans. This is most notable in the DRC, whose R-PP (despite the criticisms noted in this report) does display a note of realism and caution absent from the REDD+ Potential study – for example, insisting on the inclusion of indirect effects such as migration in any impact analysis of mining or large-scale agriculture,[201] and admitting the government's breach of its pledge to distribute forestry tax revenue locally.[202] A source close to the country's REDD+ planning has told Greenpeace anonymously that the DRC Environment Ministry commissioned the REDD+ Potential study from McKinsey (despite UN-REDD and FCPF opposition) to strengthen its negotiating position for Copenhagen, but that McKinsey's intervention compromised the national REDD+ process and has now outlived its usefulness:

*'There is no doubt that the DRC's increasing credibility in REDD terms is based above all on the long-term fieldwork conducted by the national team along with all its partners. Once the McKinsey comet has passed, it makes more sense to count on credible and less greedy partners to develop and implement the profound transformations that will be critical to REDD success.'*[203]

The 'Indonesia climate change sectoral roadmap'[204] is another non-cost curve-based plan showing a more measured way forward, albeit one that actually preceded McKinsey's approach and related proposals for Indonesia. Produced by the development planning ministry and the Ministry of Forestry, it gives more emphasis to forest protection than some other REDD+ planning documents proposed by Indonesia.[205] Specifically, it uses a baseline derived from present-day emissions rather than aggressive projections of industry expansion,[206] and emphasises the need to protect community land rights.[207] Which approach dominates in Indonesia is yet to be determined.

*The international institutions concerned with REDD+ are becoming increasingly critical of the shortcomings of plans prepared with McKinsey's advice.*

*Some rainforest countries are beginning to acknowledge McKinsey's shortcomings and develop more credible REDD+ plans.*

# Recommendations

*Action must be taken now to ensure that further destruction of forests and other natural habitats does not result from McKinsey's disastrous and ill-conceived advice.*



Greenpeace activists and local volunteers working together to stop palm oil companies draining the peatlands for plantations in Kuala Cenaku, Indonesia.
© Ardiles Rante / Greenpeace

## McKinsey must:

1. Immediately publish all the data, assumptions and analysis underlying the international and national versions of its cost curve and include such disclosures in all future publications.

2. Revise methodologies to reflect international norms in biological carbon accounting, and apply a consistent and transparent approach.

3. Fully assess and include the transaction, environmental and social costs associated with each abatement option suggested in advice or analysis.

4. Publicly commit to ensuring that all REDD+ advice and analysis explicitly recognises and protects non carbon values of natural forests and does not allow the timber industry to destructively exploit forests as a climate mitigation measure.

5. Publicly commit to ensuring that all advice will demonstrate as a bare minimum consistency with the safeguards for biodiversity and community and indigenous peoples' rights included in the Cancun Agreement on REDD+.

6. Fully disclose all instances where McKinsey has provided advice to companies associated with the drivers of deforestation in countries where they are advising on REDD+.

## Rainforest nations should:

1. Not commission further work from McKinsey until all the conditions above have been met.

2. Revise existing REDD+ plans to address the methodological flaws outlined in this report by ensuring the plans: fully address the major drivers of deforestation; focus on natural forest protection while prioritising protection of large intact forests and other biodiversity hotspots; include goals to achieve zero deforestation, and fully apply as a bare minimum the safeguards for biodiversity and community and indigenous peoples' rights included in the Cancun Agreement on REDD+.

3. Ensure a full and transparent tendering process for any further contracts for REDD advice, including publicly available terms of reference, and ensure transparency of all funding sources.

4. Publish all advice received so far, and all future advice, in full, along with full disclosure of terms of reference, any tendering documentation, costs and funding sources.

5. Ensure that all advice is developed with the full participation of, and is open to scrutiny, amendment and/or rejection by, civil society organisations, indigenous peoples and the local communities impacted by REDD+ plans.

6. Revise REDD+ plans so that any accounting rules for forestry which allow and enable the timber industry to destructively exploit forests as a climate mitigation measure are excluded.

## Donor countries and institutions should:

1. Not commission or fund further work from McKinsey until all the conditions outlined above have been met.

2. Only agree to fund the provision of REDD+ advice where all parties agree to a fully open and transparent tendering process; full public disclosure of advice; and proper participation of civil society organisations, indigenous peoples and the local communities.

