



# REDDy SET GROW

UNITED NATIONS ENVIRONMENT PROGRAMME

## Part 2

Private sector suggestions for international climate change negotiators

**Designing an effective regime for financing forest-based climate change mitigation**

A study by UNEP Finance Initiative's Biodiversity and Ecosystems Workstream (BEWS) and Climate Change Working Group (CCWG)

September 2011



**UNEP Finance Initiative**  
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UNEP Finance Initiative  
International Environment House  
15 Chemin des Anémones  
CH-1219 Chatelaine, Geneva  
Switzerland  
Tel: 41 22 917 8178 Fax: 41 22 796 9240  
fi@unep.org  
www.unepfi.org

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## **Foreword** from the United Nations Environment Programme Finance Initiative (UNEP FI)

**F**orests are the natural treasure chests of the world, providing a host of ecosystem services that – and this needs to be said very clearly and up front – are paramount to ensuring economic progress and human well-being, not only locally but globally. What forests give us is fundamental in the strictest sense of the word: they stabilise the global climate system, regulate water cycles, provide habitat for flora, fauna and people, and host genetic resources of unimaginable potential. Forests and their services remain, however, chronically undervalued by today's economic and political decision makers, resulting in their rapid destruction. One of the many consequences of current deforestation and forest degradation is their contribution of approximately one fifth of global greenhouse gas emissions.

There is hope, though, as consensus at the international level and within the United Nations Framework Convention on Climate Change (UNFCCC) was reached in Cancun in 2010 on the need to include, in a new climate change deal, efforts to reduce deforestation and forest degradation as well as to accelerate reforestation and rehabilitation. Despite considerable progress and the recent achievements in international negotiations on this issue, several critical issues – including the central question of how forest-based mitigation efforts at the needed scale will be financed – have not been resolved, and negotiations are ongoing.

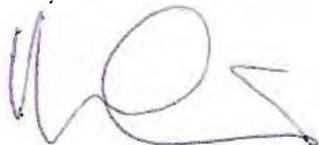
USD 17-40 billion per year is required to halve emissions from the forest sector by 2030. Given the magnitude and the absolute urgency of the challenge ahead, there is a clear, yet unaddressed, need to mobilise large volumes of private sector financing and investment in addition to government funds. However, achieving deforestation-reduction targets does not only depend on moving money from A to B. What are needed are systems that effectively address the drivers and causes of current deforestation trends, which most often are underpinned by unsustainable behaviour in the private sector itself. The private sector members of UNEP FI – banks, insurers and investors – see it as their responsibility, and an opportunity, to inform current negotiations on the REDD+ financing question, not only with broad and fundamental views that have been heard many times, but, more importantly, with specific suggestions on the elements and features that need to be in place under a future REDD+ funding mechanism in order to unlock private finance, investment and engagement for the protection, rehabilitation and reforestation of natural forests. This is what this report offers to its target audience of governments and international climate change negotiators.

This briefing does not mark the end but the beginning of an effort by the United Nations Environment Programme Finance Initiative (UNEP FI) to work with its members in the finance community, UN agencies and other stakeholders to mitigate risks related to REDD+ investments and help build regulatory frameworks and private sector capacity to scale up investment. Part 1 of this study, launched in May 2011, provides a briefing for the financial world on current and emerging avenues for business activity in forest carbon and highlights roles and barriers for financial institutions to becoming involved. Part 2 provides information for national-policy makers and international negotiators on what the international climate change architecture needs to deliver to effectively mobilise private finance and investment for forests at the necessary scale.

We hope this briefing is informative to you, and we look forward to working with you in the near future.

### **Richard Burrett**

Chair of UNEP FI's Biodiversity and Ecosystems Workstream



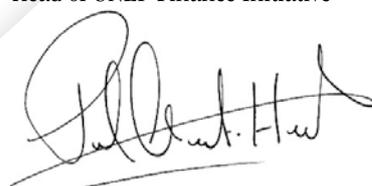
### **Nick Robins**

Co-Chair of UNEP FI's Climate Change Working Group



### **Paul Clements-Hunt**

Head of UNEP Finance Initiative



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## Abbreviations

<b>AFOLU</b>	Agriculture, forestry and other land uses
<b>AWG-KP</b>	Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
<b>CBD</b>	Convention on Biological Diversity
<b>CDM</b>	Clean Development Mechanism
<b>CDM A/R</b>	Afforestation and reforestation under the Clean Development Mechanism
<b>CIFOR</b>	Centre for International Forestry Research
<b>COP</b>	Conference of the Parties
<b>EU ETS</b>	European Union Emissions Trading Scheme
<b>FCPF</b>	Forest Carbon Partnership Facility
<b>FIs</b>	Financial institutions
<b>JI</b>	Joint Implementation
<b>KP</b>	Kyoto Protocol
<b>MRV</b>	Measuring, reporting and verifying
<b>NAMAs</b>	Nationally Appropriate Mitigation Actions
<b>PDD</b>	Project design document
<b>RED</b>	Reducing emissions from deforestation
<b>REDD</b>	Reducing Emissions from Deforestation and Forest Degradation
<b>REDD+</b>	Reducing emissions from deforestation and forest degradation and the role of conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks
<b>TEEB</b>	The Economics of Ecosystems and Biodiversity
<b>UNDRIP</b>	United Nations Declaration on the Rights of Indigenous Peoples
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>USD</b>	United States dollars
<b>VCS</b>	Voluntary Carbon Standard

# 1. Executive summary

## I. Private finance and investment: why?

**F**orests are chronically undervalued in today's economies, even though they underpin a wide range of complex and varied ecosystem services that one billion people immediately rely on for their livelihoods and that are central to economic progress and human welfare at a global scale. The nature of the problem is economic: the absence of a 'positive' price signal to protect and sustainably use forests lies at the heart of the current level of deforestation and makes the clearing of forests financially more attractive than preserving them. This notion applies equally to industrial-type deforestation – such as for the Brazilian soy and the Indonesian palm oil industries – and deforestation for subsistence farming in the Congo Basin and other regions.

Even if only the climate-related services and benefits of forests are considered, the case for systematically addressing, slowing, halting and ultimately reversing deforestation and forest degradation is overwhelming, for economic reasons alone: on a business-as-usual path, the costs of deforestation-related impacts of climate change on the world economy could reach USD 1 trillion per year by 2100 (Eliasch, 2008)<sup>1</sup>. Stopping tropical deforestation and forest degradation and planting new forests could provide climate benefits equivalent to doubling current global nuclear energy capacity, or the construction of two million new wind turbines (Socolow and Pacala, 2004). If the other benefits that forests provide, such as water retention, habitat for wildlife, and regulation of local and regional climates, are considered, the benefits are far greater.

A 50 per cent reduction in deforestation rates is needed by 2020 if the forestry sector is to support global efforts aimed at holding global temperature rise to below 2 degrees Celsius, the global climate target that the world's governments have set in international climate change agreements. This will require a combination of: **(i)** weakening or reversing the current drivers of deforestation, particularly through shifts in land use for the production of agricultural commodities, **(ii)** mobilising investment in the active protection of standing forests, as well as **(iii)** mobilising investment in the creation of new, sustainably managed forests. Realising the climate change mitigation potential of forests will require up-front investment of approximately **USD 17-40 billion per year** (Eliasch, 2008) (UNEP, 2011).

Investment at this scale is **highly unlikely to come from governments alone**. To put the figure above into context, cumulatively available public funds from donor countries to date stand at approximately USD 7 billion (the annualised figures are much lower). Hence, investment from, and engagement of, the private sector – including financial institutions (FIs) and financial intermediaries – is essential, particularly for implementation activities.

Aside from the scale and speed at which investment needs to flow, a critical reason why any future international regime to reduce emissions from deforestation and forest degradation (REDD+)<sup>2</sup> must mobilise the private sector is that the drivers and roots of deforestation need to be addressed. This includes changing current behaviour patterns in the private sector itself which can happen in an effective way only if commercial actors and (subsistence) farmers are offered financially competitive alternatives to current land-use and deforestation patterns. In other words, only if investing in forest protection, conservation and enhancement can offer revenue streams competitive with those from the production of timber and agricultural commodities such as soybeans, palm oil and beef will the private sector truly shift behaviour patterns and unlock the skills and resources needed to achieve the deforestation targets.

Mobilising the private sector will depend on **(i)** the international community and governments offering avenues and formats for the private sector to invest and engage in the protection, rehabilitation and creation of natural forests as well as on **(ii)** making such investment opportunities competitive with alternative land-use options. Failing this, REDD+ and other instruments for forest-based climate change mitigation

<sup>1</sup> Please note that this is an estimate of the forestry-related impacts of climate change, additional to the climate change impacts of other industrial emissions of greenhouse gases.

<sup>2</sup> REDD+: Reducing deforestation and forest degradation + conservation and enhancement of forest carbon stocks and sustainable management of forests.

and sustainable forest management (SFM) are unlikely to achieve their potential of transforming the way forests are used and perceived. The private sector's participation in the transformation process is essential to the success of such initiatives.

## II. Private finance and investment: how?

The international community has achieved considerable progress on the issue of REDD+ in recent years, culminating in a set of far-reaching resolutions at the UN Conference of the Parties in Cancun in 2010 (COP 16)<sup>3</sup>. However, the critical questions of how the implementation of REDD+ activities will be funded, and what the role of the private sector and private investment will be, have remained unanswered, and related negotiations are ongoing. This report aims to bring to the attention of governments and international climate negotiators **(i)** the views of financial institutions organised under the United Nations Environment Programme Finance Initiative (UNEP FI), **(ii)** the imperative of mobilising private investment and private sector engagement in the implementation of REDD+ activities (*Section 3.1*), **(iii)** the risks and challenges of private sector involvement in REDD+ and approaches to deal with these (*Section 3.2*) and, most important, **(iv)** the policy scenarios that are most likely to rapidly mobilise capital from the private sector at the required scale while actively addressing the concerns and risks of private sector participation (*Section 5.2*). The report highlights – on the basis of scenario analysis – how any future mechanism should combine different features to increase its effectiveness and efficiency.

The effectiveness of a future REDD+ funding mechanism depends on suitable answers to the following questions:

- 1. Will there be an overall deal?** Despite recent progress in the international REDD+ negotiations, it is unlikely that a global REDD+ mechanism will become truly operational unless a broader, global agreement on climate change under the United Nations Framework Convention on Climate Change UNFCCC is reached.
- 2. Who will make performance-based payments in Phase 3<sup>4</sup> of REDD+?** Will performance-based payments come from **(i)** credit buyers via a crediting mechanism and international carbon markets (for eventual REDD+ credits abroad) or **(ii)** bilateral/multilateral funding vehicles equipped with international climate finance (ultimately from taxpayers in donor countries)?

Possible answers:

Carbon credits and decentralised markets  
(polluters in developed countries pay)

Centralised public funding vehicle(s)  
(taxpayers in developed countries pay)

- 3. Who can receive performance-based payments in Phase 3?** Can performance-based payments in Phase 3 be received by **(i)** national governments only, **(ii)** by activity implementers at the subnational level only or **(iii)** by entities at national and subnational levels, including particularly private bodies such as agricultural cooperatives, forest concessionaries and project developers?

Possible answers:

National governments only

Subnational implementing  
entities only, including  
private actors

Both

- 4. Who can design and implement REDD+ activities on the ground?** Are REDD+ activities on the ground open to private sector participation, or can such efforts only be initiated and implemented by public authorities and agencies?

<sup>3</sup> <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>

<sup>4</sup> Among other resolutions on REDD+, the Cancun Agreements establish a phased approach to funding REDD+ in developing countries: **Phase 1** entails funding for public planning, organization and initial capacity-building; **Phase 2** entails funding for the implementation of national REDD+ strategies by governments; and **Phase 3** entails 'performance-based' funding for the implementation of concrete REDD+ projects and programmes on the ground. While there is agreement that Phases 1 and 2 can only be funded with public finance (and private sector stakeholders agree with that), there are diverging views on how Phase 3 activities (which will require the bulk of the total, cumulative REDD+ funding) should be financed. Therefore, the private sector suggestions in this report focus exclusively on the funding of Phase 3 activities.

**Table 1** below provides an overview of different viable scenarios for a future REDD+ funding mechanism. These are based on different combinations of the answers to the questions listed above. The table also provides an assessment, by financial institution members of UNEP FI, of the likeliness and effectiveness of each REDD+ funding scenario to mobilise private investment at the required scale and speed, as well as to address the drivers of deforestation by changing behaviour in the private sector (*Section 5*).

Table 1: **Overview and assessment of REDD+ funding scenarios**

Scenario for the REDD+ funding mechanism	Will there be an overall deal?	Who can receive performance-based payments?	Who will make performance-based payments?	Who can design and implement REDD+ activities?	Effectiveness in private capital mobilisation and in changing private sector behaviour
<b>Scenario 1</b> National crediting under a UNFCCC agreement	✓	National governments	Polluters in industrialised countries: via carbon credits/decentralised markets	Public and private entities	-- <b>Minimal scope for and likelihood of mobilising funding for REDD+ implementation in Phase 3 at the required scale.</b>
<b>Scenario 2</b> Subnational or project crediting under a UNFCCC agreement	✓	Subnational entities (including private sector)	Polluters in industrialised countries: via carbon credits/decentralised markets	Public and private entities	+ <b>Promising scope for and likelihood of private sector involvement in the implementation and financing of REDD+ in Phase 3, as long as private entities at the subnational level are eligible for crediting.</b>
<b>Scenario 3</b> The nested approach as a hybrid solution between the options in Scenarios 1 and 2: crediting at the activity level is combined with strong reference and accounting systems at the national level	✓	Both national governments and subnational entities, including private entities	Polluters in industrialised countries: via carbon credits/decentralised markets	Public and private entities	++ <b>Highest scope for and likelihood of private sector involvement in REDD+ activity implementation and financing under Phase 3, as long as private entities at the subnational level are eligible for crediting.</b>
<b>Scenario 4</b> International fund with national-level incentive payments	✓	National governments and subnational entities	Taxpayers in industrialised countries: through public international finance	Public and private entities	-- <b>Minimal scope for and likelihood of mobilising funding for REDD+ implementation in Phase 3 at the required scale.</b>
<b>Scenario 5</b> Voluntary markets only (no global REDD agreement under the UNFCCC)	✗	National governments and subnational entities	Polluters in industrialised countries: via carbon credits/decentralised markets	Public and private entities	+/- <b>Promising likelihood of mobilising private involvement and investment for REDD+ implementation, but very small size and insufficient scope to mobilise investment at the required scale.</b>

## Summary

### Scenario 1

- Country and regulatory risk, which are considerable in developing countries anyway, are intensified, which significantly deters private actors, financiers and investors from facilitating REDD+ implementation projects on the ground.
- Successful REDD+ activities at the subnational level (as measured against either a national or subnational baseline) are not rewarded unless the entire national REDD+ scheme is successful (measured against a national baseline). This type of 'performance risk' will hardly be acceptable to private sector actors or investors operating at the activity level.
- The drivers of deforestation are not addressed, as there is no shift in price/market signals; the land-use behaviour of the private sector remains unaltered.
- Scarce public funding from international donors would have to be used for Phase 3 in addition to Phases 1 and 2.

