

Carbon finance and pro-poor co-benefits: The Gold Standard and Climate, Community and Biodiversity Standards

Rachel Godfrey Wood

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Disclaimer: The views expressed in this paper are those of the author and not necessarily those of IIED.

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Abbreviations and acronyms

ADATS	Agricultural Development and Training Society
ARR	Afforestation, reforestation and restoration
CAR	Climate action reserve
CCBA	Climate Community and Biodiversity Alliance
CCB Standards	Climate Community and Biodiversity Standards
CCX	Chicago Climate Exchange
CDM	Clean Development Mechanism
CER	Certified emissions reduction
EU ETS	European Union Emissions Trading System
FSC	Forest Stewardship Council
GS	Gold Standard
GS CERs	Gold Standard certified emissions reductions
GS VERs	Gold Standard verified emissions reductions
HFC	Hydrofluorocarbon
IFM	Improved forest management
JI	Joint implementation
ODA	Official development assistance
OTC	Over the counter
PDD	Project design document
REDD	Reduced emissions from deforestation and degradation
REDD-Plus	Reduced emissions from deforestation and degradation plus sustainable forest management and enhancement of carbon stocks
RSPO	Roundtable on sustainable palm oil
SSN	South South North
UNEP	United Nations Environmental Programme
VCS	Voluntary Carbon Standard
WWF	World Wildlife Fund

Abstract

This paper assesses the practical contribution of the Gold Standard (GS) and Climate Community and Biodiversity (CCB) Standards to local development through the identification of high quality carbon offset projects and ensuring high standards of consultation with local communities during project development and implementation. It is based on desk research, involving analysis of the GS and CCB Standards' project databases, project design documents, and secondary literature. In addition, over 20 representatives of the two standards systems, project developers, NGO representatives, and researchers were interviewed. The paper concludes that both standard systems successfully reward high quality projects which have a demonstrated commitment to local consultations and sustainable development benefits. Moreover, they serve to give well-meaning project developers frameworks with which to ensure that a wide range of criteria are considered in planning and implementing projects. As voluntary standards, it is unrealistic to expect either the GS or CCB Standards to improve poor-quality or unsustainable projects.

1 Introduction

1.1 Background and study objectives

Although carbon offset markets are growing rapidly, many critics have questioned their contributions to sustainable development, particularly in terms of providing co-benefits for local communities. The Gold Standard (GS) and the Climate, Community and Biodiversity (CCB) Standards are voluntary certification systems that aim to encourage and identify projects which are deemed to be of 'high quality' in terms of consulting with local people and bringing about co-benefits beyond the primary goal of mitigating greenhouse gas emissions. Both have expanded in recent years, and are gradually becoming better known among project developers, carbon offset companies and offset buyers.

While the projects referred to in this paper contribute to sustainable development in many different ways (for example, by providing clean renewable energy to national grids or sequestering carbon with forestry activities), the main focus of the paper will be on the sustainable co-benefits that they bring to local communities. Particular emphasis will be placed on projects that deliver substantial co-benefits to local communities, which will be referred to as 'pro-poor' projects. This is not to overlook the fact that the Clean Development Mechanism (CDM) and voluntary carbon markets are ultimately climate policy instruments, rather than mechanisms specifically designed to drive development in low-and middle-income countries. On the other hand, both the GS and CCB Standards aim to ensure that co-benefits are achieved and maximised, and that they have incorporated these mutual objectives into their standards. In this light, the paper will attempt to assess the extent of these co-benefits, and highlight ways in which they can be maximised.

From this starting point, the aim is to ascertain the extent to which the GS and CCB Standards are actively improving the design and implementation of carbon offset projects. At a broader level, this is an assessment of the extent to which co-benefits are being generated, the geographical distribution of projects, and the schemes' potential to continue expanding and increasing their market share.

This paper was intended to cover a gap in existing literature on the implementation and growth of these systems of standards. Whilst there is already a significant body of literature on the expansion of offset markets, relatively little has been written on the potential impact of voluntary certification systems that aim to reward high quality projects. Reports by Ecosystems Marketplace and Ecosecurities provide information on the growth of these systems and level of demand for them, but little on what they contribute to project design and implementation, stakeholder consultations and the provision of co-benefits. Within its limited scope, this paper provides valuable feedback to various players participating or interested in these systems of standards. It will also raise issues that interested actors could pursue through more detailed work.

The most comprehensive study yet done on the GS is that of the Wuppertal Institute (Sterk *et al.* 2009), which assesses the robustness of the GS and discusses the possibility of integrating aspects of its policies into the wider Clean Development Mechanism (CDM). It concludes that the GS is a positive tool in that it ensures that project developers engage closely with stakeholders and consider a wider range of potential impacts and benefits than with conventional CDM projects, but that it does not have the means to make CDM projects significantly more sustainable than they would otherwise have been (Sterk *et al.* 2009: 131). This is deemed to be logical, given that the GS is a voluntary scheme and, by definition, tends to attract projects that are already sustainable and of high quality (*Ibid.*). Another study by Nussbaumer (2009) applied the Multi-Attributive Assessment of CDM (MATA-CDM) to compare projects labelled under the GS and the World Bank Community Development Carbon Fund (CDCF) with conventional CDM projects. Nussbaumer found that GS projects

are similar or moderately superior to comparable CDM projects (Nussbaumer 2009: 99).¹ There is no significant literature on the CCB Standards to date.

This paper is organised as follows:

- Section 2 provides an overview of the founding principles and objectives of the GS and CCB Standards, as well as their early growth.
- Section 3 considers the impact of the standards' requirement for local stakeholder consultations, and the subsequent impact of these consultations on the quality of project design and implementation.
- In section 4, the standards' contributions to pro-poor co-benefits are assessed. This analysis considers the relative contributions that different types of projects make to co-benefits, before looking at the extent to which the standard systems themselves add value, and whether there is scope for carbon finance to bring more co-benefits to the communities that need them the most.
- In section 5, the extent to which these standards have grown and are likely to grow in the future is considered.
- Section 6 highlights areas for future research.
- Finally, section 7 presents the main findings of the paper.

1.2 Methodology

In order to gain a broad understanding of the issues concerned, we used a wide range of sources to encompass the diverse types of projects, players, locations and other factors.

The main source of information for this paper was semi-structured interviews with key actors in certification system schemes. These included people who work for both the GS and CCB Standards, representatives of NGOs that are closely involved in them, project developers who have used the standards, and carbon market actors who can assess the status of labelled offsets in the marketplace. This was a consultative process, and some of the interviewees preferred not to be referenced publicly. A further round of consultations with the interviewees was also undertaken to ensure that their views are clearly and accurately represented.

A limited amount of information was gleaned from secondary literature, as relatively little exists on this subject. While there is a whole host of literature on the sustainable development contributions of the CDM, there is much less on that of labelled projects beyond the aforementioned papers by Sterk *et al.* and Nussbaumer. Important information on the spread of the GS and CCB Standards was also obtained from annual reports by Ecosystem Marketplace and Ecoscurities.

Finally, information relating to the spread and distribution of GS and CCB Standards projects was acquired from their respective websites and project registries. Information on certain projects was also gleaned from project design documents (PDDs), which are available on the standards' respective websites.

