



Reforming the CDM SD Tool

Recommendations for improvement

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Preface

In 2015 three high-level processes to achieve a paradigm shift towards a sustainable and low-carbon development are running in parallel. The general idea behind these processes is to specify global and national objectives in terms of environmental protection, development and climate protection. We face a debate on firstly Sustainable Development Goals (SDGs) of the UN Post-2015 Development Agenda originating from the Rio+20 process and secondly on Millennium Development Goals (MDGs) that may be merged with the SDGs. Thirdly parties are negotiating a new Climate Convention under the UNFCCC. These processes are intended to provide inspiration for action and deliver objectives for implementation at the national level supported by international institutions.

A globally defined but flexible approach for assessing sustainable development can provide invaluable support towards a globally harmonised assessment of sustainable development, comparable through mitigation mechanisms and embedded into development planning at the national level. This can then be used to integrate sustainability assessment standards into Performance Measurement Systems such as national Monitoring, Reporting and Verification Systems. On the other hand, compliance with standards ensures that countries also meet the requirements of international financial institutions such as the Green Climate Fund.

Sustainable development benefits of climate protection instruments are highly relevant for development paths beyond aspects of climate change. Mitigation measures may include additional health, social, environmental and macro-economic as well as equity benefits. With the prospect of a new climate protection agreement at the end of 2015, some developing countries have already started to prepare and develop their climate policies. Benefits of sustainable development in the Clean Development Mechanism (CDM) and new market mechanisms indeed may have the potential to meet the needs of developing countries both in terms of sustainable development and mitigation measures.

For this purpose, the CDM Sustainable Development Tool offers initial steps towards a globally applicable standard under an international UN institution. The Wuppertal Institute, together with UNEP DTU Partnership, has developed recommendations for its revision, improvement and enhancement that are outlined in this study.

This discussion paper does not necessarily reflect the views of the German Emissions Trading Authority. But it gives valuable input to the discussion on further development of the Sustainable Development Tool with the overall aim of increasing the sustainability of offsetting instruments.

Berlin, August 2015

Dr. Michael Angrick

Head of the German Emissions Trading Authority (DEHSt) at the Federal Environment Agency

Abbreviations

ADB	Asian Development Bank
CCB	Climate, Community and Biodiversity
CCBA	Climate, Community & Biodiversity Alliance
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CME	Coordination/managing entity
CMP/CP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
CO₂	Carbon Dioxide
COP	UN Climate Change Conference/Conference of the Parties
DEHSt	German Emissions Trading Authority
DNA	Designated National Authorities
DNV GL	DOE, merged from Det Norske Veritas und Germanischer Lloyd
DOE	Designated Operational Entity
DTU	Technical University of Denmark
EB	Executive Board
EIA	Environmental Impact Assessment
ETS	Emission Trading Schemes
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FCPF	Forest Carbon Partnership Facility
FPIC	Free Prior Informed Consent
FVA	Framework for Various Approaches
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse Gas
GS	Gold Standard
HFC-23	Hydrofluorocarbon 23
IFC	International Finance Corporation
LDC	Least Developed Country
LoA	Letter of Approval
M&P	Modalities and Procedures
MCA	Multi Criteria Analysis
MDB	Multilateral Development Bank
MRV	Measurable, reportable and verifiable
N₂O	Nitrous oxide
NAMA	Nationally Appropriate Mitigation Action
NGO	Non-Governmental Organization
NMM	New Market Mechanism
OECD	Organisation for Economic Development
PDD	Project Design Document
PoA	Programmes of Activities
PP	Project proponent
PS	Performance Standards
QA/QC	Quality Assurance/Quality Control
RBM	Results-based Management

REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
SCM	Social Carbon Methodology
SCR	Social Carbon Report
SD	Sustainable Development
SDC	Sustainable Development Co-benefits
SDG	Sustainable Development Goal
SEPC	Social and Environmental Principles and Criteria
SPS	Safeguard Policy Statement
SSN	SouthSouthNorth
TAC	Technical Advisory Committee
TGO	Thailand Greenhouse Gas Management Organisation
UBA	Federal Environment Agency
UN REDD	The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
UN(F)CCC	United Nations Framework Convention on Climate Change
UNCSD	United Nations Conference on Sustainable Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
US	United States
VCS	Verified Carbon Standard
WP	Work Package
WWF	World Wide Fund For Nature

1 Introduction

A successful achievement of keeping global warming below 2°C must be accompanied by development that ensures sustainable economies, healthy environments and sustainable societies. Sustainable development for a world that can be enjoyed by all is therefore a crucial component of a successful fight against climate change.

The Clean Development Mechanism (CDM) was created with a double mandate: on the one hand, to achieve cost-effective mitigation of greenhouse gases; on the other, to assist developing countries in achieving sustainable development, based on their national development priorities.

However, the CDM has been criticized that its contribution to sustainable development is underdeveloped (Olsen and Fenhann 2008; Sterk, Rudolph et al. 2009; TERI 2012; and others). Responding to the critique, the CDM Executive Board launched a call for input in June-July 2011 to invite comments on how to include co-benefits and negative impacts in the documentation of CDM project activities, and the role of the different actors and stakeholders in this process. The Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP) at its seventh session in Durban requested the Board to “continue its work and develop appropriate voluntary measures to highlight the co-benefits brought about by the CDM project activities and programmes of activities, while maintaining the prerogative of the Parties to define their sustainable development criteria” (8/CMP.7, paragraph 5). The CMP decision launched the process within the EB in 2012, leading to the approval of the CDM SD tool at the 70th session of the EB.