### Scenario 2

- Performance-based remuneration contracts are entered into with subnational entities – particularly private bodies such as cooperatives and forest concessionaries; the results are less political risk and better enforcement mechanisms. Weak public governance in less advanced developing countries does not affect activities directly, which makes investments less risky.
- This mechanism creates a price signal for private actors that makes the protection of forests financially competitive with conventional land-use options that lead to deforestation and forest degradation.
- The environmental integrity of REDD+ efforts is weak, as leakage cannot effectively be managed, with negative implications for the marketability of and demand for REDD+ carbon credits on international carbon markets.

### Scenario 3

- Combines all the advantages and strengths of Scenarios 1 and 2 into one framework:
- Allows crediting to and, hence, direct receiving of performance-based payments by operational entities such as municipalities, cooperatives and forest concessionaries, which in turn can secure private finance and investment to run activities.
  - Environmental integrity is ensured through reference levels and MRV (measuring, reporting and verifying) at the national level. Reference levels and MRV at the subnational and regional levels can logically be embedded into national structures. The reduced risk of intra-country leakage gives comfort to buyers on carbon markets, increases prices for REDD+ credits and makes REDD+ investments more attractive.
  - Leakage is managed through a harmonised system of subnational baselines and an all-encompassing national baseline as decided in the Cancun Agreements.
  - This mechanism creates a price signal for private actors that makes the protection of forests financially competitive with conventional land-use options that lead to deforestation and forest degradation.

### Scenario 4

- Private investment can be mobilised in this scenario to participate in an international REDD+ funding vehicle.
- However, the bulk of funds mobilised by such a vehicle can only come from public sources; it would take much time and effort and a well-established track record before private investors felt comfortable investing in a multilateral public investment structure of this nature at the required scale.
- A more fundamental question is how (i.e., from where) investors would be repaid their capital and any expected return on investment, in the absence of a market for REDD+ credits: from which revenue streams would host governments, municipalities, cooperatives and forest concessionaries in developing countries repay debt and service dividends after the successful implementation of REDD+ activities?
- The drivers of deforestation are not addressed, as there is no shift in price/market signals; the land-use behaviour of the private sector remains unaltered.
- Scarce public finance has to be used for Phase 3, in addition to its use in Phases 1 and 2.

### Scenario 5

- Market players should prepare to make use of current opportunities within the voluntary market or dedicated national cap and trade schemes that allow for REDD+ offsets (e.g., AB 32 or the EU ETS Phase 3).
- Though this scenario is not unfriendly from a private sector perspective, the scope and size of voluntary or national regulatory markets will remain far too limited to mobilise investment at the scale required to meaningfully address deforestation and forest degradation in developing countries.

### III. The nested approach – key features and advantages

**The most promising policy option for private sector involvement in REDD+ is the nested approach as described in Scenario 3.**

The nested approach is considered by a number of private sector actors and stakeholders to be the most likely as well as effective type of mechanism to develop under current conditions. An important question – and a core condition of the effectiveness of the nested approach in mobilising private sector skills and investment – is whether private sector entities, such as agricultural cooperatives and forest concessionaries, will also be eligible for REDD+ crediting, in addition to subnational governments. If not, the nested approach could lose much of its effectiveness given the regulatory and political risk profiles of many subnational governments similar to those of governments at the national level. There are a few critical design features of the nested approach that make it appealing from a private sector and investment mobilisation perspective (*for more information, go to Section 5.3*):

- 1. The effect of addressing the drivers of deforestation by changing behaviour in the private sector itself.** The fundamental reason for the unsustainable use of forests and for current trends in deforestation is that forests are worth more cleared than standing: the products derived from deforested lands – be they beef, soybeans or palm oil – offer financial revenue to landholders and economic opportunity to local communities and country governments, while standing forests do not. Systems are needed that – by opening avenues to generate financial revenues from the protection, rehabilitation or creation of natural forests – offer real and sustainable alternatives to conventional private sector practice. This is the key advantage of a market-based mechanism that formally confers monetary value on natural forests based on the real carbon sequestration services they provide (there are also disadvantages and risks, which are highlighted further below).
- 2. The possibility of making performance-based payments directly to the public and private implementers of REDD+ activities at the activity level.** This would help to mitigate the most significant investment risk category in the developing world, country and regulatory risk. This risk category is one of the main impediments to increased private investment in the developing world generally. It results from track records of political instability and corruption as well as regulatory and legal uncertainty in the countries concerned. This risk is already detrimental to private investment in ordinary market settings, but it would be considerably intensified, in a REDD+ context specifically, if all future REDD+ revenue streams, be they from carbon markets or from an international fund, were administered and distributed exclusively by public bodies and through government channels.
- 3. Subnational and regional baselines coexist with an all-encompassing national baseline; this combines environmental integrity with private investment mobilisation.** Enabling performance-based payments at the activity level, as described above, requires the ability to measure local performance accurately by making use of reference levels that are pertinent to the geographic areas concerned. This is not possible if REDD+ performance at the subnational or regional level is measured against national baselines. Rather, any baseline established at the national level, and communicated internationally (in line with the Cancun Agreements), can be disaggregated into a series of subnational baselines, which in turn can be disaggregated into regional baselines at the level of counties and/or municipalities. All these baselines need to be logically interlinked and, at any given point, sum up to the baseline at the national level. This can ensure the environmental integrity of the scheme and avoid leakage while enabling the set-up of subnational baselines that are required for subnational crediting.
- 4. A crediting mechanism beats an international fund: make carbon emitters, not taxpayers, pay for REDD+ implementation.** The bulk of the USD 17 - 40 billion estimates of needed REDD+ investment per year comprises, in essence, opportunity costs related to the conservation or enhancement, rather than the destruction or degradation, of forests. This is a cost that will have to be assumed by somebody, and there are ultimately only two options for how this might happen: **(i)** developed-country emitters of greenhouse gases take on the cost, or **(ii)** developed-country taxpayers do so. Even if an international public funding vehicle for REDD+ were mandated to mobilise private investment, such as from institutional investors

like pension funds, a fundamental question remains unanswered: how, or from which underlying revenue streams, would private investors be repaid their capital (as well as any expected return on investment), in the absence of a market for REDD+ credits? From which revenue streams would host governments, municipalities, cooperatives and forest concessionaries in developing countries repay debt, service interests and dividends after the successful implementation of REDD+ activities? The only answer that can be provided at this stage is: from the generation of carbon credits sold on international carbon markets.

#### **IV. The risks and challenges of private sector participation in REDD+**

While the systematic involvement of the private sector and the mobilisation of private finance are imperative both for the implementation and financing of REDD+ activities at scale and speed, as well as in effectively addressing the fundamental drivers of deforestation, it is also critical to take note of the resulting risks, disadvantages and potential challenges:

- 1. Fungibility.** A repeated concern with involving the private sector, in this case through a market-based REDD+ crediting mechanism that is fully integrated with the global carbon markets, is that the large volume of REDD+ credits potentially available will create downward pressure on prices and destabilise the markets. This in turn can incentivise industrialised countries with emissions-reduction commitments to increasingly meet targets through the import of credits rather than through domestic decarbonisation measures. However, the reality of this is contested. Preventive measures and controls are possible, such as limiting the fungibility of REDD+ credits; this can be supported by simultaneous commitments by countries to more ambitious emissions-reduction targets, which – coupled with flexible modalities around supplementarity<sup>5</sup> – can avoid depressing carbon prices while keeping overall mitigation costs down despite more stringent emissions-reduction commitments. Qualitative restrictions allowing the import only of credits with strong sustainability features can also play an important role.
- 2. Environmental and social safeguards.** There is a legitimate concern that by allowing the private sector and private investors to play a central role in REDD+, projects and activities will be naturally biased towards maximising the carbon component of any forest ecosystem, at the possible expense of local communities, forest-dependent indigenous people, biodiversity and non-carbon forest ecosystem services. Environmental and social safeguards are, however, included in the latest REDD+ resolutions and are being further developed and specified to counterbalance this potential threat. Moreover, discussions with financial institution members of UNEP FI have led to an understanding that strong and clear safeguards can be enablers, rather than deterrents, of private sector involvement in REDD+. Safeguards, and compliance with them, can help avoid reputational and operational risk, clarify legal requirements that must be followed, as well as clearly set out the social and environmental requirements in what for many institutions will be a new area of business.
- 3. Land tenure and ownership rights.** Private sector involvement in REDD+ can lead to increased insecurity and diminish the prospect of forest-dependent communities having their tenure rights formalised; by conferring new value on forest lands, government actors and commercial entities can be incentivised to “actively deny or passively ignore” access and control of forest resources by local, forest-dependent communities.<sup>6</sup> This problem can be addressed by establishing clear land tenure and ownership rights up front. This is not only important so that local communities can economically benefit from REDD+ activities but is in fact a key enabler, and a fundamental condition, of the involvement of the broader private sector and the mobilisation of private finance and investment in REDD+ activities: professional private sector actors such as project developers, forest concessionaries, lenders and investors will, as a core requirement in risk management, object to investing in REDD+ activities unless clear and undisputed ownership systems are in place.

<sup>5</sup> The concept of ‘supplementarity’ relates to industrialised countries with emissions-reduction commitments only being able to use foreign carbon credits (such as from the Clean Development Mechanism or from a future REDD+ crediting mechanism) for compliance in a ‘supplemental’ way, therefore achieving the bulk of emissions-reduction commitments domestically. While the concept is central to the environmental integrity and effectiveness of any global climate regime, it can be argued that, if industrialised countries increased the ambition of their overall emissions-reduction targets, a large fraction of resulting cost increases could be compensated for by more relaxed supplementarity modalities, at least for specific types of carbon credits, such as REDD+ credits, for instance. This would translate into increased global ambition on climate change coupled with solid global demand for REDD+ credits, while keeping global mitigation costs down.

<sup>6</sup> <http://www.forestsclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

**4. Geographic investment distribution, governance and corruption.** A REDD+ funding mechanism that relies on private finance mobilisation needs to recognise the risk of an uneven distribution of investment and commercial REDD+ activity between more advanced emerging economies and less developed countries, especially in the short to medium term.<sup>7</sup> Publicly funded risk-mitigation tools and other support mechanisms for private investment could play an important role in mobilising private REDD+ investment in potentially disadvantaged countries unattractive to private investors.<sup>8</sup>

Key to governance and human rights issues for communities affected by REDD+ are procedural rights and standards for consultation and involvement. Efforts to build REDD+ 'readiness' at the country level under Phase 1<sup>9</sup> should, for this reason, also contribute to building capacity among local authorities and communities to participate in processes under the principle of 'free, prior and informed consent' in the context of REDD+.

There are justifiable concerns that the pricing of forests and the large new financial flows that this will create could fuel new conflict and result in new opportunities for corruption, at both regional and national levels. However, positive improvements and developments for human rights and governance can also be achieved through a well-designed framework for financing REDD+. Robust implementation and monitoring of safeguards and mechanisms for transparent and accountable financial transfers can be established, supported by enhanced international scrutiny of forest management.<sup>10</sup>

## REDDy Set Grow explained

### Part 1: A briefing for financial institutions

Part 1 provides private sector actors, particularly financial institutions, with an overview of the current and emerging business opportunities in forest-based climate change mitigation, including an assessment of the risks involved and possible measures to reduce them. It also outlines the types of roles that financial institutions can play in such activities and efforts. This briefing to financial institutions is likely to also be useful for policymakers in understanding the views, needs and priorities of financial institutions and private sector investors.

Part 1 of REDDy Set Grow addresses the following questions:

- What are the current shape and status of forest carbon markets?
- What are the emerging opportunities for, and potential roles of, investors and financial institutions?
- What experiences have financial actors had when establishing operations in this space?
- What are the risks and barriers that private actors face?

### Part 2: A briefing for policymakers

Part 2 presents to policymakers who are involved in national REDD+ policy processes and international climate change negotiations in the UNFCCC **(i)** the imperative need to systematically mobilise private finance and investment for forest-based climate change mitigation, as well as **(ii)** concrete suggestions of how any future REDD+ funding mechanism could most effectively achieve that.

This analysis will also be useful for financial institutions in understanding the history and current proceedings in the international negotiations on REDD+ funding.

Part 2 addresses the critical question of what policy options, and what type of REDD+ funding mechanism, are most conducive towards effectively financing forest-based climate change mitigation (with a focus on Phase 3 of REDD+ implementation).

7 <http://www.forestclimatechange.org/fileadmin/downloads/movingahead5.pdf>;  
<http://www.forestclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

8 For previous work of UNEP FI on the issue of leveraging private climate finance through public finance mechanisms and risk-mitigation tools, please refer to the UNEP FI submission to the Transitional Committee of the Green Climate Fund (GCF), [http://unfccc.int/files/cancun\\_agreements/green\\_climate\\_fund/application/pdf/unep\\_fi\\_submission\\_on\\_private\\_sector.pdf](http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/unep_fi_submission_on_private_sector.pdf), as well as to the report at: [http://www.unepfi.org/fileadmin/documents/catalysing\\_lowcarbon\\_growth.pdf](http://www.unepfi.org/fileadmin/documents/catalysing_lowcarbon_growth.pdf).