The research was limited by the fact that it was not feasible to interview local stakeholders. Even if it had been, this would have been of limited use unless a significant number of people were involved. Representatives of NGOs were interviewed, but these were generally organisations that are directly involved in the GS or the CCB Standards. It was not possible to interview members of NGOs that do not have a stake in the systems, partly because most NGOs that have real knowledge of these certification systems have worked with them

¹ This study was based on analysis of project design documents, which may create a bias towards presenting most CDM projects (GS or not) as being highly sustainable (Sterk 2010, personal communication).

closely. Due to time constraints, it was not possible to interview any representatives of Designated Operational Entities (DOEs), and only one representative of a Designated National Authority (DNA) was interviewed.

Another possible weakness of this study is that more interviews related to the GS than the CCB Standards. This was because a) there are far more GS projects than CCB Standards projects; and b) GS projects are more diverse than CCB Standard ones (in terms of project type). As a consequence, there are far more people who can comment on the GS than on the CCB Standards, and it was felt that more interviews were needed to cover the greater diversity of GS projects within the limited time available.

2 The Gold Standard and Climate Community Standards: an overview

2.1 The Gold Standard

The Gold Standard was founded in 2003 by the NGOs World Wildlife Fund (WWF), Helios International and South South North (SSN). Since then, it has established rules for both the compliance and voluntary sectors, revising them in 2008 (Version 2) and again in 2009 (Version 2.1). These rules are constantly revised and major changes are only made if there is a consensus among the participating NGOs, while operational rules are constantly updated and clarified by the Secretariat (Hyman. GS, GS Director of Programs and Partnerships, personal communication, 2010). Moreover, the rules are decided in cooperation with a wide range of experts and actors from development organisations and project development and carbon finance companies (Sterk *et al.* 2009: 49). The stated mission of the GS is to 'reward excellence in carbon markets' (GS 2009a). It was established as a result of doubts and criticisms about carbon finance in developing countries, in particular:

- Serious questions over the contribution of the CDM to sustainable development in the global south. Despite the fact that sustainable development was highlighted as a parallel goal of the mechanism along with greenhouse gas mitigation, it is not given a quantitative value by the mechanism and therefore is frequently ignored. This has been noted by various analysts, such as Olsen (2007) and Sutter and Parreño (2007), who identified an inverse relationship between projects that significantly reduce emissions (and therefore attract considerable revenue), and those that provide substantial co-benefits. For example, one industrial gas capture project that contributes virtually nothing to sustainable development can generate more emissions reductions (and therefore attract more revenue) than 200 biomass projects, even though the latter have the potential to provide far more co-benefits (Nussbaumer 2009: 92). Furthermore, in the voluntary market, carbon standards such as the Voluntary Carbon Standard (VCS) have not established key requirements for co-benefits.² The extent to which the CDM contributes to a transition to low carbon growth based on renewable energy and energy efficiency has also been challenged, particularly with regards to industrial gas capture projects.
- The lack of clear requirements and frameworks for consultation with local people. While the CDM and other voluntary market standards require consultation with local people about relevant projects, they do not mandate any particular framework or ensure that consultation is genuine and sufficient. Moreover, this lack of effective consultation has been seen as a cause of negative impacts on local people and sometimes opposition (Olsen, personal communication, 2010).

These are by no means the only criticisms of the CDM. Issues such as additionality are arguably even more controversial than sustainable development and local consultation, although these are the main questions that the GS seeks to address, and are most relevant for this study.³ In response to these issues, the founders of the GS resolved to create a standard that would do the following:

² Possible exceptions include the Plan Vivo and the Social Carbon Standard, but they are relatively small.

³ When the GS was first designed its additionality requirements went beyond those of the CDM, but the executive board of the CDM subsequently strengthened testing for additionality, to the extent that any differences between the additionality of GS, CDM and non-GS projects has disappeared (Sterk, 2010, personal communication).

- Explicitly require a far more rigorous consultation process than was demanded by the CDM and other voluntary carbon standard rules. This is explained further in section 3.
- Require, record and identify sustainable development contributions from all projects. This is mainly achieved through the use of the UNDP safeguarding principles (to screen out harmful projects) and the GS's own sustainable development matrix, which requires project developers to provide indicators on a range of issues, and to consider ways in which their projects could be made more beneficial to local people and environments. This is explained further in section 4.

It should also be emphasised that the GS attempts to achieve these goals without compromising the environmental integrity of the projects. This means only recognising and promoting projects that clearly contribute to low carbon development paths. As a result, it was decided to permit only projects that promote renewable energy and demand-side energy efficiency.

Certain additional criteria were also put in place for particular projects: for example, any hydro project over 20MWe must undergo a pre-feasibility assessment, while those involving palm oil or palm oil by-products must comply with the Roundtable on Sustainable Palm Oil (RSPO).⁴ Finally, the GS also seeks to uphold the highest standards available with regard to issues such as additionality and leakage, and uses conservative baselines and methodologies to calculate emissions reductions. Although these are still points of contention, they were not within the remit of this paper.

The GS is similar to the Forest Stewardship Council in that it acts as a voluntary certification scheme that aims to set high standards, and give project developers a framework within which to design and implement high quality projects, and then identify those projects in the marketplace. It attempts to attract the private sector by promising price premiums, risk mitigation and the enhanced social and environmental credibility of its credits.

In its early years the GS grew extremely slowly, and for some time had just five projects in the pipeline (Sterk *et al.* 2009: 96). This was because it was understaffed, there were concerns over transactions costs and many buyers were unwilling to pay high premiums (Hyman, personal communication, 2010). In recent years, though, it has grown rapidly. In March 2010, the GS had 288 projects in the pipeline (142 under the CDM and 146 in the voluntary market),⁵ of which 53 were registered (18 under the CDM and 35 in the voluntary market) and a further 16 had credits issued (6 in the CDM and 10 in the voluntary market). Of the 142 CDM projects, 97 were listed by UNEP Risø as being on the CDM pipeline, giving the GS 1.9 per cent of all (4,968) CDM projects in the pipeline, and 0.9 per cent of registered CDM projects (Gold Standard Registry 2010; UNEP Risø 2010).

In the last year the GS has increased its capacity significantly. It has tripled its staff and now employs regional managers in every region where it operates, to 'work with local stakeholders to reduce market entry barriers, identify high quality projects and build capacity for their development and implementation' (GS 2009e).

⁴ For a comprehensive list of the project types available under the GS, see the Gold Standard, Annex C 'Guidance on Project Type Eligibility'.

⁵ There were six projects that had credits issued under the CDM and also had retroactive VERs issued for them before they were accepted under the CDM. These have been included under the CDM and not the voluntary market in this report.

2.2 The Climate Community and Biodiversity Standards

The Climate, Community and Biodiversity Alliance (CCBA) was established in 2003 as a partnership of leading NGOs (particularly Conservation International, Care International, the Nature Conservancy, the Rainforest Alliance and the Wildlife Conservation Society) and private sector actors aiming to promote high quality forestry carbon projects. Its standards are therefore used for projects involving afforestation, restoration and reforestation (ARR), reduced emissions from deforestation and degradation (REDD), and improved forest management (IFM). Many certified projects combine several of these techniques. The CCB Standards were perceived as necessary in order to respond to concerns that carbon forestry projects had the potential to be highly inequitable if implemented in the wrong way. For example, many NGOs fear that such projects will lead to the displacement of local people or the introduction of inappropriate monoculture plantations. At the same time, the NGOs involved in the CCB Standards were convinced that forestry projects could bring significant co-benefits to local people and environments if they were done in the right way. Like the GS, the CCB Standards aim to attract investors interested in paying a little extra for guaranteed co-benefits and greater guarantees that projects will not attract the criticism and controversy that has often dogged forestry carbon projects.