Still, the SD tool in its current form faces a number of weaknesses that limit its usefulness for meaningful assessment of the impacts on Sustainable Development a CDM project may have. In order to identify such possible shortcomings, and to develop structured recommendations on how to improve the tool, the German Emissions Trading Authority (DEHSt) has tasked the Wuppertal Institute and UNEP DTU Partnership (formerly UNEP Risoe Center) with conducting the research project „Evaluation and development of recommendations on the CDM EB’s sustainable development tool including the sustainability requirements of other flexible mechanisms“.

In order to identify such possible shortcomings, and to make structured recommendations on how to improve the EB’s SD tool, the German Emissions Trading Authority (DEHSt) has tasked the Wuppertal Institute and UNEP DTU Partnership (formerly UNEP Risoe Center) with conducting the research project „Evaluation and development of recommendations on the CDM EB’s sustainable development tool including the sustainability requirements of other flexible mechanisms“. Findings from this project are meant to have a lighthouse effect on the development of provisions on Sustainable Development within other carbon mechanisms of the UNFCCC and beyond.

The first work package of this project covered the assessment and comparison of the SD provisions of selected flexible mechanisms and multilateral standards. The second work package consisted of a literature review and interviews with selected host country governments, project developers and a buyer perspective on the usability of the EB’s SD tool.

In the paper at hand (work package 3), the project team recalls and synthesizes findings of the previous two work packages. The paper discusses pros and cons of the EB’s SD tool in comparison to other mechanisms (analysed in WP 1) and needs voiced by practitioners (determined in WP 2).

This analysis serves to arrive at structured recommendations for further developing the SD tool, divided into more easily implementable amendments, and those that would transform the SD tool into a sound assessment tool for SD effects.

As a final step, we provide an outlook on possibilities to feed in experiences and recommendations to further develop the tool on the way to a globally harmonized, flexible assessment of mitigation actions for Sustainable Development.

2 Methodology

This report synthesizes the outcomes of the preceding work packages (WP 1, cp. Arens et al. 2014 and WP 2, cp. Olsen, Fenhan et al. 2015), with an aim to discuss and propose politically feasible options for further development of the EB's SD tool. We draw up recommendations on how to enhance the tool and on how to strengthen SD assessment of CDM projects in general, with a view to impact ongoing and future SD considerations even beyond CDM, on a global level.

2.1 Synthesis of WP1 & WP2

The first two work packages approached the assessment of sustainable development impacts from two perspectives:

- ▶ Work package 1 analysed the current status of SD assessment approaches, within, but also outside of the CDM context. Outcomes of this work package therefore represent what is currently **,offered'** in terms of SD assessment practice.
- ▶ Work package 2 surveyed experiences on a national level with assessing sustainable development. By interviewing representatives of host country DNAs as well as practitioners and reviewing existing literature, we developed knowledge on what is **,needed'** by practitioners, as well as on practical issues in applying the tool.

Comparing these two angles yields insights on shortfalls between the **,offers'** and the **,needs'** in domestic practice. We therefore develop a matrix that juxtaposes those findings from work package 1 and 2 that fit into the set of indicators developed in WP1.

The **,needs'** are presented in the left column reflecting enhanced criteria for SD assessment voiced by the interviewees, cp. example matrix below. This table also serves to identify the positive and negative aspects of the EB's SD tool.

Criterion	CDM SD Tool	Mechanism 1	Mechanism 2	Mechanism 3
Criterion A	x	✓	✓	✓
Criterion B	x	x	✓	✓
Criterion C	x	✓	✓	✓
Criterion D	✓	x	x	✓
Criterion E	x	x	x	x

From the matrix, we derive information on where the EB's tool is already well set-up, and which areas may need refinement. Some issues do not fit exactly into this table. These issues we integrate into an overall written analysis. With this, we aim at providing more in-depth information that a pure matrix can provide.

2.2 Recommendations and feasibility of improvements

In a second step, we evaluate the feasibility to overcome the shortfalls identified. We discuss possible ways to improve and enhance the tool, and to improve the consideration of SD in CDM in general.

The recommendations in this report discuss possible ways to improve / enhance the EB's SD tool and to improve the consideration of SD in CDM in general. The discussion draws upon the results of the preceding work packages, the literature surveyed, the CDM EB's recommendations to CMP10, the discussion on the CDM modalities and procedures, and other relevant documents.

Our recommendation are divided into two consecutive levels:

- ▶ Level one lays out **improvements**.
Improvements to the SD tool we regard as relatively easy to install. Recommendations we make here are likely to be within the frame of the current CMP / EB mandate, e.g. inclusion of human rights into the CDM, or enhanced stakeholder consultation requirements, which are already under consideration within the Board. Other issues would go beyond the current discussion and would therefore need to be fuelled into the negotiations on modalities and procedures (M&P) under UNFCCC. While this would go beyond changes that can be made at the level of the Board, we still consider these as not fundamentally transformative for the SB tool. They are however, a prerequisite for farther-reaching changes of the SD tool.
- ▶ Level two lays out enhancements.
These enhance the SD tool on a deeper level, adding a different quality to it. Level 2 recommendations thus go one step further than those made at Level 1. They describe more fundamental changes that would help to transform the voluntary paper tool into a global SD assessment standard which would add monetary value to credits with rectified SD co-benefits.