9 Among other resolutions on REDD+, the Cancun Agreements establish a phased approach to funding REDD+ in developing countries: Phase 1 entails funding for public planning, organization and initial capacity-building; Phase 2 entails funding for the implementation of national REDD+ strategies by governments; and Phase 3 entails 'performance-based' funding for the implementation of concrete REDD+ projects and programmes on the ground. While there is agreement that Phases 1 and 2 can only be funded with public finance (and private sector stakeholders agree with that), there are diverging views on how Phase 3 activities (which will require the bulk of the total, cumulative REDD+ funding) should be financed. Therefore, the private sector suggestions in this report focus exclusively on the funding of Phase 3 activities.

10 <http://www.forestclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

## 2. Introduction

**T**he lack of a clear price signal to use forests in a more sustainable way is the key reason why deforestation and forest degradation continue unabated. Changes in financial incentives are needed to both tackle commercial activities, taxes and subsidies that lead to forest loss (the ‘downside’) as well as stimulate activities and initiatives that promote the protection and sustainable use of forests (the ‘upside’). Forest carbon markets are one way, but not the only way, to stimulate the upside while counterbalancing the downside. Markets for forest carbon, however, will not succeed unless the drivers of deforestation are confronted and given greater prominence.

The conservation and sustainable management of forests, especially in the tropics and sub-tropics, are essential parts of the international effort to reduce global greenhouse gas (GHG) emissions and stabilise the global climate system. It is necessary to state up front, though, that forests are not only about greenhouse gas (GHG) emissions and climate change. They provide a host of ecosystem services such as soil stability, water regulation and habitat for biodiversity – services that specifically underpin the climate, food, energy, water and health security on which more than a billion people depend on a daily basis. Given the opportunity to develop a global system to reduce emissions from deforestation and forest degradation (REDD+) through the UNFCCC negotiations, however, this report logically focuses on the ecosystem service of carbon sequestration and in forest biomass and soils.

The protection and enhancement of forests, especially in the tropics and sub-tropics, is an essential part of the international effort to reduce global greenhouse gas (GHG) emissions and stabilise the global climate system. Previous research suggests that a 50 per cent reduction in deforestation is needed by 2030 if the forestry sector is to effectively support global efforts aimed at holding global temperature rise at below 2 degrees Celsius (UNFCCC, 2010). During the past decade, 13 million hectares of tropical forests have disappeared annually on average (FAO, 2010). This is equivalent to about six billion tonnes of carbon dioxide being released into the atmosphere – about 17 per cent of global man-made GHG emissions. The potential of forests to mitigate climate change is vast: stopping tropical deforestation and forest degradation and planting new forests could represent the equivalent of doubling current global nuclear energy capacity, or the construction of two million new wind turbines (Socolow and Pacala, 2004).

However, considerable investment is needed for this potential to be realised – estimated at a minimum of USD 17-33 billion per year to halve emissions from the forestry sector by 2030 (Eliasch, 2008). UNEP’s Green Economy Initiative comes to the conclusion that annual investment in the order of USD 40 billion is needed to both halve global deforestation by 2030 as well as to increase reforestation and afforestation by 140 per cent by 2050 relative to business as usual. Reducing deforestation and forest degradation can mitigate climate change less expensively than many other technology-based abatement options, and with immense potential co-benefits such as biodiversity conservation and watershed protection – ‘free’ services with an estimated annual value of up to USD 45 billion by 2050 (TEEB, 2010). These services are central to human well-being and economic progress in the medium to long term: estimates show that on a business-as-usual path, the deforestation-related impacts of climate change on the world economy could reach USD 1 trillion per year by 2100 (Eliasch, 2008).<sup>11</sup> UNEP’s Green Economy Report concludes that, on average, the global climate regulation benefits of reducing deforestation by 50 per cent exceed the costs by a factor of three (UNEP, 2011).

Investment on the scale of USD 17-40 billion per year is highly unlikely to come from governments alone, especially in light of current budgetary constraints of most donor countries, and thus active participation of private sector investors, including financial institutions (FIs), will be imperative for the implementation of

<sup>11</sup> Please note that this is an estimate of the forestry-related impacts of climate change, additional to the climate change impacts of other industrial emissions of greenhouse gases.

forest-based mitigation activities at the needed scale and pace. This in turn depends on making the protection and enhancement of natural forests, and the planting of new forests, a competitive investment opportunity.

There are many reasons why forest-based mitigation should be interesting to the private sector generally and financial institutions specifically (for more information, please refer to *REDDy Set Grow - Part 1*). However, in order to mobilise this private sector capital at the required scale, it is paramount that policymakers **(i)** offer avenues and formats for the private sector to invest and engage in the protection, rehabilitation and creation of forests; **(ii)** increase the financial competitiveness and attractiveness of forest-based climate mitigation investments and **(iii)** reduce the investment risks involved. While a global framework for forest protection, conservation and enhancement is now a top priority in the international climate change negotiations, there is no consensus yet that a framework agreed upon at this political level will **(i)** aim to involve and **(ii)** be effective in involving the private sector at scale and unlock the required volumes of investment and finance.

It is therefore essential that:

- (i) Financial institutions** fully understand the nature of the commercial opportunities, and potential investment avenues in the area of forest-based climate change mitigation; as well as the public mechanisms and risk-mitigation instruments available for such investments.
- (ii) Policymakers, including in particular UNFCCC negotiators,** understand the needs, priorities and views of private sector investors, lenders and insurers in relation to the specific characteristics of forest-based mitigation opportunities, so as to facilitate their involvement. Without such involvement, it seems likely, for reasons outlined in this report, that the effective implementation of forest-based climate change mitigation at the needed scale seriously risks remaining an idea rather than becoming a reality.

Improving the understanding, along these lines, of both stakeholder groups is the fundamental objective of the two parts of these UNEP Finance Initiative publications.<sup>12</sup>

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12 REDDy Set Grow, Parts 1 and 2

### Box 1: Reducing emissions from deforestation and forest degradation (REDD+)

The international community has debated how to reduce tropical deforestation for decades. At the Rio Earth Summit in 1992, attempts to negotiate an international forest convention failed, while treaties on climate change and biological diversity were successfully concluded. Recognition of forest-based climate change mitigation proved contentious in the Kyoto Protocol negotiations because some saw it as an easy compliance option for developed countries; as a result, eligibility for forest carbon credits under the Clean Development Mechanism was limited to afforestation and reforestation, specifically excluding any recognition of reductions in deforestation. Nevertheless, at the Conference of the Parties in Montreal in 2005 (COP 11) a formal process was launched to consider mechanisms for compensating developing countries for reducing emissions from deforestation (RED), later expanded to include forest degradation (REDD). In 2007, the Bali Action Plan called for a new post-2012 climate change agreement to include *“policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.”* Significant progress was achieved by this expanded approach, labelled **REDD+**, being included as an important element in both the 2009 Copenhagen Accord and the 2010 Cancun Agreements. It is expected to be an important feature of the 2011 climate change negotiations in Durban, South Africa. The Cancun Agreement marked a watershed moment, with countries reaching a definitive agreement on the establishment of a REDD mechanism – leaving open, however, the question of its design and, hence, ability to mobilise the private sector.

Support for REDD+ was also included in US climate legislation that passed the House of Representatives in June 2009 but stalled in the Senate in 2010 (Cortez et al., 2010). Meanwhile, voluntary trading of carbon credits related to reduced deforestation projects also has a long history, with forest carbon credits actually forming the basis of the world's first-ever carbon trades in the early 1990s (Hamilton et al., 2010). In the absence of a legally binding international framework, the voluntary market is currently an important, but by far insufficient, driver of REDD+ activity.

While international negotiations on REDD+ will continue and while there is still no guarantee that an agreement will be reached, multilateral progress on REDD, and the mobilisation of considerable amounts of resources, is already taking place outside the formal negotiations: in June 2010, 69 governments, including all major forest-rich developing countries, joined efforts in the Interim REDD+ Partnership. This partnership serves as an interim platform to coordinate REDD+ activities, with the objective of enhancing the effectiveness, efficiency and transparency of current activities and existing financing instruments. Furthermore, this partnership is facilitating the flow of USD 4 billion in fast-start climate finance pledged for REDD+ efforts, particularly for readiness and capacity-building, and is demonstrating the future potential of REDD+ activities.

### Box 2: Afforestation and reforestation (A/R) as part of the Clean Development Mechanism (CDM) in developing countries

In addition to the concept and international approach of REDD+ described in Box 1, afforestation and reforestation (**A/R**) projects that create new forests by planting trees or assisting natural regeneration have already been eligible for carbon credits under the Kyoto Protocol's Clean Development Mechanism (CDM). The carbon uptake of the growing trees creates a carbon sink in the tree biomass. At the climate negotiations in Marrakesh in 2001, it was agreed that industrialised countries could meet part of their emissions-reduction commitments under the Kyoto Protocol by financing A/R activities in developing countries through the CDM. Although an international framework exists to support A/R in developing countries, the voluntary market is currently a stronger driver of A/R activity (Hamilton et al., 2010). The newer REDD+ concept also includes the activity of 'enhancing forest carbon stocks', which can in theory comprise afforestation and reforestation activities.

### 3. Private sector involvement in financing forest-based climate change mitigation: roles, benefits and challenges

This section explains why the systematic involvement of the private sector and the mobilisation of private investment and finance at scale are imperative to close the funding gap in REDD+ and achieve the REDD+ objectives in line with what is needed; it also highlights the challenges of private sector involvement from a government and public policy perspective and how these can effectively be dealt with.

#### 3.1 Why is the involvement of private sector finance in REDD+ imperative?

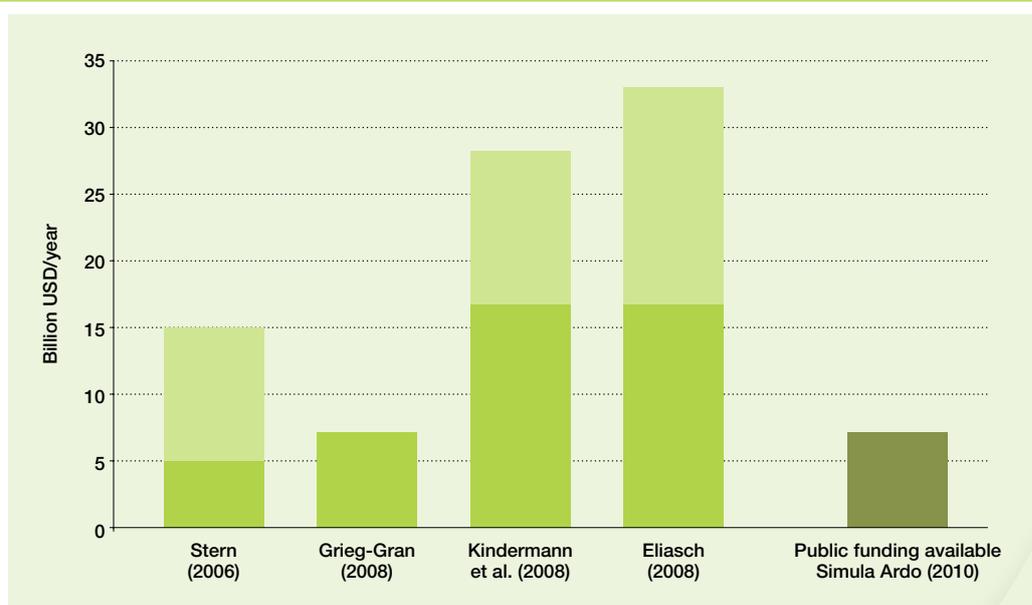
##### The need for scale and speed

A wide variation exists in estimates of the costs of and investment needs for reducing deforestation and forest degradation at the required scale and speed. Estimates start at lower ranges of USD 5-15 billion annually (Stern, 2006), or USD 7 billion annually for 30 years (Grieg-Gran, 2008), for a 50 per cent reduction in global deforestation. At the higher range, Kindermann et al. (2008) assume investment needs of USD 17-28 billion annually for a 50 per cent reduction in deforestation from 2005 to 2030, while *The Eliasch Review* estimates the investment required to achieve a 50 per cent cut in deforestation by 2030 at USD 17-33 billion per year. In fact, investment volumes are expected to be even higher in reality, as the estimates used here mainly refer to opportunity costs from other land-use activities, excluding significant cost categories such as transaction costs, as well as administration and monitoring costs in the implementation of REDD+.

Simula Ardo (2010) estimates the total amount of available public REDD+ funding to currently stand at a total of approximately USD 7.2 billion. **Figure 1** shows the gap between *annual* investment need estimates for REDD+ and the relevant public funds available *to date*. Please note that the amount of public funds available concerns all cumulated public REDD+ funding pledged since 2008. It is not an annual figure. Hence, the actual gap is greater than that displayed in **Figure 1**.