3. Not commit further funding to REDD+ plans until a thorough review has taken place to ensure that they address the methodological flaws outlined in this report, so that they: fully address the major drivers of deforestation; focus on natural forest protection while prioritising protection of large intact forests and other biodiversity hotspots; include goals to achieve zero deforestation; and fully apply as a bare minimum the safeguards for biodiversity and community and indigenous peoples' rights included in the Cancun Agreement on REDD+.

4. Introduce explicit national funding policies for REDD+ which make it clear that funding will not be given bilaterally or through multi-lateral institutions until REDD+ plans are changed, and provide support to revise these plans so that they fully address the major drivers of deforestation, demonstrate a focus on natural forest protection, include goals to achieve zero deforestation, and fully apply as a bare minimum the safeguards for biodiversity and community and indigenous peoples' rights included in the Cancun Agreement on REDD+.

5. Introduce explicit national funding policies for REDD+ which make it clear that funding will not be given bilaterally or through multi-lateral institutions, for REDD+ plans that rely on accounting rules for forestry which allow and enable the timber industry to destructively exploit forests as a climate mitigation measure.

Full implementation of the Cancun Agreements should also now further strengthen the scrutiny applied to REDD+ plans and help to ensure that plans are not considered for funding unless they clearly prioritise the protection of natural forests, protect biodiversity, and recognise the rights of local communities and indigenous peoples as requested in the UNDRIP.[208]

These principles must provide the foundations for a new round of REDD+ plans, which reject advice based on faulty assumptions and poor quality analysis and build instead on the willingness of the international community to protect once and for all the global heritage of our natural tropical forests and all who depend on them.

# Endnotes

**List of documents referred to in endnotes by abbreviations:**

**POT** Ministry of the environment, nature conservation, and tourism 'Potentiel REDD+ de la RDC' French version, ('The Democratic Republic of Congo's REDD+ Potential' – English version) December 2009 *Wholly or partly McKinsey-authored report on application of its cost curve methodology to the DRC*

**CIAD** Office of the President of Guyana 'Creating incentives to avoid deforestation' December 2008 www.lcds.gov.gy/images/stories/ Documents/Guyana%20Office%20 of%20the%20President%20 Avoiding%20Deforestation%20 Paper.pdf *Wholly or partly drafted by McKinsey, this is the first published source for Guyana's baseline-setting strategy and claims for REDD+ funding*

**LCDS** 'Low Carbon Development Strategy: Transforming Guyana's Economy while Combating Climate Change' May 2010 www.lcds.gov.gy/ images/stories/Documents/Low%20 Carbon%20Development%20 Strategy%20-%20May%202010.pdf *Follow up to CIAD and incorporates much of its strategy wholesale*

**SDCCD** 'Climate-compatible development for PNG - Second draft' March 2010 *Largely McKinsey-authored report on application of its cost curve methodology to PNG.*

**IAP** GoPNG Office of Climate Change and Development 'Interim action plan for climate-compatible development' June 2010 *Study incorporating and updating much of SDCCD's analysis – probably largely authored by McKinsey*

**NPD** 'UN-REDD PNG National joint programme document' GoPNG, FAO, UNDP, UNEP September 2010 REDD+ *Plan incorporating much analysis from IAP – probably worked on by McKinsey*

**CC** DNPI (National Council on Climate Change) 'Indonesia's GHG Abatement Cost Curve' August 2010 *Partly McKinsey-authored report on application of its cost curve methodology to Indonesia – main target of this dossier*

While we haven't directly quoted from the Rainforest Foundation UK's report 'McREDD How McKinsey 'cost-curves' are distorting REDD', we would like to acknowledge it as a comprehensive resource showing how advice given by international consultants, McKinsey & Company, to governments of forested nations could harm the scheme to stem destruction of the rainforest, known as REDD.

