



Options for Financing
REDD+ in the Context
of EU Climate Policy
Status and
Opportunities

Options for Financing REDD+ in the EU: Status and Opportunities

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The Nature Conservancy Climate Change Program 4245 North Fairfax Arlington VA 22203 United States of America

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Authors: Moritz von Unger Charlotte Streck Donna Lee



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Executive Summary

The European Union (EU) has declared a policy target of halting global forest cover loss by 2030 at the latest and a reduction of gross tropical deforestation by at least 50 percent by 2020. To achieve this goal, the EU is a strong supporter of an international policy framework that creates incentives for "reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks" (REDD+). It is expected that the EU and its Member States will contribute significant public resources to support developing countries in their efforts to reduce forest related emissions. Following the 15th session of the conference of the parties (COP) to the UN Framework Convention on Climate Change (UNFCCC), the EU Commission and EU Member States collectively pledged to contribute more than a billion EUR in fast-start finance for REDD+. However, public pledges will hardly be sufficient to meet REDD+ financing needs, even where significant resources are contributed by developing countries themselves. It is therefore essential to evaluate new and sustained sources of REDD+ finance.

As REDD+ gains momentum internationally, and given the unlikely advancement in the near term of either a comprehensive global climate agreement or climate legislation in the United States, increasing attention has been given to creating demand for greenhouse gas emission reductions from REDD+ by the EU and its Member States. Climate Focus, with the support of The Nature Conservancy, has evaluated options on how to mobilize funding to support REDD+ in the context of EU climate policy. The analysis focuses on mobilizing sustained support for emission reductions and removals from REDD+ that would complement the funding of readiness activities, forest governance programs and other direct policy support. It is also limited to analyzing EU-wide policies and measures, acknowledging that the 27 Member States of the EU may implement their own complementary funding and support mechanisms for REDD+.

State of Play: REDD+ Policy in the EU

Traditionally, EU climate policy concentrates on energy and industry related emissions. The EU Commission has been reluctant to consider land use as a core element of climate policy and remains concerned about uncertainties in the estimation and volatility of emissions from both forestry and agriculture. Consequently, the EU did not include forest and agriculture related emission sources in the 2008 Climate and Energy Package that defines the EU climate policy for the period up to 2020. The EU has formulated incentives to increase forest cover in the EU (e.g. short-term rotation plantations on former agricultural land, and natural forest expansion). However, the current emission caps set by the EU for a range of sectors exclude forestry activities from their scope.



The most important instrument of EU climate policy, the EU Emissions Allowance Trading Scheme (EU ETS), does not issue allowances to the forest sector in the EU, neither does it allow domestic, Community or international forestry offsets to be used for compliance purposes. Complementary to the EU ETS, the so-called Effort-Sharing Decision (ESD) establishes targets for non-ETS sector emissions—excluding forestry but including emissions from agriculture—and annual binding targets for the period 2013-2020. While the EU ETS targets private sector emissions, the ESD addresses EU Member States. While neither of the two instruments currently accepts emission reductions from REDD+, both instruments consider support for REDD+:

- The ESD foresees a review process related to the appropriateness of including REDD+, among others, into the ESD in the context of a future international treaty on climate change. Acceptance of REDD+ is likely to depend on the overall ambition of emission reduction targets and the EU's progress in meeting such targets.
- The EU ETS Directive encourages EU Member States to use a portion of the revenues from the auctioning of allowances for "measures to avoid deforestation".

EU-wide annual revenues from auctioned allowances under the EU ETS are estimated to be 30 to 50 billion EUR¹ and may prove to be a promising source for REDD+ funding. However, here too exist a number of barriers that may limit funds from flowing. Such barriers include the non-mandatory nature of the revenue clause under the EU ETS and a possible interpretation that would condition the spending of the funds on the existence of an international agreement on climate change.

Additional support for REDD+ could come in the context of bilateral cooperation agreements between the EU and developing countries. In the absence of an international climate agreement, the EU is considering entering into sectoral agreements with developing countries. Such agreements could foresee the issuance of REDD+ credits and results-based payments for REDD+. The EU Commission has also proposed a Global Forest Carbon Mechanism, a government-to-government body to offer capacity building, assist with nation-wide implementation and provide performance-based financial support. However, it has yet to offer any opinion how to fund such a Mechanism. The EU may also allow tests of REDD+ crediting and pay-for-performance mechanisms. If such tests are satisfactory, a link between REDD+ and the EU ETS may be considered after 2020.

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¹ See Impact Assessment (footnote 18), page 10; Cooper/Grubb, Revenue Dimensions of the EU ETS Phase III (2011), calculate a lower amount, i.e. 150 to 190 billion EUR total over the period 2013-2020 (20% scenario) and 200-310 billion EUR total (30% scenario), respectively.



Prevailing Concerns

Forestry credits have been excluded from EU policy from the beginning in part because of concerns regarding environmental and market risks associated with such credits. The most important risks and approaches to managing these risks are summarized in the table below

mportant risks and approaches to managing these risks are summarized in the table below.	
Environmental Integrity	Management Approach
Leakage	Once national accounting is in place, leakage will be captured at the country level. During the transitional phase prior to national accounting, sub-national programs will need to assess and manage leakage (e.g. through discounting, buffer pools, etc.). In addition, REDD+ programs should address the drivers of deforestation, thereby minimizing pressure for deforestation elsewhere.
MRV	MRV challenges are increasingly being addressed through rapidly advancing satellite and aerial remote sensing techniques and improvements in ground-truthing through field measurements. Estimates should reflect the uncertainty levels in the monitoring approach. Independent, third party verification can also ensure accountability and credibility.
Permanence	Permanence risk can be addressed through the use of buffer pools and insurance mechanisms. In addition, REDD+ programs should be designed to be inclusive and supportive of local stakeholders and communities to ensure incentives are aligned towards achieving REDD objectives over the long term. And appropriate legal and institutional mechanisms should be employed to ensure enduring results.
Market Integrity	
Market Flooding	Quantitative limitations can regulate the number of REDD+ credits used for public or private compliance purposes.
Price Volatility	Reserve pools of publicly managed REDD+ credits can help keeping credit and allowances prices in an acceptable band. The

(trigger) level.

EU Commission could auction or sell (at fixed prices) acquired REDD+ credits once EU allowance prices have reached a critical



While the risks associated with REDD+ credits are real and relevant, those risks can be addressed and managed. The risks are also counterbalanced by the opportunity of REDD+ and the relevance of reducing forest-related emissions for keeping global climate change at manageable levels.

Emerging Opportunities

Strategies to mobilize demand for REDD+ can be divided into those applicable in the short term and those generating sustained demand for REDD+ in the long term. They can also be divided into private and public sector driven opportunities. In the long-term a connection of REDD+ to private sector demand for carbon credits seems one of the most promising options to mobilize sustained funding for REDD+. Such linking will have to be carefully evaluated, it will have to rely on tested and reliable REDD+ crediting frameworks and be accompanied by safeguards and regulation of supply and demand. For political, legal and technical reasons it is unlikely that such linking will be considered before 2020.

In the short and medium-term (up until 2020), REDD+ may be supported by programs and investments by Member States and the EU Commission. Well-designed programs would catalyze public and private sector activity in generating emission reductions from REDD+ activities while testing reference levels and MRV systems. Such programs could test the procurement of emission reductions from REDD+ in public tenders or under bilateral agreements. Institutionally, the EU could support REDD+ by:

- Strengthening the EU REDD+ Facility. The Facility could pool resources, ensure an
 equitable and transparent allocation of REDD+ funds, monitor standards, reference level
 and MRV development, and enhance implementation of REDD+. It could also conclude
 and manage bilateral agreements with pioneering REDD+ nations, coordinate with the
 EU FLEGT process, and support policies and results-based demonstration activities.
- Coordinate the use of auction revenues for REDD+. A coordinated approach would assist EU countries, in particular smaller Member States, to support REDD+. It would also avoid the development of competing and conflicting standards for REDD+ as long as there is no international framework operationalizing REDD+.
- Supporting REDD+ demonstration activities. The EU could begin testing standards and potential crediting rules to establish environmental credibility, inform future EU policies, and build confidence in a new carbon asset class for future compliance frameworks. To further trigger Member State level demand, a link to the ESD could encourage Member States to procure REDD+ credits without risking volatility in private emission trading markets. Such a measure would respond to the EU Commission's option assessment under the 2008 Communication on Deforestation that anticipates a government-backed pilot phase before involvement of the private sector through integration in the EU ETS.