Figure 1:

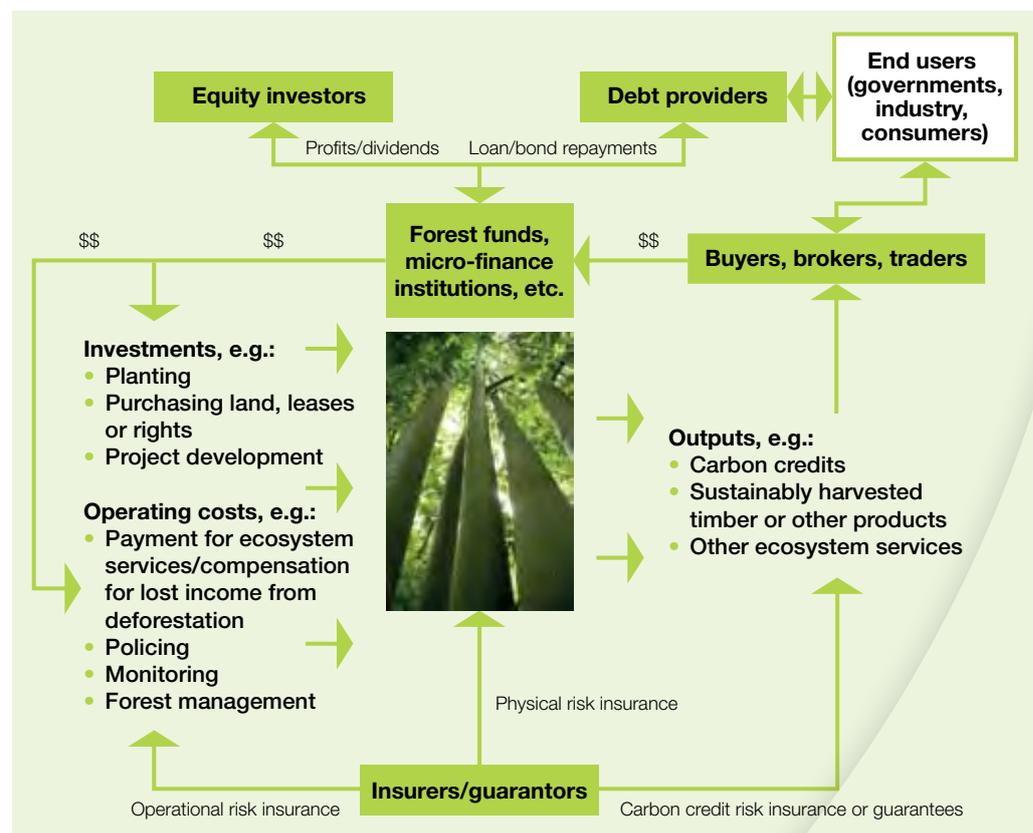
**Annual investment estimates for reducing deforestation versus estimate of public funds available to date (note that this is cumulative funding pledged since 2008 and does not represent annual funding)**



There is an overwhelming funding gap between what is needed to effectively address deforestation and the public funds currently available. Carbon markets are thought to be one of the ways to mobilise private sector finance for REDD+. In fact, already today private funding for REDD+ activities is being mobilised through the voluntary carbon markets. See *REDDy Set Grow – Part 1* for cases in which public and private financial institutions have funded the protection, rehabilitation or creation of forests on the basis of carbon offsets generated for the voluntary carbon markets (UNEP FI, 2011). In fact, voluntary markets have arguably been more successful in mobilising finance for forest-based mitigation than regulatory markets for afforestation and deforestation under the Clean Development Mechanism (CDM). However, the voluntary markets remain far too small to mobilise the required funding for REDD+ at the scale stated above (see *REDDy Set Grow – Part 1*).

Private sector involvement and finance are not only important to tackle the funding gap itself; the speed at which the private sector can mobilise finance at the required scale is important as well. With project implementation, development and financing, the private sector can offer a varied and substantial amount of expertise, skills and innovation that could greatly add to the efficiency and success of REDD+ activities. Roles for investors and asset managers include equity investors or acting as brokers or intermediaries. Debt finance can take the form of loans, leveraged funds or individual projects. Insurance and guarantees are crucial ways to manage both conventional investment risk in the forestry sector as well as risks that are more specific to investments in the area of forest-based climate change mitigation (**Figure 2**).

Figure 2:  
**Overview of the major potential roles for financial institutions in forest-based mitigation investments**



### The need to change private sector behaviour

As much as there is a key role for private actors and investors to play in mobilising investment for the protection and creation of forests, private actors, including investors and financial institutions, today continue playing a central role in and contributing to current deforestation and forest degradation trends.

**Figure 3** gives an overview, of the areas where the private sector and capital markets today benefit from deforestation, particularly in areas such as timber extraction, agricultural commodities (especially soybeans, palm oil and meat) and infrastructure. The figure furthermore highlights how the economic use of forests can be shifted to a more holistic and sustainable approach and how forests can, in fact, become a pillar of

the Green Economy. This can happen through a combination of efficiency gains and more fundamental step changes, particularly by:

- (i) Increasing efficiency and inducing step changes in the sectors that drive deforestation (higher land efficiency in agricultural production, greater exploitation of already deforested land, shifts from conventional agriculture to agro-forestry and a greater focus on tree crops);
- (ii) Enhancing land efficiency in the production of conventional forest products, such as timber, fibre and other non-timber products; and
- (iii) Establishing markets for and creating monetary value for forest-based ecosystem services, which, despite their tremendous importance to societal and economic well-being, remain formally undervalued.

Private actors, investors and financial institutions have fundamental roles to play in rethinking their own behaviour patterns and shifting – via all three avenues above – the way today’s forests are exploited. In order to be truly effective, a REDD+ funding mechanism, in addition to finding new sources of investment, should aim to fundamentally reshape the way forests are currently exploited, towards more sustainable land-use patterns. This will have to entail concepts that effectively and systematically address the drivers of deforestation at their very roots. In simple terms, the main driver of deforestation is that clearing land and cutting down forests are financially more attractive, by far, than protecting, rehabilitating and creating forests. This means that, at present, private sector actors, ranging from subsistence farmers at the local level to international companies active in the production and export of agricultural commodities, lack any reason not to deforest.

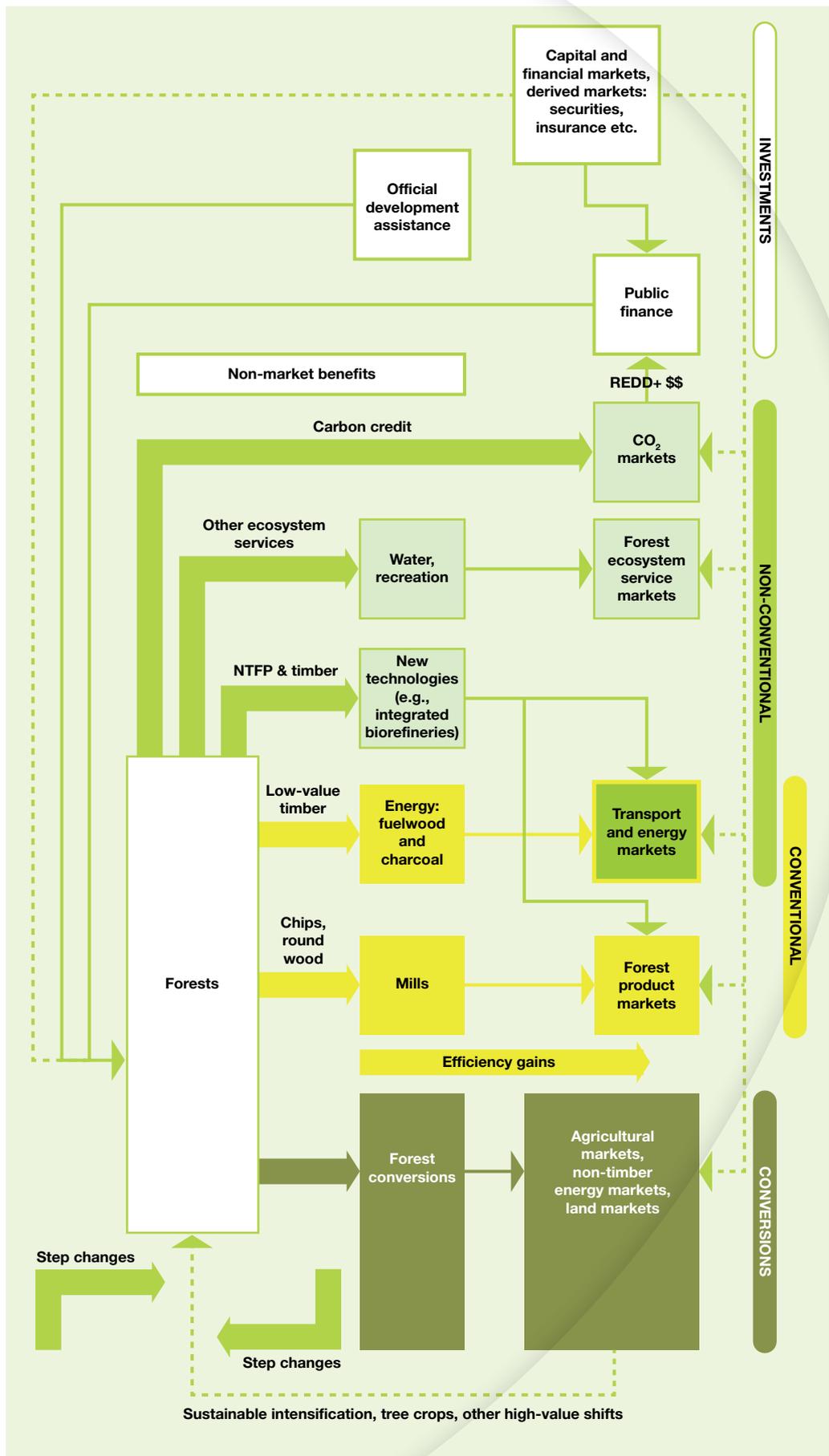
The latter is a critical reason of why any future REDD+ funding mechanism needs to involve the private sector: so as to change current behaviour patterns in it. This can happen in an effective way only if private sector actors are offered financially competitive alternatives to current land-use and deforestation patterns; only if investing into forest protection, conservation and enhancement can offer potential revenue streams competitive with the revenue streams offered by the unsustainable production of timber and agricultural commodities such as soy beans, palm oil, and beef, will the private sector truly shift behaviour patterns and unlock the skills and resources needed to achieve the REDD+ targets described above.

Against this background, the design of a REDD+ funding mechanism can play a crucial role in creating monetary value for forest-based ecosystem services (in this case the sequestration and stocking of CO<sub>2</sub>) and that currently remain undervalued. Only if ecosystem services are attributed an appropriate monetary value will the protection, rehabilitation and creation of forests result in revenue streams which are attractive for private sector actors and investors. Only like this will the drivers of deforestation be addressed, and private sector behaviour which remains at the heart of the deforestation challenge shift towards more sustainable paths.

Figure 3:

**Framework of links among forests, forestry and financial institutions**

Source: Prabhu after Aulisi et al. (2008), personal communication



### 3.2 Risks and challenges of private sector involvement

While the above demonstrates that the systematic involvement of the private sector and the mobilisation of private finance is imperative both for the implementation and financing of REDD+ activities at scale and speed, as well as in effectively addressing the fundamental drivers of deforestation, it is also critical to take note of the resulting risks, perceived or real, disadvantages and potential challenges. Some of these are highlighted below.

#### Implications of REDD+ credits fully fungible with other types of carbon credits

A repeated concern with involving the private sector, in this case through a market-based REDD+ crediting mechanism that is fully integrated with the global carbon markets, is that the large volume of REDD+ credits potentially available will create downward pressure on prices and destabilise the market. This in turn can incentivise industrialised countries with emissions-reduction commitments to increasingly meet targets through the purchase of credits rather than through domestic decarbonisation measures. However, the reality of this is contested. Preventive measures and controls are possible, such as limiting the fungibility of REDD+ credits, supported by a simultaneous commitment by countries to more stringent emissions-reduction targets in order not to depress carbon prices. Qualitative restrictions allowing the import only of credits with strong sustainability features, for instance, can also play a role. This comes down to a debate over whether there should be full fungibility of REDD+ credits with other types of carbon credits, or whether REDD+ credits should be traded on a separate market. This is also explored later in this report.

**Non-fungibility of REDD+ credit with other types of carbon credits should not be rejected up front, although it does add a layer of complexity to emerging carbon markets. If a path to full or partial fungibility is chosen, it is necessary to impose preventive measures to ensure REDD+ credits do not depress global carbon prices.**

#### Safeguards to ensure positive environmental and social implications of REDD+

The main perceived risk and objection to having private investments in REDD+ is the explicit orientation to maximize profit at the expense of the potential of forest-based mitigation activities that generate significant environmental and social co-benefits (Ebeling and Yasue, 2008). This would, for example, come from using carbon density as the only indicator for locating REDD+ activities in order to maximize carbon savings and thus carbon credit generation, or from activities that reduced emissions without reducing deforestation or forest degradation. Comprehensive framework design and implementation and well-informed policy approaches are therefore needed to respect the intention of REDD+, stated in the Cancun Agreements and other documents, to alleviate poverty, contribute to social and economic development, conserve biodiversity and protect ecosystems.

The Cancun Agreements 2010, reached at the UNFCCC COP 16, include a range of safeguards and guidance principles for REDD+ activities<sup>13</sup>, which are intended to prevent negative environmental and social implications of REDD+ activities. It is explicitly stated that REDD+ activities should:

**Be environmentally integrated and also consider the non-carbon functions of forests; and**

**Be implemented in the context of sustainable development and aimed at reducing poverty while responding to climate change.**

In addition, all actions should be consistent with conservation of natural forests and biodiversity, and respect the rights and knowledge of indigenous people as requested by international agreements. However, the language used for the latter safeguards is softer than for the guiding principles: while the former statements are required in implementation (activities “should”), the latter are recommendations that “should be promoted and supported”.

<sup>13</sup> See ‘Section C, paras 68-79. Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries’, and Annex 1 for guidance and safeguards. [http://unfccc.int/files/meetings/cop\\_16/application/pdf/cop16\\_lca.pdf](http://unfccc.int/files/meetings/cop_16/application/pdf/cop16_lca.pdf).

The practicalities of how compliance with the safeguards will be ensured and monitored remain unclear, and they remain vulnerable to dilution and variable to interpretation at the national level. It is likely that an international monitoring system will be relied upon to ensure safeguards are being enforced and that there is consistency among countries, with it being important that this system is independent and accountable to a multi-stakeholder body.<sup>14</sup>

However, it should be noted that encouraging and maintaining effective participation from the private sector does not have to oppose a REDD+ regime characterised by strong and clear safeguards for REDD+ activities. Discussions with a number of financial institution members of UNEP FI have led to an understanding that, in fact, strong environmental and social safeguards can be enablers, rather than deterrents, of private sector involvement in REDD+. Safeguards, and compliance with them, can be important conditions for the involvement of financial institutions in REDD+, as they can help avoid reputational and operational risk, clarify legal requirements that must be followed, as well as clearly set out the social and environmental requirements in what for many institutions will be a new area of business. While stricter laws and regulations are often argued to be overwhelming and discouraging to private sector participation, it could be argued that the language of the current REDD+ safeguards needs to be sharpened and clarified further.