**1** www.mckinsey.com/aboutus/whatwedo/
**2** www.unesco.org/new/en/natural-sciences/ about-us/single-view/news/protecting_ biodiversity_protecting_forests/
**3** www.un.org/en/events/iyof2011
**4** IPCC WGIII (2007) Figure SPM.1
**5** See Humphreys, D (2006) Logjam: Deforestation and the Crisis of Global Governance (London: Earthscan).
**6** UNFCCC 2007 decision 2/CP.13
**7** www.forestcarbonpartnership.org/fcp/ sites/forestcarbonpartnership.org/files/ Documents/PDF/Nov2010/FCPF%20%20 one%20pager%2011-21-10%20.pdf
**8** www.climateinvestmentfunds.org/cif/ node/5
**9** www.economist.com/node/15129518
**10** www.economist.com/node/15129518
**11** www.conservation.org/newsroom/ pressreleases/Pages/Reaction- Developed-Pledge-Forest- ProtectionIsNotNearlyEnough.aspx
**12** www.mckinsey.com/aboutus/whatwedo/
**13** www.businessweek.com/magazine/ content/02_27/b3790001.htm
**14** www.mckinsey.com/aboutus/whoweare/
**15** www.mckinsey.com/aboutus/locations/
**16** www.mckinsey.com/aboutus/whatwedo/
**17** www.mckinsey.com/aboutus locations/
**18** www.businessweek.com/magazine/ content/02_27/b3790001.htm
**19** www.businessweek.com/magazine/ content/02_27/b3790001.htm
**20** http://uk.reuters.com/article/2009/10/20/ mckinsey-insider-trading- idUKLNE59J00L20091020
**21** www.themonthly.com.au/nation-reviewed- malcolm-knox-hard-stuff--2507
**22** www.independent.co.uk/news/business/ analysis-and-features/the-might-of-the- mckinsey-mob-664081.html
**23** Pers. comm. to Greenpeace, 3 November 2010
**24** www.mckinsey.com/aboutus/whatwedo/
**25** McKinsey & Company (2009) *Elaboration d'une analyse exploratoire du potentiel REDD+ de la Republique Democratique du Congo: Dossier de candidature* 23 October p9-10
**26** POT para 11, p4: 'Ses ambitions dans le cadre de cette stratégie sont d'actionner à la fois tous les leviers de mitigation envisageables à des coûts acceptables de même que ceux de séquestration.'
**27** McKinsey & Company (2009) *Mengembangkan cost curve pengurangan carbon untuk Indonesia* p8, 19-22
**28** CC p21
**29** McKinsey & Company (2010) 'Creating low carbon prosperity in Indonesia: Detailed project overview (Phase 3): Institutional capability building for low carbon growth' 5 February 5 2010
**30** Dr Justin Ondopa, Climate Change Coordinator with PNG Eco Forestry Forum and observer to the REDD Technical Working Group, pers. comm. to Greenpeace, 10 November 2010; corroborated by a 28 September 2010 letter from Kenn Mondiai, Chairman of PNG EFF to Dr Wari Iamo of the OCCD, available at http://pngexposed.files. wordpress.com/2010/10/ngo-letter.pdf
**31** PNG dossier, section 8a p31
**32** McKinsey & Company 'Elaboration d'une analyse exploratoire du potentiel REDD+ de la Republique Democratique du Congo: Dossier de candidature' 23 October 2009 p10
**33** McKinsey's cost curve report *Pathways to a low carbon economy for Brazil* differs

from the other country reports under discussion in that it 'does not evaluate the economic value of the standing forest itself, which consists of the revenue from selling deforested timber and the alternative use of the land'33 and does not claim REDD credits based on opportunity cost. Brazil is ahead of other major tropical forest countries in developing its approach to deforestation and it appears that, in this report, McKinsey has turned its cost curve to supporting existing policy rather than attempting to influence future plans. Because of this, the Brazil report is only occasionally referred to below.

**34** Information on countries' readiness activities under the FCPF, and their participation in the Forest Investment Program, is taken from the FCPF website, specifically the FCPF Dashboard (revised October 2010, www.forestcarbonpartnership.org/ fcp/sites/forestcarbonpartnership. org/files/Documents/PDF/Nov2010/ FCPF%20Readiness%20Progress%20 MASTER_103110.pdf), the chronological digests of individual countries' R-PP submissions (indexed at www. forestcarbonpartnership.org/fcp/ node/257), and the individual countries' REDD Readiness Progress Fact Sheets (September'October 2010, indexed at www.forestcarbonpartnership.org/fcp/ node/283). Information of countries' UN-REDD programmes is taken from the UN-REDD website (www.un-redd.org/ UNREDDProgramme/CountryActions/ tabid/584/language/en-US/Default. aspx and specific country pages as indicated). Information on the measures and approaches advocated by McKinsey summarises information given in more detail in the body of this briefing.
**35** DRC dossier, section 9.a.I p38 for further discussion
**36** DRC R-PP p147; Intergovernmental taskforce (2010) REDD+ *survey: Democratic Republic of Congo* p1, www.oslocfc2010.no/ pop.cfm?FuseAction=Doc&pAction=View& pDocumentId=24929
**37** Republique Democratique du Congo: Fonds Commun Multibailleurs pour le Renforcement de la Gouvernance Forestiäre (2010) *Rapport Final* August p.1, 9, 11, 14
**38** Ibid. p14
**39** POT paras 47, 59
**40** http://unfccc.int/files/methods_science/ redd/country_specific_information/ application/pdf/eng_final_report_ exploring_redd_potential_071209.pdf p35
**41** POT para 59
**42** POT para 47, p19
**43** POT para 59, p28
**44** 80 Mt CO2e at 13 Euros / t CO2e  POT p27
**45** POT p27
**46** Ibid p39
**47** Endundo, J (2011) 'Clôture du processus du conversion des anciens titres forestiers et perspectives dans le secteur de l'exploitation forestière en RDC', press release 29 January p5
**48** Guyana dossier, section 9.a.I, p52-53
**49** Ian Gray, DFID Openness Unit, letter of 10 November 2010 and attached Memorandum of Understanding (undated, but apparently drafted before 1 June 2008 when the project was due to commence, though signed by UK and Guyanese representatives on 20