Finally, additional support for the generation of REDD+ may come from voluntary carbon market transactions as well as support for subnational (province, regional) REDD+ activities, in preparation for a future transition to national REDD+ systems. Support for demonstration activities at subnational levels allows the testing of MRV, crediting and financing arrangements for REDD+ which, in turn, can help inform international negotiations as well as implementation arrangements and future policies. The Governor's Forest and Climate Force initiated by the State of California, as well as emerging regional markets in Asia, may serve as examples for such subnational initiatives.



Glossary of Terms

CERs Certified Emission Reductions, issued units under the Clean Development Mechanism,

one of three flexible mechanisms under the Kyoto Protocol

CDM Clean Development Mechanism, one of three flexible mechanisms under the Kyoto

Protocol

COP Conference of the Parties, the official meeting among Parties to the United Nations

Framework Convention on Climate Change

DG Directorate-General of the European Commission; the European Commission is made up

of about 30 directorates-general and almost a dozen of additional services

ESD Effort Sharing Decision as established by Decision 406/2009/EC of the European

Parliament and of the Council on the efforts of Member States to reduce their

greenhouse gas emissions to meet the Community's greenhouse gas emission reduction

commitments up to 2020

ERUs Emission Reduction Units, issued units under Joint Implementation

EU ETS European Union Emissions Trading System, the greenhouse gas emission allowance

trading scheme as established by Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading

within the Community, as amended from time to time;

FLEGT Forest Law Enforcement, Governance and Trade Action Plan

GHG Greenhouse gas

IPCC Intergovernmental Panel on Climate Change

JI Joint Implementation, one of three flexible mechanisms under the Kyoto Protocol

LULUCF Land use, land-use change and forestry; in line with IPCC guidelines and guidance,

LULUCF includes emissions and removals considered under REDD+

MRV Measurement, reporting and verification

REDD+ Reducing emissions from deforestation and forest degradation, conservation of forest

carbon stocks, sustainable management of forests, and enhancement of forest carbon

stocks in developing countries



1. Introduction

Limiting increases in the global average temperature to +2° Celsius is among the greatest challenges facing humanity. Global greenhouse gas (GHG) emissions continue to accelerate, with deforestation accounting for about 15 percent of the world's emissions. But deforestation is not only a large contributor to climate change, it also offers the opportunity of reducing emissions in a cost-effective way. Over the past years, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have formally embraced a policy framework of "Reducing Emissions from Deforestation and forest Degradation, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks" (REDD+) to create incentives for developing countries to lower land-use emissions. In a decision adopted at the Conference of the Parties (COP) in Cancun, December 2010, all countries are called upon to "collectively aim to slow, halt, and reverse forest cover and carbon loss". Developed countries, in particular, are urged "to support, through multilateral and bilateral channels, the development of national strategies or action plans, policies and measures and capacity-building".²

The European Union (EU) represents over 20 percent of the world's economy, its GHG emissions allowances trading system (EU ETS) around 85 percent of the global carbon market, and it plays an important role in international negotiations on climate change. As such, the EU is a critical player in the design and implementation of a system that would create incentives for REDD+. As REDD+ gains momentum internationally, and given the unlikely advancement in the near term of either a comprehensive global climate agreement or climate legislation in the United States, increasing attention has been given to creating demand for GHG emission reductions from REDD+ by the EU and its Member States. One option that has been discussed is the possibility of linking the emerging international REDD+ system directly or indirectly to the EU ETS. Alternatively, incentives for REDD+ could be created if EU Member States were authorized to use verified emission reductions or REDD+ credits to meet its obligations under the Effort-Sharing Decision (ESD) that allocates GHG reduction targets to Member States. However, to date, the EU remains cautious when it comes to allowing forest-related offsets for public or private compliance purpose.

The objective of this report is to present options on how to mobilize funding to support REDD+ emission reductions in the context of EU climate policy. This analysis takes into account the concerns of some powerful EU players over allowing REDD+ credits for compliance under the EU ETS. We focus, therefore, our analysis on the potential support of REDD+ by EU Member States,

² Decision 1/COP.16 (Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention) paras. 67 et seqq.

³ World Bank, State and Trends of the Carbon Market 2011.



which would create initial demand for REDD+ emission reductions while testing and building confidence in the robustness of measurement and accounting methods. Based on such experience, REDD+ could eventually be linked to a private sector compliance scheme, possibly directly or indirectly linked to the EU ETS. In addition, there are many other legitimate and necessary ways that EU institutions and EU Member States can support the implementation of REDD+ strategies by developing countries, through funding of readiness activities, or support for policies or performance-based initiatives not linked to the issuance of carbon credits. These are complementary to the policy instruments we analyze in the context of this paper. Our analysis further focuses on EU-wide policies and measures, acknowledging that the 27 Member States of the EU may implement their own complementary funding and support mechanisms for REDD+.

We begin our assessment with an overview of the EU ETS, as well as other laws and regulatory frameworks enacted with the EU's climate and energy package of 2009, in particular the ESD, scrutinizing their relevance for providing support for REDD+. We then summarize emerging EU decisions and policies that may have an influence on REDD+ crediting and financing. These include the European Commission's proposal to test the recognition of REDD+ credits, its option assessment to move beyond its 20 percent Community-wide GHG emission reduction target, and the 2050 Low Carbon Economy Roadmap.

In a second step, we outline a suite of options that could support future demand for compliance-grade REDD+ emission reductions in the context of EU policy. We will review the prospects and implications of linking REDD+ to the EU ETS before 2020, and, based on this analysis, elaborate possible pathways, or step-wise approaches, that can support policies and funding in the near-term for REDD+ that will also build constituencies to support market-linked or market-based demand for REDD+ in the future. Such transitional options include the implementation of a REDD+ pilot phase under the ESD in combination with bilateral approaches, and encouraging the use of proceeds from EU allowances for REDD+ activities. We conclude this report by describing options on how to collaborate with policy makers—including the European Parliament and its Committees, Member States, the EU Council, the European Commission, and others—civil society, academia, and subnational entities (state jurisdictions and local governments) in defining the EU's REDD+ position from now until 2020 and beyond.



2. State of Play: REDD+ in the EU

In some ways, the treatment of forest and land-use emissions in the context of international and EU climate policy are an anathema in European climate politics and to European policy makers. Forest may rank high in speeches, political declarations, communications and in international negotiations—indeed, the EU was crucial in brokering a deal on REDD at the COP 13/Bali negotiations, and on numerous occasions has repeated the aim to achieve a halt in global forest cover loss by 2030 at the latest and a reduction of gross tropical deforestation by at least 50 percent by 2020. Yet, the EU has maintained a notable unease over the role of land use and forestry in international climate change policy ever since the Kyoto Protocol was adopted. Quite consonant to this unease, in its domestic legislation, namely the *Climate and Energy Package*, a set of legislative acts to govern the Union's climate policy from 2012 onwards adopted in 2009, it does not address land-use related emissions within or outside of the EU.

2.1. Institutions and roles

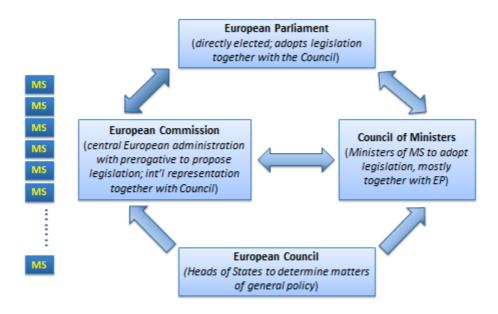
When assessing "the EU position", one should keep in mind that the Union is heterogeneous with different actors following different agendas and setting different goals. While the European Commission is the most vocal voice in EU policy making, it is by far not the only one (see figure 1). The EU position in the context of international climate negotiations is defined by the collective interests and capacity of the Member States represented by the EU Presidency. In most situations, therefore, the Member States, with assistance of the European Commission, negotiate as a single actor on the basis of a common position. The Member States form their common position in the Council of Ministers through a lengthy and intensive policy-making process. While the European Commission is not the EU's lead negotiator, it provides the Council with information documents, strategic advice and recommendations. As a result the informal role of the Commission is greater than its formal mandate. It is also noteworthy that within the Commission it is the Commissioner for Climate Action and the Directorate-General for Climate Action, which emanates from the Directorate-General for Environment, that leads international negotiations on behalf of the European Commission; this ensures a strong emphasis on environmental matters, while an economic and market focus may be less pronounced.