**Clear and sharp environmental and social safeguards and standards can be enablers for, rather than deterrents of, private sector involvement and investment in REDD+ activities.**

### Land tenure and ownership rights

The lack of clear land tenure and resource rights is also a concern by private sector actors seeking involvement in markets for REDD+ credits. Large segments of the populations that depend on forest lands and resources have little or no secure rights or formal tenure as protection for their habitats and livelihoods. The insecurity of property rights of many forest-dependent communities is related to poverty, forest destruction and degradation, and a key constraint to increasing rural incomes through sustainable forestry.<sup>15</sup> It is believed that private sector involvement in REDD+ could further increase insecurity and diminish prospects of forest-dependent communities to have their tenure rights formalised: by conferring new value on forest lands, government actors and commercial entities could be incentivised to “actively deny or passively ignore” access and control of local, forest-dependent communities to forest resources.<sup>16</sup>

It is important for all stakeholders to realise that private sector involvement in REDD+ and forest carbon projects does not have to entail efforts to privatise, or change control and access to, forest resources. The concept of financing forest-based mitigation projects and REDD+ activities by the private sector must be distinguished from transferring or changing current ownership of forest lands. Most importantly, clear land tenure and ownership rights are not only important so that local communities can economically benefit from REDD+ activities. They are in fact a key enabler, and a fundamental condition, for the involvement of the broader private sector and the mobilisation of private finance and investment in REDD+ activities: professional private sector actors such as project developers, forest concessionaries, lenders and investors will object to investing in REDD+ activities unless clear and undisputed ownership systems are in place as a core requirement in risk management. Private sector actors will hesitate to invest in situations where local rejection or, even social conflict, cannot be categorically ruled out.

Analysis has identified three types of tropical forests: **(i)** forests beyond the agricultural frontier (49 per cent of tropical forests); **(ii)** forest frontiers and disputed areas (37 per cent); and **(iii)** forest mosaic lands (14 per cent). It is suggested that these will each have different policy and finance needs, creating both different governance challenges and different market opportunities. Currently, and for the reasons stated above, private sector finance can most easily be leveraged, and can currently play a greater role, in forest mosaic lands with stronger land tenure and governance. They do, however, represent the smallest share of tropical forests. Private finance is likely in forest frontiers if an enabling environment for REDD+ investments is

<sup>14</sup> Forests and climate change after Cancun, 2011, p. 14.

<sup>15</sup> <http://www.forestsclimatechange.org/fileadmin/downloads/movingahead11.pdf>, p. 4.

<sup>16</sup> <http://www.forestsclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

secured – on the back of the REDD+ funding mechanism as suggested in this report – and less likely in forests beyond agricultural frontiers, as clear land tenure will be required for performance-based REDD+ payments to private sector entities.<sup>17</sup>

**Clear and undisputed land tenure and ownership rights are not only a condition for equitable participation of local communities and indigenous peoples in REDD+ activities, but a key condition for the involvement of the broader private sector and the mobilisation of private finance and investment in REDD+ activities. REDD+ readiness activities should include efforts to formalise land tenure and ownership rights of forest lands, particularly for forest-dependent communities.**

### **Geographic investment distribution, governance and corruption**

A REDD+ funding mechanism that relies on private finance mobilisation needs to recognise that there may be an uneven distribution of investment and commercial REDD+ activity between more advanced emerging economies and less developed countries, especially in the short to medium term. As has been observed with the Clean Development Mechanism (CDM), investment is less likely where there is weak governance, concentrating private investments in emerging economies with stronger legal frameworks and financial markets. Greater attention therefore needs to be given, as part of overall REDD+ readiness efforts, to address the needs of countries that have weaker governance systems, including in the forestry sector, or are slower to establish these.<sup>18</sup> Publicly funded risk-mitigation tools and other support mechanisms for private investment could play an important role in mobilising private REDD+ investment to potentially disadvantaged geographies and countries unattractive to private investors.<sup>19</sup>

Key to governance and human rights issues for communities affected by REDD+ are procedural rights and standards for consultation and involvement. The principle of ‘free, prior and informed consent’ (FPIC) for communities and indigenous peoples affected by external development interventions is being increasingly recognised by governments and the private sector, and establishing similar standards in the context of REDD+ implementation at all stages and levels of design and implementation is being suggested by stakeholders.

There are justifiable concerns that the pricing of forests and the large new financial flows that this will create could fuel new conflict and result in new opportunities for corruption, at both regional and national levels. However, positive improvements and developments for human rights and governance can also be achieved through a well-designed framework for financing REDD+. Robust implementation and monitoring of safeguards and mechanisms for transparent and accountable financial transfers can be established, supported by enhanced international scrutiny of forest management.<sup>20</sup>

**The potentially uneven geographic distribution of private REDD+ investment needs to be addressed by the future funding mechanism. Publicly funded risk-mitigation tools and other support mechanisms for private investment could play an important role in mobilising private REDD+ investment to potentially disadvantaged geographies and countries currently unattractive to private investors.<sup>21</sup>**

**Efforts to build REDD+ ‘readiness’ at the country level should contribute to building capacity among local communities and indigenous peoples to participate in processes towards ‘free, prior and informed consent’ (FPIC) in the context of REDD+ implementation processes.**

17 [http://www.unfccc.int/files/methods\\_science/redd/application/pdf/financing\\_redd.pdf](http://www.unfccc.int/files/methods_science/redd/application/pdf/financing_redd.pdf)

18 <http://www.forestclimatechange.org/fileadmin/downloads/movingahead5.pdf>;  
<http://www.forestclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

19 For previous work of UNEP FI on the issue of leveraging private climate finance through public finance mechanisms and risk mitigation tools, please refer to the UNEP FI submission to the Transitional Committee of Green Climate Fund (GCF): [http://unfccc.int/files/cancun\\_agreements/green\\_climate\\_fund/application/pdf/unep\\_fi\\_submission\\_on\\_private\\_sector.pdf](http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/unep_fi_submission_on_private_sector.pdf), as well as to the report under: [http://www.unepfi.org/fileadmin/documents/catalysing\\_lowcarbon\\_growth.pdf](http://www.unepfi.org/fileadmin/documents/catalysing_lowcarbon_growth.pdf)

20 <http://www.forestclimatechange.org/fileadmin/downloads/movingahead11.pdf>.

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For any REDD+ agreement to be effectively implemented, legislators must confront the concerns and areas of risk arising from involving the private sector. What is most important is that these challenges are addressed through action at international, national and regional levels, and on an ongoing basis through all three phases of REDD+. **As the discussion above illustrates, it should be realised that many requirements of the private sector and those of other stakeholders, particularly local communities, are, however, rarely in conflict.**

## 4. From Copenhagen to Cancun to Durban: the state of forest-based mitigation in international negotiations

**S**ince the climate change negotiations in Bali in December 2007, REDD+ has been ever more prominent on the international agenda. This section provides an overview of the discussions on forest-based mitigation within the realm of the international climate change negotiations. It also highlights the outstanding issues that continue to lead to areas of uncertainty and risk, and outlines what outcomes, especially with regards to REDD+, are most and least promising in the context of mobilising private sector investment and finance.

### 4.1 Background and overview

REDD+ was included as an important element in the Copenhagen Accord (2009)<sup>22</sup> following COP 15 in 2009. REDD+ has also been included in US climate legislation that passed the House of Representatives in June 2009, and in draft Senate legislation that was introduced in May 2010 (Cortez et al., 2010). While the Cancun Agreements reached in December 2010 specify the inclusion of a REDD+ mechanism in a future climate change regime, a range of important issues remain unresolved. One of these is the essential question of how REDD+ activities will ultimately be financed, and how to close the REDD+ investment gap of approximately USD 17-40 billion per year (*as outlined in Section 3.1*). A second concern is how to reform A/R activities under the CDM to accelerate and scale up project development in a way similar to that observed in the voluntary carbon markets.

### 4.2 Agreements under REDD+ and promising outcomes for the private sector

A range of formal agreements have been reached with regards to a future REDD+ mechanism. A number of these agreements have resulted in promising outcomes for the prospects and the likely effectiveness in involving the private sector and unlocking private investment and finance for REDD+.

#### Current REDD+ agreements

- 1. There is consensus that a REDD+ mechanism will be part of a future climate change regime.** Japan, Norway, the UK and the US have pledged considerable resources – close to USD 4 billion – to help developing countries prepare for the future mechanism.
- 2. The term REDD has been extended to REDD+** as of the 2007 Bali Action Plan, which in addition to reducing emissions from deforestation and degradation now includes the conservation, management and enhancement of forest carbon stocks in developing countries. As agreed upon in Cancun, the five eligible activities under REDD+ are therefore:
  - Reducing emissions from deforestation
  - Reducing emissions from forest degradation
  - Conservation of forest carbon stocks
  - Sustainable management of forests
  - Enhancement of forest carbon stocks

<sup>22</sup> <http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf>.

- 3. The Cancun Agreements formulate and outline a set of guidelines and safeguards,** aimed at ensuring that REDD+ activities are in line with social, environmental and governance principles, such as the consistency of REDD+ activities with the goals of conservation of forests and biological diversity and poverty reduction. Safeguard language also mentions the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and addresses land tenure and gender considerations.<sup>23</sup> Please refer to *Section 3.2.2* for an elaboration of why clear and sharp safeguards are important enablers of private sector participation in REDD+.

### Box 3: Activities in different REDD+ phases

#### REDD+ 'readiness'

##### Phase 1 - Planning, organization and initial capacity-building

- Organization of the REDD+ process
- Consultations and stakeholder engagement
- Development of national REDD+ strategy
- Preparation of action plans
- Design of policies and measures
- Elaboration of reference scenario
- Design and testing of monitoring system
- Initial training and other capacity-building activities
- Pilot and demonstration activities

##### Phase 2 - Implementation of REDD+ national strategies

- Policy, legal and institutional reforms
- Land-use planning and zoning
- National forest inventory
- Strengthening of law enforcement
- Capacity-building for REDD+ implementation on different levels
- Technology transfer
- Targeted programs to address drivers of deforestation and forest degradation
- Implementation of demonstration activities
- Development of the performance-based payment system for Phase 3

##### Phase 3 - Performance-based incentive payment systems

- Administration of the payment system
- Implementation of results-based actions by forest communities, landowners, the private sector, government agencies and other stakeholders
- Implementation of other low-carbon activities to reduce pressure on forests
- Monitoring and verification of implementation and outcomes of results-based actions

- 4. There is agreement on a range of methodological issues,** including:

- An approach to estimate emissions from land-use activities, removals by sinks, forest carbon stocks and change in forest area
- That reference levels for deforestation and/or for emissions from deforestation should ultimately be at the national level, but that in the interim sub national reference levels will be accepted as well
- That monitoring and reporting systems for REDD+ activities should ultimately be at the national level, but that in the interim sub national systems will be accepted as well
- That developing countries, in establishing forest reference emission levels and forest reference levels, should do so transparently, taking into account historical data, and adjust for national circumstances

<sup>23</sup> See *Section 3.2* for a detailed description of some of the key challenges raised by the involvement of the private sector relating to these principles.

**5. The official adoption of a phased approach.** The REDD+ process is now formally divided into three different phases

**Phase 1:** Readiness and capacity-building, accompanied by pilot and demonstration activities

**Phase 2:** Reform and implementation of national policies and REDD+ strategies

**Phase 3:** Performance-based payments for reductions in deforestation levels

The phased approach is intended to address country-specific needs for sufficient time and resources to prepare and build capacity for REDD+ implementation. It enables countries with different circumstances to pilot and mainstream REDD+ actions before a results-based payment system is eventually established.

The Cancun Agreements explicitly mention the eventual evolution of REDD+ into a system of **performance-based payments** under Phase 3 where actions are subject to measuring, reporting and verification (MRV). The Cancun Agreements further request developed countries to support, with public finance and through both multilateral and bilateral channels (see DECC, 2011, for further details on the current donor landscape), the implementation of Phases 1 and 2 in developing countries. This means that funding requirements can be better distributed among funding sources (see **Table 2**). It also implies that private sector involvement could mainly be concentrated in Phase 3, where payments are intended to take place in a performance-based manner.

Table 2:  
**Different roles for private and public funding sources in the phased REDD+ process**

Funding source	Phase 1	Phase 2	Phase 3
Bilateral			
FCPF			
UN REDD			
Private sector			

**6. Keeping open the option of sub national/project-level accounting and crediting.**

While many indications hint at the eventual crediting at the national level, this is not specifically contained in the Cancun Agreements. This means that Parties to the COP would like to keep open the option of direct sub national crediting, even though most other activities (e.g., monitoring, reference-level setting) are specified to happen at national scale. For the private sector, this implies the possibility that project-level investments in REDD+ activities could be issued directly with carbon credits rather than going through a national allocation process that may be associated with uncertainties and regulatory risks. For a full elaboration on and more comprehensive analysis of different design options and future scenarios for the REDD+ funding mechanism, please refer to *Section 5*.

#### **4.3 The Cancun Agreements: areas of concern and uncertainty for the private sector**

A number of issues remain unresolved, some of which cause concern and uncertainty for the private sector (see Table 3 for agreed and undecided issues). Some of the most relevant outstanding issues under REDD+ include:

**1. Will there be an international deal on climate change?** While the international community has agreed that REDD+ will be a component of a future international climate change regime, it remains uncertain whether such a regime will indeed be established in the near future. This will only happen if the international community achieves consensus on many contested issues both inside but especially outside of the actual REDD+ negotiations.

**2. How will the REDD+ investment gap be closed?** While it has been agreed that the financing for preparedness and capacity-building efforts in Phases 1 and 2 will be realised through public means and disbursed through development banks and similar channels, the fundamental question of how the implementation of actual REDD+ investments in Phase 3 will be financed has remained unaddressed. Will results-based REDD+ projects be financed through public transactions in a government-to-government fashion? Or will a crediting mechanism be established to translate resulting emissions reductions into carbon offsets that can be traded on international markets? Would such credits be fungible with existing carbon credits and allowances under the CDM, Joint Implementation (JI), International Emissions Trading (IET) or the different regional cap and trade schemes? Or will additional and separate market structures be put in place?