The first set of standards was established in 2005, and a second edition was released in 2008. By March 2010, 19 projects had been validated, 15 under the first edition and 4 under the second (CCB Standards Registry 2010), while a further 21 were undergoing validation. Of these 40 projects, 30 were in low-and middle-income countries (11 in Latin America, 11 in Asia and 8 in Africa).

3 Engaging stakeholders in project areas

3.1 Introduction

Both the Gold Standard and the CCB Standards place a high emphasis on the importance of stakeholder consultation as a means of guaranteeing that local people participate positively in projects. Both are based on a firm belief that the close participation of local people is one of the strongest guarantees that they will benefit from a project. Moreover, well-implemented consultations can be crucial in ensuring that a given project will not be subject to opposition or criticism at a later date. This is a serious issue, as some offset projects in both compliance and voluntary markets have fallen by the wayside due to resistance from local people (Olsen, personal communication, 2010). This guarantee that projects will run smoothly could also make certified credits more attractive to offset buyers by minimising the risk of opposition to such initiatives (*Ibid.*).

3.2 Gold Standard consultations

The Gold Standard goes beyond the CDM and VCS requirements in that it requires one consultation process with two spaces for stakeholder intervention (as opposed to the one consultation mandated by the CDM), and establishes clear guidelines on how project developers should carry out this process (GS 2009a; Fadda, GS Regional Manager for Central and South America, personal communication, 2010). Consultations must be clearly documented, and the names of people who attend and participate should be supplied. Details of the project must be presented to stakeholders in a non-technical form, with an explanation of carbon markets and the generation of finance from offsetting.

The first point to make is that the nature of GS projects makes them unlikely to attract much opposition. Because its exclusion list limits GS projects to initiatives involving renewable energy and energy efficiency, they are unlikely to generate significant negative impacts. Project developers report that temporary disputes only arise if local people misunderstand the nature of the project and believe that it will have exaggerated negative impacts (Castro (project developer), Zelaya, (NGO representative / project developer) Alemán (government official), personal communications, 2010). Another issue is that projects that involve relatively little participation, such as wind farms in remote areas, may gain very little from extra consultations, and project developers can feel that they are unnecessary. However, even with wind farm projects, there are still cases where additional consultations could make the project developer aware of new issues. For example, project developers working on wind projects in Tamil Nadu in India often dump waste and packaging for the turbines in the locality, and large lorries can cause blockages in small gullies used for irrigation. These problems were identified in GS-mandated consultations, and resolved to the benefit of local stakeholders (personal communication, anonymous project developer, 2010). In Turkey, there have been cases where consultations have led project developers to build trees around wind turbines or support other local activities and projects (Gorina, (emissions portfolio manager of Essent Trading), personal communication 2010).

Consultations are far more important for the long-term sustainability of more participatory projects that aim to bring greater lasting benefits to local people, such as those involving energy-efficient cookstoves and biogas digesters. According to Jamal Gore of Carbon Clear, such projects demand a high level of participation from beneficiaries, consultation processes are crucial in preparing and training them (Gore, personal communication, 2010). Project developers often have to interact with women as they are most likely to be using the equipment on a regular basis, and this can require a particularly rigorous consultation process involving education about maintaining the equipment and explaining the importance of allowing regular monitoring. Consultations are also crucial in ensuring the smooth monitoring of carbon emissions reductions and preventing emissions leakage. This can be

particularly challenging and potentially unpopular in such projects. For example, participants must sign a deal allowing efficient cooking stoves to be inspected on a regular basis. Project developers also have to ensure that villagers do not keep using their old cookers along with the new ones, and do not cause leakage by selling their old ones (Gore, personal communication 2010). According to Gore and the project developer Ram Esteves, effective consultation can make participants aware that such monitoring is vital for the generation of VERs/CERs, and thus for the sustainability of the project (Gore and Esteves, personal communications, 2010).

Some project developers have become particularly enthusiastic about the consultations and taken a creative approach to the process. For example, one used a puppet show to explain the implications of a cookstove project in rural Kenya (Welch (GS deputy operation director, personal communication, 2010), while another in Honduras uses ongoing consultations to break down traditional clientelist paradigms and encourage people to be pro-active in improving the quality of their lives (Castro, personal communication, 2010). In Turkey, GS-mandated stakeholder consultations are often the first opportunity that many local people have had to participate in such a process, especially women (Hyman, personal communication, 2010). While many project developers working on this type of initiative are likely to be well disposed towards open and inclusive stakeholder processes, regardless of certification, the framework offered by the GS can still be extremely helpful. It can be particularly useful in providing non-technical explanations of projects, templates of invitations and suggesting ways of engaging people and recording their input (GS 2010d). Moreover, according to Jamal Gore, GS certification means that project developers can be more easily held to account by local people, civil society and investors (Gore, personal communication 2010). Although it is obviously impossible to ascertain whether such consultations are correctly implemented across all GS projects in a study of this scope, it seems likely that the implementation of consultations can vary significantly, and that other factors are important regardless of whether it is a GS project or not. According to Patrick Burgi of the project developer South Pole Carbon Asset Management, such factors include the project developer's commitment to a participatory process, the level of civil society engagement, local culture and the position of government officials (Burgi, personal communication, 2010).

3.3 CCB Standards consultations

Under CCB Standards, project developers have to identify communities and any other actors likely to be affected, and clearly explain how they are being involved through consultation (CCBA 2008). All affected actors must be informed of the likely impacts of the project, and be able to express their hopes and concerns (*Ibid.*). The CCB requirements for stakeholder consultations appear to be more demanding than those of the GS, as they require a constant, ongoing process of consultation that goes beyond the single consultation and two stakeholder interventions mandated by the GS (*Ibid.*). It could be argued that active and ongoing participation is particularly necessary for terrestrial carbon projects, which deal with issues that are often fluid and can change over time. For example, in the Madre de Dios REDD project in the Peruvian Amazon, ongoing consultations with local people are crucial, as the construction of the trans-Amazonian inter-oceanic road will inevitably lead to increased internal migration into the area (Gomez-Caviglia of the project developer, Greenox, personal communication 2010). Therefore, the Madre de Dios project is largely dependent on the developers' ability to maintain relationships with increasing numbers of people, and to convince them of the benefits of the sustainable livelihood alternatives on offer (*Ibid.*).

As with the GS, project developers for CCB Standards projects are generally well intentioned, and many would have engaged in stakeholder consultations regardless of the certification process. Even so, consultations can bring to the fore issues that would otherwise have been ignored. For example, according to Toby Jansson-Smith of

Conservation International (who have been central in the establishment and implementation of the standards), the consultation for one project highlighted the local community's dependence on charcoal and fuel wood, and this led to the establishment of a fast-growing planted forest to meet those needs (personal communication, 2010).