March and 26 March 2009 respectively) in response to Greenpeace Freedom of Information Act request. See also discussion in our Guyana dossier, section 6.a, p41-42.

**50** 'Memorandum of understanding between the Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway regarding cooperation on issues related to the fight against climate change, the protection of biodiversity and the enhancement of sustainable development' reproduced in LCDS p67-68

**51** See our Guyana dossier, section 2.d p4-10 for further discussion

**52** www.forestry.gov.gy/Downloads/Guyana_MRVS_Interim_Measures_Report_2010_Final_January_2011.pdf, p iv

**53** CIAD p19, LCDS p20

**54** www.forestry.gov.gy/Downloads/Guyana_MRVS_Interim_Measures_Report_2010_Final_January_2011.pdf, p iv

**55** LCDS p10, 12

**56** Robert Goodland 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.biscusa.org/en/Document.102355.aspx p2

**57** Robert Goodland 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.biscusa.org/en/Document.102355.aspx p2

**58** At conversion factors of 0.47 biomass: carbon, 3.67 carbon: $CO_2$

**59** The evidence is set out in detail in our PNG dossier, section 9.a.I (p35-36). Among the most compelling instances are the fact that the Properties box of the 'Climate-compatible development' PDF gives the producer as 'McK PDF Writer' (just like the second draft of Guyana's (LCDS) and the fact that the official body credited with producing the 'Interim Action Plan' did not start work until two months after its publication.

**60** www.un-redd.org/UNREDDProgramme/CountryActions/PapuaNewGuinea/tabid/1026/language/en-US/Default.aspx

**61** Ibid. p32-33

**62** IAP p27

**63** IAP p11

**64** SDCCD p18-19, IAP p11

**65** IAP p10

**66** IAP p11

**67** www.un-redd.org/UNREDDProgramme/CountryActions/Indonesia/tabid/987/language/en-US/Default.aspx

**68** eg BAPPENAS (Indonesian Ministry for National Development Planning) (2010) *Indonesia Climate Change Sectoral Roadmap: Synthesis Report*, March, p6

**69** DNPI (National Council on Climate Change) /UNFCCC 'National Economic, Environment and Development Study (NEEDS) for Climate Change: Indonesia Country Study' December 2009 p76

**70** Intergovernmental taskforce (2010) *REDD+ survey: Indonesia*, p1-2, available at www.oslocfc2010.no/pop.cfm?FuseAction=Doc&pAction=View&pDocumentId=24932

**71** Ibid, p2-3

**72** MRV are monitoring systems that allow for credible measurement, reporting and verification of REDD+ activities

**73** Ministry of Forestry (2009) *National Strategy: Reducing emissions from deforestation and forest degradation in*

*Indonesia: Readiness phase*, draft, August, Table 4 p35

**74** Mogstad, Per (2010) Email to Greenpeace from Norwegian Ministry of Foreign Affairs in response to freedom of information request, 26 November

**75** Excluding 10% VAT but minus a discount equivalent to roughly $1.5 million

**76** Excluding 10% VAT and minus a discount equivalent to roughly $2.5 million

**77** CC p21

**78** Greenpeace International 'REDD Alert: Protection Money' November 2010 www.greenpeace.org/international/en/publications/reports/Protection-Money/: 31-32, CC p21