Each recommendation will be complemented by a short paragraph analysing the feasibility of the improvement. This assessment is based on expert judgement, but points to specific references where applicable.

In general, we regard level one improvements as unlikely to meet with massive political head winds, especially since there seems to be a growing propensity towards more stringent SD assessment within the CDM at the moment.

Deeper change also comes with greater difficulties in political feasibility. Level two recommendations we therefore generally regard as harder to implement, but with a stronger impact if achieved.

We conclude our recommendations with an overview table, which allows to view the entirety of our recommendations at both levels at a glance.

The report finishes with an outlook beyond the CDM and the relevance of the issues discussed for the wider climate mechanisms at national and internationally levels such as domestic emissions trading schemes (ETS), New Market Mechanisms (NMM), a Framework for Various Approaches (FVA), Nationally Appropriate Mitigation Actions (NAMAs) and Green Climate Fund (GCF) financing for mitigation actions.

3 Synthesis of the pros and cons of the EB CDM SD tool

In this chapter, we synthesize main findings of the previous work packages (WP1 and WP2). While work package 1 analysed what is ,offered‘ in terms of the assessment of Sd impacts by a number of mechanisms, work package 2 determined the ,needs‘ of practitioners when applying the CDM SD tool.

We compare these two angles within a matrix (chapter 3.1, see next page). The matrix is set up as follows:

- ▶ The assessment criteria (first column) reflect the key ,needs‘ as voiced by the host country DNAs and practitioners interviewed in the course of WP2. We juxtapose these with what is currently available in the CDM SD tool, in comparison with other approaches within and outside the CDM, as analysed in WP1.
- ▶ The matrix simplifies the available information in order to provide quick and easy access to the provided information.

A ,tick‘ ✓ signifies that a given mechanism features that criterion.

Bracketed ,ticks‘ signify that a feature is possible, but not explicitly included.

A ,cross‘ ✗ signifies that a given mechanism does not exhibit this feature.

For some mechanisms, certain indicators are not applicable (n/a). In some cases, the information needed could not be simplified. In that case, we have included a minimal amount of text.

The subsequent section (3.2) provides some more in-depth information in textual form. We analyse the information provided through the matrix in order to identify shortcomings of the CDM SD tool. We draw from both previous work packages, highlighting ,needs‘ voiced by interviewees, and indicating the state of the art for each indicator, as ,offered by other mechanisms analysed in work package 1 (Arens et al. 2014).

3.1 Matrix comparing the ‘needs’ for CDM sustainability assessment against ‘offers’ by different flexible mechanisms

Criteria/Needs	CDM SD Tool	Social Carbon Methodology	CCB Standards	CDM Gold Standard	Crown Standard	UN REDD Programme	UNDP NAMA SD Tool	ADB	IFC
Indicators for SD co-benefits	✓	✓	✓	✓	✓	Criteria but no indicators	✓	Safeguards	Safeguards
Quantification	✗	✗	Partly quantitative	✗	✗	✗	✓	✗	✗
Assessment of negative SD impacts	✗	✓	✓	✓	✗	✓	✓	✓	✓
Monitoring and reporting	(✓)	✓	✓	✓	✗	✓	✓	✓	✓
Independent 3 rd party validation and verification	(✓)	✓	✓	✓	✗	n/a	n/a	✗	✗
Certification	✗	✓	✓	✓	✓	n/a	n/a	n/a	n/a
Guidelines Stakeholder consultation	✗	✓	✓	✓	✓	✓	✗	✓	✓

3.2 Analysis of the matrix to identify shortcomings of the CDM SD tool

In this chapter, we analyse the CDM SD tool in comparison to other mechanisms' approaches to sustainability assessment along the 'needs' criteria identified in work package 2. This analysis builds upon and expands the information that can be gleaned from the matrix.

Indicators for SD co-benefits

As a core component for determining co-benefits of project activities, this criterion is fulfilled by all analysed mechanisms that share the goal of co-benefit determination. A number of host country governments themselves provide some form of checklist in order to determine possible co-benefits of CDM projects (Olsen, Fenhann et al. Forthcoming 2015).

The approaches championed by the Multilateral Development Banks (MDBs) differ in this regard, as they have a different focus. Their safeguard policies are meant to ensure that supported projects 'do no harm', i.e. do not have a negative effect on sustainable development. The UN REDD Programme, more a framework rather than an explicit tool, provides criteria, but omits specific indicators. It presumably does so in order to give governments more freedom to independently decide on appropriate indicator sets.

The CDM SD tool is structured similarly to the checklist approach already applied by host countries. By providing a taxonomy of sustainable development benefits with three dimensions, 12 criteria and 70 indicators as a menu for structuring reporting on expected positive SD impacts of projects, the tool facilitates a harmonization of information in a structured, consistent and comparable manner that respects Parties' prerogative to decide on national priorities. The SD tool is found to meet its objectives and to assist investors to factor in the SD co-benefits in decision-making (UNFCCC 2014).

Quantification

A method of quantifying SD impacts was named as highly desirable in particular by project participants. A quantification would greatly aid to know the scope and significance of SD impacts and is necessary to monetize the value of co-benefits.

A quantification would also allow to better determine the cost/benefit ratio not only of the GHGs mitigated by a project, but also of its positive (and negative) impacts on sustainable development. A method of quantification could therefore lead to clearer determine and communicate price premiums for projects with strong positive impacts on sustainability. However, quantifying SD impacts is highly difficult, as SD impacts of a project will often be diffuse and not readily quantifiable.