The CCB Standards commit project developers to consult with traditional local authorities and groups that may have been marginalised within their community. This can be problematic as traditional authorities may resist the wider inclusion of these groups, but CCB Standards can be used as a positive lever to persuade local elites and officials to make compromises that they might otherwise not have been prepared to countenance (Jansson-Smith, personal communication 2010). For example, in the Oddar Meanchey project in Cambodia, the project proponent, the NGO PACT Cambodia, used the CCB Standards as a means of convincing the government to agree that 50 per cent of the revenues generated from carbon finance would be designated to local community benefits (Bradley, PACT Cambodia, personal communication, 2010). In another case, a historically more marginalised indigenous group used the consultation process during project design to gain greater parity vis-à-vis another indigenous group (Jansson-Smith, personal communication, 2010). One area that might be worth exploring is the extent to which rigorous consultation can be maintained in larger projects. According to Jeff Hayward of the Rainforest Alliance and auditor for the CCB Standards, consultations are often far more substantial in smaller projects where the stakeholders are the direct beneficiaries, than in larger projects where impacts are more indirect (Hayward, personal communication, 2010).

4 Sustainable development contributions

4.1 Gold Standard sustainable development rules

Under Version 2 of the GS, project developers must apply the UNDP safeguarding principles in order to guard against the possibility of a project having significant negative impacts (GS 2008). These safeguards are generally considered to be in line with the standards of the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC) (Sterk *et al.* 2009: 14). However, the main area in which the GS really goes beyond the CDM is in requiring operators to complete a sustainable development matrix and then monitoring for significant co-benefits. This matrix is compiled with the participation of the project developer, the stakeholders and the GS itself, which reviews the inputs and approves the matrix once the information has been verified. Under Version 1, projects were allocated a score of between -2 and +2 for 12 indicators, while in Versions 2 and 2.1. each indicator is simply given a '+', '0' or '-'. The indicators are divided into three groups as follows:

- Environmental impacts: water quality, air quality, other pollutants, soil condition and biodiversity
- Social sustainability and development: employment quality, livelihoods of the poor, access to energy services, and human and institutional capacity.
- Economic and technological deployment: employment numbers, balance of payments, and technological self-reliance.

The scores then have to be justified. In order to qualify, a project must gain a net positive score in two categories, and at least a neutral score in the remaining category. Significant negative impacts are not allowed or need to be mitigated against. In reality negative scores are practically unheard of, which is unsurprising given that the projects permitted by the GS are unlikely to have strong negative impacts. As mentioned before, potentially controversial projects involving palm oil or large hydro projects need to comply with additional rules in order to be allowed. Other potential negative impacts could occur from biomass plants if they lead to deforestation in order to create fuel, although it is claimed that the general CDM rules and GS requirements ensure that supply lines are sustainable and transparent (Burgi, personal communication, 2010).

In compiling the matrix, project developers must supply information, data and proof for all of the indicators, even those that are unlikely to be affected by the project. The GS gives a list of indicators that can be used to demonstrate impacts (for example, NO_x to demonstrate impacts on air quality, or death rates from malaria for the criterion 'livelihood of the poor'; GS 2009c). This can be a source of frustration, as one wind farm project developer reports that developers often find it unnecessary and burdensome to have to supply data on a project's effect on water supply if this is likely to be minimal. On the other hand, the fact that project developers occasionally find the requirements onerous could be inferred as proof that the standard is indeed rigorous.

Under Version 2, non-neutral indicators or indicators that have been neutralised through mitigation measures are monitored throughout the project cycle. This is a change from Version 1, which only monitored negative impacts, allowing project developers to exaggerate benefits and gain high scores. Under Version 2, the hope is that the additional monitoring that comes with significant positive impacts will make developers consider issues very carefully before claiming a '+' for any indicator. In the event of a project failing to live up to its promises on co-benefits, it would lose its GS certification.

It should be stressed at this stage that the GS does not seek to impose any particular view on what constitutes 'sustainable development'. As we will see, the extent to which projects lead to co-benefits is highly variable.

Sterk *et al.* note that there is inevitably a degree of subjectivity in the use of the sustainable development matrix (2009: 128). It relies heavily on qualitative explanations of potential impacts, rather than enforcing quantitative impact assessments (*Ibid.*). For example, in the past, projects often used inconsistent baselines. A wind project might score 2 for air quality on the basis that the impact wind of power on local air quality would be far better than the impact of coal power, but then fail to compare the employment generated by the wind project with that of a coal project. This issue was identified by the Wuppertal Institute with regard to a wind project in Fujian, China; the authors also questioned the fact that such an inconsistency had not been picked up during the validation or verification stage (Sterk *et al.* 2009: 118). Under Version 2, the GS has made it clear that all indicators will be assessed on the basis of comparison with a likely alternative project or source of power generation. Even so, this still leaves room for uncertainty, as developers may not know whether they should refer to power generated under new capacity or greater use of old capacity, etc., and it can still be extremely time-consuming and difficult to provide data on this (Burgi, personal communication, 2010).

Given such inconsistencies, it may be tempting to impose a more quantitative and detailed tool to measure sustainable development, such as the Multi-Attributive Assessment of CDM Projects (MATA-CDM), but this has proved to be very rigid and difficult to put into practice (*Ibid.*). Essentially, the sustainability matrix serves as a framework that encourages project developers to consider the ways in which their project does or could benefit local people, and makes them take various issues into account. Whilst subjectivity can obviously detract from the environmental and social credibility of the matrix, moving to the other extreme and eliminating all sources of flexibility would run the risk of over-burdening well-meaning project developers and increasing costs excessively. Such a move would almost certainly not be conducive to the generation of greater co-benefits.

4.2 GS projects and sustainable development contributions

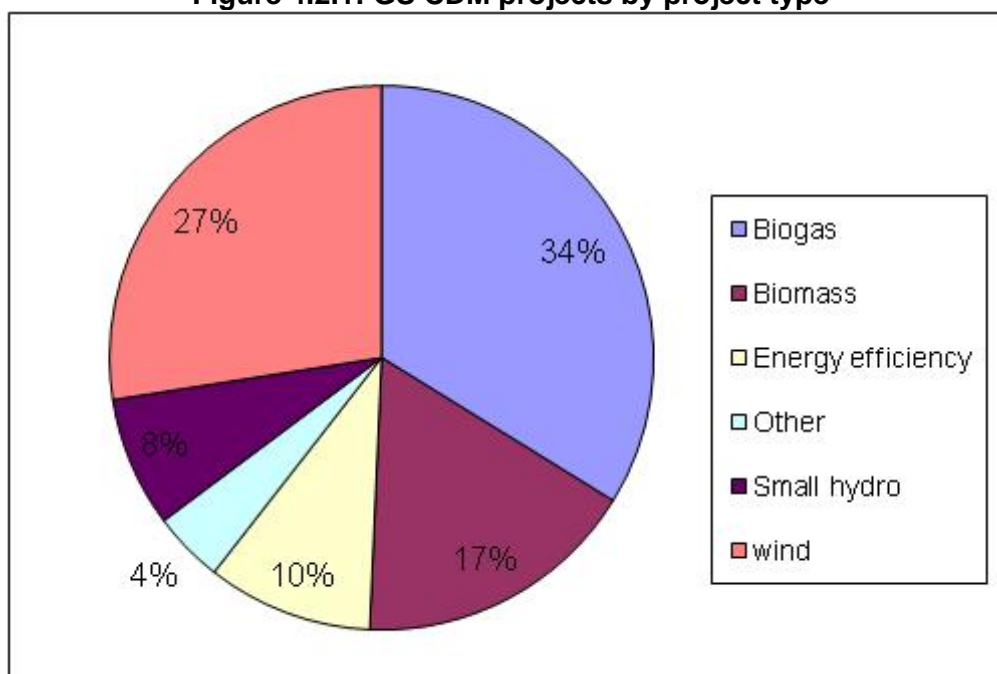
As mentioned before, the contribution of GS projects to co-benefits varies substantially. For example, the real co-benefits of wind power projects are essentially limited to the jobs created (the majority of which are during the construction phase, and are therefore temporary), improved infrastructure links, and the absence of any pollution that would have been caused by conventional power generation. This is not to denigrate the importance of this type of project or downplay their crucial role in shifting towards clean, renewable energy, but simply to point out that the wider co-benefits are limited. It should also be noted that, according to one project developer, the benefits generated by wind farms are likely to be similar for wind projects regardless of whether they are registered with the GS or not. These points are not trivial, as wind projects are also the most common type of project in the GS pipeline, constituting 28 per cent of GS CDM projects (see Figure 4.2.1) and 39 per cent of GS VER projects (See Figure 4.2.2). More importantly, they are by far the greatest generator of emissions reductions, a point that will be dealt with in section 4.3. They are also most common in China and Turkey, two rapidly developing countries with rising energy demands and a strong national commitment to renewable power.