**79** CC p21

**80** CC p20

**81** CC p22

**82** DNPI (2010a): 21

**83** Based on $28-29/tonne $CO_2$e and 192t carbon (705t$CO_2$e) per hectare. Source: DNPI (2010a): 21 Exhibit 12, 22

**84** P42 Greenpeace report Protection Money 2010

**85** BAPPENAS /UN-REDD (2010): 41 establish a technical carbon threshold for land suitable for low carbon development (<35tC/ha), as well as land meriting conservation purely for its carbon storage potential (potential to store >100tC/ha)

**86** www.mckinsey.com/aboutus/whatwedo/

**87** McKinsey confirmed this to Greenpeace in face to face meeting

**88** For more on this problem, see: Ekins P, Kesicki, F, Smith, A 'Marginal abatement cost curves: a call for caution' 2010 p19

**89** POT para 56, p27

**90** POT Exhibit 13 (NB only in English version). Calculation based on 900 ha planted annually for 5 years (4500 ha total) and 2.5m t$CO_2$ (681,199tC) sequestered after 30 years, ie 556t $CO_2$e uptake per hectare, equivalent to 151t carbon.

**91** Humid, low-altitude dense forest in Congo Basin 126-275tC/ha Souce: 'Un aper'u des stocks de carbone et leurs variations dans les foràts du bassin du Congo' Nasi, R et al, in *Etat des Foràts 2008* p207

**92** Ekins P, Kesicki, F, Smith, A 'Marginal abatement cost curves: a call for caution' (2010) p25

**93** IAP: 10, CC p21

**94** POT para 56 p27

**95** See for example Greenpeace International 'REDD Alert: Protection Money' November 2010 www.greenpeace.org/international/en/publications/reports/Protection-Money/ : 39-42

**96** Greenpeace International 'REDD Alert: Protection Money' November 2010 www.greenpeace.org/international/en/publications/reports/Protection-Money/ : 7-8

**97** IAP p10-11

**98** McKinsey & Company, 'Pathways to a low carbon economy for Brazil' 2009 p31

**99** POT Planche 16, p59

**100** Series of articles by Janette Bulkan in Stabroek News July-August 2009 www.redd-monitor.org/wordpress/wpcontent/uploads/2009/08/REDD_SN_series_July_August_2009_carbon_in_Guyana.pdf p26

**101** IAP p10

**102** SDCCD p19

**103** SDCCD p2

**104** www.mckinsey.com/aboutus/whatwedo/

**105** LCDS p77

**106** LCDS p51

**107** CC p18

**108** POT, p19

**109** POT, p19

**110** POT, p25

**111** IAP: p7

**112** Overseas Development Institute (2007) 'Issues and opportunities for the Forest Sector in Papua New Guinea'

**113** CC p19

**114** Greenpeace International 'REDD Alert: Protection Money' November 2010 www.greenpeace.org/international/en/publications/reports/Protection-Money/: 42-43

**115** LCDS p91

**116** POT para 142, p55; similar disclaimers appear in other countries' reports

**117** POT p25, p31 Etude potential REDD+

**118** Forest Carbon Partnership Facility 'Revised FCPF TAP Synthesis Review of R-PP of DRC' 17 Mar 2010. p8-9

**119** CC p21

**120** Greenpeace International 'REDD Alert: Protection Money' November 2010 www.greenpeace.org/international/en/publications/reports/Protection-Money/: 31-32, CC 21

**121** CC p21

**122** POT para 124, p50-51

**123** For example, no implementing legislation has yet been produced for the 2002 Forest Code (DRC R-PP p130) nor, astonishingly, for the Land Tenure Law of 1973 (Cotula, L and Mayers, J (2009) *Tenure in REDD: Start-point or afterthought?*, International Institute for Environment and Development, London, p35)

**124** To give one of many possible examples, the whole vast country has only 50 forest agents (DRC R-PP 58)

**125** For example, local forest administrations are largely dependent upon logging companies themselves for information, logistics, transport and finance, and bribery is frequent (Greenpeace International (2008) *Étude Sectorielle: Exploitation forestière en République Démocratique du Congo*, October, p3).

