EU BIOFUEL BASELINE PROJECT

Subtask 2.3

Sustainability criteria for land use activities in the carbon market

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Summary for main report

The objective of this task is to identify how the project target countries manage sustainability challenges, or rather safeguard sustainability of developments in the land use sector at the example of carbon forestry activities. The willingness of a set of target countries to adopt sustainability criteria for land-based developments in the carbon market is assessed, in order to derive conclusions for the possible future acceptance of such standards for biofuel production.

This task analyses two different processes; on one hand sustainability criteria and priorities formulated by target country governments themselves in order to participate in international regimes (e.g. Clean Development Mechanism (CDM), Reduced Emissions from Deforestation and Degradation (REDD+)), and on the other hand target country governments' and/or project partners' acceptance of sustainability requirements that are imposed by external sources, such as carbon standards.

In spite of several limitations to this approach (see full report, annex x), some general conclusions can be drawn.

- A general trend seems to be that sustainability safeguards of externally verified carbon standards are stricter than those formulated by target country governments themselves (i.e. compare results of DNA sustainability criteria with voluntary carbon standards).
- Overall, the safeguards used in the voluntary carbon market seem to overlap most with the EU sustainability safeguards, and are thus classified as "most stringent" in our analysis. The presence of forest carbon activities under the most stringent carbon standards shows that under certain circumstances target countries are willing to accept and adopt sustainability safeguards that are "imposed" externally and have not been formulated on national level.
- The recently established REDD+ initiatives do not yet seem to have gotten to the stage of formulating specific safeguards. This is in line with the fact that sustainability safeguards for REDD+ mechanisms were decided upon for the very first time at the last Climate Conference in Cancun in December 2010, and are thus very new. Our assessment attempts proved therefore premature, and results showing non-existence of safeguards in the current documentation cannot be conclusive as to countries' general willingness to establish sustainability safeguards.
- The results from the DNA analysis on the other hand are expected to be at least indicative of countries priority setting for sustainability. The level of detail for DNA host country requirements is however much broader than the specific safeguards formulated by the EU, so a direct comparison is difficult.
- The results imply the conclusion that Brazil, Tanzania and India are very open to voluntary carbon
 projects and thus seem open for complying with externally defined sustainability criteria.
 Regarding initiatives where countries define the sustainability criteria themselves, Tanzania,
 Bolivia and Indonesia are the target countries most apparent in the analysis. All put together,
 Tanzania is the country engaged in most initiatives and projects under carbon standards.
 However, it would be rather daring to draw general conclusions on countries' willingness to
 accept specific requirements for biofuel production from this.
- Malaysia on the other extreme is a country not present in any of the country defined sustainability initiatives, nor does it act as a host country for any carbon forestry projects under

the standards we assessed. This could very well be a strategic move from Malaysia; however it is very difficult to draw such conclusions based on this analysis.

Objective

The objective of this task is to identify how the project target countries manage sustainability challenges, or rather safeguard sustainability of developments in the land use sector at the example of carbon forestry activities. The willingness of a set of target countries to adopt sustainability criteria for land-based developments in the carbon market is assessed, in order to derive conclusions for the possible future acceptance of such standards for biofuel production.

Method and Approach

This task analyses two different processes; on one hand sustainability criteria and priorities formulated by target country governments themselves in order to participate in international regimes (e.g. Clean Development Mechanism (CDM), Reduced Emissions from Deforestation and Degradation (REDD+)), and on the other hand target country governments' and/or project partners' acceptance of sustainability requirements that are imposed by external sources, such as carbon standards (Table 1, for more detailed description, see appendix 1). Following this approach, the analysis is divided in two main parts:

1. Sustainability criteria and priorities defined by target country governments

This block includes analyses of

- a) Host countries' sustainability criteria under the CDM, which is expected to reflect countries' willingness to prioritize sustainable development, through the stringency of the national criteria and indicators for CDM projects.
- b) Sustainability objectives and criteria specified in the documentation submitted to the major REDD+ pilot initiatives, such as the World Bank's Forest Carbon Partnership Facility (WB FCPF) and the UN-REDD programme.
- c) Sustainability requirements and criteria that governments commit to in bilateral agreements; e.g. the Norway-Tanzania REDD+ agreement, and the Australian International Carbon Partnership Initiative (ICRF).

By screening the wording of sustainability approaches and the mentioning of criteria contained in the above sources, we identified overlaps with the EU sustainability safeguards for biofuel activities (see Table 2 below). Based on the number of identified overlaps (i.e., matching wording), we then ranked countries according to their prioritization of sustainability criteria in the screened documents.

2. Sustainability criteria accepted in target countries, but defined by external bodies such as VER carbon standards

In the voluntary carbon standards, it is mainly projects that need to comply with the criteria specified by the standards and thus the national government is not necessarily involved or forced to adhere to any sustainability criteria in that process. Therefore, these analyses might not provide direct indications of governments' and host country willingness to adhere to sustainability criteria. However, it still provides information about the willingness of actors in the field, such as project developers. This is conclusive as the biofuel production and export agreements are also happening on a project basis, i.e. between companies and not necessarily between governments. The assessment of voluntary carbon standards was approached in two steps:

- a) Screening of guidance documents of the major carbon project development standards in the voluntary carbon market, where overlaps with the EU sustainability safeguards were identified (i.e., matching wording). In this step the stringency of these standards in terms of sustainability requirements was assessed.
- b) Identification of target countries hosting activities under the respective carbon standards. Depending on the number of carbon standards present in one country and the stringency of these standards assessed in step 1, some indications were derived about the general willingness of project actors in these countries to adhere to more or less stringent sustainability requirements.