Table 4.2.1: GS CDM projects by status, project type and location (March 2010)

	Biogas	Biomass	Energy efficiency	Other ⁷	Small hydro	Wind	Total	Per cent
Listed	38	20	11	4	10	30	113	79.6%
Validated	5	1	1	0	0	4	11	7.7%
Registered	4	2	2	2	0	2	12	8.5%
Issued	1	1	0	0	1	3	6	4.2%
Total	48	24	14	6	11	39	142	100.0%
Per cent	33.8	16.9	9.9	4.2	7.7	27.5	100.0	100.0%
Asia	40	19	7	5	7	36	114	80.3%
China	6	2	5	2	2	33	50	35.2%
India	5	11	1	3	5	3	28	19.7%
Thailand	23	6	0	1	0	0	30	21.1%
Asia other	6	0	1	0	1	0	8	5.6%
Honduras	3	3	0	0	3	0	9	6.3%
LAC other	3	1	4	0	0	1	9	6.3%
Oceania	2	0	0	0	0	0	2	1.4%
CEE	0	0	0	0	0	0	0	0.0%
Africa	0	1	3	0	0	2	6	4.2%
Total	48	24	14	6	11	39	142	100.0%

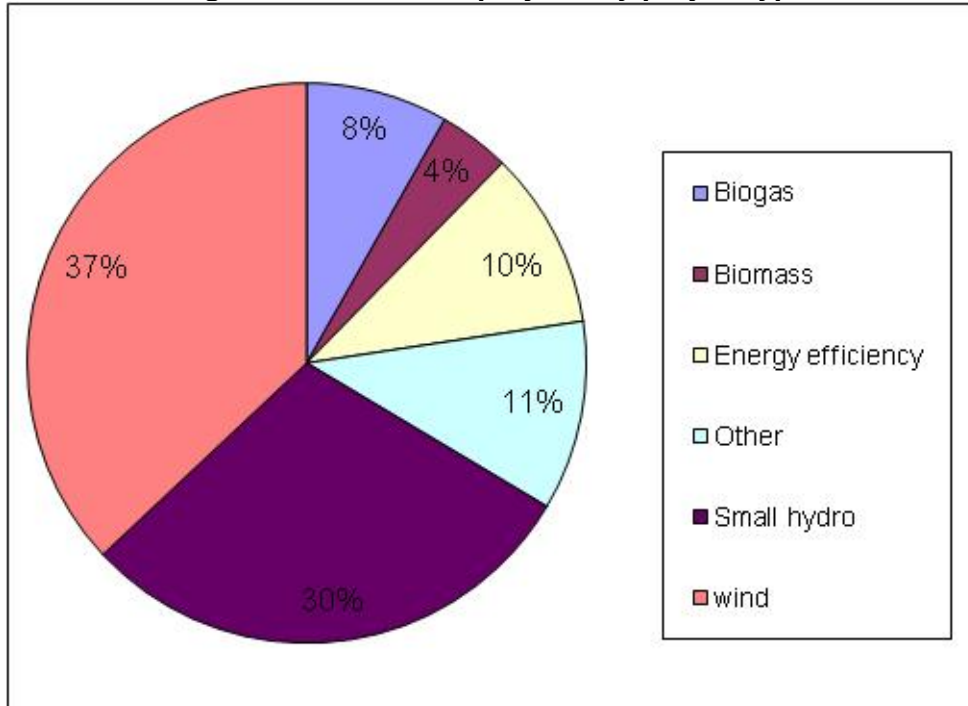
Source: GS Registry, March 2010

Figure 4.2.1: GS CDM projects by project type



⁷ The 'other' category is mainly dominated by photovoltaic and solar power projects, but also includes geothermal, liquid biofuels and landfill management to generate electricity.

Figure 4.2.2: GS VER projects by project type



Source: GS Registry, March 2010

One type of project that can generate considerable sustainable development co-benefits is the use of biomass to generate electricity. There are currently 30 biomass projects in the GS pipeline, mainly in the CDM. These generate 6 per cent of the expected annual emissions reductions of all registered projects, and are particularly prevalent in India, with projects at Malavalli, Tonk and Sri Balaji. Perhaps the main benefit is that they are highly labour intensive. The Malavalli project alone has generated at least 500 jobs, dynamising the local economy and creating work all year round (Malavalli PDD 2006). It also significantly improves the livelihoods of the poor by creating a value for previously worthless biomass residues, improving air quality by reducing the burning of biomass in the fields, and supplying villagers with organic fertiliser. A 2007 study by Hansson and Sundemo found that the poor had indeed benefited significantly from this project, as the wages of people working as contract labourers rose by 39 per cent, while their overall social welfare improved by 70 per cent (Hansson and Sundemo 2007: 22). The GS CERs brought in 30 Euros (85 per cent more than conventional CERs at that time), of which 14 Euros directly improved the livelihoods of the poor (Hansson and Sundemo 2007: 47).

Table 4.2.2: GS VER projects by status, project type and region (March 2010)⁸

	Biogas	Biomass	Energy efficiency	Other	Small hydro	Wind	Total	Per cent
Listed	10	5	10	8	36	26	95	65.1%
Validated	0	1	2	0	3	10	16	11.0%
Registered	2	0	3	7	4	9	25	17.1%
Issued	0	0	0	1	0	9	10	6.8%
Total	12	6	15	16	43	54	146	100.0%
Per cent	8.2	4.1	10.3	11.0	29.5	37.0	100.0	100.0%
Asia total	8	4	2	5	13	11	43	29.5%
China	4	2	2	1	11	7	27	18.5%
India	3	2	0	1	0	1	7	4.8%
Asia other	1	0	0	2	2	3	8	5.5%
NAM	2	0	1	0	0	1	4	2.7%
LAC	1	0	2	1	1	1	6	4.1%
Oceania	0	0	0	0	0	3	3	2.1%
CEE other	0	1	0	0	0	0	1	0.7%
Turkey	1	0	0	6	27	37	71	48.6%
Africa	0	1	10	5	2	1	19	13.0%
Total	12	6	15	16	43	54	146	100.0%

Source: GS Registry, 2010

However, before enthusiastically celebrating the role of the GS in promoting projects like the one in Malavalli, we need to consider the context of this type of project. Firstly, there are numerous factors in India that encourage biomass plants, the most notable being government support. Secondly, there are 670 biomass projects registered under the CDM, the vast majority of which are obviously not registered under the GS. They account for 13 per cent of all projects and contribute 6 per cent of annual CERs in the CDM pipeline (UNEP Risø 2010), and many of these plants can also be expected to have sustainable development benefits through clean energy contributions, job creation and the valorisation of previously worthless agricultural residues. Therefore, it is hard to know whether GS biomass plants offer significantly greater co-benefits than conventional CDM plants, beyond the added stakeholder consultation processes. There are likely to be high quality, uncertified biomass projects in the CDM that do not seek GS registration, either because they can find a good price for their credits anyway, or because they are unaware of it (Hyman, personal communication, 2010).