**3. How will REDD+ activities, in any of the envisaged phases, relate to the system of Nationally Appropriate Mitigation Actions (NAMAs) currently under development?** Although much has been discussed about establishing an official link between REDD+ and NAMAs, the Cancun Agreements say very little on this point. REDD+ is not explicitly mentioned in the text concerning NAMAs. Assuming there will be a link, it is not yet clarified whether and how accounting of REDD+ activities could be structured to avoid double counting of REDD+ activities as NAMAs.

**4. How - guided by which principles and methods - will reference baselines be calculated?** The Cancun Agreements require the establishment of a national forest reference emission level and/or forest reference level, with sub national levels accepted as an interim solution. This is to be decided according to the principles determined at COP 15 in Copenhagen (2009) of **(i)** transparency, **(ii)** a basis on historical data, and **(iii)** adjustment for national circumstances, but also be subject to future provisions that may be adopted during subsequent COP meetings.

This means that historical emissions and deforestation rates will be the basis for reference-level setting, and then country-specific projections will be used to adjust expected future deforestation levels. Depending on specific national circumstances, reference levels could also be a combination of several sub national reference levels. What these “national circumstances” may be, what they could entail and how they would be weighted compared to historical data are, however, still open to discussion.

**5. How will compliance with safeguards be reported, and who will use the information provided?** The success of REDD+ will be determined by how well the mechanism considers and addresses the needs and interests of all relevant stakeholders (see *Section 3*). However, there are concerns that if REDD+ considers multiple benefits, it may overwhelm the mechanism and reduce its capacity to carry out its primary aim of carbon storage and enhancement (UN-REDD, 2010). Compliance with safeguards contained in the Cancun Agreements is not mandatory. The COP 16 decision requires that these standards be “promoted and supported”, and it requests the development of a system “for providing information on how the safeguards are being addressed and respected [...] while respecting sovereignty” (Cancun Agreements, 2010). As for now, this does not entail a strict reporting system of safeguards but rather leaves it to the discretion of individual REDD+ countries to establish an information system rather than a reporting system. It has not been specified how and to whom this information must be made available. However, it is expected that a more strict definition will be discussed in upcoming negotiations.

**Table 3** summarises which issues were in principle agreed upon in Cancun and which remain to be resolved.

Table 3:

**Resolved and open issues in REDD+ negotiations, based on the Cancun Agreements from COP 16 (adapted from Bleaney, Peskett and Mwayafu, 2010)**

Agreed Upon	Undecided
Principle to contribute to sustainable development and poverty reduction	Nature of financing (i.e., amount, source) – to be further discussed at COP 17 in Durban
Safeguards to be considered (including rights, good governance and protection of natural forests)	Scale, implementation procedures – acceptance of sub national implementation
Scope (i.e., REDD+)	Scale – acceptance of sub national credit allocation
Phased approach (i.e., policy/strategy development; policy/strategy implementation; results-based actions)	Measuring, reporting and verifying (MRV) of support provided by developed countries
Consideration of drivers of deforestation and forest degradation, land tenure, forest governance, gender issues and safeguards when developing national strategies	Commitment to MRV for REDD+ activities and results-based actions in a phased approach
National approach to reference scenarios as well as to monitoring and reporting systems; acceptance of sub national approaches in the interim	Link to Nationally Appropriate Mitigation Actions (NAMAs)/low greenhouse gas emission strategies; the link is contained in the text but remains unspecified

#### 4.4 CDM afforestation and reforestation - what is happening, and what are potential lessons for REDD+?

The modalities and rules governing forest activities under the CDM A/R were negotiated and decided upon during the early Kyoto negotiations in the years 2000 to 2003. Since the rules were determined in 2003, the topic has not been the subject of much debate during subsequent climate negotiations. After a slow start for forestry under the CDM, the project cycle has finally picked up some momentum, with a total of 17 projects registered and a further 32 in earlier stages of the development cycle as of 1 March 2011 (UNEP Risoe, 2010).

While the latest draft negotiation text by the chair of the AWG-KP, released after the UNFCCC Climate Change Conference in Tianjin, China, in October 2010, still included a paragraph about the potential expansion of eligible CDM A/R activities, no text concerning this topic is contained in the Cancun Agreements. Thus, while the expansion of CDM A/R has been discussed on several levels during the past years, there are no concrete recent developments on the potential scope or modalities of such expansions. In particular, none of the much-needed reforms of CDM A/R have been suggested or discussed.

The following points outline areas that currently hamper private sector interest in CDM, and which need to be addressed at the policy level in order to make CDM A/R an interesting investment opportunity:

##### **COSTS of CDM A/R projects**

- High up-front costs for land, seedlings and labour
- Economies of scale – large-scale projects are considered more financially viable than small ones
- Complex and cumbersome project development process with stringent project design documents (PDDs) and methodological requirements
- Specialised carbon forestry consultants are usually required to prepare project documentation and carry out associated analyses

## **REVENUES from CDM A/R projects**

- Long time duration for return on investment: first credits issued only after several years
- Currently, projects result in temporary carbon credits rather than permanent ones, with the effects of low prices and little demand
- Main demand could have come from the European Union Emission Trading Scheme (EU ETS), but temporary credits have been excluded
- Currently not a high-revenue activity with attractive rates of return

There are a range of proposals referring to a potential amendment to the CDM, including reforming the temporary crediting of CDM A/R activities to create permanent carbon credits that are more attractive to buyers. This could be done via several options:

- Host countries taking responsibility for any potential reversals (as is currently the case with the JI approach)
- Establishing insurance schemes for project activities to cover the risk of credit cancellation
- Creating buffers of credits from CDM A/R projects to compensate for reversals, as is currently the case in the Voluntary Carbon Standard (VCS)
- Exempting low-risk projects from modalities and procedures for addressing potential non-permanence
- Creating credit reserves from which any reversals can be compensated at the end of a commitment period
- Simplifying methodologies relating to CDM A/R projects in terms of eligibility requirements and carbon accounting requirements
- Increasing the limit for small-scale CDM A/R projects, in order to allow a greater number of projects to benefit from the simplified rules and modalities for small-scale projects; doing so would facilitate the flow of a greater number of A/R projects through the CDM pipeline under simplified conditions

## 5. Policy scenarios that best stimulate private sector finance for REDD+

**A**s discussed previously, a range of policy options and different scenarios for a future REDD+ mechanism are currently under discussion. The we will summarise them in this section

Following the Cancun Agreements, there are a number of different scenarios on the table for a future REDD+ funding mechanism. The different scenarios are summarised in this section. We also identify which international policy options and resulting scenarios would be most effective in closing the REDD+ investment gap by mobilising private finance at scale.

The current status of CDM A/R was outlined in *Section 4.4*, and scenarios concerning long-term policy options for the broader land-use sector are illustrated below. These suggestions could potentially be part of a redesigned CDM or REDD+ mechanism. They could also constitute an independent land-based approach to emissions reductions.

### 5.1 Factors that influence the architecture of a future REDD+ funding mechanism

As discussed before, with the Cancun Agreements the international community achieved remarkable consensus on a number of REDD+ and related issues. However, the important questions of what the international funding mechanism for REDD+ should look like and how the needed billions of REDD+ investment should be mobilised are not yet resolved. This section describes different components of any future funding mechanism for REDD+. We also highlight – on the basis of scenario analysis – how any future mechanism should combine different features to most effectively unlock private sector finance and investment at the needed speed and scale. The following questions relate to the features or components of any future funding mechanism.

#### 1. Will there be an overall deal?

**A major issue concerns whether any formal agreement on REDD+ can be reached at the international level, as part of a broad and global deal on climate change under the UNFCCC.** Considerable progress has been observed in the REDD+-related negotiations over recent years. Despite this progress, it is unlikely that a global REDD+ mechanism will be established unless a broader, global agreement on climate change under the UNFCCC is achieved into which a REDD+ mechanism can be embedded.

Possible answers:

Yes	No
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#### 2. Who will make performance-based payments in Phase 3?

**Will performance-based payments come (i) from buyers via a crediting mechanism and international carbon markets (of eventual REDD+ credits abroad); or (ii) from bilateral or multilateral funding vehicles equipped with international climate finance (ultimately from taxpayers)?** Neither of these two approaches is friendly or unfriendly to the private sector per se. In principle, private sector finance for REDD+ can be mobilised via international carbon markets through an approach of ‘carbon finance’ reminiscent of the funding of CDM projects. It can also be mobilised through a system of international public funding vehicles. In the case of the latter,

such funding vehicles could, for instance, explicitly aim to raise funding not only from governments but also from private sector institutions such as banks, pension funds and other investors. There are reasons to assume, however, that a decentralised and dispersed approach, such as through carbon markets, is likely to be effective in mobilising private finance and investment at the required scale and speed. A centralised funding structure, potentially subject to considerable political risk and bureaucratic delays, will likely enhance regulatory risk and hence market risk for private investors.

Possible answers:

Carbon credits and decentralised markets  
(polluters in developed countries pay)

Centralised public funding vehicle(s)  
(taxpayers in developed countries pay)

### 3. Who can receive performance-based payments?

**Can foreign, performance-based payments under Phase 3 – either from a centralised international fund for REDD+ or from buyers on international carbon markets – be received by national governments, by public authorities at both the national and sub national levels, or by a wider array of entities at the sub national level? The latter includes private bodies such as agricultural cooperatives, forest concessionaries and project developers.**

Possible answers:

National governments only

Sub national implementing  
entities only, including  
private actors

Both

### 4. Who can design and implement REDD+ activities on the ground?

**Are REDD+ programmes and projects open to private sector participation, or can such efforts only be initiated and implemented by public authorities and agencies?**

‘Openness towards the private sector’ translates into private sector entities being eligible to participate in processes that lead to the generation of REDD+-based revenue streams, and initiate processes under national and sub national REDD+ strategies. The extent to which a national or sub national REDD+ strategy will be open to private sector participation will essentially depend on national policies and regulation, rather than the design of an international funding mechanism for REDD+. This is why this particular point is not further debated as a feature of different international policy scenarios in the subsequent parts of this section. However, it is likely that the design of the international funding mechanism will influence the ‘private sector friendliness’ of any domestic REDD+ strategy and policy. If all performance-based payments are exclusively channelled through public authorities at the national level, for instance, governments might feel incentivised not to include the private sector in concrete REDD+ efforts. And even if they did, it seems that in light of the political instability in many of the countries concerned, the private sector would not agree to rely exclusively on domestic government channels for REDD+-related revenue streams. If, on the other hand, governments could tax any credit-based REDD+ revenues of private actors, it would incentivise governments to involve the private sector in concrete REDD+ efforts to the extent possible.

Possible answers:

National governments only

Public entities only

Public and private entities

## 5.2 Policy scenarios for a future international REDD+ regime

Combined, these factors result in five potential policy scenarios for a future REDD+ regime, as summarised in **Table 4**. The left column of **Table 4** answers for each scenario the five questions posed in *Section 5.1* above. The right-hand column of **Table 4** indicates whether the proposed scenario is favourable to unlock private sector participation. We characterise five different levels of conditions to mobilise private sector finance and investment:

++	Very favourable conditions
+	Favourable conditions
+/-	Neutral conditions
-	Unfavourable conditions
--	Very unfavourable conditions

Table 4: **Main policy scenarios for a future REDD+ system and implications for private sector finance**

	Main features of the policy scenarios presented, as well as overall advantages and disadvantages	Specific implications for the mobilisation of private sector finance and investment
<b>SCENARIO 1</b>	<b>National crediting under a UNFCCC agreement</b>	
<p><b>1. WILL THERE BE AN OVERALL DEAL?</b></p> <p>→ YES</p> <p><b>2. WHO WILL MAKE PERFORMANCE-BASED PAYMENTS IN PHASE 3?</b></p> <p>→ CARBON CREDITS AND DECENTRALISED MARKETS</p> <p><b>3. WHO CAN RECEIVE PERFORMANCE-BASED PAYMENTS?</b></p> <p>→ NATIONAL GOVERNMENTS ONLY</p> <p><b>4. WHO CAN DESIGN AND IMPLEMENT REDD+ ACTIVITIES ON THE GROUND?</b></p> <p>→ PUBLIC AND PRIVATE ENTITIES</p>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>Establishment of a reference level at the national scale only.</li> <li>Any verifiable emissions reductions below this baseline, or any other 'compensation baseline', result in REDD+ carbon credits.</li> <li>These are fungible with the larger post-2012 carbon markets or traded on a separate REDD+ market, and are issued to central governments.</li> <li>This means that performance-based payments take place – through a crediting mechanism and on the basis of the national baseline – exclusively to national governments.</li> <li>In a subsequent step, the central government distributes payments to public and/or private implementing entities at the sub national level.</li> </ul> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>Potential for large financial flows to compensate for wide efforts driven by national governments; better accounting for leakage within the country concerned; creates economies of scale.</li> <li>Simple design of the international REDD+ funding mechanism with only one interface point between REDD+ countries and an international carbon credit market (the federal government).</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>Only effective and transparent if strong public governance systems and efficient administrative processes are in place, which is not the case in most forested countries in the developing world.</li> <li>Likely delays due to necessary readiness reforms and implementation. Funding can only take place once a full MRV, monitoring and accounting system is established at the national scale.</li> <li>As private sector actors remain 'detached' from the generation of REDD+-based revenues, they have little or no incentive to change behaviour. Changing private sector behaviour is key to addressing the drivers of deforestation.</li> <li>Supply of REDD+ credits needs to be met with a sufficiently high level of demand for such credits if prices are to be stabilised at levels that (i) ensure attractive revenue generation for REDD+ activities to be competitive with other types of land use; (ii) do not harm other carbon-credit-generating projects in developing countries in the case of fully integrated carbon markets; and (iii) continue to encourage domestic mitigation action by developed countries in the case that complementarity modalities are lax. Given low current levels of emissions-reduction ambition among developed countries, high-enough levels of demand appear unrealistic.</li> </ul>	<ul style="list-style-type: none"> <li>The fact that the only link between domestic action and international REDD+ markets would be the government, which would also be the contractual partner for carbon credit purchase agreements, and be liable for REDD+ credit generation and delivery, would make any REDD+ revenue streams at the program level immediately subject to country and regulatory risk. In other words: country and regulatory risk, which can be considerable in emerging economies, would significantly deter private sector financiers and investors from facilitating the implementation of REDD+ projects on the ground. This does not imply that private entities are not eligible to initiate and participate in REDD+ processes.</li> <li>Successful REDD+ activities at the sub national level (measured against either a national or sub national baseline) are not rewarded unless the entire national REDD+ scheme is successful (measured against a national baseline). This type of 'performance risk' will hardly be acceptable to private sector actors or investors operating at the activity level.</li> <li>Private sector actors are not offered a real financial alternative to deforestation and conventional land use, as payments for timber and commodity exports are not channelled through a public apparatus.</li> <li>The rationale for these disadvantages would also apply in the case that performance-based payments come from bilateral or multilateral public funding vehicles.</li> <li>National-level MRV and accounting minimize the level and risk of national leakage and resulting risks for the buyers of carbon credits.</li> <li>The private sector would have limited scope for involvement and investment, and contracts would be subject to political risk and potentially weak governance.</li> </ul> <p><b>Overall opportunity for private sector involvement: – –</b></p> <p><b>Minimal scope and likelihood for private sector involvement in REDD+ activity implementation and financing under Phase 3. Scarce public financing would have to be used for Phase 3 in addition to Phases 1 and 2. Minimal likelihood of mobilising REDD+ funding at the required scale. The drivers of deforestation are not addressed through a shift in price/market signals.</b></p>