Our assessment was based on a range of data sources from forestry activities in the carbon market, both afforestation and reforestation (A/R) and forest conservation activities (REDD+):

Part 1: Criteria formulated by governments	Part 2: Criteria formulated externally and applied in target country
CDM Sustainability Criteria of the Designated	The Verified Carbon Standard (VCS)
National Authority (DNAs) of our target countries	
Forest Carbon Partnership facility (FCPF) R-PP	The Gold Standard Voluntary Project Guidelines
country submissions by our target countries*	
UN-REDD country submissions by our target countries*	Plan Vivo Documentation
The REDD+ bilateral agreement between Tanzania	The Climate, Community and Biodiversity
and Norway	Standards (CCBA)
The Australian International Carbon Partnership	The GHG Protocol
Initiative (ICRF)	
	The Chicago Climate Exchange (CCX)
	TUEV Sued's VER+
	Requirements of the Amazon Fund
	Requirements of the GEF SFM-REDD+ programme
	Requirements of the WB Forest Investment
	Plan (FIP)
	FCPF global guidance documents
	UN-REDD global guidance documents
	REDD+ Social & Environmental Standards

Table 1: Data sources for assessments under Blocks 1 and 2

*Not all target countries participate in the REDD+ initiatives, assessments could thus only cover part of the country list

The above documents were screened for the mentioning of EU biofuel requirements as contained in Table 2. When the criteria could not be found in the document, i.e., they were not mentioned explicitly, the country score with regard to the specific criteria was 1. When the criteria was mentioned in general terms but not required, the score was 2, and when the criteria was described as mandatory precondition for forest carbon activities, the score was 3. By summarize each value of the subcategory, a mean for each standard or initiative was calculated, presenting the total score for comparison.

Criteria specifically required	3
Criteria not specifically required but discussed in general	2
Criteria not required	1

1. Measure, Benefits & Impacts related to	2. Measures, Benefits & Impacts related to
social sustainability	biodiversity
1.1 Food production	2.1 Deforestation
1.2 Food security	2.2 Areas designated for nature protection purposes
1.3 Societal development	2.3 Rare, threatened or endangered species
1.4 Property rights	2.4 Conversion of grasslands
1.5 MRV	2.5 Land-use changes
	2.6 Introduction of invasive alien species
	2.7 Biodiversity (general)
	2.8 MRV
3. Measures, Benefits & Impacts related to	4. Measures, Benefits & Impacts related to
GHG emissions	carbon stock
3.1 Drainage of peatland	4.1 Conversion of wetlands
3.2 Indirect land-use changes	4.2 Conversion of forested areas
3.3 GHG emissions from cultivation of raw materials	4.3 Conversion of grasslands, scrublands, woodlands
3.4 GHG emissions from processing	4.4 Restoration of degraded land
3.5 GHG emissions from transport and distribution	4.5 Restoration of contaminated land
3.6 GHG emission saving from carbon capture and replacement	4.6 MRV
3.7 MRV	The second s
5. Measures, Benefits & Impacts related to air,	
water and soil	ecosystem services
5.1 Air quality	6.1 Watersheds
5.2 Water quality	6.2 Erosion
5.3 Water availability	6.3 MRV
5.4 Soil quality	
5.5 MRV	

Table 2: Assessment framework; documents were screened for these safeguards that are part of the EU biofuel directive

Results

Part 1

How do the target countries sustainability requirements defined by the Designated National Authority (DNA) overlap with EU sustainability safeguards?

In total DNA sustainability criteria from 12 countries were screened for overlaps with EU sustainability safeguards. This means that out of the 16 developing target countries, four were left out of the analysis. The reason for this exclusion was either that the DNA sustainability criteria were unavailable or not finalised at the time of the report.

- The results show that very few countries applying DNA sustainable criteria ranks higher than 1 in the analysis. This means that there is no or very little overlap with the EU sustainable safeguards in any of the analysed DNAs. The results show that only Bolivia and Indonesia scored a 2 where the EU sustainability safeguards are merged into the main categories. Bolivia scores higher than the other countries under the category "societal development" whereas Indonesia scores higher under the category "air, water and soil".
- When the countries were going through the full analysis, including all sub categories (see table 2), some of the countries present criteria corresponding to a higher degree with the EU safeguards. For example, almost all countries score high (3) when it comes to "societal development". Another category where the DNAs score high (3) and thus match the EU safeguards is "air, water and soil". However, a few scattered high scores do not generally increase the mean score of the DNAs, which is seen in the overall low total scores by the DNAs.
- The general low score of the DNAs can mainly be explained by the different focus of the DNAs compared to the EU sustainability safeguards, where the DNAs are targeting multiple sectors mitigating GHGs emissions. The sectors are ranging from large scale projects of gas capture from the industry to agricultural projects and even if bioenergy production is covered in one or more of the sectors, the sustainability criteria are not specifically designed to fit land use projects.
- Not only do the DNAs cover a vast range of greenhouse gas mitigation sectors and are adjusted to be applicable to the whole range. The DNAs sustainable criteria cover, beside issues such as environment and social development, economical and technology development, issues that the EU safeguards neglect.
- A general remark is also that DNA criteria are vague in the description, with few concrete and specific indicators. This makes it difficult to monitor and verify compliance.

How do the sustainability criteria of the UN-REDD overlap with the EU sustainability requirements?

In addition to the DNA sustainable criteria, we analysed the three target countries included in the UN-REDD programme. UN-REDD is not a directly implementing unit, but rather a programme in place to build capacity in countries interested in taking part of the REDD+ mechanism. The countries included in the programme are divided into active countries and observer countries, where the active countries prepare and submit UN-REDD documents (the Project Idea Note (PINs)), which present a

broad illustration of the REDD/forest situation in the country. However, the focus of this analysis has been on the planned outcomes of the projects, their aims and objectives that later on can be verified. These documents are the bases of our analysis. Out of our target countries, Tanzania, Bolivia and Indonesia are engaged as active UN-REDD countries and are therefore included in this analysis.