The decision-making process is often cumbersome with (some) Member States clearly differing in their views and political preferences from the Council, the EU Parliament or the European Commission. Still, the EU institutions, in particular the European Commission, often end up on the winning side in setting EU policy priorities not least for three reasons: First, they are institutionally strong with clear hierarchies and a large body of administrators and experts following many of the detailed negotiations, an effort many Member States do not have the resources to do themselves. Second, while climate policy belongs to the policy areas of 'shared competence' in which, *prima facie*, both the EU and the Member States can adopt legally binding



acts, the EU, with the adoption of the climate and energy package in 2009, has *de facto* reserved most of the specific regulatory powers for itself;⁴ and the Commission as the EU's administrative branch assumes the role of a central, delegated legislator whose domestic agenda counts a lot for the positioning of the EU internationally. Third, the European Commission is the sole EU institution with the right to propose bills and prepares draft laws. Thus, matters with implications for the EU portfolio, notably the EU ETS, will fall primarily into the remit of the EU institutions.

Figure 1: Institutions of the EU



While the EU Commission is a powerful player in determining EU climate policy and influencing the EU position in international climate negotiations, it is significantly less relevant or influential when it comes to pledging or spending climate finance. Budget allocations for REDD+ as well as decisions on how to spend such funds fall under the authority and jurisdiction of EU Member States. The EU's contributions to fast-start climate finance reflect the Member State support, reflected in public pledges, for climate change mitigation, adaptation and REDD+. Such pledges are essential to support REDD+ in the early phases. However, they are vulnerable to changes in the political climate. It has therefore been proposed to use existing or define new mechanisms to mobilize long-term and sustained funding for climate change in general, and REDD+ in particular. Such proposed mechanisms include the generation of revenue through the auctioning of EU allowances, levying a fee on bunker fuels or international financial transactions, or the generation of demand for compliance-grade REDD+ credits through links to existing policy instruments.

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⁴ Note that the Member States can only exercise their competence to the extent that the Union has not exercised its competence (Article 2 (2) TFEU).



2.2. Forestry in the EU's climate policy

The EU did not include forest and agriculture related emission sources in the 2008 Climate and Energy Package that defines the EU climate policy for the period up to 2020. The European Commission acknowledges that these activities have the potential for additional emission reductions, however, it also states that "uncertainties in calculation⁵ and volatility⁶ make short term predictability of land-use activities - and their contribution to EU targets - difficult to assess". However, the Commission also acknowledges that these activities "could over time provide a growing contribution to the mitigation effort through improved cultivation methods and forestry management". 8 It has also established incentives for the increase of forest cover in the EU. Indeed, for the first commitment period of the Kyoto Protocol, afforestation and reforestation is expected to result in a net increase of 3.3MtC/y within the Community territory.9 Expansion of forest carbon sinks is supported by national and community-supported afforestation programs (e.g. regulation 1257/99), short-term rotation plantations on former agricultural land, and natural forest expansion. While the EU considers the relevance of forestry for its future climate policies, current emission caps set by the EU for a range of sectors through the EU ETS targeting energy and industrial sectors and the ESD targeting additional non-EU ETS sectors—exclude forestry activities from their scope (see figure 2).

⁵ Such uncertainties may exist, according to the EU Commission, because of lack of data or of agreed measuring techniques for carbon in forest and agricultural soils.

⁶ Volatility occurs due to a large impact of variable weather conditions (e.g. storms affecting the standing stock of

⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage (SEC(2010) 650)

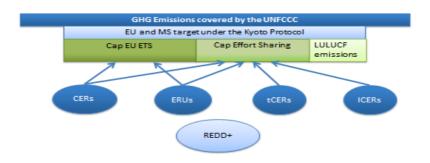
⁸ Ibid

⁹ The Working Group on forest related sinks, set up in 2002 under the European Climate Change Programme (ECCP), has produced a report, in 2003, that outlines the most promising measures that can increase the contribution of forests to the mitigation of climate change. Forest-related actions will also be considered in the second phase of the ECCP, launched in 2005. The report is available on the EC website:

http://ec.europa.eu/clima/policies/forests/docs/forest_sinks_final_report_en.pdf



Figure 2: European Emission Caps and International Credits¹⁰



(a) Revised EU ETS

A revised EU ETS Directive, adopted in 2009, is the EU's most important tool for cutting emissions cost-effectively by imposing compliance obligations for about 11,000 installations. The ETS will apply a single EU-wide¹¹ cap on emission allowances from 2013 through 2020 and beyond and reduce the number of allowances available to businesses 21 percent below 2005 levels (by 2020); it will also include new sectors, notably aviation (from 2012). That said, the overall coverage remains limited: only between 40-50 percent of the EU's emissions are, or will be under current legislation, capped by the EU ETS. As of 2013, free allocation of allowances will be progressively replaced by auctioning.

The EU ETS includes sources of carbon dioxide, nitrous oxide and perfluorocarbon; and the installations¹² covered as of 2013 include energy generation, large industrial emitters (glass, cement, paper, aluminium, among others) and aviation. Emissions from agriculture and forestry remain outside the scope of the EU ETS because, as the European Commission explains "LULUCF [Land use, land-use change and forestry] projects cannot physically deliver permanent emission reductions", monitoring and reporting cannot be realized or would be too costly, and because "the simplicity, transparency and predictability of the ETS would be considerably reduced". ¹³ The mandate given under the original version of the Directive to reassess the issue in 2006 led to the conclusion in 2008 that the main problems relating to forest activities would persist, namely non-

¹⁰ Note that the Kyoto Protocol is smaller in scope in that (a) not all gases covered by the UNFCCC fall into the scope of the Kyoto Protocol; and (b) the Kyoto Protocol foresees non-mandatory reporting, and accounting, for certain LULUCF activities (cropland, grazing land, wetland management, etc.). Most EU countries chose not to report and account on them.

¹¹ The 27 EU Member States, Iceland, Liechtenstein and Norway.

¹² For each sector there are capacity thresholds below which installations are exempt from the EU ETS.

¹³ All quotes from the European Commission's Question & Answer website on Emissions Trading, http://ec.europa.eu/clima/faq/ets/index_en.htm.



permanence, cumbersome transparency, and unpredictability of supply, questionable environmental integrity, and unresolved accounting as well as measurement, reporting and verification (MRV) matters. ¹⁴

The revised Directive, encourages international negotiations on REDD+,¹⁵ but confirms its exclusion of international forest carbon credits within the EU ETS: While Certified Emission Reductions (CERs), issued under the Clean Development Mechanism (CDM), and Emission Reduction Units (ERUs), issued under Joint Implementation (JI), are generally tradable into the EU ETS, certain types are restricted—in particular CERs and ERUs from forest activities are excluded. In the Impact Assessment¹⁶ that accompanied the European Commission's proposal for a review and amendment of the EU ETS Directive, the Commission evaluated three potential ways of including forest emissions into the EU ETS:

- Option 1 (international forest option): Allowing the use of credits (and debits) from forest CDM and JI project activities in to the ETS.
- Option 2 (domestic offset option): Providing for domestic offsetting projects from forest and other land-use activities.
- Option 3 (domestic forest option): Including the EU's domestic forest and agriculture sector in the ETS.

The Commission dismisses all three options mainly for reasons of environmental integrity. It considers the "risks related to the temporary and reversible nature of LULUCF activities in a company-based trading system" as highly risky and potentially unmanageable. More importantly, the Commission claims that "LULUCF projects cannot physically deliver permanent emissions reductions" and that "applying these in a company-based trading system would impose great liability risks on Member States and is contrary to the intentions of the EU ETS to steer the EU towards a low-carbon economy." Finally, the Commission's position is informed by the desire to protect the functional integrity of the EU ETS by keeping it transparent and simple, and by avoiding a "sheer quantity of potential credits entering the EU ETS" that would undermine the functioning of the EU ETS. In order to show its support for forestry activities, the Commission

15 Directive 29/2009/EC, Recital 36: "The Union should work to establish internationally recognised systems for reducing deforestation and increasing afforestation and reforestation, supporting the objective, within the UNFCCC, of developing financing mechanisms, taking into account existing arrangements, as part of an effective, efficient, equitable and coherent financial architecture within the international agreement on climate change to be reached in the Copenhagen Conference on Climate Change (COP 15 and COP/MOP 5)."