**126** Acknowledged by the DRC's Readiness Preparation Proposal (Ministry of the Environment, Nature Conservation and Tourism (MECNET) (2010) *Readiness Plan for REDD, 2010-2012 'R-PP Final Version, July*, p131). See also Cotula, L and Mayers, J (2009) *Tenure in REDD: Start-point or afterthought?*, International Institute for Environment and Development, London, p21

**127** www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/APR2010/4b-DRC_R-PP_Presentation_FCPF_LOPE_ENG_2.pdf, p24

**128** POT para 77, p37: 'la finalisation de la rÇforme institutionnelle'

**129** POT para 80, p38

**130** Chatterton, Paul (2010) Review of the *UN-REDD Joint Program in Papua New Guinea*, pp2-3, http://un-redd.org/PolicyBoard/5thPolicyBoard/tabid/1002/Default.aspx

**131** www.mckinsey.com/aboutus/whatwedo

**132** LCDS website FAQ www.lcds.gov.gy/faqs.html#18:

**133** IAP p8

**134** Mining and hydrocarbon extraction are predicted to be responsible for 9% of BAU deforestation to 2030. POT para 47, p22

**135** POT para 59, p31-32

**136** IAP Exhibit 7, p10

**137** IAP Exhibit 3, p6

**138** http://en.wikipedia.org/wiki/Ok_Tedi_Environmental_Disaster

**139** SDCCD p17

**140** CC p17

**141** Greenpeace International 'REDD en RDC: Menace ou solution?' November 2010 p14

**142** Greenpeace International 'REDD en RDC: Menace ou solution?' November 2010 p14

**143** based on 381.9Mt$CO_2$e (DNPI (Dewan Nasional Perubahan Iklim – National Council on Climate Change) 'Fact Sheet – Carbon Emissions and Development' 2 September 2010 p4) at $29/tonne (CC p21)

**144** LCDS: 26

**145** Robert Goodland, 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.bicusa.org/en/Document.102355.aspx p2

**146** Robert Goodland, 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.bicusa.org/en/Document.102355.aspx p2

**147** At conversion factors of 0.47 biomass: carbon, 3.67 carbon: CO2

**148** Robert Goodland, 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.bicusa.org/en/Document.102355.aspx p3

**149** Robert Goodland, 'Guyana: Amaila Falls Hydro: Social and Environmental Aspects' Bank Information Centre, 19 October 2010 www.bicusa.org/en/Document.102355.aspx p6

**150** POT Planche 10, p26

**151** IAP: 10, further discussion in our PNG dossier section 2.e, p10

**152** DNPI (Dewan Nasional Perubahan Iklim 'National Council on Climate Change) 'Fact Sheet 'Carbon Emissions and Development' 2 September 2010: p4 gives emissions reductions from stopping plantation development as 190.95Mt$CO_2$e for each of estate crops and timber plantations – ie 381.9Mt$CO_2$e (eq. 104Mt carbon) for the two combined. Divided by CC's figure of 192tC/ha in forest land (CC p22) this gives an estimated 542,000ha of avoided deforestation from plantation establishment in 2030. On the same logic, avoided deforestation from smallholder agriculture in 2030 would be around 273,000 hectares. BAU deforestation in 2030 is predicted at 1.1m ha annually (CC p20), suggesting that even under full implementation of CC's plan, 285,000ha of natural forest would continue to be cleared each year.

**153** CC p22

**154** McKinsey & Company, 'Pathways to a low carbon economy for Brazil' 2009: 7

**155** McKinsey & Company 'Supporting the development of PNG's national REDD and climate change plans: draft project proposal' June 2009 p6

**156** CC p18

**157** http://en.wikipedia.org/wiki/Bornean_Orangutan

**158** Rhee, S, Kitchener, D, Brown, T, Merrill, R, Dilts, R and Tighe, S (2004) *Report on biodiversity and tropical forests in Indonesia*, USAID/Indonesia, Jakarta, p7.12, available at www.rmportal.net/library/content/1/118_indon

**159** POT paras 59, p29-31and 106, p44

**160** CC p21

**163** IAP p11

**164** IAP p29

**165** Edwards, D, TH Larsen, TDS Docherty, FA

Ansell, WW Hsu, MA DerhÇ, KC Hamer and DS Wilcove (2010) Degraded lands worth protecting: the biological importance of Southeast Asia's repeatedly logged forests, Proc.R. Soc. B, published online 4 August 2010. doi: 10.1098/rspb.2010.1062

**166** POT paras 56, p27; 59, pp29–31; and 90, pp40–41

**167** Chidumayo, E (1999) *Using Natural Fertilizers in Miombo Woodlands*, Issues in African Biodiversity 2, Biodiversity Support Program, p1, available at pdf.usaid.gov/pdf_docs/PNACK011.pdf