- The results show that the UN-REDD country programmes generally have a large focus on social sustainability and issues regarding biodiversity (Table 3). While, as in many other standards and initiatives focused on REDD+, the criteria for emissions reduction from the activities are built into the aim of the programme, they are not specified in the documents. This results in a general low score in the comparison with the EU sustainable safeguards.
- One should note that the country programmes are PINs, as in planned action, and not verified action. However, the UN-REDD programme requires the inclusion of a thorough monitoring, reporting and verification (MRV) in the PIN, which is included in all investigated cases. However, some of the plans presented in the PINs could still very well fail to meet the requirements.
- The analysis has made clear that the UN-REDD documents cover many of the EU sustainability safeguards, although in a lower level of detail. Where the UN-REDD documents clearly mention the importance of social sustainability and biodiversity, they do not specify the same sub-categories described in the EU sustainability safeguards.
- When it comes to issues related to carbon stock and benefits from ecosystem services the results differ between the countries to such an extent that no clear conclusion can be drawn.
- One main reason for the general low scores for the UN-REDD programme is the different focus of the two standards compared. The EU sustainability requirements are detailed regarding issues important to bioenergy production that is less important in the design and implementation of REDD+ projects.
- Indonesia has the highest mean score with only a low score (1) in the "carbon stock" category. Indonesia is followed by Bolivia and then Tanzania. However, the differences are rather small indicating that the UN-REDD documents are generally prepared according to the same structure and with a similar planned outcome.
- The lowest score does belong to Tanzania in the "ecosystem services" category and Bolivia in the "air, water and soil" category.

	Tanzania	Bolivia	Indonesia
1. Social sustainability	2,00	1,80	2,00
2. Biodiversity	1,63	2,13	1,63
3. GHG emissions	1,29	1,29	1,57
4. Carbon stock	1,66	1,66	1,33
5. Air, water and soil	1,2	1	1,60
6. Ecosystem services	1	1,67	1,67
OVERALL	1,46	1,59	1,63

 Table 3: Results of assessment comparing sustainability of UN-REDD country documents with the EU sustainability

 safeguards

How do the FCPF criteria overlap with EU sustainability safeguards?

We assessed the sustainability criteria and requirements contained in the general guidance of FCPF, and then looked at individual country submissions.

- In general, country statements in FCPF documentation remain vague about sustainability criteria. While social sustainability, biodiversity and ecosystem services are at least mentioned in nearly all country documents; issues like air, water and soil quality are not explicitly highlighted or even mentioned (Table 4).
- The overall country score compared to EU safeguards is quite low out of eight countries, 5 score low and 3 score medium. This means that the wording of the EU sustainability requirements might be contained in the documents, although not further specified. The lowest score of 1 means that the criteria we were looking for are not mentioned in the text, which is the case for more than half of the criteria.
- Countries with the highest scores include Guatemala, Bolivia and Argentina mainly prioritises social sustainability and biodiversity. Countries with the lowest scores include Tanzania, Indonesia and Ethiopia.
- It is possible that our results do not indicate poor sustainability priorities of the target countries, but rather the fact that safeguards for sustainable biofuel production cannot be directly translated into forest conservation safeguards. Several of the safeguards explicitly stated for biofuel production might be inherently contained in forest conservation strategies, so that they do not need to be spelled out further (e.g. the requirement not to convert natural forest ecosystems). Also, it seems odd that almost none of the readiness plan (R-PPs) in our target countries explicitly mention the treatment of GHG emissions, as specified in the EU sustainability safeguards. Emissions are the central part of REDD+ strategies, so they will need to be mentioned somewhere. It must be assumed that the requirements are either framed differently in the biofuel community and the forest community, or that the explicit goal of reducing deforestation for emissions reduction makes the explicit mentioning of GHG emission treatment in the R-PPs redundant. This could imply that the direct comparison of carbon standards and biofuel standards with different objectives can be quite problematic.

	Indonesia	Guatemala	Mozambique	Bolivia	Argentina	Ethiopia	Tanzania	Uganda
1. Social								
sustainability	1.67	2.20	1.50	1.40	2.20	1.80	1.40	1.40
2. Bio-								
Diversity	1.50	1.50	1.50	1.88	1.75	1.63	1.38	1.88
3. GHG								
emissions	1.43	1.14	1.14	1.14	1.29	1.14	1.00	1.29
4. Carbon								
stock	1.67	1.33	1.33	1.33	2.33	1.50	1.67	1.17
5. Air, water								
and soil	1.00	1.40	1.20	1.00	1.80	1.20	1.00	1.00
6. Ecosystem								
services	1.00	2.67	1.67	2.33	1.67	1.00	1.00	1.67
OVERALL	1.38	1.71	1.39	1.51	1.84	1.38	1.24	1.40

Table 4: Results of assessment comparing sustainability of FCPF standards with the EU sustainability safeguards

• Regardless of the above mentioned limiting factors, some results of the assessment can be presented. However it needs to be clear that they need to be treated with care, as they do not carry a direct message for biofuel production.

Comparing the EU sustainability safeguards with bi-lateral agreements aiming at capacity building for REDD

Comparing the EU sustainability safeguards with funding mechanisms for REDD+ projects creates difficulties. The funding mechanisms does not have sustainability criteria per se, rather a guideline for producing a PIN that can in turn be the basis for approving funding for the projects proposed. In this section, two guidelines for funding mechanisms have been compared to the EU sustainability safeguards and analysed based on the overlap. The two cases are bi-lateral agreements, the first between Tanzania and Norway and the second between Indonesia and Australia (ICRF). The aim of both agreements is to build capacity for REDD+ implementation and the donor countries and the host country define the conditions for implementation jointly. For example, the Tanzania - Norway contract is based on Tanzania's own deforestation strategy developed in collaboration with UN-REDD.

- The ICRF guidelines are being adopted for PINs in Indonesia at the same time as the bi-lateral
 agreement between Norway and Tanzania are being adopted for PINs in Tanzania. Generally
 the two initiatives score low when it comes to the overall sustainability criteria, which
 reflects the relatively weak emphasis on social and environmental efforts in these initiatives
 (Table 5).
- Both initiatives mention social sustainability and biodiversity in their guidelines, although not as detailed or strict as the EU sustainability requirements.
- Both initiatives show limited correlation to the EU requirements when it comes to GHG emissions and carbon stock. Due to the focus on REDD+ projects, GHG emissions mitigation is one of the major aims of REDD+ projects, however rarely or never directly pointed out in the guidelines.
- The EU sustainability requirements highlight the importance of ecosystem services including air, water and soil quality, which are completely lacking in the bi-lateral guidelines.
- The analyses of both ICRF and the Tanzania Norway initiative show only limited overlaps with the EU sustainability requirements. Both initiatives focus on capacity building for REDD+, which requires different criteria for sustainability compared to the EU sustainability safeguards.