16 Impact Assessment, Commission Staff Working Document, accompanying document to the proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the EU greenhouse gas emission allowance trading scheme (COM(2008) 16 final)(SEC(2008)53, 23/1/2008.

¹⁴ Impact Assessment, Commission Staff Working Document, accompanying document to the proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the EU greenhouse gas emission allowance trading scheme (COM(2008) 16 final)(SEC(2008)53), 23/1/2008;



however encourages "research to identify other instruments to tackle global deforestation and create incentives to increase the carbon content of terrestrial ecosystems."

A special Impact Assessment on Deforestation¹⁷ raised additional market considerations and rejected the notion of linking REDD+ credits to the EU ETS citing that: The EU would either face the risk of oversupply ('flooding') of cheap credits diminishing benefits of innovation, energy security and clean air or, as a consequence of strict quota set by the EU ETS, the risk of unwanted windfall profits for the few credits that would enter the market (at prices close to allowance prices) with the vast majority of potential REDD+ credits staying outside the EU ETS. This problematic situation, the Impact Assessment held, could only be overcome if large-scale demand from other trading schemes would emerge.

Thus, the revised EU ETS still excludes credits stemming from forest activities, while once more mandating the EU Commission to submit a report on "the appropriate modalities for including emissions and removals related to land use, land use change and forestry in the Community" and "afforestation, reforestation, avoided deforestation and forest degradation in the event of the establishment of any internationally recognized system". Note, however, that this report is due only in the event that there is an international agreement negotiated "leading, by 2020, to mandatory reductions of greenhouse gas emissions exceeding 20 percent compared to 1990 levels". Page 1990.

Nevertheless, the revised Directive while excluding any linkage of REDD+ credits to the EU ETS, makes the case for funding for REDD+. Member States are invited ("should") to earmark 50 percent of allowance auction revenues to any of several activities ranging from the development of renewable energy to contributions to the Adaptation Fund to environmentally safe capture and geological storage of CO2, and also including "measures to avoid deforestation and increase afforestation and reforestation in developing countries" and "forestry sequestration in the Community". With EU-wide annual revenues from auctions estimated at EUR30 to 50 billion, ²⁰ this is an opportunity of significance for REDD+ activities. There is a string of *caveats* attached, though: First, the EU has no say, and no sanction, as to whether a Member State complies with the imperative to earmark 50 per cent of its auction revenues accordingly. Second, Member States are free to choose which of the various measures they are willing to fund and which not to

¹⁷ Impact Assessment, Commission Staff Working Document, accompanying document to the Communication from the Commission to the European Parliament et al. addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM(2008) 645; SEC(2008) 2619/2).

¹⁸ Ibda, Article 28 (1) (f) and (q).

¹⁹ Article 28 (1) EU ETS.

²⁰ See Impact Assessment (footnote 18), page 10; Cooper/Grubb, Revenue Dimensions of the EU ETS Phase III (2011), calculate a lower amount, i.e. 150 to 190 billion EUR total over the period 2013-2020 (20% scenario) and 200-310 billion EUR total (30% scenario), respectively.



fund. Hence, while some Member States have set encouraging examples,²¹ others remain undecided. Third, the Directive provision in question requires that recipient countries have ratified the international agreement on climate change. One could interpret from this requirement that an international agreement must be in place in order to facilitate REDD+ funding altogether.

(b) Effort Sharing Decision

The ESD establishes targets for non-ETS sector emissions—excluding forestry but including emissions from agriculture²²—and annual binding targets for the period 2013-2020 to ensure an average 10 percent reduction in emissions below 2005 levels. Taken together with the 21 percent reduction target (below 2005 levels) of the EU ETS, both frameworks will achieve a reduction of 20 per cent below 1990 levels by 2020. The ESD is directed to Member States (*ergo* Effort Sharing "Decision" as opposed to EU Regulations and Directives which that directly affect individuals and corporations), not to (private) economic actors, leaving it wholly to Member State governments and legislators how to ensure compliance and whether to impose obligations on private individuals or businesses or not.

The sectors covered include small-scale emitters in a wide range of sectors such as transport (cars, trucks), buildings (in particular heating), services, small industrial installations, agriculture and waste, currently represent some 60 per cent of total GHG emissions in the EU. As a rule, it will be left to Member States to define and implement policies and measures in such sectors, although a number of EU-wide measures in areas such as energy efficiency standards, regulations targeting emissions from cars or waste will also contribute to emission reductions in non-ETS sectors. The ESD foresees a linear reduction path between 2013 and 2020. Member States have annual binding emission limits, and receive annual emission allocations in accordance with the reduction path and they must report their emissions to the Commission each year. This strategy is chosen to ensure a gradual move towards agreed 2020 targets, in sectors where changes take time, such as buildings, infrastructure, and transport.

To increase the cost-effectiveness of the reduction path, several flexibility measures are provided, allowing Member States to:

- bank and borrow emission budgets up to 5 per cent between years;
- transfer overachieved emission reductions between Member States; and
- invest in projects in other Member States.

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²¹ Even without the revised Directive in force, Germany pledged 500 million EUR between 2009 and 2012 for the protection of forests and ecosystems and additional 500 million EUR every year from 2013 with funding generated from the EU ETS auctioning proceeds.

²² Agriculture as defined by the Kyoto Protocol (the ESD referring to European Commission Decision 2006/166/EC, Annex I, Category 4): enteric fermentation, manure management, rice cultivation, agricultural soils, prescribed burning of savannas, field burning of agriculture residues, and other.



This flexibility does not increase the total amount of GHG emissions in the EU, it only changes the location of reductions and allow small changes in timing of reductions. At the same time, just as with the EU ETS, the ESD recognizes international credits issued under the Kyoto Protocol, i.e. CERs and ERUs but not Assigned Amount Units, for compliance purposes. It is significant to note, however, that under the ESD Member States can also use CERs (not, however removal units generated by forest activities in the EU or ERUs) from afforestation and reforestation projects (temporary as well as long-term CERs). Similar to the EU ETS review process, the ESD foresees that the EU Commission will produce a report regarding "the appropriate modalities for including emissions and removals related to land use, land use change and forestry in the Community" and "afforestation, reforestation, avoided deforestation and forest degradation in third countries in the event of the establishment of an internationally recognized system in this context", ²⁴ while the Decision leaves it open what the potential consequences of the findings are.

Note that the possible inclusion of forestry and agriculture in the "Community reduction commitment" will be a future policy subject regardless of the conclusion of an international agreement. Article 9 of the Decision foresees that in case an international agreement is not concluded by 31 December 2010, Member States may specify their "intentions" in this regard and the Commission shall, by 30 June, 2011, "assess modalities for the inclusion of emissions and removals from activities related to land use, land use change and forestry in the Community reduction commitment, ensuring permanence and the environmental integrity of the contribution of land use, land use change and forestry as well as accurate monitoring and accounting, and make a proposal, as appropriate, with the aim of the proposed act entering into force from 2013 onwards." By December 2011, the results of such assessment had not been published yet.

(c) Complementary EU's Forestry Policies

The Union's flagship policy on the protection of international forest resources, on the other hand, does not address deforestation *per se* but governance and illegality. With the adoption of the Forest Law Enforcement, Governance and Trade Action Plan (FLEGT) in 2003 and Regulation No 995/2010 laying down the obligations of operators who place timber on the EU market, the Union attempts to reduce demand for illegally logged timber. While there is doubtless a link between governance and deforestation, the FLEGT framework, which is implemented through bilateral Voluntary Partnership Agreements (VPAs), regulating forms of legal and illegal logging, the establishment of governance oversight through timber tracking systems and monitoring, and the issuance of FLEGT licenses, does not entail any chapter or title on targeted mechanisms to prevent deforestation and forest degradation.

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²³ It is not entirely clear why the authorization for LULUCF-related credits is limited to CERs. The authors believe that reasons of EU internal accounting congruence may be behind it: Since JI projects can be implemented within EU countries, the generation of credits from any such project would not be discounted from the ESD quotas. Also, the status of JI within the EU after 2012 is altogether fragile independent from international negotiations regarding the continuation of this mechanism, cf. Climate Focus: Carbon Offsetting in Europe post 2012 (2011).