We might expect the value added by the GS to come from the greater emphasis on stakeholder consultations and continuous monitoring of the sustainable development criteria throughout the project cycle, unlike the conventional CDM. In addition to this, the GS uses the most conservative methodologies available to calculate the emissions reductions of each project, thus giving them environmental credibility (Hyman, personal communication, 2010). Sutter argues that the Malavalli project is superior to many others as it uses agricultural residues as well as those from mills, and has established an innovative mechanism for collecting waste sugar cane that guarantees a sustainable biomass supply (Sutter 2003: 156), while many other biomass plants are at risk of exerting unsustainable pressure on local forests to keep the plants running at full capacity (*Ibid.*: 164). Finally, the Malavalli plant uses a particularly expensive technology that would only have been viable with carbon finance (Burgi, personal communication, 2010). Even so, it is still unclear whether the GS *per se* was

⁸ This table does not include six GS CDM projects that retroactively applied for VER credits.

the cause of all this, and it is extremely difficult to ascertain the extent to which the Gold Standard really adds value to these projects without more extensive study. Given the point made by Sterk *et al.* that voluntary schemes will naturally attract projects which are already sustainable, it is probably unrealistic to expect the 'value added' by the GS to be substantial. What is clear, though, is that the GS has played a role in branding and marketing the plant, and it is to be hoped that this will lead to the replication of such projects.

Other projects that generate significant pro-poor benefits are those that involve energy-efficient or renewable energy-based cookstoves. Beyond job creation, these projects create substantial benefits for the poor, mainly by significantly improving the air quality within their houses and reducing household expenditure on fuel. Families in rural areas benefit because the stoves drastically reduce the amount of time they spend collecting fuelwood, thereby allowing them to engage in other activities. There are currently 16 energy-efficient stove projects in the GS pipeline, most of which are in the voluntary market and located in Africa. As mentioned earlier, such projects are extremely challenging for project developers, particularly when they are dispersed over large rural areas, and there is still considerable debate over the issue of monitoring for leakage. On the other hand, they can still be scaled up and generate a surprisingly high amount of emissions reductions (over 60,000 credits per year expected), particularly when implemented in urban areas (as with the Ugastoves project in Kampala).

There is obviously little reason to believe that GS projects have significant negative effects, and all projects contribute to sustainable development by providing energy services while reducing dependency on fossil fuels. What is not clear, however, is the extent to which Gold Standard projects offer substantially greater co-benefits than comparable conventional CDM and VER initiatives. There are many other factors that may have a greater impact on the quality of local benefits than the GS process. These include the project developer's capacity and intentions, local laws and regulations, and the pre-existing level of community organisation and ability to absorb opportunities (Burgi, personal communication, 2010). Finally, it should not be forgotten that the GS exclusion list will inevitably not include some highly beneficial projects, such as those involving waste management (*Ibid.*).⁹ Therefore, as Nussbaumer concluded (2009), it would be wrong to assume that all GS projects are necessarily superior to conventional CDM and VCS schemes (2009). Importantly, the GS does not claim to have a monopoly on high quality projects, and its main role lies in mandating superior consultation processes, providing a framework to encourage co-benefits and then certifying high quality projects, thereby allowing them to be identified and rewarded by the market (Hyman, personal communication 2010).

4.3 Maximising mitigation activities with substantial co-benefits

Because GS projects contribute energy services while reducing dependence on fossil fuels, they can all be said to contribute to sustainable development, and thus do not suffer from the mitigation-sustainable development trade-off identified in the CDM by Sutter and Parreño (2007). On the other hand, the majority of emissions reductions are generated from projects with relatively less co-benefits. If we consider Table 4.3.1 and Figure 4.3.1 below, it is clear that wind power, which provides modest local co-benefits and is concentrated in middle-income rather than low-income countries, is by far the greatest generator of emissions reductions (and therefore revenue). Some 71 per cent of the expected annual VERs and CERs from all registered GS projects are from this type of project, while schemes that generate far more co-benefits produce relatively negligible VERs and CERs. For example,

⁹ The GS does allow some waste management projects, but only if they contribute to energy production. However, as Renat Heuberger of South Pole Carbon Asset Management points out, the majority of emissions reductions from these projects are in the form of methane capture (cited in Sterk *et al.* 2009: 56).

the Malavalli and Bagepalli projects in Karnataka, which create substantial co-benefits for local people, generate five to twenty times less emissions reductions than certain big wind farm projects.¹⁰

This is not to downplay the contribution that many wind farm projects make to sustainable development by providing clean, renewable energy in countries where there is a demand for it, such as Turkey and China. Nevertheless, it does seem that that carbon finance within the GS plays a limited role in leveraging large funds to pro-poor projects with substantive co-benefits, and that these projects currently attract a very small share of the overall carbon finance available.

Table 4.3.1: Expected annual VERs and CERs of all registered and issued GS projects by project type (total of 4,106,317 from 55 projects in late March 2010¹¹)

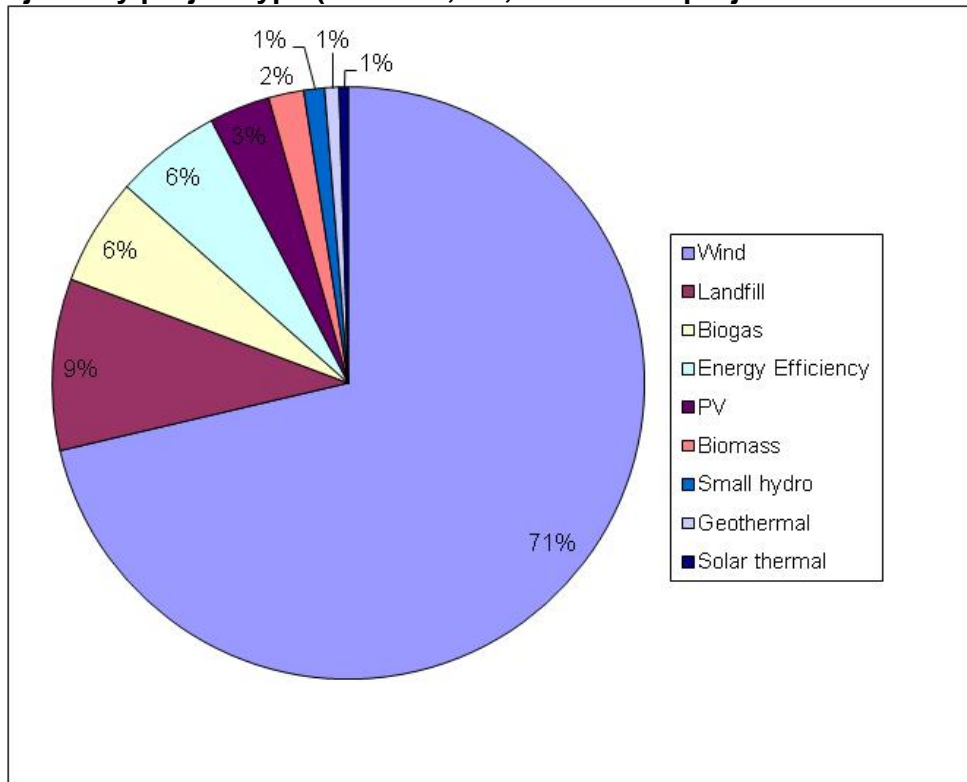
Wind	2,929,340
Landfill	384,480
Biogas	239,893
Energy efficiency	238,338
PV	136,300
Biomass	78,811
Small hydro	46,593
Geothermal	32,000
Solar thermal	20,562
TOTAL	4,106,317

Source: GS Registry, 2010

¹⁰ The Malavalli biomass plant and Bagepalli biogas project generate approximately 20,000 CERs a year, while the largest registered GS CER project will generate 120,000, and the Taichung wind power plant in Taiwan on the voluntary market is expected to generate 370,000 VERs.