Of the analysed mechanisms, only UNDP's NAMA SD tool attempts to fully quantify SD impacts. Within the CDM SD tool, SD benefits can be described for the SDC report; a quantification is not foreseen in any way. The CCB Standards offer a mixture of quantitative and qualitative assessments, which may be more suitable to adequately depict different forms of SD impacts. All other mechanisms fully rely on qualitative data, mostly in prose form.

Assessment of negative SD impacts

Project activities may not only have beneficial effects on sustainable development of a host country. The requirement to assess negative impacts of project is therefore highly helpful. In most of the mechanisms negative impacts are assessed with negative scores, and positive impacts are assessed with positive scores. A requirement to also assess foreseeable negative impacts helps to alleviate them from the beginning, and ensure that they do no harm to the environment, social and/or economic development. A number of interviewees have indicated that stronger guidance in this regard would be appreciated.

All mechanisms analysed make such an assessment mandatory, with the exception of Thailand's Crown Standard. The Crown Standard itself does not contain provisions to assess negative SD impacts. Instead, it refers to existing national legislation. Indirectly, its provisions can therefore also be considered mandatory.

The strongest and most detailed requirements for the assessment of negative impacts can be found in the safeguard requirements of the MDBs, as they are especially geared towards this type of assessment. The Gold Standard, as well as the CCB Standards, also provide for detailed negative impact assessments, and include safeguard principles in order to ensure that projects do no harm.

By contrast, the CDM SD tool does not contain such provisions. Furthermore, the tool only enables assessment of positive impacts, as the concept of ‘co-benefits’ excludes a mandate to assess negative impacts. In draft form, the tool did contain safeguard provisions, but its current form does not. This can be considered a major shortcoming, which severely limits the tool’s usefulness as a means of project assessment.

Monitoring and Reporting

If a project claims sustainable development co-benefits, significant credibility is added if adequate monitoring and reporting requirements are put in place to back up these claims. Similarly, if negative impacts are identified, monitoring is needed to ensure that these impacts are alleviated.

Nearly all of the mechanisms analysed require monitoring systems to be put in place. The independent certification standards (Gold Standard, CCB Standard, and Social Carbon Methodology) all have strong obligatory provisions, including dedicated monitoring plans and regular monitoring reports that are independently verified.

The SD tool instead does not call for any monitoring requirements. The SDC report as a single document may be submitted at any time, without any requirements for follow-up monitoring of SD claims made. DNAs do not systematically monitor SD claims, and some voiced concern in the interviews that this would put an additional burden on them or the PPs.

However, a process has recently started within the CDM Executive Board at its 82nd meeting in February 2015, which may strengthen the CDM in this regard. The Board discussed a concept note on ‘Voluntary monitoring of sustainable development co-benefits’ (UNFCCC 2015), which may lead to using the CDM SD tool as a basis for monitoring, validation and verification of SD claims in a standardized way that supports DNA practices.

Independent third party validation and verification

In order to give credibility to review and evaluation efforts, the use of external auditors can be highly recommended.

The Gold Standard, the SCM and CCB standards cover this step which is needed to ensure that a project did fulfil its requirements, and, in case of certification, can receive the intended certificate. The MDBs do not prescribe external auditing as a mandatory step but they have internal review procedures in place, and in some cases require external check-up as well.

Again, the CDM SD tool in its current form does not contain any requirements in this regard. However, the same process that may strengthen SD monitoring and reporting within the CDM (UNFCCC 2015) may also include suggestions for the use of independent auditors.

Certification

Certificates can add significant value to carbon credits generated by a project with high SD co-benefits. Certified credits regularly fetch higher prices on the carbon market, in return for the assurance that the project fulfills high standards.

The four certification standards considered in WP1 (three independent, and the Thai Crown Standard), have this consideration at their core. The CDM SD tool’s SDC report could in principle be used as a type of certificate as well. At the moment, this is not foreseen. It needs to be noted that in order to add value to claims made in the SDC report, a verification of claimed SD co-benefits would be needed, if possible by an independent institution.

Guidelines for Stakeholder consultation

At least one country (Cambodia) has requested technical assistance from the UNFCCC Secretariat to assist with country specific guidance for guidelines for local stakeholder consultations. A process to consult with stakeholders is a core element to ensure that a given project activity is beneficial to sustainable development and does not impact negatively.

By far the most approaches covered in WP1 have included mandatory stakeholder consultation processes into their project design, albeit with varying strictness. In order to identify stakeholders, all approaches include structured processes, stakeholder meetings and project reference material in local languages (for the Crown

Standard, this is unknown). Of the certification standards, only the Gold Standard has established procedures that open the local consultation to globally active stakeholders/NGOs. The MDBs as well as the UN REDD Programme provide for dedicated policies for the inclusion of indigenous peoples into the project assessment process.

Another important aspect of stakeholder involvement is the establishment of a grievance mechanism to address and solve complaints about the project activity by the local stakeholders. With the exception of the NAMA SD tool, which is completely silent on stakeholder consultation processes, all mechanisms include some form of grievance mechanism.

By contrast, the CDM SD tool does not contain any mentioning of stakeholder consultations. This absence of the issue is puzzling, as there are provisions for stakeholder involvement in the CDM itself.