24 Article 8 (1) (f) and (g) of Decision No 406/2009/EC.



3. Plans and Prospects

The European Commission considers the acquisition of verified emission reductions from REDD+ in the context of more ambitious climate targets. In its option analysis to move beyond the current 20 percent target, the Commission muses that the EU "could partially fulfill reinforced targets [up until 2020] with international emission reduction credits [generated under a robust international rulebook in order to accelerate the fight against the loss of tropical forests] that meet adequate standards of environmental integrity". The Commission does not go into the details of whether these credits could be traded and also held by private sector entities. In particular, there is no link or reference to the EU ETS or another domestic cap-and-trade framework under which such credits could be used. Yet, the 20/30 percent debate marks one of several scenarios under which, over the coming years, the approach to REDD+ credits and REDD+ support could significantly alter.

3.1. Bilateral Agreements

Both the revised EU ETS Directive and the ESD address the fact that international credits are so far only linked to the flexible mechanisms of the Kyoto Protocol and that such credits may not exist after 2012. They foresee, therefore, the possibility to replace the acceptance of international emission reduction credits issued by institutions linked to the Kyoto Protocol to emissions trading and crediting arrangements under bilateral agreements. Thus, the EU may conclude bilateral agreements with third countries on climate change coordination including crediting mechanisms—all this provided the international community has failed to adopt a comprehensive international agreement that would define a multilateral framework:

(Article 11 (5) EU ETS Directive)

"To the extent that the levels of CER and ERU use, allowed to operators [...] for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted [...] and in the event that the negotiations on an international agreement on climate change are not concluded by 31 December 2009, credits from projects or other emission reducing activities may be used in the Community scheme in accordance with agreements concluded with third countries, specifying levels of use. In accordance with such agreements,

²⁵ Communication from the European Commission to the European Parliament et al., Analysis of options to move beyond 20percent greenhouse gas emission reductions and assessing the risk of carbon leakage, SEC(2010) 650, of 26 May 2010, page 8.



operators shall be able to use credits from project activities in those third countries to comply with their obligations under the Community scheme."²⁶

Thus, as time has moved past the date of 31 December 2009, regardless of the continuing availability of Kyoto credits (CERs and ERUs), the EU foresees an option for bilateral crediting mechanisms or programs. For each agreement, the "levels of use" may be negotiated between the third country and the EU. While forestry is not explicitly mentioned it is not excluded either. Bilateral agreements could entail sectoral arrangements covering REDD+ and support the generation of compliance-grade REDD+ emission reductions through results-based payments. In the context of bilateral agreements, entities regulated under the EU ETS may use "credits from project activities". Under the agreements it is possible however to generate not only credits from projects but also from "other emission reducting activities". To which extent those other emission reduction activities and resulting emission reductions can be used for compliance purposes under the EU ETS remains unclear. It may also be that private entities could use project credits nested into broader national accounting frameworks.

While the EU institutions have not yet formally opened bilateral negotiations under these provisions, several countries are preparing for the bilateral track;²⁷ and the EU Commission suggested using these bilateral links to develop "sectoral carbon market mechanisms":

(EU Commission's Post Copenhagen Strategy)

"The EU should [...] use the [bilateral track] provisions of the current EU ETS legislation to incentivize the development of sectoral carbon market mechanisms and to promote the reform of the CDM. To this end, the Commission will: (1) work together with interested developed and developing countries to develop sectoral mechanisms, whose credits could then be recognized for use in the EU ETS, in the emerging OECD-wide market and under the EU's Effort Sharing Decision containing Member State reduction commitments: and (2) dependent on progress in the development of sector-wide mechanisms, develop and propose measures for improving the quality requirements for credits from project based mechanisms." ²⁸

Building on this strategy consideration, the EU seems willing to engage in sectoral negotiations with selected developing countries having a clear preference for arrangements that cover entire sectors rather than projects. Whether such intention covers also REDD+ and whether crediting

²⁶ Article 11 a (5) of Directive 29/2009/EC for the EU ETS; Article 5 (2) of Decision 406/2009/EC for the Effort Sharing framework makes reference to the former provision.

²⁷ See for instance Ukraine which raised the issue in its EU/Ukraine partnership negotiations in spring 2011.

²⁸ Communication from the Commission to the European Parliament et al., International climate policy post-Copenhagen: Acting now to reinvigorate global action on climate change, Sec(2010) 261, 9 March 2010.



options below national approaches (subnational, project-based, other) would be acceptable is not clear.

3.2. A Global Forest Carbon Mechanism

In its 2008 Communication on Deforestation,²⁹ the European Commission formulated a target to reduce gross tropical deforestation by 50 percent in 2020 and halt forest cover loss by 2030 promising that the EU would "take a leading role to shape the global policy response to deforestation".

The Commission reckons that to reach the 50 percent reduction target, an estimated amount of between EUR15 to 25 billion annually will be needed.³⁰ Thus, the Commission continues, "[at] the EU level, an appropriate level of funding would be required for the fight against deforestation". However, the Commission concludes that the "[recognition] of forestry credits in the EU emissions trading system (ETS) would not be realistic at the present time". Such recognition should be considered only as a "complementary tool" and "in the longer term—i.e. post 2020—provided that certain conditions are fulfilled". For the period 2013–2020, the Commission promotes the use of auction revenues but insists that "sources of public funding should be complemented by private funding".

For supporting REDD+, the EU Commission has proposed a Global Forest Carbon Mechanism, a government-to-government facility to offer capacity building, assist with nation-wide implementation and provide performance-based financial support. While not explicit on the financial sources, the financial volume and the governance structure, the Commission has pronounced on a range of design features.³¹ The Mechanism should be open to developing countries that ratify an international agreement on climate change that include a chapter on deforestation. National implementation would be required (in large countries regional implementation being an option) to reduce the risk of in-country leakage. Financial incentives should target co-benefits such as protecting biodiversity and eradicating poverty. Effective forest governance structures must be in place for countries to participate in the mechanism. And funding should be performance-based and linked to robust independent verification. While the Global Forest Carbon Mechanism is a vision for future policy implementation, today's support for forest conservation in third party countries remains largely within Member State responsibility.

²⁹ Communication from the Commission to the European Parliament et al., Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM(2008) 645/3.

³⁰ lbda., page 10, making reference to the accompanying Commission Staff Working Document (Impact Assessment), SEC(2008) 2619/2, pp. 38 et seqq., which contains a review of existing literature at the time.

³¹ Communication from the Commission to the European Parliament et al., Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM(2008) 645/3.



3.3. Public Sector Support for REDD+

While the Commission remains cautious with respect to accepting future REDD+ credits for private sector compliance, it is more positive when it comes to accepting REDD+ for government compliance. The Commission holds that it "will test the recognition of deforestation credits for government compliance" between 2013 and 2020. Certain pre-conditions would need to be met, however, before any inclusion of forests in carbon markets could be considered:

- An international agreement with ambitious mid-term emission reduction commitments;
- Proper monitoring and independent verification need to be secured; and
- Permanence and liability issues need to be resolved which requires the establishment of a
 "new sectoral market mechanism [...] to avoid leakage problems and to ensure a benefit
 in terms of net-deforestation".³²

There are no indications as to the size of such 'test recognition' and what the compliance framework in question would look like. Also, the third pre-condition suggests that only those REDD+ credits would have to be measured against national reference levels. The use of credits for "government compliance" would imply that the EU either creates a new compliance framework for Member States or, probably simpler and more likely, that it expands the categories of international credits under the ESD. Both options would require the decision of both the Council and the EU Parliament. In any event, EU ETS inclusion, the Communication continues, should only be considered after a thorough review of the experience with the test pilot and for "the period after 2020". 33

In December 2010, the EU also helped establish the Europe Forest Institute's EU REDD Facility with the mandate of "overcoming the governance challenges related to REDD+ and promoting overall sustainability of REDD+ activities". 34 While it is too early to say what the scope of activities, the leverage and the budget of the Facility will be, or whether there is any linkage to REDD+ crediting, the establishment of the Facility is a promising sign of reinforced REDD+ activity on the side of the European Union. In this respect, it should also be noted that in the latest 2009-2010 Call for Proposals of the Commission's Environment and Natural Resource Thematic Program (ENRTP, Including Energy), the 'Forest' part of the call was dedicated to REDD+ and FLEGT activities. 23 projects for a total value of EUR40 million have been selected. The Facility may play an important role in the future of EU's REDD+ policy, in particular in the context of bilateral agreements with developing countries, in coordinating EU REDD+ efforts with the FLEGT governance program, and the spending of REDD+ funds administered at the EU level.

³² European Commission, Communication on deforestation, page 12.

³³ lbd.