Table 5: Results of assessment comparing sustainabilit	y of different VER standards with the EU sustainability safeguards
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	ICRF	Tanzania - Norway
1. Social sustainability	1,80	1,80
2. Biodiversity	1,63	1,75
3. GHG emissions	1,57	1,29
4. Carbon stock	1,33	1,66
5. Air, water and soil quality	1	1
6. Ecosystem services	1	1
OVERALL	01.39	01.42

Which target countries host activities under the initiatives assessed?

- Tanzania and Indonesia are the countries most frequently engaged in activities requiring some sort of sustainability analysis and compliance. Four of the initiatives have activities in both countries and three have activities in Bolivia. The presence of initiatives could indicate an increased willingness or capacity within these countries to comply with sustainability requirements that are formulated mainly internally within the country and partly in collaboration with external actors (Table 6).
- Malawi and Malaysia do not have activities by any of the initiatives presented in this section, while India, Pakistan, Guatemala, Uganda, Nigeria and Brazil have engagement in one initiative. This result might indicate that these countries have a low willingness or capacity to engage or comply with sustainability requirements from national or external actors. However, it could also be an indicator for the low flexibility of the initiatives to broaden the country scope and also include countries less frequently engaged in these sorts of initiatives.
- The initiative with the lowest stringency is the most frequent one in the countries, namely the DNA sustainability criteria. The reason could very well be the inbuilt ability for nations to define sustainability criteria and the limited international interference in the definitions. When it comes to the bi-lateral agreements, the UN-REDD or the FDPF the documents are formulated by the host nation, although directly verified by the funding countries. This mechanism is not present in the DNA sustainability criteria formulation. In the DNA case, the host countries can very well benefit financially from weak requirements while, in the case of the initiatives with direct verification, they might loose out on funding if the requirements are too weak.



Table 6: Results of assessment comparing different countries with applied sustainability criteria

*Observer country **Document available only in Spanish

Results Part 2

How do sustainability requirements of voluntary carbon market standards overlap with EU sustainability safeguards?

In order to address this question, eight different carbon standards of the voluntary carbon market were screened for their mentioning of the sustainability safeguards specified by the EU. The results of the degree to which these standards overlap with the EU sustainability safeguards have been summarized in the bullet points below, followed by the identification of target countries which host land based carbon activities under these standards.

- Scoring against the EU sustainability safeguards yields a ranking of carbon standards starting
 with the Gold Standard having most overlaps with the EU sustainability safeguards, followed
 by the CCBA and Plan Vivo. These three standards reach scores of above 2, while all other
 standards show scores below 2. Of these, the CCX and the GHG Protocol have lowest
 overlaps with the EU safeguards. The CCBA REDD+ standard, the VER+ and VCS reach similar
 scores with only medium stringent sustainability requirements (Table 7).
- In terms of stringency³, the Gold Standard scores highest in this analysis, however parts of the EU safeguards are not applicable because the Gold Standard does not allow for land based projects. So, ironically, the standard whose criteria overlap most with the EU safeguards is not suitable for land use activities. The Gold Standard has the strictest requirements for environmental impacts on air, water and soil, the interference with ecosystem services and in overall monitoring.
- The second most overlaps are found in the CCBA standard, which reflects the standard's detailed sustainability requirements for reporting, monitoring and verification of environmental and social implications of forest activities. The CCBA is not a carbon standard as such as it does not issue carbon credits; its main purpose is to certify projects with a strong holistic approach to integrating climate, biodiversity and livelihood benefits. Accordingly, the standard shows highest overlaps in biodiversity, social sustainability, ecosystem services and overall monitoring.
- Interestingly, the REDD+ social and environmental standard, introduced by the CCBA and Care International, reaches a significantly lower score than the CCBA main standard. The REDD+ standard is very thorough when it comes to the social criteria, including rights of indigenous people, tenure rights and benefit distribution. This however is not reflected in the comparison with the EU sustainability safeguards, as these do not use the same indicators for societal development as the CCBA does. In addition, as the REDD+ standard focuses mainly on ensuring social and environmental co-benefits, it is not as stringent on the GHG and carbon stock accounting, which is also part of the EU safeguards. This is yet another reason for the relatively few overlaps of that standard with EU safeguards in our analysis.
- Plan Vivo as standard targeting small scale community based activities also scores quite high in its sustainability requirements. It has very stringent social criteria that must be met, in addition to a focus on biodiversity and ecosystem services. Plan Vivo is less strict on the actual carbon emissions or removals, and in the monitoring requirements, thus facilitating the involvement of local communities and low-tech projects.

³" Stringency" in this context means a strong overlap with EU safeguards, implying stringent sustainability requirements.

- The analyses of both the VER+ and the VCS show only limited overlaps with the EU sustainability requirements. This is due to these standards' pronounced focus on carbon benefits; they have rather unspecific requirements regarding social and environmental impacts. This is the reason why it is common practice in the voluntary carbon market to cocertify VCS land use projects with the CCBA standard in order to properly cover the sustainable development impacts of VCS land use activities.
- The CCX scores very low throughout most of the sustainability criteria, reflecting the rather weak requirements for social and environmental impacts set by this standard.
- The lowest possible overlaps have been found with the GHG Protocol. However, this does not say anything about the stringency of the standard in general, it mainly reflects the fact that sustainable development considerations are beyond the scope of the GHG Protocol. The standard purely focuses on greenhouse gas accounting, any side effects or co-benefits are not included in the scope of the Protocol. This standard has been included in the analyses out of completeness reasons, however it was to be expected that the standard shows very low overlaps with the EU sustainability safeguards.