4 Recommendations and feasibility analysis to further develop the CDM SD tool

Building upon results of the synthesis, this chapter serves to develop recommendations for further improving the EB's CDM SD tool. We discuss possible ways to improve and enhance the tool, and to improve the consideration of SD in CDM in general.

This is done on two consecutive levels:

- ▶ Level one lays out improvements that we regard as amendments to the SD tool, and therefore relatively easy to install.
- ▶ Level two recommendations go one step further: They describe more fundamental changes that would help to transform the voluntary tool into a credible assessment and reporting system.

Each recommendation will be complemented by a short paragraph analysing the feasibility of the improvement. This assessment is based on expert judgement, but points to specific references where applicable.

4.1 Level 1 Recommendations: Improving the tool

Introducing no-harm safeguards

At the moment, there is no provision to include information on potential negative impacts of CDM activities in the SD tool.

An introduction of reporting on no-harm safeguards in the voluntary SD tool is considered a first step in order to arrive at a holistic Sustainable Development assessment of CDM projects / programmes.

A common procedure to do a no-harm assessment that could also be applied to the SD tool is the declaration of risk levels of an activity according to a catalogue of general safeguard principles (cp., for example, Ibenholt 2011, IEG 2010, MDG 2008). These could be further specified by a number of questions that the project proponents answer to their best informed knowledge. Such general safeguard principles may include:

- ▶ Human rights,
- ▶ Good labour practice,
- ▶ Environmental protection,
- ▶ Anti-corruption,
- ▶ Landrights,
- ▶ Other activity-related impacts

As the introduction of such no-harm safeguards was already proposed to be included in the first draft of the SD tool (UNFCCC 2012), taking up the original proposal again could be a starting point. The principles and negative impact options laid out in that document are based upon the UN Global Compact and the Millennium Development Goals (MDGs). This proposal could be revised in order to accommodate for concerns raised by EB

members, who argued against the inclusion of safeguards at the 68th session of the EB, and decided upon the design of the tool as it stands today.

The set-up of all mechanisms except one covered in WP1 of this research indicates that a mandatory inclusion of safeguards is feasible (Arens et al. 2014). Moreover, the COP decision 1/CP.16, which states that human rights must be respected in all climate related actions, provides a mandate and an entry point for considering a rights-based approach to the CDM (cp, for example, Human Rights and Climate Change Working Group 2012, Filzmoser, Voigt et al. 2015).

In addition, introducing safeguards also comes with additional benefits, p.ex. project proponents can use safeguards for their project planning, in order to demonstrate responsibility and increase local acceptability for the project. Buyers may use the safeguard assessments as part of their due diligence reporting (Olsen, Fenhann et al. Forthcoming 2015). Guidance on the introduction of no-harm safeguards also has the potential to increase the capacities of DNAs towards structured and systematic SD assessment approaches.

Developing monitoring and reporting guidelines

In its current form, the SD tool solely foresees the notification of assumed SD co-benefits, in a single report (the so-called SDC report). There is no requirement for following up on the identified co-benefits over the project lifetime. This means that changes in SD effects over time do not have to be reflected in the current form of the SDC report.

At its 82nd session, the Board decided to make monitoring and reporting of SD impacts an option. Yet there are no guidelines for monitoring and reporting which would allow for a standardized, comparable and credible follow-up of the SD benefits claimed in the SDC reports. Such guidance by the Board would assist project developers and CMEs to monitor and report on SD impacts during implementation.

As a first step, existing guidelines developed by other mechanisms could be taken as blueprints for a voluntary application in the SD tool. As an example, the Gold Standard, as well as the other certification mechanisms, provide detailed guidance on monitoring and reporting of SD co-benefits, tailored towards the use within the CDM context (cp. Olsen et al 2015, see also Bumpus & Cole 2010, Sterk et al. 2009).

The Board could therefore adjust them with relative ease to fit the SD tool's specifics, and publish them as guidance for PPs and CMEs in their voluntary reporting of SD co-benefits in a more continuous fashion.

To keep the SD tool voluntary and flexible to use, monitoring and reporting of SD co-benefits should be clearly separated from GHG reduction monitoring requirements, and be included in regularly updated SDC reports.

Setting up modalities and procedures to assist third party validation and verification of SD claims

The SD Tool's lack of monitoring and reporting requirements also means that no procedures have been defined for the validation and verification of SD claims made in SDC reports. Without any validation or verification by third parties, the reports only have limited credibility to SD claims made therein. Third party validation and verification also is a prerequisite for SD benefits to be priced in the carbon market, mainly in the premium segment (Olsen, Fenhann et al. Forthcoming 2015, The Gold Standard 2014).

In its 82nd session, the Board has begun to strengthen optional monitoring and reporting of SD co-benefits. This process could be widened to authorize DOEs validate and verify SD claims made in the SDC reports. DOEs already cover validation and verification of GHG reductions, which puts them in an ideal position to also cover SD co-benefits.

We propose to clearly separate modalities and procedures concerning SD claims from those for GHG reductions. While the latter are a base requirement for the functioning of CDM, the former should account for the SD Tool's voluntary nature, and to provide maximum flexibility in their use. However, if PPs choose to report on SD co-benefits, a validation and verification of their claims by DOEs, following modalities and procedures established by the EB, would greatly enhance the credibility of SDC reports. This would add considerable value to credits generated by those projects reporting on SD co-benefits.