³⁴ EU FLEGT Voluntary Partnership Initiatives Website,



In sum, the EU Commission starts to look favorably at Government support for REDD+, including the piloting of the acquisition of REDD+ credits, but remains sceptical towards any (i) REDD+ projects or subnational activities; as well as (ii) allowing REDD+ credits as compliance tool under the EU ETS.

3.4. Strengthening the Commitment: The 30 Percent Target

The debate is ongoing in the EU whether the Union should unilaterally strengthen its 2020 milestone—20 percent GHG reductions below 1990 levels—regardless of progress in formulating an international, sufficiently ambitious, climate agreement. The EU Commission sees a range of arguments that would support an increase in ambition. By 2009 the EU's GHG emissions stood at 17.3 percent below 1990 levels.³⁵ While emissions went slightly up again in 2010, in parallel to the recovery of the European economy after the crisis of 2008/2009, the Union is well on track to reach its 20 percent target by 2020. Moreover, with the Energy Efficiency Plan 2011 implemented, the Union will have exceeded this goal by another 5 percent.

Europe's economy, in fact, is doing so 'well' emission-wise (albeit in the context of a slowing economy) that according to estimates the allowance market for the second trading phase (2008-12) has an oversupply in the range of 1.3 billion units.³⁶ The ESD sectors, having shown less of an imprint from the global economic crisis, are less over-performing, yet even here, for many Member States, the 2020 targets are in easy reach.

In response to these developments, the EU Commission in its 20 percent option analysis found that the overall costs implied in reaching a 20 percent target had decreased by a third (from EUR70 billion to EUR48 billion) and that there are several options to move beyond this target. Notably the option to increase the EU ETS target by reducing the number of allowances available for auctioning each year—the Commission sees a reduction capacity of 15 percent over the period 2013-2020 representing some 1.4 billion allowances (equivalent to 1.4billion tons of CO2e emissions), and to build on international crediting mechanisms using sectoral approaches including REDD+. Sectoral crediting in general is favored as a mechanism to overcome identified shortcomings of project-based approaches (lacking additionality, insufficient government support, leakage). While the Commission's consideration for sectoral mechanisms relate largely to industrial production, the readiness of REDD+ countries may present them as early candidates to forge sectoral cooperation, financing and crediting agreements.

36 Barclay's Capital, Monthly Carbon Standard (April 2011). The European Commission reckons that operators will be able to carry over between 5-8percent of their 2008/12 allowances into the third trading phase, see option analysis, footnote 11, page 3.

³⁵ Report from the European Commission to the European Parliament and the Council, Progress towards achieving the Kyoto objectives, SEC(2010) 1204, 12 October 2010.



However, despite the limited effort needed to strengthen the reduction target, there is considerable resistance among several Member States pointing to the hardship a further increase in emission reduction ambition would add to a struggling economy, and EU Commissioner *Connie Hedegaard* announced in July 2011 that the option analysis has been put on ice for the coming six months or so.³⁷ This announcement followed the failure of the European Parliament to adopt a report proposing an unconditional 30 percent target for the European Union.³⁸

3.5. 2050 Roadmap

After COP16 in Cancun and in line with a change of gears in international negotiations, there has been a noticeable shift in the EU approach away from the 2020 paradigm to a long-term decarbonization strategy. Evidence can be found in the 2050 Roadmap issued by the EU Commission in March 2011,³⁹ under which the year 2020 is only an intermediary milestone on a trajectory to 2030, 2040 and 2050. The Roadmap does not set intermediary targets. Rather, on the basis of the long-term target set by the European Council—the body in the European Union consisting of the heads of state of Member States charged with defining the general political directions and priorities of the Union—it presents the most "cost-effective pathway" to reach the overall reduction goal of 80-95 percent below 1990 levels by 2050. According to the Commission's calculations, this pathway implies for 2020 a domestic reduction of 25 percent, for 2030 a reduction of 40 percent and for 2040 a reduction of 60 percent.

Apart from domestic efforts, the Roadmap considers "implications for the agricultural and forestry sector in a global perspective", and "underscores the need to consider all land uses in a holistic manner and address [LULUCF] in EU climate policy". On this basis, the EU Commission indicates that it will present an initiative on this issue later in 2011.⁴⁰

As with the option assessment on moving beyond 20 percent by 2020, the Roadmap 2050 has so far proved contentious, even though rejection among Member States was not as wide-spread as with the former option assessment. Most recently, in the June 2011 meeting of the Council, Poland blocked the adoption of conclusions that would have approved the Roadmap.

³⁷ Commissioner Hedegaard made the announcement at the informal Environment Council on 12 July 2011, reported by IETA the same day.

³⁸ The Parliament was put to vote by a resolution adopted by its Environment Committee which calls for the European Commission "to come forward, as soon as possible and before the end of 2011, with proposals [...] to move to a 30 percent overall target for 2020". After the plenary had adopted an amendment to this motion proposed by conservative and liberal MEPs according to which the 30 percent should only apply, "if and when the conditions are right", there was no majority in the final vote with socialists, greens and democrats rejecting the motion on the ground that it had considerably weakened the 30 percent target.

³⁹ Communication from the Commission to the European Parliament et al., A Roadmap for moving to a competitive low carbon economy in 2050, COM(2011) 112 final, 8 March 2011.
40 lbda., page 10.



4. Challenges and Opportunities for REDD+ in the EU

At several occasions, the EU Commission has expressed principled concerns with respect to recognizing emission reductions from forestry for compliance with emission reduction commitments. These concerns are more prominent when it comes to integration of REDD+ credits into the EU ETS, but they continue to apply to acquisition by governments as well. To put these concerns into context, we summarize in the following the concerns expressed by the Commission. We also formulate options on how to address these concerns while still mobilizing demand for REDD+.

4.1. Challenges

The concerns expressed by the EU Commission with respect to REDD+ crediting, the use of market mechanisms and a link to the EU ETS fall into two main categories: (i) the lack of environmental credibility of REDD+ credits; and (ii) market risks related to the issuance of tradable credits for REDD+. Both categories of concerns are compounded by the fact that REDD+ crediting is new and untested.

(a) Challenge I: Environmental credibility

The methodological concerns of the EU Commission are reflected in the impact assessment of the EU ETS published in January 2008. These concerns are summarized in table 1.

Management Approach

Table 1 EU Concerns relating to the environmental integrity of forestry credits

Environmental Integrity Leakage Once national accounting is in place, leakage concerns will be eliminated at the country level. During the transitional phase prior to national accounting, sub-national programs will need to assess and manage leakage (e.g. through discounting, buffer pools, etc.) outside their borders. In addition, REDD+ programs should be designed to address the drivers of deforestation, thereby minimizing pressure for deforestation elsewhere. MRV MRV challenges are increasingly being addressed through rapidly advancing satellite and aerial remote sensing techniques and improvements in ground-truthing through field measurements. Estimates should reflect the uncertainty levels in the monitoring approach. Independent, third party verification can also ensure accountability and credibility. Many countries are currently building



Permanence

robust MRV systems in the context of REDD+ readiness programs.

Permanence risk can be addressed through the use of buffer pools and insurance mechanisms. In addition, REDD+ programs should be designed to be inclusive and supportive of local stakeholders and communities to ensure incentives are aligned towards achieving REDD objectives over the long term. And appropriate legal and institutional mechanisms should be employed to ensure enduring results.

(b) Challenge II: Market instability

A REDD+ market mechanism faces the dilemma that participating countries will have to sell REDD+ emission reductions to cover their costs, while potential buying countries have a wide array of choices how they meet their Quantified Emission Limitation and Reduction Obligations (QERLOs). While demand is therefore hard to gauge, the supply of REDD+ credits is also uncertain and difficult to assess precisely. Estimates of mitigation potential from REDD+ range from 2.6 GtCO₂e per year by 2030⁴¹ to 3.3 GtCO₂e per year by 2030⁴² to 3.5 GtCO₂e by 2050⁴³. However, mitigation potential is not synonymous with the generation of tradable REDD+ credits—the actual generation of credits is likely to be much lower than the cited technical potential. A number of factors will affect the generation of REDD+ credits including how reference levels are set and how easy (or difficult) it is to implement activities that will generate emission reductions and removals in each country.⁴⁴ If demand is set too low or is uncertain, this may negatively affect supply but also opens up the risk of market flooding. If demand is set too high, any problems with supply will drive carbon prices to unacceptably high levels. These uncertainties surrounding supply and demand of REDD+ credits produce a number of potential risks including market flooding, price volatility, and timing of unit issuance.