	Gold	ССВА	Plan Vivo	CCBA REDD+	VER+	VCS	ССХ	GHG
	Standard							Protocol
1. Social			2.00		2.75	1.00		
sustainability	2.00	2.20	3.00	2.2	2.75	1.60	1.8	1.00
2. Biodiversity	2.38	2.63	2.38	2.75	1.38	1.38	1.25	1.00
3. GHG								
emissions	NA	2.00	1.29	1	1.57	1.14	1.29	1.14
4. Carbon stock	NA	1.33	1.33	1.33	1.00	2.33	1.67	1.00
5. Air, water and	2.00							
soil quality	3.00	2.20	2.20	1.00	1.00	1.00	1.00	1.00
6. Ecosystem	0.00							
services	3.00	3.00	3.00	3.00	1.00	1.00	1.00	1.00
7. General MRV	3.00	3.00	2.00		3.00	3.00	3.00	2.00
OVERALL	2.7	2.3	2.2	1.9	1.7	1.6	1.6	1.2

Table 7: Results of assessment comparing sustainability of different VER standards with the EU sustainability safeguards

Which target countries host activities under the different carbon standards?

- Brazil and India are the countries that host projects from five of the analysed standards, followed by Tanzania where activities under four of the standards can be found. Gold Standard and CCBA activities are present in all three countries, while Plan Vivo projects can be found in Tanzania, compare with Table 8. The presence of carbon projects under several of the most stringent standards could indicate an increased willingness or capacity within these countries to comply with sustainability requirements that are formulated and verified by external actors (Table 8).
- It is also interesting that the two standards found to have the most stringent sustainability criteria, namely the Gold Standard and CCBA, seem to be the most accepted carbon standards in the target countries. The Gold standard is present in 12 of the countries assessed, while CCBA projects can be found in 11 of our target countries. Gold Standard

projects are thus present in more than half of the target countries, indicating no objections to the most stringent sustainability requirements in these cases.

- VCS AFOLU seems to score rather low in terms of countries where it is represented, especially in comparison with widely used standards such as the Gold Standard. This is because the analysis of the Gold Standard was based on the complete project portfolio across all project types, whereas the VCS was only screened for forestry (AFOLU) activities; this might slightly skew the results. The reason for this is that the Gold Standard does not allow for any land use or bioenergy projects at all, whereas the VCS has a distinct category for land use activities.
- The CCBA REDD+ standards are not included in this table as they have been developed for REDD+ activities and strategies at national level, which are currently under development. It is not a project-based standard as such and is thus not (yet) represented in any of our target countries.

	Plan		VCS	Gold Standard			GHG
	Vivo	CCBS	AFOLU	VER	ССХ	VER+	Protocol
Brazil		x		x	х	х	x
Argentina							
Ethiopia	x	x		x			
Malawi	x			x			
Mozambique	x	x					
Nigeria							
Sudan				x			
Tanzania	x	x	х	x			
Uganda	x	х		x			
Indonesia		x		x	х		
Malaysia							
India		x		x	х	x	x
Pakistan							
Guatemala			х				
Bolivia				x			
Peru		x		x		x	
South Africa		x		x		х	

Table 8: VER activities in target countries under the various carbon standards assessed

Concluding, it can be said that most of the carbon standards assessed in this chapter include some sort of sustainability requirements, which to a larger or smaller degree overlap with the safeguards specified by the EU. Depending on the overlaps between the criteria used in the carbon standards and the EU safeguards, we have classified the carbon standards according to their "stringency" in applying criteria that match EU requirements. This approach has obviously limitations, as several of the carbon standards are recognized for their strong focus on sustainability as well as social and environmental benefits, which however is not always reflected in the results of this assessment. As discussed in the chapter on Methodological Limitations (see below), one reason could be the use of different terminology in the forest and the biofuel sectors, or a slightly shifted focus of sustainability

requirements due to the different objectives of the carbon standards (=sustainable emissions reductions) and the future biofuel standard (=producing sustainable biofuels).

Table 2 indicates in which target countries activities under these standards are represented. The results imply the conclusion that some countries like Brazil, Tanzania and India are very open to voluntary carbon projects and thus seem not to object to complying with externally defined sustainability criteria. However, it would be rather daring to draw general conclusions on countries' willingness to accept specific requirements for biofuel production from this.

How do the recent REDD+ umbrella programmes and initiatives frame sustainability in comparison to the EU safeguards?

In addition to the eight voluntary carbon standards, we looked at the guidance documents of several multilateral, mainly donor-funded initiatives currently engaging in REDD+ development. We assessed the sustainability requirements for projects under the Amazon Fund, the World Bank Forest Investment Programme (WB FIP) and the GEF programme on Sustainable Forest Management and REDD+ (GEF SFM-REDD+), as well as the global guidance documents of the World Bank FCPF and the UN-REDD. The results show that most of these general guidance documents do not contain very stringent sustainability criteria but instead emphasize the importance of social and environmental benefits on a more conceptual level. How these benefits will be safeguarded is however not specified in most of these documents, in some cases this could be up to the host countries themselves, or the documents refer to future developments and definition of safeguards under the UNFCCC REDD+ process (e.g., UN-REDD, FCPF).

A detailed comparison of EU safeguards with criteria of the programmes was only possible for the GEF SFM-REDD, the Amazon Fund and the World Bank FIP, and results are presented in Table 9 below. The table shows that the Amazon Fund does not specify clear requirements that projects aiming to reduce deforestation in the Amazon will have to meet. Decisions are taken on a case-by-case basis, and thus the overlaps of the requirements set by this programme with the specific EU safeguards are very few. The World Bank FIP shows most stringent criteria in the social and biodiversity fields, whereas other environmental considerations are not emphasized in the documents; this also leads to a rather low overall match with EU requirements. The GEF REDD+ programme reaches best results in our analysis; it includes wording on the main criteria societal development, biodiversity, carbon stock, and ecosystem services. It does not explicitly mention greenhouse gas emissions; however these are implicitly included in the programme objectives.