Linking enhanced stakeholder requirements to the CDM SD tool

The SD tool in its current form does not contain requirements for stakeholder involvement. However, stakeholder involvement at global and local levels is seen as an important means to enhance acceptance of the project, and to ensure transparency (as stated in Principle 10 of the 1992 Rio Declaration on Environment and Development). Furthermore, as can be seen in our assessment of the SD provisions of other mechanisms (Arens et al. 2014), it complements other risk-minimising strategies like no-harm safeguards and assessments in order to mitigate potential negative impacts of projects, to increase local acceptability and respect for human rights generally.

Linking enhanced stakeholder consultation requirements to the CDM SD tool would be a necessary step in order to implement a meaningful SD assessment. This should comprise holding an initial local stakeholder meeting before the PDD is submitted to UNFCCC. At this meeting, stakeholders should be addressed in their local language and a non-technical project description should be presented. The extended SDC reports featuring the “do no harm” section as well as an outline of how to monitor SD benefits and to follow-up on the safeguards (cp. above) could be used as the basis for stakeholder consultations (cp. Olsen, Fenhann et al. Forthcoming 2015). This should be complemented by a second stakeholder meeting where the PPs follow-up on the stakeholder’s comments is assessed (see also Carbon Market Watch 2014, Sterk et al. 2009).

Furthermore, the introduction of a grievance mechanism for CDM projects to address potential negative impacts of projects/programmes would be advisable in order to be prepared for a transparent resolution of conflicts (Filzmoser et al 2015, Schade and Obergassel 2014).

The further development of the CDM’s stakeholder consultation processes has been difficult over the years. It might therefore be advisable to shift this discussion to the review of the modalities and procedures of the CDM. As shortcomings are not only caused by vague rules but also by a lack of transparent and clear national practices, direct support to countries with best practice guidance is needed including strengthening the role of civil society organisations and local communities to be involved in data collection for monitoring of co-benefits and social safeguards (Dong, Olsen et al. 2015). Proposals for enhanced rules for stakeholder consultations in this context already exist, see, for example, the EU submission (EU 2013).

4.2 Level 2 Recommendations: Enhancing the CDM SD tool

Introducing UNFCCC certification of SD co-benefits based on the CDM SD tool with enhanced requirements

Independent certification of Sustainable Development benefits serves to ensure that SD impacts are being addressed within the certified projects, and to generate added value through fulfilling high SD standards. The Gold Standard for CDM projects is an example of how certification can assist to raise additional finance for CERs, when SD impacts are documented and verified. (Koakutsu, K., K. Tamura, et al. 2012, The Gold Standard 2014, Sterk et al. 2009).

Host countries are increasingly showing interest in certification of CERs, with initiatives like the domestic Crown Standard in Thailand (TGO 2014 a+b, cp. also Arens et al 2014). Other countries, such as Cambodia, Indonesia and the Philippines, have indicated their interest in certifying carbon credits (Tewari 2012). According to one of the leading DOEs, DNV GL, there is also an interest to develop a common standard at the global level for quantification of SD development benefits and enable bottom-up development of methodologies (DNV 2013).

A global standard for the certification of SD co-benefits that would raise the value of certified CERs could be implemented on the UNFCCC level, based on the EB’s SD tool. The SDC report in its current form can already be considered a means to raise the value of a project through documenting SD co-benefits.

The SD tool could in our view thus be transformed into a template for in-country certification that could be adapted by host-country DNAs to fit their domestic circumstances. The fact that the SD tool already provides a comprehensive taxonomy of SD indicators greatly enhances the adaptability of the tool. If DNAs should lack capacities to adapt it, they may simply use the SD tool’s taxonomy without alterations; the tool’s comprehensiveness would ensure that all effects on sustainability a project may have are covered.

However, without considerably strengthening the tool and ensuring independent third-party verification of SD claims, the added value for a project is limited. Therefore, to ensure the integrity of certification, all improvements to the tool as proposed in chapter 4.1 should be met:

1. Introduction of no-harm safeguards
2. Development of monitoring and reporting guidelines
3. The use of independent auditors that verify the monitored effects
4. Strengthened stakeholder participation rules and guidelines

By designing the SD tool as a template for certification rather than a certification mechanism in itself, a number of known political difficulties to international standard-setting (cp. Wehnert et al. 2012) could be circumvented. The SD tool would serve as a global blueprint that would manifest itself only on a national level, which would aid domestic acceptability and the respect for local circumstance.

Creating a global standard for the quantification of SD co-benefits

For most policymakers particularly in developing countries, alleviating poverty, securing energy supply, and reducing environmental pollution or in general sustainable development co-benefits take priority over mitigating greenhouse gases (GHGs). SD co-benefits have the potential to attract public-private investors to finance mitigation projects. Therefore, the need for methods and data to quantify SD co-benefits is an emerging trend that will also enable monetization and valuation of the co-benefits (Santucci et al. 2014). Our review on SD assessment tools shows that none of them, except partially in CCB Standards and the NAMA SD tool, provides direct guidance on how to quantify SD benefits (see matrix in chapter 3.1).

Quantification and possibly monetization of SD co-benefits of a project would indicate interactions between climate change mitigation projects and effects on the local environment, economy, and society, which is valuable for stakeholders in developing countries, especially for local governments. Establishing a value for the SD co-benefits means that the willingness to pay for these achievements can be identified and additional sources of finance for mitigation can be leveraged.