A large supply of REDD+ credits would flood the carbon market if (i) the total volume supplied is significant compared to the total market volume; and (ii) there is insufficient demand for REDD+ credits. Large supplies of emission reductions from REDD+ would depress the price of REDD+ credits and, provided REDD+ credits are fully fungible with existing carbon markets, carbon prices generally.⁴⁵ This in turn may (i) decrease the

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⁴¹ Johan Eliash, Climate Change: Financing Global Forests, The Eliash Review, (2008), p 191 (long version document).

⁴² Vattenfall, Global Mapping of Greenhouse Gas Abatement Opportunities up to 2030, Forestry sector deep-dive, (2007), at 1

⁴³ Nicholas Stern, Stern Review: The Economics of Climate Change, (2007), at 218 - 219

⁴⁴ The former will affect the theoretic potential to generate REDD units if, for example, part of the mitigation potential is accounted for under a business as usual scenario of reductions. The latter will affect the actual supply of REDD units. Actual supply may be depressed if, for example, the international rules surrounding the generation of REDD units are so complex they create a barrier to enter the market, or a country's REDD policy or governance do not engender the development of REDD activities that generate REDD units.

⁴⁵ It should be noted that some analysis has questioned the validity of the concern over flooding. This analysis found that allowing REDD units into the carbon market would only cause a modest price depression (13percent) which would



incentive to invest in low carbon technologies; (ii) decrease the incentive for technology transfer and investment in low carbon technologies in non-capped countries (i.e. countries that generate offsets); and (iii) reduce the amount of income to actors undertaking REDD+ activities and selling REDD+ credits. Such market flooding could be addressed by limiting the amount of REDD+ credits allowable for compliance purposes under the EU ETS or the ESD.

Uncertain supply and/or demand for REDD+ credits would also create volatility within the carbon market. While some volatility can be expected, significant price volatility will discourage investment in low carbon technologies and REDD+ initiatives as the price incentive for doing so will remain too speculative and unclear. This is particularly relevant for developing country governments where they rely on income from the sale of REDD+ emission reductions to fund their forest policies. An additional risk relates to the timing of issuance of REDD+ credits. If participant countries would account for emission reductions and removals at the same time intervals, uncertain but almost certainly high amounts of REDD+ credits would also reach the market at the same time, driving prices down leading to significant insecurities and speculation in REDD+ and other sectors of the carbon market.

Policy can either compound price volatility or be directed towards stabilizing prices. Active regulation of the supply of credits helps to keeping price incentives reliable. By creating a reserve pool of REDD+ credits, the EU ETS regulator can also use REDD+ credits to regulate supply under the EU ETS, avoiding price peaks and supporting stability within the system. Such measures would lead to a sustainable increase in demand for REDD+ credits, while, at the same time, avoiding contingent windfall profits.

This could be similar to, or be mirrored after, the provision included in the American Clean Energy and Security Act of 2009 (Waxman-Markey Bill) that would have allowed "strategic reserve auctions". ⁴⁶ Under that provision, a certain number of allowances were to be banked by the system, and—in the case of the price hitting a specific threshold—could be purchased at auctions by covered entities to meet a predetermined portion of their emission reduction obligations. In the case of Waxman-Markey, the proceeds from this special auction were then to be used to purchase and retire international offset credits for reduced deforestation activities.

Another example is California's AB32, which also proposes to establish an Allowance Price Containment Reserve.⁴⁷ In California's case, rather than banking additional allowances, it removes a number of allowances from the overall cap at the beginning of the program and allows covered

not be significant enough to deter investment in low carbon technologies. See Cabezas, P., and Keohane N, Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD): Implications for the Carbon Market, Environmental Defense Fund, (2008).

⁴⁶ H.R. 2454: American Clean Energy and Security Act of 2009.

 $^{47\} http://www.arb.ca.gov/regact/2010/capandtrade10/capv3appg.pdf.$



entities to purchase them at specified prices during direct quarterly sales. Unlike the Waxman-Markey Bill, this mechanism helps to moderate (but not guarantee) the risks of higher-than-expected prices, while not relaxing the amount of emission reductions that would be achieved by the program.

In any case, a number of options/variations on a reserve mechanism could be structured to fit the EU's needs and help mitigate both price volatility and allowance oversupply.

4.2. Opportunities

The opportunities to generate demand for REDD+ credits can be divided into two broad categories: (i) the linking of REDD+ to mechanisms regulating private sector emission reductions; and (ii) the acquisition of REDD+ credits through public actors. The various options are not mutually exclusive but could be combined to mobilize additional funds for REDD+.

(a) Private sector approach: Allowing a small percentage of REDD+ credits into the EU ETS

It has been proposed to open the EU ETS to REDD+ credits in the short term.⁴⁸ This could be facilitated in a phased approach starting with opening the EU ETS for a (small) percentage of REDD+ credits, even before 2020. Such percentage could be increased with the growing confidence into a REDD+ mechanism and the availability of supply of REDD+ credits. While such gradual allowing of REDD+ credits into the system would avoid market flooding, it would still face a number of important hurdles:

- Unless in the scenario of bilateral agreements, the opening of the EU ETS to REDD+
 credits, even to a small amount of REDD+ credits, would require an amendment of
 the EU ETS, which is a cumbersome and politicized affair. Such amendment is not
 planned and is extremely unlikely to be triggered for allowing REDD+ credits under
 the EU ETS.
- Given the existing oversupply of EUAs under the EU ETS, it is hard to think of valid arguments to increase the supply of offset credits under the system.
- If a link to the EU ETS was created, any allowance for REDD+ credits would be merely symbolic and unlikely to create significant demand for REDD+ credits.
- It will take a while until developing countries are ready to sell REDD+ credits, including the adoption of REDD+ reference levels, which may result in very limited supply of REDD+ credits before 2020.
- The innovative nature of REDD+ may require some piloting of subnational approaches, MRV systems and disbursement mechanisms before private sector can acquire compliance grade REDD+ credits.

48 See, for instance, Carbon Markets & Investors Association, Reducing Emissions from Deforestation in Developing Countries: Approaches to Stimulate Action (2009).



In sum, while the opening of the EU ETS to REDD+ credits before 2020 is an option, the likelihood that this happens is low.

(b) REDD+ Tenders and Auction Revenue Facility

The EU Commission or individual Member States could also support early REDD+ initiatives by setting up tenders that procure REDD+ credits. Such programs could be modelled after the early example of the Dutch Government who pioneered international carbon markets by issuing buying orders for ERUs and CERs before the detailed rules of the JI and CDM frameworks were agreed. Procured REDD+ credits could be retired from the market after the initial acquisition. Procuring REDD+ credits would stimulate private and public supply of approved and authorized REDD+ projects and programs. It would create incentives for developing countries to accelerate readiness and engage in REDD+ and help testing protocols and MRV frameworks while an international system is being developed.

Public tenders could be cross-financed with EUA auctioning proceeds. If Member States are willing to use portions of the auctioning revenues—50 percent of allowances are to be auctioned as of 2013—for REDD+ activities and REDD+ crediting frameworks, substantial funding will be available (Auction Revenue Facility). Note, in this context, that the revised EU ETS Directive empowers the Commission to adopt a regulation on "timing, administration and other aspects auctioning" (Article 10 (4)) and that such regulation was adopted in late 2010.⁴⁹ A first amendment is currently under discussion. The regulation, in its current form, does not determine the use of revenues generated from auctioning activities, pointing out that the revised EU ETS Directive leaves this decision to Member States. However, arguably the regulation could incorporate a (voluntary) structure to coordinate and facilitate revenue flows into results-based REDD+ activities. This would not least correspond to the new competence of the EU for "promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change".⁵⁰

Any funds made available (through an Auction Revenue Facility or other) could then be organized in the form of a EU Member States REDD+ Initiative. Funding under this Initiative could be organized and administered by the new REDD+ Facility of the European Forest Institute. The establishment of an Auction Revenue Facility—through a revised auctioning regulation—and of a coordinated Member State REDD+ Initiative could be set in parallel to organizing the first EUA auction in 2012.

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⁴⁹ Commission Regulation (EU) No 1031/2010 of 12 November 2010.

⁵⁰ Article 191 (1) Treaty of the Functioning of the European Union (TFEU), as in force since 1 December 2009.