	Main features of the policy scenarios presented, as well as overall advantages and disadvantages	Specific implications for the mobilisation of private sector finance and investment
<b>SCENARIO 2</b>	<b>Sub national or project crediting under a UNFCCC agreement</b>	
<p><b>1. WILL THERE BE AN OVERALL DEAL?</b></p> <p>→ YES</p> <p><b>2. WHO WILL MAKE PERFORMANCE-BASED PAYMENTS IN PHASE 3?</b></p> <p>→ CARBON CREDITS AND DECENTRALISED MARKETS</p> <p><b>3. WHO CAN RECEIVE PERFORMANCE-BASED PAYMENTS?</b></p> <p>→ SUB NATIONAL ENTITIES ONLY, INCLUDING PRIVATE SECTOR ACTORS</p> <p><b>4. WHO CAN DESIGN AND IMPLEMENT REDD+ ACTIVITIES ON THE GROUND?</b></p> <p>→ PUBLIC AND PRIVATE ENTITIES</p>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>Carbon accounting and crediting, by an international body, take place at the local or regional programme and/or project level only, open to both sub national government entities as well as private sector actors such as local cooperatives and forest concessionaries.</li> <li>The forest emissions reference level used can be at either the national level or a regional/programme-specific level that is derived from a national or sub national baseline.</li> <li>Project crediting possibly in conjunction with national-level monitoring and accounting, if technically feasible. But it is concrete REDD+ activities on the ground, such as projects and programmes, that generate carbon credits and which are assigned by an international body.</li> <li>The government assumes a coordinating role of authorising activities and ensuring they enter a national MRV system.</li> </ul> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>Stimulating early action: dispersed activities, initiated and developed by a wide range of actors on the ground, including the private sector, can take place before a comprehensive national MRV and accounting system is put in place.</li> <li>Achieving scale through a bottom-up approach: dispersed activities, initiated and developed by a wide range of actors on the ground, including the private sector, can add up to considerable ‘cumulative scale’. It is uncertain, though, whether it will be faster than a top-down, government-led initiative, especially if public governance is weak.</li> <li>Mobilising private investment by effectively mitigating risk: carbon credits are directly issued to activities by an international body rather than distributed through national government channels. This reduces country/regulatory risk of REDD+ investments considerably.</li> <li>A more flexible, decentralised system that is less dependent on national good governance.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>Less control over intracountry leakage: increased risk of leakage and greater demands for ensuring permanence of emissions reductions in the cases of ‘enhancement of carbon stocks’ and ‘sustainable forest management’.<sup>24</sup> Overall, REDD+ carbon credits can be generated within a country without overall national deforestation rates decreasing.</li> <li>Less room for achieving top-down scale: the need to set medium- to long-term national targets for REDD+ and to ensure achievement through necessary policy means and government incentives, in a top-down manner, is not sufficiently pronounced.</li> <li>Supply of REDD+ credits needs to be met with a sufficiently high level of demand for such credits if prices are to be stabilised at levels that (i) ensure attractive revenue generation for REDD+ activities to be competitive with other types of land use; (ii) do not harm other carbon-credit-generating projects in developing countries in the case of fully integrated carbon markets; and (iii) continue to encourage domestic mitigation action by developed countries in the case that complementarity modalities are lax. Given low current levels of emissions-reduction ambition among developed countries, high-enough levels of demand appear unrealistic.</li> </ul>	<ul style="list-style-type: none"> <li>REDD+ programmes and projects at the local or regional level would be rewarded immediately for reducing deforestation with internationally issued carbon credits.</li> <li>Performance-based remuneration contracts would mainly be entered into with sub national entities – particularly private bodies such as cooperatives and forest concessionaries: the result would be less political risk and better enforcement mechanisms; weak public governance would not affect the activities directly, which would improve the attractiveness of activities to investors.</li> <li>Private sector actors are offered a financial alternative to deforestation, which is not riskier than conventional land use: the payments for timber and commodity exports are namely not channelled through government channels.</li> <li>Environmental integrity is limited due to high risk of leakage, which decreases the attractiveness of resulting credits to buyers on international carbon markets, both public and private. Hence it affects the attractiveness to investors.</li> </ul> <p><b>Overall opportunity for private sector involvement: +</b></p> <p><b>There is a promising scope and likelihood for private sector involvement in the implementation and financing of REDD+ in Phase 3, as long as private entities at the sub national level are eligible for crediting. This mechanism creates a price signal that could make the protection of forests financially attractive compared to deforestation and forest degradation. As such, it directly addresses the drivers of deforestation. The environmental integrity of REDD+ efforts is weak, however, as leakage cannot effectively be managed, with negative implications for the marketability of and demand for REDD+ carbon credits.</b></p>

24 ‘Enhancement of carbon stocks’ and, under certain circumstances, ‘sustainable forest management’ are two of five activity categories under REDD+ where the issue of permanence plays a significant role, as these two activities address mitigation by increasing GHG removals from the atmosphere into sinks. On the other hand, all other REDD+ activities address mitigation by decreasing GHG emissions from sources. In the latter case, the issue of permanence does not play a critical role, as reduced emissions are credited, or rewarded through performance-based payments, ex post on a yearly basis.

	Main features of the policy scenarios presented, as well as overall advantages and disadvantages	Specific implications for the mobilisation of private sector finance and investment
<b>SCENARIO 3</b>	<b>The nested approach as a hybrid solution between Scenarios 1 and 2</b>	
<p><b>1. WILL THERE BE AN OVERALL DEAL?</b></p> <p>→ YES</p> <p><b>2. WHO WILL MAKE PERFORMANCE-BASED PAYMENTS IN PHASE 3?</b></p> <p>→ NATIONAL GOVERNMENTS AS WELL AS PUBLIC AND PRIVATE ENTITIES AT THE SUB NATIONAL LEVEL</p> <p><b>3. WHO CAN RECEIVE PERFORMANCE-BASED PAYMENTS?</b></p> <p>→ CARBON CREDITS AND DECENTRALISED MARKETS</p> <p><b>4. WHO CAN DESIGN AND IMPLEMENT REDD+ ACTIVITIES ON THE GROUND?</b></p> <p>→ PUBLIC AND PRIVATE ENTITIES</p>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>• Allows both sub national and national approaches to coexist.</li> <li>• A national forest emissions reference level is determined in line with decisions in the Cancun Agreements, communicated internationally and then disaggregated, as part of the national REDD+ strategy, into sub national and regional baselines that are logically interlinked and serve as baselines for implementation activities on the ground. At any given time, regional reference levels add up to the national baseline.</li> <li>• Allows both on-the-ground activities (by public and private entities at the sub national level) such as REDD+ projects and programmes as well as national governments to earn REDD+ credits, similar to the Joint Implementation (JI) mechanism under the Kyoto Protocol: carbon credits issued to implementation projects are taken from a national account, and sub national emissions reductions enter the national emissions budget/target. This means that governments assume liability for the emissions reductions by sub national activities.</li> <li>• The sum of <b>(i)</b> credits issued to on-the-ground activities and <b>(ii)</b> credits issued to national governments adds up to the difference between the overall national emissions from deforestation and the national reference level (or compensation level) per year and/or per commitment period.</li> <li>• A registry system of approved initiatives, reference emission levels, monitoring reports and carbon transactions ensures transparent carbon accounting and avoids double counting of sub national and national emissions reductions (Pedroni et al., 2010).</li> </ul> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Combines all advantages and strengths of Scenarios 1 and 2 into one framework.</li> <li>• Allows for a smooth transition from the current landscape of scattered and voluntary – but valuable – implementation projects at the pilot stage towards frameworks that are built around variables at the national level, as decided in the Cancun Agreements.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>• Challenge to harmonise systems at different scales and levels, when sub national activities continue and are credited by an international mechanism in parallel with national-level accounting and crediting.</li> <li>• Requires careful design, including a buffer or insurance solution, to address situations where sub national REDD+ activities perform while the national REDD+ strategy does not.</li> <li>• Supply of REDD+ credits needs to be met with a sufficiently high level of demand for such credits if prices are to be stabilised at levels that <b>(i)</b> ensure attractive revenue generation for REDD+ activities to be competitive with other types of land use; <b>(ii)</b> do not harm other carbon-credit-generating projects in developing countries in the case of fully integrated carbon markets; and <b>(iii)</b> continue to encourage domestic mitigation action by developed countries in the case that complementarity modalities are lax. Given low current levels of emissions-reduction ambition among developed countries, high-enough levels of demand appear unrealistic.</li> </ul>	<p>Combines all advantages and strengths of Scenarios 1 and 2 into one framework:</p> <ul style="list-style-type: none"> <li>• Allows crediting to, and, hence, direct receiving of, performance-based payments, by operational entities such as municipalities, cooperatives and forest concessionaries, which in turn can secure private finance and investment to run activities.</li> <li>• Environmental integrity is ensured through reference levels, MRV and reporting, at the national level. Reference levels, MRV and reporting at the sub national and regional levels can logically be embedded into national structures. The reduced risk of intracountry leakage gives comfort to buyers on carbon markets, increases prices for REDD+ credits and makes REDD+ investments more attractive.</li> </ul> <p><b>Overall opportunity for private sector involvement: + +</b></p> <p><b>There is a high likelihood of private sector involvement in REDD+ activity implementation and financing under Phase 3, as long as private entities at the sub national level are eligible for crediting. This mechanism creates a price signal that can make the protection of forests financially attractive, compared to deforestation and forest degradation. As such, it directly addresses the drivers of deforestation. Leakage is managed through a harmonised system of sub national baselines and an all-encompassing national baseline as agreed upon in Cancun.</b></p>

	Main features of the policy scenarios presented, as well as overall advantages and disadvantages	Specific implications for the mobilisation of private sector finance and investment
<b>SCENARIO 4</b>	<b>International fund with national- and sub national-level incentive payments</b>	
<p><b>1. WILL THERE BE AN OVERALL DEAL?</b> → YES</p> <p><b>2. WHO WILL MAKE PERFORMANCE-BASED PAYMENTS IN PHASE 3?</b> → CENTRALISED PUBLIC FUNDING VEHICLE(S)</p> <p><b>3. WHO CAN RECEIVE PERFORMANCE-BASED PAYMENTS?</b> → NATIONAL GOVERNMENTS AS WELL AS PUBLIC AND PRIVATE ENTITIES AT THE SUB NATIONAL LEVEL</p> <p><b>4. WHO CAN DESIGN AND IMPLEMENT REDD+ ACTIVITIES ON THE GROUND?</b> → PUBLIC AND PRIVATE ENTITIES</p>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>• Performance-based payments for REDD+ would come from a dedicated international fund rather than from carbon markets. Such an international fund could aim to be equipped with both public and private capital.</li> <li>• Levels of compensation/reward could be calculated in a manner similar to other market-based scenarios, using national baselines and verified reductions.</li> <li>• Performance-based payments would be made to central governments and/or to sub national entities, including, in principle, private sector entities.</li> </ul> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Likelihood of fewer challenges in calculating incentives, because no 'offsets' are created – less need for stringent rules and quality control than in a market system, even if payments are performance-based.</li> <li>• More opportunity for up-front funding or enhancement of non-carbon co-benefits, even if payments are performance-based.</li> <li>• Performance-based payments can be mobilised regardless of global levels of demand for REDD+-derived carbon offsets, which are likely to remain low in light of the current lack of emissions-reduction ambition among developed countries.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>• The bulk of the funds mobilised by such a vehicle could only come from public sources; it would take much time, effort and a well-established track record before private investors could possibly invest in a multilateral public investment structure at scale.</li> <li>• A more fundamental question is how/from where investors would be repaid their capital and any expected return on investment, in the absence of a market for REDD+ credits: from which revenue streams would host governments, municipalities, cooperatives and forest concessionaries in developing countries repay debt and service dividends after the successful implementation of REDD+ activities?</li> <li>• As a result, scarce public funds would have to be used to finance implementation activities under Phase 3, in addition to financing efforts under Phases 1 and 2. It is almost certain that the level of funding required for effective REDD+ implementation would dwarf the public funds available.</li> <li>• Greater risk of inefficient allocation of payments and reduced accountability and transparency.</li> </ul>	<ul style="list-style-type: none"> <li>• The bulk of the funds mobilised by such a vehicle could only come from public sources; it would take much time, effort and a well-established track record before private investors would feel comfortable enough to invest at scale in a multilateral public investment structure.</li> <li>• A more fundamental question is how and from where investors would be repaid their capital and any expected return on investment, in the absence of a market for REDD+ credits: from which revenue streams would host governments, municipalities, cooperatives and forest concessionaries in developing countries repay debt and service dividends after the successful implementation of REDD+ activities?</li> <li>• As a result, scarce public funds would have to be used to finance implementation activities under Phase 3, in addition to financing efforts under Phases 1 and 2. It is almost certain, as demonstrated in earlier sections of this report, that the level of funding required for effective REDD+ implementation would dwarf the public funds available.</li> <li>• At the same time, as long as a price for REDD+ carbon credits is established, incentives exist for private sector actors (ranging from farmers to forest concessionaries to financial institutions) to tackle the drivers of deforestation and forest degradation.</li> </ul> <p><b>Overall opportunity for private sector involvement: — —</b></p> <p><b>Private sector investment can be mobilised in this scenario to participate in an international REDD+ funding vehicle. But it would fail to do so, though, unless there is a system that allows those that implement REDD+ activities (including private-land owners) to generate revenue with such activities. It remains unclear what that system will look like if a crediting mechanism is not established. Furthermore, if price and market signals for REDD+ activities are not offered to private sector actors on the ground, the drivers of deforestation will remain unaddressed. Scarce public funds would have to be used for Phase 3 in addition to Phases 1 and 2. Minimal likelihood of mobilising REDD+ funding at the required scale.</b></p>