Criteria	Amazon Fund	WB FIP	GEF-5 SFM REDD+				
1. Social sustainability	1.4	2.2	1.8				
2. Biodiversity	1.63	1.75	1.63				
3. GHG emissions	1	1.14	1				
4. Carbon stock	1.16	1.5	1.66				
5. Air, water and soil quality	1	1	1				
6. Ecosystem services	1	1	1.67				
OVERALL	1.2	1.4	1.5				

Table 9: Results of screening sustainability criteria mentioned in REDD+ programmes against the EU sustainability criteria for biofuel production

It can be concluded that the screening of currently still rather preliminary REDD+ programme documents is not very conclusive in order to make statements about countries' willingness to accept or set sustainability criteria. The terminology of guidance documents seems in large parts not to overlap with the specific sustainability safeguards formulated by the EU. In order to avoid giving wrong indications we refrain from identifying target countries that participate in these programmes, as results would not be conclusive at all for answering the research question.

Methodological Limitations

Several factors limit a conclusive assessment of the strategic documents submitted under the recently established REDD+ programmes for biofuel production safeguards. First, the relative prematurity of planning processes in REDD+ countries and the related very general documentation to the global REDD+ initiatives is not compatible for comparison with clearly specified criteria under an existing standard – the requirements for developing a strategic plan do not match with requirements of an on-the-ground activity. The analysis of FCPF Readiness Plans (RPP-P) submitted by our target countries can serve as an example for these difficulties. Our first assessment showed that all FCPF documents screened had very few overlaps with EU safeguards.

The explanation can probably not be that all these countries are uninterested in safeguarding sustainability; but what we found was that the FCPF guidelines do not require R-PPs as such to comply with any environmental or social safeguards. R-PPs have to mention that they will establish and use a comprehensive Strategic Environmental and Social Assessment (SESA) ESA, but the countries are not required to show in the RPP how sustainability safeguards in general will apply during the REDD+ process. Although the main objectives of the SESA is to identify, avoid and mitigate risk and adverse impacts, and to enhance positive impacts (among others on sustainability) from readiness activities, the idea behind is that countries will first develop general guiding frameworks in their R-PPs, and only once specific REDD readiness activities are prepared, safeguards will apply. This specific non-requirement of sustainability safeguards in the R-PPs seems the more likely reason why the analysis of the R-PPs yielded so vague results in terms of clearly defined sustainability criteria. The FCPF standard might therefore be hard to compare with biofuel requirements, as the current R-PPs refer to an early planning phase of national REDD+ strategies only and not to requirements of on-the-ground activities.

A second limitation and reason for non-matching requirements in the list of EU sustainability safeguards and the documents screened in this task could be based on different terminology used in the biofuel and forest communities. In case one concept refers to the same thing (e.g. societal development) but is framed differently, our assessment would not have been be able to pick this up, as we were only screening for the indicator words in the documents, and only if this was detected did we start screening for content.

Therefore it is possible that especially for countries or carbon standards with low overlaps, our results do not indicate poor sustainability priorities of the target countries, but rather the fact that safeguards for sustainable biofuel production cannot be directly translated into forest conservation safeguards. Several of the safeguards explicitly stated for biofuel production might be inherently contained in forest conservation strategies, so that they do not need to be spelled out further (e.g. the requirement not to convert natural forest ecosystems). For instance, it seems odd in the case of the FCPF assessment; all screened R-PPs did not explicitly mention the treatment of GHG emissions

as specified in the EU sustainability safeguards. Emissions are the central part of REDD+ strategies, so they will need to be mentioned somewhere! It must be assumed that the requirements are either formulated differently in the biofuel community and forest community, or that the explicit goal of reducing deforestation for emission reduction makes the explicit mentioning of GHG emission treatment in the R-PPs redundant. This could imply that the direct comparison of carbon standards and biofuel standards with different objectives can be quite problematic, and any interpretation of the results must therefore be treated with great care.

Conclusions

In spite of several limitations to this approach, some general conclusions can be drawn.

- A general trend seems to be visible that sustainability safeguards of externally verified carbon standards are stricter than those formulated by target country governments themselves (i.e. compare results of DNA sustainability criteria with voluntary carbon standards).
- Overall, the safeguards used in the voluntary carbon market seem to overlap most with the EU sustainability safeguards, and are thus classified as "most stringent" in our analyses. The recently established REDD+ initiatives on the other hand seem not to have gotten yet to the stage of formulating specific safeguards. This is in line with the fact that sustainability safeguards for REDD+ mechanisms were decided upon for the very first time at the last Climate Conference in Cancun in December 2010, and are thus very new. The adoption into national scale or multilateral global REDD+ initiatives can be expected for the near to medium term future only. Our assessment attempts proved therefore premature, and results showing non-existence of safeguards in the current documentation cannot be conclusive as to countries' general willingness to establish sustainability safeguards.
- The results from the DNA analyses however are expected to be at least indicative of countries priority setting for sustainability. The level of detail for DNA host country requirements is however much broader than the specific safeguards formulated by the EU, so a direct comparison is difficult. Almost all EU safeguard categories (1-6, compare Table 2) are reflected in the DNA sustainability criteria, however no indicators or procedures of monitoring and verification are usually given. The stringency of DNA criteria is therefore low in our analysis.
- The assessment of carbon standards (Part 2 of the analysis) seems to yield the most useful indications of acceptance of sustainability requirements in the target countries. The presence of forest carbon activities under the carbon standards most stringent in sustainability requirements shows that under certain circumstances target countries are willing to accept and adopt sustainability safeguards that are "imposed" externally and have not been formulated on national level. It seems that on a project level, adherence to externally set criteria seems to be accepted and successful.
- The analyses of the bi-lateral agreements, ICRF and the Tanzania Norway initiative, show only limited overlaps with the EU sustainability requirements. The initiatives both focus on capacity building for REDD+ which require different criteria for sustainability compared to the EU sustainability safeguards.
- The results imply the conclusion that Brazil, Tanzania and India are very open to voluntary carbon projects and thus seem not to object to complying with externally defined

sustainability criteria. When it comes to the initiatives where the countries define the sustainability criteria themselves, Tanzania, Bolivia and Indonesia are the target countries most apparent in the analysis. All put together, Tanzania is the country engaged in most initiatives and projects under carbon standards. However, it would be rather daring to draw general conclusions on countries' willingness to accept specific requirements for biofuel production from this.