¹¹ Table 4.3.1 and Figure 4.3.1 were compiled two weeks after tables 4.2.1 and 4.2.2, which is why they show 55 registered and issued projects rather than the 53 shown in the previous tables.

Figure 4.3.1: Expected annual VERs and CERs of all registered and issued GS projects by project type (total of 4,106,317 from 55 projects in March 2010)

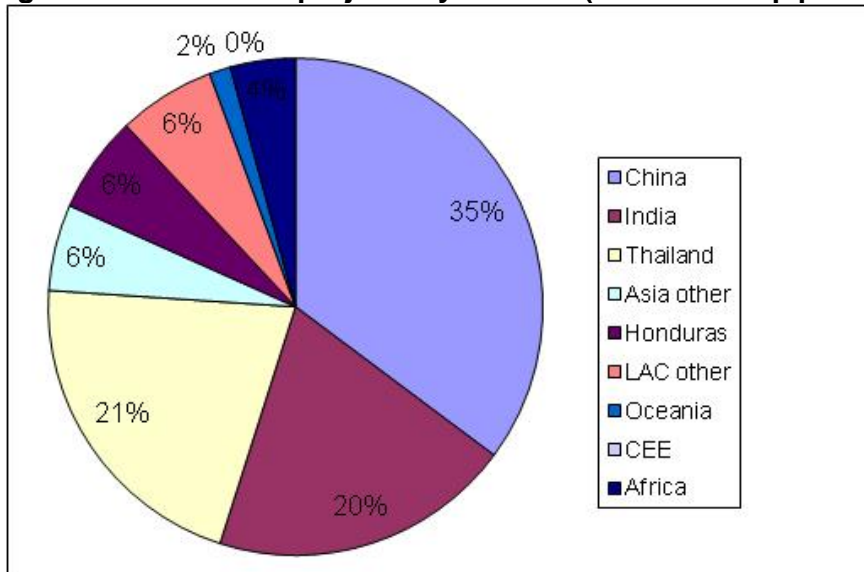


Source: GS Registry, late March 2010

Another well-noted CDM trend that is partly mirrored in the GS is the concentration of projects in certain rapidly growing middle-income countries.¹² The GS CDM market is dominated by China, India and Thailand, which account for 75 per cent of projects; while the overall CDM market is dominated by China, India, Brazil and Mexico, which contribute 71 per cent of projects (UNEP Risø 2010). Thailand is an interesting GS ‘story’, in that it has 29 GS CDM projects (mainly biogas), which account for a large portion of its overall CDM profile. This is because Thailand’s CDM profile is dominated by biogas and biomass projects, which are both eligible under the GS. The project developer South Carbon Asset Management has a strong presence in Thailand, and has established numerous biogas projects there. The greatest contributor in Latin America is Honduras, with nine projects in the pipeline as a result of Honduran NGOs actively promoting CDM projects with co-benefits since the Kyoto protocol (Fadda and Zelaya, personal communications, 2010). Africa, on the other hand, only accounts for 4 per cent of GS CDM projects in the pipeline (compared with 2.5 per cent of the overall CDM). As with conventional CDM projects, this is because Africa offers fewer cost-effective abatement opportunities and suffers from a poor investment climate and lack of awareness of the CDM.

¹² Although it should be noted that much of this concentration is logical and should not necessarily be viewed negatively. If we consider China’s population, growth in emissions (and therefore abatement opportunities), as well as local infrastructure, capacity and investment conditions, it is unsurprising that a large proportion of CDM projects are concentrated there.

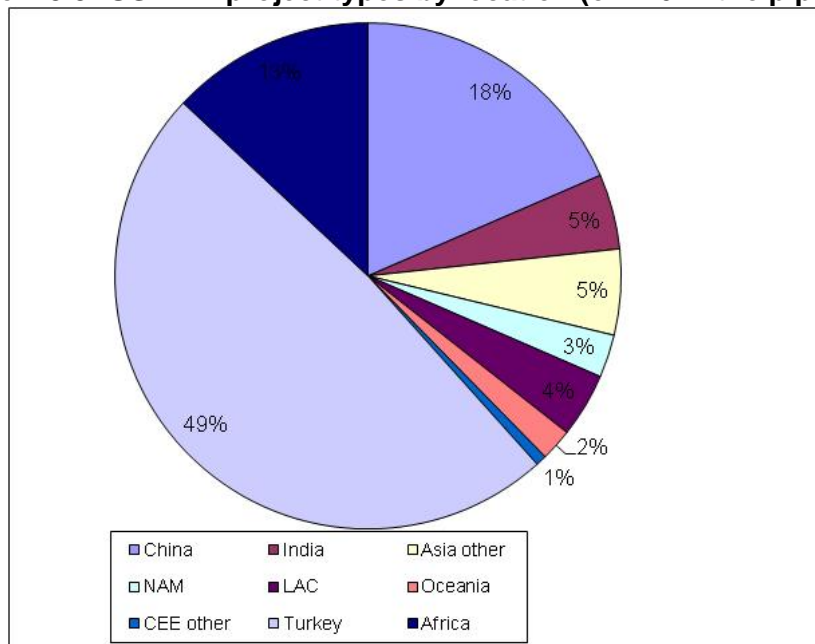
Figure 4.3.2: GS CDM projects by location (of 142 in the pipeline)



Source: GS Registry, 2010

The GS VER market is dominated by Turkey, which has 46 per cent of projects, the vast majority of which are wind and hydro projects. This reflects a more general growth in Turkey's contribution to the voluntary carbon market in 2008 (Hamilton *et al.* 2009: 37). The country is undergoing a general energy transformation, so demand for renewable energy is high; but since it is not eligible for CDM/JI projects as an Annex 1 country, it is not surprising that it dominates the GS VER market. Africa accounts for a small but growing number of projects, with 19 projects in the GS VER pipeline (13 per cent). On the other hand, we have seen that the types of project common in China and Turkey generate far greater emissions reductions than projects in Africa, so they are likely to receive a much greater proportion of overall finance than is suggested by Figure 4.3.3 below.

Figure 4.3.3: GS VER project types by location (of 146 in the pipeline)¹³



Source: GS Registry, March 2010

¹³ Does not include the six CDM projects which retroactively applied for VER credits.