(c) Allowing REDD+ credits under the EDS

As in the case of the EU ETS, opening the ESD to REDD+ credits may require legislative activity. However, the process may be more straightforward, not least because it may be in the Member States' interest to expand the number of eligible credits that can be used for ESD compliance. Other challenges such as price volatility, predictability and transparency of the credit market, are less relevant given the limited number of buyers. The ESD foresees the preparation of an ESD implementation report (by the European Commission) with proposals for revision, as appropriate, by 2016. A more ambitious timeframe for the opening of the ESD to address REDD+ could also be feasible. If preparatory works (modelling, impact assessment, etc.), were to start immediately, a legislative amendment could be in place by 2013 or 2014 and the REDD+ test phase could be triggered no later than 2015.

The opening of the ESD to REDD+ may go hand in hand with an increase of the overall Community climate goal to a 30 percent reduction target by 2020. In any case, the measure would respond to the EU Commission's option assessment under the 2008 Communication on Deforestation which foresees a government-backed pilot phase before involvement of the private sector through integration in the EU ETS is possible.

There are different forms in which an ESD-integration is possible. There is the *individual option* in which Member States receive REDD+ credit quotas in the same way as they receive CDM and JI quotas today. Then, there is a *collective option* under which Member States would pool their credit demands (e.g. 1 or 2 percent of the annual allocation) and install a REDD+ fund that itself could invest in REDD+ activities testing the crediting mechanism. Addressing the issue of permanence, both options could go hand in hand with a collective Member State "set-aside" allocation to hedge the risk of future forest losses.

In the absence of a crediting framework under the UNFCCC, the *collective option* could be combined with one or more bilateral agreements concluded under Article 5 (2) ESD in conjunction with Article 11a (5) EU ETS Directive. The agreements could explicitly refer to the pilot character of the crediting scheme in question, and they could specify that (only) EU Member States (under the ESD) can acquire credits generated under the scheme.

Promoting bilateral schemes in the absence of an ambitious international agreement remains a challenge, though, not least politically for the EU Commission which has pronounced in the past that the conclusion of such an agreements would be seen as pre-condition for any piloting phase. However, there is a good chance that Europe will not stand idle if international negotiations fail and that the European Commission will agree to go ahead with concluding bilateral agreements. The increased activity under FLEGT and the interest of third party countries to enter into VPAs with the EU could be a starting point to discuss sectoral REDD+ agreements with interested developing nations.



Under the Waxman-Markey Bill, entities were allowed to purchase "REDD" credits either under an international mechanism, such as the UNFCCC, or through bilateral agreements between the U.S. and host countries participating in REDD+. The Administrator of the emissions trading program would have been required to work in consultation with the US Department of State to determine eligible countries and activities, and ensure that the selected REDD+ activities met certain standards and requirements. Finally, the bill foresaw the setting up of an Offset Integrity Advisory Board which would meet immediately after the bill's passage to recommend rules for offsets, and then every five years to review offset programs, including deforestation, to ensure that offset credits do not compromise the integrity of the emissions cap.

(d) Opportunities at the Member State level and subnational approaches

Despite the broad (and arguably growing) competencies for climate policy at the EU level, international climate finance from public sources is still mostly governed by Member States. Thus, the promotion of public sector driven REDD+ funding including government funding for REDD+ credit purchase programs needs to target the different European capitals rather than Brussels. While any credits generated may not be used either under the EU ETS or the ESD without EU approval, the crediting approach is still interesting for Member States—not least as an accounting framework allowing for MRV-proof certification for performance-based finance. Member State-driven investments in REDD+ before 2020 could take the following forms:

- general REDD+ investments by Member States;
- results-based (credit-based) investments by Member States at the national and subnational level; or
- investments by subnational public entities from Europe into REDD+ programs or credits.

While a Europe-wide REDD+ crediting campaign with Member State governments is likely to increase overall demand for REDD+ credits, such a campaign may be extended to include also subnational entities. The *Governors' Climate and Forests Task Force* (GCF) is an example of how states and provinces can actively participate in REDD+. The GCF is the most important REDD+ initiative at the subnational level. It integrates 16 states and provinces from Brazil, Indonesia, Mexico, Nigeria, Peru, and the United States. The GCF is one of the most successful initiatives to date supporting the development of a REDD+ crediting mechanism and advancing REDD+ activities at the subnational level. So far, none of the participating states and provinces comes from Europe, despite the fact that many European nations have federal constitutions or have devolved governance structures with separate policy responsibilities and administrations, independent political representation and genuine budgetary powers at the subnational level.

Europe's regions are slowly embracing the challenge: Recently the EU's Committee of the Regions—an often overlooked institution of the European Union—adopted a resolution that



confirms the commitment to international cooperation when it states that it intends to "expand the work with sub-national authorities in the developing world to raise awareness, exchange best practice, transfer technology and ensure that the financial commitments made in Copenhagen are invested effectively".⁵¹

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⁵¹ JO C 15/1, 18.1.2011 Resolution of the Committee of the Regions 'The Cancún Climate Summit: the contribution of the COR to the UNFCCC (COP 16) - 29 November to 10 December 2010' (2011/C 15/01).



5. Conclusions

The EU strongly backs an emerging international framework on REDD+. Within such framework the Union wishes "to take a leading role to shape the global policy response to deforestation". ⁵² In the context of "an effective policy [that] has to reward the value of the services provided by forests", ⁵³ the EU will have to develop a strategy on how to support REDD+ beyond the fast-start pledges. At the time of COP-17, such strategy is still lacking. While REDD+ remains to be excluded from the EU burden-sharing decision and there is no clear pathway that would link demand for REDD+ credits to private sector compliance frameworks (such as the EU ETS), the Union has yet to formulate a strategy on how to mobilize sustained funds for REDD+. So far, the EU merely encourages Member States to allocate finance to REDD+.

While a longer-term strategy will depend both on the overall ambition and architecture of an international climate regime and on the EU's emission reduction targets, there are a number of steps that can be taken in the short term to mobilize support for (results-based) REDD+.

- Strengthening the EU REDD+ Facility. The new EU REDD+ Facility of the European Forest Institute has the potential to become an important player in the EU's REDD+ policy. It may pool resources, ensure an equitable and transparent allocation of REDD+ funds, monitor standards, reference level and MRV development. While the Facility to date consists of little more than two staff and while it has a research budget only, its focus to identify and build operational synergies between REDD+ and FLEGT points into the direction of an enhanced role in the implementation of REDD+. The EU REDD+ Facility may conclude and manage bilateral agreements with developing countries for REDD+ financing in anticipation or in compliance with an international REDD+ framework. Such agreement could foresee the support of policies and results-based demonstration activities on the subnational level that would be supported in transition to a national REDD+ system.
- Allocate Auction Revenues for REDD+. As EU Member States are required to use at least
 half of their revenues from allowance auctions from 2013 for the funding of various climate
 purposes, including on REDD+, the EU may create a framework that allocates and channels funds
 to REDD+ activities in a coordinated manner. Such an enabling framework could offer Member
 States the management of (a portion of) REDD+ funds through an EU initiative for REDD+. The
 EU REDD+ Facility would be well placed to ensure coherence in REDD+ implementation (e.g.
 requirements for reference levels, MRV, safeguards), which is particularly important as long there
 is no operational international framework for REDD+. Coordinated negotiations will also facilitate
 the interaction of developing countries with the EU as it avoids several, competing and possibly

53 Ibid.

⁵² European Commission, Communication from the Commission to the European Parliament et al. addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM(2008) 645; page 6.



conflicting REDD+ arrangements. A REDD+ Auction Revenue Facility could be set up in the context of the EU's auctioning regulation (Commission Regulation (EU) 1031/2010).

• Support for REDD+ Demonstration Activities. The support of results-based REDD+ demonstration activities in developing countries allows the testing of standards and crediting rules for REDD+. Such pilots help to establish the environmental credibility of REDD+ and inform EU institutions in their decision to integrate REDD+ into existing and future compliance frameworks. A link to the ESD could encourage Member States to procure REDD+ credits (possibly in a 30% reduction scenario) without risking further volatility in private emission trading markets. The procurement of emission reductions from REDD+ could follow tender procedures or be negotiated under bilateral agreements focussing on particular regions or provinces within a REDD+ country. From an operational point a view, such results-based demonstration activities need to be set up addressing design, credit issuance, MRV, oversight, etc. From a financial point of view, at least as long as the pilot is not linked to a compliance regime, funding needs to be available, coming either from EU funds or Member States sources.