**168** IAP p11

**169** IAP p11

**170** CC p21

**171** WWF (2001),*Trans Fly savanna and grasslands*, www.worldwildlife.org/wildworld/profiles/terrestrial/aa/aa0708_full.html

**172** Dr Justin Ondopa, Climate Change Coordinator with PNG Eco Forestry Forum and observer to the REDD Technical Working Group, pers. comm. to Greenpeace, 10 November 2010

**173** WWF (2001) *Central Range sub-alpine grasslands*, www.worldwildlife.org/wildworld/profiles/terrestrial/aa/aa1002_full.html

**174** LCDS p10, 12

**175** Evans, Pamela (2002) Agricultural development on the move in the Intermediate Savannahs, Guyana Chronicle, 1 September, www.landofsixpeoples.com/news022/nc209016.htm

**176** Hanif, M and Otto, R (1978) Impact identification and evaluation: Guyana Small Farm Development Project, Annex IV, Exhibit 1 in Department of State, Agency for International Development (1978) Proposal and Recommendations for the Review of the Bilateral Assistance Subcommittee: Guyana – Small Farm Development, Black Bush Region, p6–7, http://pdf.usaid.gov/pdf_docs/PDAAA043B1.pdf

**177** Naipaul, Chamanlall (2007) $6.5M needed to kick–start ethanol production – UN report, Guyana Chronicle, 1 May, www.landofsixpeoples.com/news702/nc0705013.html

**178** Cited in Government of Guyana (n.d.*) Investing in Guyana's Low Carbon Future: Agriculture*, www.agriculture.gov.gy/Investment%20in%20Guyana/Investing%20in%20Guyana%27s%20Low%20Carbon%20Future.pdf

**179** IAP Exhibit 7, p10. It is unclear what the levers included have in common, as two (agricultural extension and afforestation/reforestation) might be assumed to have negative biodiversity impacts that needed mitigating, while the third (secondary forest management) presumably would not.

**180** POT paras 87–89, p40

**181** For example, in the context of PNG, Keenan, Rodney J (2009) 'Disturbance, degradation, and recovery: forest dynamics and climate change mitigation' (XIII World Forestry Congress Buenos Aires, Argentina, 18 – 23 October), p6; in the context of Guyana, Cedergren, Jonas (2009) 'Measurement and reporting of forest carbon in Guyana: Preparing for REDD implementation', UN-REDD, p.5, www.fao.org/climatechange/unredd/53128/en/ (ironically the one country surveyed where, perhaps due to the relative strength of the indigenous lobby as well as the special nature of the approach taken to REDD+, shifting agriculture is not proposed to be targeted in the documents on which McKinsey has worked, though the government itself has equivocated over the issue – see the discussion in our dossier, section 5c, p39)

**180** POT para 98, p42

**181** IAP p10

**182** SDCCD p20

**183** Thomas K. Rudel, Agricultural intensification and changes in cultivated areas, 1970–2005

**184** SDCCD p19

**185** NPD p7–8

**186** IAP exhibit 7, p10

**187** Acknowledged by the DRC's Readiness Preparation Proposal (Ministry of the Environment, Nature Conservation and Tourism (MECNET) (2010) *Readiness Plan for REDD, 2010-2012 'R-PP Final Version, July*, p131). See also Cotula, L and Mayers, J (2009) *Tenure in REDD: Start–point or afterthought?*, International Institute for Environment and Development, London, p21

**188** The legislation in question is the Environment (Amendment) Act 2010: see Callick, R (2010) *PNG law to shield resource giants from litigation, The Australian (Canberra)*, 2 June, p24. For a more detailed analysis of the act and its implications, see www.actnowpng.org/sites/default/files/BRIEFING%20PAPER%20%20enviro%20amend%202010.pdf. Greenpeace Australia Pacific has been advised by a legal expert that the Act is applicable to any development deemed in the national interest (potentially including forestry, agriculture and plantation), not merely to mining, although the latter has so far been the focus of objections.

**189** LCDS p35

**190** An injustice of which Amerindian communities are keenly aware: see for example Amerindian Peoples Association/Forest Peoples Programme (2009) *Indigenous peoples' rights, REDD and the draft Low Carbon Development Strategy (Guyana): A summary report of a workshop held in the Regency Suites, Georgetown, 24– 26 June 2009*, p3–4, www.forestpeoples.org/sites/fpp/files/publication/2010/08/guyanareddiprightswshoprepjun09eng.pdf. See also discussion in our Guyana dossier, section 5.b, p33–35.