However, some concerns of host country governments that were identified through the interviews will have to be addressed within the SD tool: this comprises, for example, the extra costs for data collection and quantification, and the question whether a framework for quantification shall be nationally determined or common standards shall be globally defined; the extent to which quantification of SD impacts is feasible and desirable and the human- and institutional capacity required from domestic MRV systems.

Therefore, we recommend:

1. To develop a global approval standard for SD co-benefit quantification methods,
2. To give project developers as well as other institutions the opportunity to develop methods for SD co-benefits quantification compatible with their needs and
3. To task an institution such as the UNFCCC Meth Panel with the approval procedure of these methods.

Some private and civil society entities such as DNV as well as VCS/GS and other organizations are currently developing standards for the quantification of SD co-benefits (cp. preceding section) and are interested in developing a global standard. Therefore, in order to harmonize technical specifications and requirements across countries, a voluntary global standard for quantification of co-benefits could be developed / recognized to enhance the UNFCCC CDM SD tool.

4.3 Summary

In short, our recommendations to improve the SD tool can be summarized as follows:

Improving the tool	<p>Introduce no-harm safeguards</p> <p>This implies assessing possible negative impacts of CDM projects by establishing “no harm” safeguards as mandatory benchmarks. Such safeguards could be based, p.ex., on the MDGs and comprise Human rights, good labour practice, anti corruption issues, and the like.</p>
	<p>Develop monitoring and reporting guidelines</p> <p>Since EB82, monitoring and reporting of SD impacts is optional. Global guidelines can be made available and tailored for voluntary use with the SD tool. We propose to keep this monitoring separate from GHG reduction monitoring, so as to keep the SD tool voluntary and flexible to use.</p>
	<p>Introduce 3rd Party validation and verification of SD claims</p> <p>Independent validation and verification of SD co-benefits will greatly enhance the credibility of the SDC reports. Again, keeping 3rd party validation and verification separate from validation and verification of GHG reductions will keep the tool voluntary and flexible.</p>
	<p>Link enhanced stakeholder requirements to the CDM SD tool</p> <p>SDC reports could be used as the basis for stakeholder consultations. The additional introduction of a grievance mechanism for CDM projects to address potential negative impacts of projects / programmes should complement this measure.</p>
Enhancing the tool	<p>Introduce UNFCCC certification of SD co-benefits</p> <p>There is an interest in national certification for SD co-benefits, as can be seen in the Crown Standard in Thailand. A UNFCCC SD certification framework could be made available to countries that do not have the capacity to develop their own standards.</p>
	<p>Create a global standard for quantification of SD co-benefits</p> <p>Establishing a value for the SD co-benefits means that the willingness to pay for extra benefits can be identified and additional sources of finance for mitigation can be leveraged. We propose a three-step approach:</p> <ol style="list-style-type: none"> 1. Develop a global approval standard for quantification methodologies, 2. Give project developers as well as other institutions the opportunity to develop methods for SD co-benefits quantification compatible with their needs, and 3. Assign an institution such as the ‘UNFCCC Meth Panel’ for the approval procedure of the methods.

5 Towards an internationally harmonized SD assessment

Level 1 and level 2 recommendations introduce a step-by-step approach to increasingly ambitious and more fundamental changes to the SD tool, which could make it attractive and more widely applicable for SD assessment of mitigation actions beyond CDM to other climate mechanisms at national and international levels such as domestic emissions trading schemes (ETS), New Market Mechanisms (NMM), a Framework for Various Approaches (FVA), Nationally Appropriate Mitigation Actions (NAMAs) and Green Climate Fund (GCF) financing for mitigation actions.

A key starting point for harmonization across mechanisms is the SD tool’s international definition of SD criteria and indicators that enables a uniform SD assessment report in a transparent, inclusive and objective manner across projects and countries, while maintaining the prerogative of Parties to define their national SD priorities.

5.1 Framework for sustainability assessment of mitigation actions based on an improved CDM SD tool

Global governance for SD assessment through the CDM EB can set common standards and criteria and guide national authorities to develop their own criteria, procedures and systems for certification of how mitigation actions' contribute to national sustainable development. Improvements to the voluntary CDM SD tool can be relevant to other mechanisms by promoting the use of CDM standards in the development of a flexible framework building on the level 1 and level 2 recommendations that countries and market players can adapt to specific country or market needs. An enhanced CDM SD tool can set robust standards with a view to enable linking and harmonization with emerging national and international market and non-market mitigation mechanisms similar to the way, the CDM already sets standards for accounting and MRV of GHG reductions (Dialogue 2012).

An example of a flexible SD framework is the development of an approach to measure the SD impacts of NAMAs, which build on the CDM SD taxonomy by adding an institutional dimension to the current social, environmental and economic dimensions, see figure below.