	Main features of the policy scenarios presented, as well as overall advantages and disadvantages	Specific implications for the mobilisation of private sector finance and investment
<b>SCENARIO 5</b>	<b>Absence of a global treaty on climate change</b>	
<b>1. WILL THERE BE AN OVERALL DEAL?</b> <b>→ NO</b>	<p><b>Assumptions:</b></p> <ul style="list-style-type: none"> <li>• Despite the progress made and REDD+-related agreements reached at COP 16, no comprehensive international agreement has been reached. This means that no global REDD+ mechanism has been established.</li> <li>• REDD+ carbon credit demand comes either from voluntary markets or from national or regional cap and trade systems (e.g., a potential US federal scheme, or the EU ETS).</li> <li>• Most likely: crediting against project-specific baselines, either under voluntary standards or CDM-type offsetting standards accepted by national schemes.</li> <li>• Voluntary markets represent a fallback option, although they could also complement a regulatory REDD+ market.</li> </ul> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• International negotiations among fewer countries – for instance, between the EU and forested countries in the developing world – could be less complicated, and it would be easier and quicker to find consensus; for instance, on modalities for REDD+ implementation and financing.</li> <li>• Negotiations among donor countries and the most critical forested developing countries could entirely focus on REDD+ and leave aside all other questions currently negotiated under the UNFCCC.</li> </ul> <p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>• Insufficient global demand for REDD+ carbon credits to mobilise the required investment and funding – the only source of demand would be voluntary carbon markets, the EU ETS and, eventually, emerging cap and trade schemes at the sub national level in the US and other countries.</li> <li>• Given their tiny size, voluntary markets alone will remain very far from being able to mobilise investment for REDD+ at the required scale.</li> </ul>	<ul style="list-style-type: none"> <li>• Growing and interesting opportunities for private sector involvement and investment in voluntary carbon markets, but size to remain far from the scale required.</li> <li>• All other implications would depend on the shape of any multilateral mechanism or respective bilateral mechanisms negotiated outside of the UNFCCC, in line with the other scenarios outlined above.</li> </ul> <p><b>Overall opportunity for private sector involvement: +/-</b></p> <p><b>If no overall climate agreement can be reached to succeed the Kyoto Protocol after 2012, market players should prepare to make use of current opportunities within the voluntary market or dedicated national cap and trade schemes that allow for REDD+ offsets (e.g., a future US scheme and/or EU ETS Phase 3). Though this scenario is not unfriendly from a private sector perspective, the scope and size of voluntary or national regulatory markets will likely be much too limited to mobilise investment at the scale required to meaningfully address deforestation and forest degradation in emerging economies.</b></p>

### **5.3 A nested approach for REDD+: key features and advantages of Scenario 3**

The most promising policy option for private sector involvement in REDD+ seems to be the nested approach as described above in Scenario 3.

The nested approach is considered by a number of private sector actors and stakeholders to be the most likely scenario to develop under current conditions (Angelsen et al., 2008; Parker et al., 2009; Pedroni et al., 2010; Cortez et al., 2010; O’Sullivan et al., 2010). An important question – and a core condition of the effectiveness of the nested approach in mobilising private sector skills and investment – is whether private sector entities, such as agricultural cooperatives and forest concessionaries, will also be eligible for REDD+ crediting in addition to sub national governments. If not, the nested approach could lose much of its effectiveness given the regulatory and political risk profiles of many sub national governments similar to those of governments at the national level. Another caution of the nested approach is that it is much more complex to implement, and would hence require rigorous governance structures. Under the nested approach we propose in this report, there is a risk that sub national actors may not receive compensation for successful activities in the event that the country as a whole fails to perform. This risk will need to be minimized in order to promote sub national participation and private investment (The Nature Conservancy and Baker & McKenzie, 2010). Related to the previous issue, another risk or challenge concerns transaction costs. These may be substantial using a nested approach, since it requires rigorous governance/MRV.

There are a few critical design features of the nested approach as presented in Scenario 3 that make it appealing from a private sector and investment mobilisation perspective:

#### **The possibility of performance-based payments at the activity level to mitigate country and regulatory risk.**

This risk category is one of the main impediments to increased private investment in the developing world generally. It results from track records of political instability and corruption as well as regulatory and legal uncertainty in the countries concerned. This risk is already detrimental to private investment in ordinary market settings. In a REDD+ context, if all future REDD+ revenue streams – from carbon markets or from an international fund – were administered and distributed exclusively by public bodies and channels, this risk would be considerably intensified.

Potential REDD+ activity implementers from the private sector (cooperatives, forest concessionaries, farmers), as well as their financial backers (investors and lenders), who would ultimately carry the ‘performance risks’ of REDD+ implementation, are unlikely to accept such an intensification of ‘country and regulatory risk’. This is the case especially when the revenue of conventional land-use alternatives, such as the export of timber or agricultural commodities, is not affected. As such, by not providing a direct incentive to private actors that is reliable over time, any such REDD+ scheme would likely fail to change market behaviour, address the drivers of deforestation or mobilise private investment for REDD+ implementation.

Intensified country, legal and regulatory risk can be dealt with by offering to private REDD+ implementers special international hedging instruments, such as guarantees that governments will act upon commitments. A less costly alternative would consist of designing the finance mechanism for REDD+ in a way that allowed direct performance-based payments, such as through international crediting, to take place at the level of implementing entities, including from the private sector. Such activity-level payment channels could coexist with parallel channels to federal governments and sub national authorities for activities implemented by them. As such, having a special ‘crediting window’ for private actors would complement, not compromise, the ability of larger-scale activities – implemented by central governments – to generate REDD+ revenue, too.

### **Sub national and regional baselines coexist with an all-encompassing national baseline: combining environmental integrity with private investment mobilisation**

Enabling performance-based payments at the activity level, as described above, logically requires the ability to measure local performance accurately, making use of reference levels that geographically coincide, to the extent possible, with the geographic coverage of the activity concerned. This is not possible if emission trajectories at the sub national or regional level are measured against national baselines. Rather, any baseline established at the national level, and communicated internationally in line with the Cancun Agreements, could be disaggregated into a series of sub national baselines, which in turn could be disaggregated into regional baselines at the level of counties and/or municipalities. All these baselines would, however, have to be logically interlinked and, at any given point, sum up to the cumulated baseline at the national level to ensure environmental integrity. Ultimately, the total sum of credits issued for regional and sub national activities, and credits issued to national governments, would have to add up to the difference between overall national emissions from deforestation/forest degradation, and the national baseline, per year and/or per commitment period.

The functioning and integrity of such a system of multiple reference baselines at multiple levels could only be enabled by a registry system of approved initiatives, reference emission levels, monitoring reports and carbon transactions ensuring transparent carbon accounting and avoiding double counting of sub national and national emissions reductions (Pedroni et al., 2010). Furthermore, special buffers, reserves and/or insurance solutions would have to be devised to address situations where sub national REDD+ activities perform while the national REDD+ strategy does not.

### **A crediting mechanism is preferable to an international fund: making emitters, not taxpayers, pay for REDD+ implementation**

The bulk of the estimated USD 17-33 billion of REDD+ investment needed per year is, in essence, opportunity costs related to the conservation, rather than the exploitation, of forests. These costs will have to be assumed by somebody, and ultimately there are two options: **(i)** developed-country emitters of greenhouse gases, or **(ii)** developed-country taxpayers. Even if an international public funding vehicle for REDD+ were mandated to mobilise private investment – for example, from institutional investors such as pension funds – the fundamental question of how, or from where, investors would be repaid their capital and any expected return on investment, in the absence of a market for REDD+ credits, remains: from which revenue streams would host governments, municipalities, cooperatives and forest concessionaries in developing countries repay debt and service interests and dividends after the successful implementation of REDD+ activities? The only answer that can be provided at this stage is: from the generation of carbon credits sold on international carbon markets.

The only alternative would be a REDD+ financing mechanism entirely built on public grants, financed by developed-country taxpayers. It is known from previous analysis, however, that it is highly unlikely that the amount of Phase 3 REDD+ investment needed could ever come from taxpayers, especially in light of the significant fiscal constraints currently experienced by most donor countries.

## 5.4 A nested approach for funding REDD+ implementation under Phase 3: will it do the job alone?

Of all possible generic models for a REDD+ financing mechanism, it seems that the nested approach would be best suited to address a number of stakeholder needs while combining promising resource-mobilisation potential with environmental integrity. The mere establishment of a stand-alone crediting scheme for REDD+ following the nested approach model, however, will by itself be unlikely to deliver satisfactory results. As detailed above, the effectiveness of any REDD+ finance mechanism will also depend on the concrete outcomes of a number of negotiation areas under the UNFCCC. Some of these key links are the following:

- **Existing carbon markets and the risk of intensive pressure on carbon prices** – links with the project-based flexible mechanisms (CDM, JI) and International Emissions Trading (IET): a REDD+ crediting mechanism could dramatically increase the supply of carbon credits on the global markets. As it will be imperative to keep international carbon prices at levels high enough to justify domestic carbon reductions in developed countries, as well as continue supporting other emissions-reduction efforts in developing countries through the CDM, such increased supply will have to be met with an increased level of demand. The flooding of carbon markets with REDD+ credits would not only put intensive pressure on credits from the CDM and JI as well as the prices of assigned amount units (AAUs), but would concordantly put pressure on the prices for REDD+ credits themselves – making REDD+ projects increasingly unattractive for private sector actors and investors. The crediting mechanism, if not implemented with careful consideration of the links REDD+ has with other areas, would counteract its initial goal of mobilising private investment for REDD+. The level of demand for carbon credits will ultimately be determined by: **(i)** the level of ambition among developed countries in terms of their short-, medium- and long-term emissions-reduction commitments, and **(ii)** how the issue of ‘supplementarity’ is dealt with. A solution in this context could also be the set-up of separate international carbon markets that are non-fungible: a market for REDD+ credits on the one hand, and a market for other types of carbon credits on the other.
- The **emissions-reduction commitments by developed countries**, at this stage of the negotiations, remain weak for many of the largest industrialised countries. The collective level of ambition will have to increase substantially in order to make a REDD+ crediting mechanism work while keeping international carbon prices at sensible levels.
- **Supplementarity** is the principle that, for their compliance with emissions-reduction commitments, developed countries should only buy carbon credits ‘imported’ from developing countries in a supplementary way. The bulk of the compliance efforts should be underpinned by emissions-reduction achievements within a country’s borders. A too-stringent level of supplementarity, while forcing developed countries to reduce emissions themselves, will reduce the demand for carbon credits and vice versa. If a REDD+ crediting mechanism is to properly function while keeping the carbon price at a sensible level, the handling of supplementarity in the next regime will have to be carefully balanced and eventually softened to allow for an influx of REDD+ credits into developed countries on top of projected flows of Certified Emission Reductions (CERs). A potential compromise, and promising avenue into the future, could consist of developed countries dramatically increasing their emissions-reduction targets, particularly in the short term, while softening the modalities for supplementarity with regards to the import of REDD+ credits. Higher targets, combined with softer supplementarity conditions, could unlock much of the credit demand needed for a global REDD+ crediting mechanism to mobilise private investment at the needed scale, while reducing global greenhouse gas emissions in a cost-effective and politically acceptable way.

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## **About the UNEP FI**

The United Nations Environment Programme Finance Initiative (UNEP FI) is a global partnership between the United Nations Environment Programme and the private financial sector. UNEP FI works closely with the nearly 200 financial institutions that are Signatories to the UNEP FI Statements, and a range of partner organizations, to develop and promote linkages among the environment, sustainability and financial performance. Through regional activities, a comprehensive work programme, training activities and research, UNEP FI carries out its mission to identify, promote and realise the adoption of best environmental and sustainability practices at all levels of financial institution operations.

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The Biodiversity and Ecosystems Workstream is based on the need to engage the financial services sector in identifying and addressing the challenges arising from the loss of biodiversity and the degradation of ecosystem services.

## **About the Climate Change Working Group (CCWG)**

The Climate Change Working Group is a global platform of financial institutions – lenders, investors and insurers – that collaborate to understand the implications of climate change on financial performance and the roles of the finance sector in addressing climate change, as well as to advance the integration of climate change factors – both risks and opportunities – into financial decision-making.

## **Project Team at UNEP FI**

Head of Unit: Paul Clements-Hunt

Lead Authors and Project Leaders: Remco Fischer and Ivo Mulder

Authors and Project Team: Jessica Boucher and Jenny Lopez

## **Project Team at EcoSecurities**

Authors: Marianna Doria and Francisco Ascuí

Special Contributors: Jan Fehse and Robert Tippmann

## **The study was independently reviewed by EnviroMarket.**

Project Manager: Simon Petley

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[www.unep.org](http://www.unep.org)

United Nations Environment Programme  
P.O. Box 30552 Nairobi, Kenya  
Tel.: 254 20 62 1234  
Fax: 254 20 62 3927  
E-mail: [cpiinfo@unep.org](mailto:cpiinfo@unep.org)



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**UNEP Finance Initiative**  
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International Environment House  
15 Chemin des Anémones  
CH-1219 Chatelaine, Geneva  
Switzerland  
Tel: 22 917 8178  
Fax: 22 796 9240  
[fi@unep.org](mailto:fi@unep.org)  
[www.unepfi.org](http://www.unepfi.org)

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