**191** See for example posting from Nelly Avila on REDD+ Monitor website, 30 October 2010, www.redd-monitor.org/2010/10/13/redd-rubber-hits-the-road-in-guyana-skid-marks-a-plenty/ (re TAAMOG and NADF); Amerindian Peoples Association/Forest Peoples Programme (2009) *Indigenous peoples' rights, REDD and the draft Low Carbon Development Strategy (Guyana): A summary report of a workshop held in the Regency Suites, Georgetown, 24–26 June 2009*, p5 (re National Toshaos Council (NTC); and APA executive members and others (2010) *Indigenous peoples demand action on land rights, consent issues*, press release from workshop on 'Indigenous Peoples' Rights, Extractive Industries and National Development Policies in Guyana', 9 March, www.forestpeoples.org/topics/extractive-industries/news/2010/08/press-release-guyana-indigenous-peoples-demand-action-land (re NTC). On the NTC, see also our Guyana dossier, section 5.b, p35–36.

**192** Widely reported, eg Kaieteur News (2010) 38 foreign groups write Jagdeo to protect Amerindian leader, 21 December, www.kaieteurnewsonline.com/2010/12/21/38-foreign-groups-write-jagdeo-to-protect-amerindian-leader/; *REDD-Monitor* (2010) President of the Amerindian Peoples Association gets death threats in Guyana, 21 December, www.redd-monitor.org/2010/12/21/president-of-the-amerindian-peoples-association-gets-death-threats-in-guyana/

**193** www.mckinsey.com/aboutus/

whatwebelieve/

**194** For a fuller discussion of this issue, see our Guyana dossier, section 6.a, p41–42.

**195** On the grounds that, while this would yield three times the emission savings of reduced impact logging, it would do so at a higher opportunity cost – though scarcely higher than that for afforestation (see IAP p10) and with an abatement potential at least three times as great as any other lever discussed.

**196** IAP p11

**197** UN-REDD Programme (2010) *National Programme Submission Form – Papua New Guinea*, p10, un-redd.org/PolicyBoard/5thPolicyBoard/tabid/1002/Default.aspx

**198** Chatterton, Paul (2010) *Review of the UN-REDD Joint Program in Papua New Guinea*, p1, http://un-redd.org/PolicyBoard/5thPolicyBoard/tabid/1002/Default.aspx

**199** Forest Carbon Partnership Facility 'Revised FCPF TAP Synthesis Review of R–PP of DRC' 17 Mar 2010 p9, 14

**200** Carbon Partnership Facility 'Revised FCPF TAP Synthesis Review of R-PP of DRC' 17 Mar 2010 p14

**201** Ministry of the environment, nature conservation, and tourism 'Readiness Plan for REDD, 2010-2012 – R-PP Final Version' July 2010 p59

**202** Ministry of the environment, nature conservation, and tourism 'Readiness Plan for REDD, 2010-2012 – R-PP Final Version' July 2010 p131

**203** Anon. pers. comm. 3 November 2010

**204** BAPPENAS (Indonesian Ministry for National Development Planning) 'Indonesia Climate Change Sectoral Roadmap: Synthesis Report' March 2010

**205** For example BAPPENAS (Indonesian Ministry for National Development Planning) 'Indonesia Climate Change Sectoral Roadmap: Synthesis Report' March 2010 p88: 'It is far more effective to avoid deforestation than to rehabilitate forestland'

**206** BAPPENAS (Indonesian Ministry for National Development Planning) 'Indonesia Climate Change Sectoral Roadmap: Synthesis Report' March 2010 p9-10

**207** BAPPENAS (Indonesian Ministry for National Development Planning) 'Indonesia Climate Change Sectoral Roadmap: Synthesis Report' March 2010 p80, 85

**208** United Nations Declaration for the Rights of Indigenous Peoples, adopted by 144 states.

Industrial logging is impacting on forests in the Congo which are globally significant for biodiversity conservation and critical to climate regulation. And new logging roads are providing easier access for primate hunters.
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# GREENPEACE

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Greenpeace is an independent global campaigning organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace.

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We campaign to protect the world's remaining ancient forests and the plants, animals and peoples that depend on them.

We investigate, expose and confront the trade in products causing forest destruction and climate change.

We challenge governments and industry to end their role in forest destruction and climate change.

We support the rights of forest peoples.