- Malaysia on the other extreme is a country not present in any of the country defined sustainability initiatives, nor does it act as a host country for any carbon forestry projects under the standards we assessed. This could very well be a strategic move from Malaysia, however it is very difficult to draw such conclusions based on this analysis.

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Pakistan

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5. The Australian International Carbon Partnership Initiative

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Appendix 1: Background to carbon standards and REDD+ initiatives assessed in Task 2.3c

Part 1: National REDD+ plans and documents, bilateral agreements, CDM host country sustainability criteria

CDM DNA SD criteria

The CDM DNAs are established as a national unit to nationally approve CDM projects in all sectors as well as define the national sustainability criteria. These criteria need, at least in theory, to be fulfilled by the project in order to be approved by the DNA and to be passed over to the CDM Executive Board, which will make the final decision regarding registration. The sustainability criteria have received a fair share of criticism regarding its real sustainable development impact from a project and the nations capability to create an unbiased verification of the same. The formation of the DNA is mandatory for countries with the intent to host CDM projects; however, the availability of the sustainability criteria can vary. Therefor a number of the target countries are left out of this analysis.

UN-REDD

The UN-REDD Programme is the United Nations Collaborative initiative on Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries. The Programme was launched in September 2008 to assist developing countries prepare and implement national REDD+ strategies, and builds on the convening power and expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP). The programme has 29 partners across the world including 12 countries receiving financial support for national programme activities. The programme conducts work on a both global and national level where the main global focus is the development of MRVs of carbon emission and flows and to ensure the continuing provision of multiple benefits for the civil society. Emphasis is also put on building consensus ad knowledge about REDD+ to ensure the inclusion in a future climate regime.

WB FCPF

The Forest Carbon Partnership Facility (FCPF) is a global REDD+ partnership and carbon fund administered by the World Bank. It was launched in June 2008 and assists tropical and subtropical forest countries in developing the systems and policies required for REDD+ preparation and implementation. Eventually, the FCPF aims to make performance-based payments for emission reductions to countries that successfully reduce deforestation. The FCPF has created a framework and processes for REDD+ readiness, which helps countries in the development of REDD+ strategies and systems. This includes the determination of an emissions and deforestation reference scenario, adoption of a REDD+ strategy, design of monitoring systems and setting up REDD+ national management arrangements.

As of March 2011, 37 REDD countries have been selected in the partnership, and about half of these countries have completed and submitted Readiness Preparation Proposals (R-PPs). The R-PPs of Indonesia, Guatemala, Mozambique, Bolivia, Argentina, Ethiopia, Tanzania and Uganda were used in our assessment and their respective most recent versions (found on the FCPF website) have been screened for the mentioning of EU sustainability safeguards.

Norway-Tanzania agreement

The bilateral REDD+ agreement between Norway and Tanzania is part of Norway's International Climate and Forest Initiative launched in 2007, which involves a global commitment of up to 3 billion Norwegian Kronor (NOK) annually towards REDD efforts at international and national levels. Drawing on this initiative, in April 2008, Norway and Tanzania signed a letter of Intent on a Climate Change Partnership; with a focus on supporting REDD pilot activities in the field, capacity building, national strategy development and implementation. Norway has allocated NOK 500 million (USD 73 million) to the development of a national REDD programme in Tanzania over a five-year period. Tanzania's deforestation strategy is being developed in collaboration with the UN-REDD Programme. The contract and its framework modalities have been assessed and screened for overlaps with the EU sustainability safeguards. REDD+ contract signed in Mars 2009. REDD framework in August 2009.

Australian International Carbon Partnership Initiative

Australia's International Forest Carbon Initiative is an international initiative for global action on REDD+. The Initiative aims to help building REDD+ capacity and provide momentum to support the inclusion of REDD+ in a post-2012 global climate change agreement. It involves funds of \$273 million. A central element of the Initiative is taking practical action on REDD+ through collaborative Forest Carbon Partnerships with Indonesia and Papua New Guinea. These Partnerships demonstrate how the technical and policy hurdles to REDD+ might be addressed and provide lessons learned to support international efforts under the UNFCCC to design a REDD+ financial mechanism.

Part 2: Carbon project development standards and REDD+ programme standards

The Climate, Community and Biodiversity Alliance (CCBA)

The CCBA is a partnership of international NGOs and research institutes that aims to promote integrated and holistic approaches to land management activities. The CCBA has developed rigorous certification standards that evaluate climate, community and biodiversity impacts of land-based climate change mitigation projects. The aim is to identify land management activities that achieve the triple objectives of minimizing climate change, supporting sustainable development and conserving biodiversity. The CCBA standards are no carbon standards as such as they do not create carbon credits; they rather assign a quality label to projects that address all three objectives under this standard, and these are all equally important. In that sense the CCBA standards are special as they do not focus on emission reductions and treat the environmental and social implications as side effects.

REDD+ Social and Environmental standard

The CCBA together CARE International introduced the REDD+ Social and Environmental standard in 2010 as a complement to the CCBA standards for land use and emission reduction projects, and to introduce a standard for REDD+ activities with strong emphasis on social and environmental issues. The standard is intended to be used by governments, NGOs, financing agencies and other stakeholders that design and implement REDD+ programmes. The standard is based on a set of principles including criteria and indicators, both verifiable. Both the principles and the criteria are generic, however there are opportunities for a country specific interpretation of the indicators.

Plan Vivo

Plan Vivo is a System for developing community-based payments for ecosystem services (PES) projects and programmes, with an emphasis on building capacity, long-term carbon benefits, diversifying livelihoods and protecting biodiversity. Project participants are smallholders and forest-dependent communities in developing countries.