Flexible SD Framework for NAMAs

Steps	Element	Description
Ex-Ante Assessment	1. SD criteria & indicators	Identify and describe SD impacts - using the CDM SD taxonomy with one new dimension
	2. Transformational change	Indicators of the processes of change for a paradigm shift to low carbon and sustainable development
	3. Quantification & Monetization	Units of measurement to track SD impacts towards SD goals are identified and methods to estimate their monetary value are applied
Procedural steps	4. Alignment with SD goals	SD impact analysis and contribution to SD goals at global, national, and other relevant levels
	5. Stakeholder Participation	Guidelines for stakeholder involvement throughout NAMA design and implementation
	6. No-Harm Safeguards	Compliance with no-harm safeguards to avoid or mitigate negative impacts
Ex-Ante Assessment	7. Monitoring & Reporting	Develop a monitoring plan; How are indicators monitored, by whom, how often? Describe quality assurance procedures. Report the monitoring data to relevant stakeholders at regular intervals.
	8. Verification	Independent review of methods and data shall be provided when needed to ensure SD impacts are credible and transparent
	9. Certification	Public, private or civil society players may want to define standards for certification of units of GHG reductions with SD impacts

Source: Draft final report on Measuring Sustainable Development in NAMAs (Olsen, Bizikova et al. forthcoming)

The framework is a menu of elements for SD assessment of NAMAs that can inform the development of specific SD tools. Each of the elements is a step towards a comprehensive SD impact assessment. Realising the differences in country and stakeholders' perspectives, it is not possible to impose a 'one size fits all' standard that includes global, technical specifications for all the elements. Rather, a voluntary UNFCCC SD certification scheme for CDM projects can be made available to countries that may choose to develop their own standards guided by UNFCCC criteria and principles, or if countries do not have capacity to develop their own standards, they can choose to make use of the UNFCCC CDM SD certification scheme in their approval process.

5.2 Usability of an enhanced UNFCCC SD tool by host countries and market players

Governance of mitigation actions by developing countries is moving towards the national level with countries deciding their own rules, procedures and methods for issuance of units of GHG reductions, including SD co-benefit assessment following the same path. A trend in domestic MRV systems is that increasingly countries want to measure the SD co-benefits in parallel to GHG reductions, partly due to international financing agencies requiring that co-benefits and impacts for transformational change are part of performance measurement frameworks (Cerqueira, Davis et al. 2012; GCF 2014).

The relevance of an enhanced UNFCCC SD tool is to develop standards for a common framework for sustainability assessment of mitigation actions applicable across countries and levels of activities ranging from projects and programmes to sector-wide approaches for GHG and SD goals based on policies and actions. However, while project developers and buyers have an interest in standardization for uniform criteria and requirements across countries, host countries are divided and are often opposed to international standards that challenge the principle of national sovereignty as identified in the WP2 interviews.

A national certification approach to mitigation actions can promote a higher standard for SD assessment, internalize the SD benefits into the price of CERs (Koakutsu, Tamura et al. 2012) or other units of GHG reductions and give an incentive to developers of projects, policies or actions to consider the SD impacts of their mitigation actions. A few host countries have already developed national schemes such as the Crown Standard in Thailand and the introduction of scoring of SD indicators in Cambodia, Philippines and Georgia (Tewari 2012), however, national schemes are not widely used. A wider use also beyond CDM would require an enhanced role of DNAs or other national authorities more central to development planning to ensure alignment between mitigation actions and national, sectoral or sub-sector SD goals. Options to strengthen the role of DNAs are considered in a technical paper on possible changes to CDM modalities and procedures and include proposals to increase the transparency of DNA operations (UNFCCC 2014).

Should host country DNAs continue to fall short of setting high standards for approval of SD co-benefits as demanded by premium buyers in the market, private or civil society organizations provide voluntary certification schemes with higher SD standards such as the CCB, GS and social carbon methodology. Some of these standards are starting to explore new market opportunities for expanded SD impact and transformational change assessment for payment of verified results of mitigation actions based on policies and actions. However, the market-based SD standards have never developed beyond a small niche of the compliance market. To ensure demand for SD certification a CMP decision could be envisaged, introducing a binding quota of e.g. 50% of the share of CERs/units of GHG reductions purchased across jurisdictions. This proposal builds on the idea of a two-track approach to certification of GHG reductions and SD benefits, keeping it separate to avoid trade-offs between the two objectives of the CDM, offset production and sustainable development (Torvanger, Shrivastava et al. 2013). An enhanced UNFCCC SD tool could be developed at the global level by the EB of the CDM/UNFCCC Secretariat or delegated to the market for a bottom-up approach to development of new methods and procedures to be recognized as compliant with UNFCCC SD framework principles and criteria.

5.3 Towards harmonization of SD assessment at global and national levels

This year in 2015 three high-level processes are running in parallel to define global and national goals for the environment, development and climate: the Sustainable Development Goals (SDGs), originating in the Rio+20 process and merging with the Millennium Development Goals (MDGs) from the UN Post-2015 Development Agenda, and the New Climate Agreement under the UNFCCC process. The three processes are related but institutionally separate. They aim to inspire actions and targets for implementation at national level supported by international institutions.

Common to the three processes is their intention to achieve a paradigm shift towards sustainable and low-carbon development. However, implementation of global goals for such as a paradigm shift requires action at the national level.

This is where a globally defined, but flexible approach to SD assessment can truly make a difference: global harmonization of SD assessment, comparable across mitigation mechanisms and mainstreamed into develop-

ment planning frameworks at national level can serve to integrate sustainability assessment standards into performance measurements systems such as domestic MRV systems. Adhering to agreed standards, on the other hand, ensures that countries are in compliance with international finance institutions such as the Green Climate Fund.

Sustainable Development benefits of climate instruments are highly relevant for development pathways beyond the area of climate change. Mitigation measures can have additional health, social, environmental, macroeconomic as well as equity aspects. With the prospect of the new 2015 climate change agreement on the horizon, many developing countries have begun installing and refining their climate policies. SD benefits in CDM and new market mechanisms actually have the potential to match developing countries' needs with regard to both sustainable development and climate mitigation measures. Therefore, the prospect of enhanced SD assessments could not be more timely.

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