Plan Vivo has a strong emphasis on social factors and communities' involvement in forestry activities. The assumption used by this standard is that communities should be empowered to take control of their resources. This is because livelihoods are only sustainable when they can cope with and recover from stresses and shock. Well-managed forestry/agroforestry activities can not only reduce emissions, but also increase rural families' resilience to the impacts of climate change. The emphasis of Plan Vivo is therefore clearly on social and environmental sustainability, however requirements for the actual monitoring and verification of emission reductions are not very stringent.

Gold Standard

The Gold Standard Foundation is a non-profit organization under Swiss law that operates a certification scheme for premium carbon credits, both in the Kyoto Market as well as the Voluntary Carbon Market. It was designed to ensure that the emissions reductions are not only real and verifiable, but that the project activities make a measureable impact on sustainable and social development in local communities. The Gold Standard is thus recognized for its high quality and stringent requirements, both on the emission reductions side as well as regarding social and environmental impacts. It has to be noted that the Gold Standard only allows for renewable energy and end-use efficiency projects with sustainable development benefits, land use activities are explicitly excluded.

Voluntary Carbon Standard (VCS)

Since 1st March 2011, the VCS changed its name to "Verified Carbon Standard" instead of "Voluntary", however it still remains the same standard. Its objective is to provide a robust global standard for approval of credible voluntary carbon emission activities. The VCS has a dedicated section for land use activities, called "AFOLU"- Agriculture, Forestry and Other Land Use, in line with the latest IPCC terminology. Eligible project types are afforestation, reforestation and revegetation, sustainable land management, improved forest management and forest conservation, which makes the VCS one of the best suited standards for land use activities.

VCS projects have to fulfill certain requirements, e.g., they must be real, additional, measurable, permanent, independently verified and unique; however requirements regarding the social and environmental impacts of these activities are not explicitly mentioned. The main objective is to prevent harmful activities, and the creation of co-benefits beside emission reductions is not mandatory in the VCS. A common practice in the voluntary carbon market is therefore the co-certification of AFOLU projects with the CCBA standard that emphasizes the environmental and social benefits.

Chicago Climate Exchange (CCX)

The CCX was established in 2003 as a voluntary greenhouse gas reduction and offset trading platform in the US. Market participants included major corporations, utilities and financial institutions with activities in the United States and Canada. The total program baseline covered 700 million metric tons CO2 - equal to roughly one-third the size of Europe's cap and trade program. CCX's objective is to help businesses and markets prepare for potential climate regulations at the international, federal, and regional levels. CCX members made a legally-binding commitment to meet annual reduction requirements, which can also be met though offsets from a range of project activities within North America and in selected countries abroad. Forestry and Land management are among these offset activities. The CCX is being considered in this assessment, although it is usually known to not have stringent requirements in terms of quality criteria. In addition, CCX will cease action during 2011 as interest and business is decreasing in the US. Subject of analysis is therefore the past forest offsetting activities under this standard.

The Greenhouse Gas Protocol (GHG Protocol)

The GHG Protocol is an international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. It consists of a partnership between the World Resources Institute and the World Business Council for Sustainable Development, and works with international businesses, governments, and environmental groups to build credible and effective programs for tackling climate change. The GHG Protocol mainly provides a GHG accounting framework that is primarily focused on emission reductions. Social and environmental impacts are not included in the accounting guidelines; they are beyond the scope of this standard.

VER+

The VER+ is a voluntary carbon standard developed by one of the leading carbon market auditor companies, Tuev Sued. VER+ was launched as one of the first voluntary carbon standards in the market, with the objective of providing a certification tool for projects that do not intend to get registered under the Kyoto scheme or another governmental system. In principle the criteria for VER+ are in line with those for the Kyoto Protocol project based mechanisms (JI and CDM), including the requirement on project additionality. The difference is that all projects regardless of their location can choose to use either a JI or CDM methodology for emissions accounting, thus providing greater flexibility at least for land use activities, as there are more eligible activities in the JI than in the CDM. In terms of harmful side effects, the VER+ specifies that projects should not have "substantial negative impacts on the environment" or "cause severe negative social impacts".

GEF-5 SFM/REDD+ programme

In GEF-5, all types of forests, ranging from tropical and sub-tropical forests to woodlands, are eligible for funding under the SFM/REDD+ Program. GEF projects are fully country-driven. The new GEF SFM/ REDD+ Strategy offers a wide spectrum of options for countries, including: forest policy (re)formulation, forest protected area creation and management, forest inventory and carbon measurement and monitoring, reduced-impact logging, certification of timber and non- timber forest products, payment for ecosystem services, among others.

The GEF focuses its activities particularly on the implementation phase of REDD+ by supporting the following activities: developing national systems to measure and monitor carbon stocks and fluxes from forests and peatlands, strengthening forest-related policies and institutions, developing policy frameworks to slow the drivers of carbon emissions from deforestation and forest degradation, establishing innovative financing mechanisms and piloting projects to reduce emissions from deforestation and forest degradation. In addition, the GEF is strongly supporting work with local communities to develop alternative livelihood methods to reduce emissions and sequester carbon. Under special circumstances, the GEF may also finance REDD+ Readiness activities.

World Bank Forest Investment Programme (WB FIP)

The World Bank FIP is a program within the Strategic Climate Fund (a multi-donor Trust Fund within the Climate Investment Funds). An important objective of the SCF is to maximize co-benefits of sustainable development, particularly in relation to the conservation of biodiversity, natural resources, ecosystem services and ecological processes. The FIP's overall objective is to mobilize significantly increased funds to reduce deforestation and forest degradation and to promote sustainable forest management, leading to emission reductions and the protection of carbon terrestrial sinks.

Strategic areas of funding are a) implementation of policies and measures identified in national multi-stakeholder REDD planning processes, b) processes of change towards conservation and sustainable use of forests resulting in significant emission reductions and c) pilot models that can feed into the UNFCCC negotiations on REDD concerning how to leverage additional and sustained financial resources from the public and private sector. The FIP demands rigorous impact assessments to ensure outcomes and effectiveness of the interventions financed.