While this may be disappointing for those hoping that the GS would encourage much greater revenues for pro-poor projects in areas where sustainable development is most needed, it is hardly surprising. It goes without saying that the poor, who have the most to gain from co-benefits, contribute the least to global warming and can therefore generate fewer emissions reductions, and it would be unreasonable to expect the GS to correct this. Moreover, the poor are usually located in countries where there are a whole host of constraints to investment, and these also affect carbon investors.

Nevertheless, these trends do not necessarily mean that the amount of projects which higher co-benefits cannot be increased. Indeed, given the likely prevalence of carbon markets at least in the foreseeable future, it would be a wasted opportunity to ignore the possibility of securing finance for more pro-poor projects as well. According to Dick Jones of the project developer Carbon Aided, while carbon finance may sometimes entail unwanted conditions, it can have advantages over traditional finance from overseas development assistance (ODA) (Jones, personal communication 2010). It not only has the potential to be a more sustainable source of finance, but also - and more importantly - actually creates incentives to ensure the longevity of a project. For example, whereas on many 'traditional' NGO development projects, equipment is often installed only to break down after some time, the need to keep mitigating emissions and generating finance means that the project developer has to ensure the maintenance of equipment (*Ibid.*). However, if more finance is to be secured for projects that generate substantial co-benefits, two things need to happen:

Firstly, those projects contributing substantial co-benefits have to be scaled up to generate more emissions reductions (and therefore finance) and spread co-benefits. At the moment, many of them are very small and therefore muster insignificant sums. Nevertheless, they usually have considerable potential to expand over time, and there is some indication that this is possible. There are already plans for the Bagepalli biogas project to be scaled up, and there are other examples of pro-poor projects that are expected to generate large amounts of VERs and CERs. For example, it is anticipated that energy-efficient cookstove projects in Kampala, Accra and Bamako will generate over 60,000 credits a year, and that a photovoltaic project in India will generate 130,000 credits (GS Registry 2010).

As well as being scaled up, successful projects also need to be replicated. If this occurs, it may be possible for project developers and NGOs to reduce the costs and timescales involved in establishing pro-poor projects. It is already clear that the replication of projects can lead to large 'clusters' of a particular type of project in a certain region.¹⁴ If pro-poor projects are to mushroom in this way, there will have to be substantial sharing of knowledge and experience among project proponents. Fortunately, there is evidence that this might be occurring in some places. In Bagepalli, India, the NGO Agricultural Development and Training Society (ADATS) has been proactive in sharing the expertise gained in developing the award-winning Bagepalli biogas project with other NGOs and project developers. It has helped establish the Fair Climate Network, which has met seven times in the last 30 months (Esteves, ADATS, personal communication, 2010). This not only means that the Bagepalli project is set to expand, but also that there are now 20 'pro-poor' GS CDM projects in the pipeline in southern India, all being developed by local NGOs (*Ibid.*). In other cases, the popularity of pro-poor GS projects has led neighbouring communities and villages to ask for them to be extended or replicated (Pagare, project manager, GoodPlanet, personal

¹⁴For example, there are 14 GS CDM wind farm projects in Inner Mongolia, and 23 biogas projects in Thailand. This is largely because one or more project developers may develop a successful system for managing a particular project, thereby reducing its cost and duration, and commit themselves to a number of projects. Larger project developers such as Tricorona and South Pole Carbon Asset Management, which are largely responsible for these clusters, have done this on a number of occasions.

communication 2010); and there has been a significant uptake in cookstove projects in Africa in the last year. Therefore, it will be extremely interesting to see if project developers and NGOs can use these cluster effects to help pro-poor projects mushroom in the areas that most need them.

The GS has a key role to play here, by creating methodologies that especially encourage pro-poor projects. It has been criticised for failing to do this, and one project developer accuses it of being excessively bureaucratic, administrative and jargon-heavy, saying that this works against pro-poor projects in particular. Nevertheless, the GS has made progress in overcoming bottlenecks in the last year, and has tripled its staff to improve overall efficiency. It is also continually trying to make processes more streamlined for micro-projects, and argues that the current market interest in cookstove projects in Africa is partly due to its new simplified methodology for such projects (Welch, personal communication, 2010). In May 2010, it unveiled a new community-focused micro-scale scheme to allow for streamlined procedures and lower transaction costs in the poorest countries (Gold Standard 2010). Such improvements have been recognised by project developers who have been working with the GS to develop new methodologies and encourage such projects (Pagare, personal communication, 2010).

The other factor that may lead to a shift in carbon finance towards pro-poor projects is the greater market premiums that are available for these projects. According to some actors in the carbon market, investors are increasingly interested in 'charismatic' pro-poor projects (schemes that bring about visible and substantial improvements in local people's lives) outside China and Turkey, and are prepared to pay a premium for these on the voluntary market. It remains to be seen how significant this effect will be, and it needs to be understood that the existence of demand for such credits does not necessarily guarantee a substantial increase in such projects if there are serious issues with supply. Moreover, 'charismatic' projects are less attractive in the compliance market, where cost effectiveness is a higher priority for buyers. Another trend that may benefit poorer regions could be the exhaustion of cheap mitigation options in some areas, and difficult business environments in regions characterised by aggressive market competition, such as South-East Asia (Kossov and Ambrosi 2010: 39). The World Bank notes that previously neglected regions such as Africa and Central Asia respectively increased their overall CDM market shares to 7 per cent and 5 per cent in 2009 due to these factors (*Ibid.*: 40).

4.4 CCB Standards rules for sustainable development benefits

In order to gain certification under the CCB Standards, projects must satisfy 14 criteria. This may make the standards appear more ambitious than the GS sustainability matrix, which only requires net positive impacts and accepts neutral impacts on various indicators. For example, the CCB Standards specifically require positive impacts on communities and biodiversity, whereas the GS may accept neutral effects as long as the net score is positive. Even so, this is not particularly notable, as forestry carbon projects potentially have far more obvious positive effects on issues such as biodiversity. Another difference is that all 14 CCB Standards indicators are subject to monitoring throughout the project cycle, while the GS only continues to monitor non-neutral impacts after the initial validation. In some ways, these greater requirements are logical because some issues (such as biodiversity, land use and property rights) have strong relevance to forestry projects. The 14 indicators are grouped into categories and listed as follows:

- General: original conditions in the project area, baseline projections, project design and goals, management capacity and best practices, and legal status and property rights.
- Climate: net positive climate impacts, offsite climate impacts, and climate impact monitoring.

- Community: net positive community impacts, offsite stakeholder impacts, and community impact monitoring.
- Biodiversity: net positive biodiversity impacts, offsite biodiversity impacts, and biodiversity impacts monitoring.

Positive community impacts accrue from investment in education, infrastructure, job opportunities, sustainable forestry projects, etc. Biodiversity effects, on the other hand, are usually based on a no-project baseline. For example, in the Madre de Dios project in Peru biodiversity impacts are demonstrated through comparison with the no-project baseline, where the construction of the road and arrival of immigrants would certainly cause far greater ecological destruction (Madre de Dios, 2009).

Benefits need to be demonstrated using verifiable indicators, although the CCB Standards are less clear than the GS in specifying which indicators should be used. They provide a whole range of potential indicators, and allow project developers to choose which are the most appropriate. Sterk *et al.* (2009: 60) believe this could lead to confusion, although Toby Jansson-Smith claims that this makes them more flexible and user-friendly (personal communication, 2010). If certain indicators become unusable or irrelevant, project developers are free to think of new ways to demonstrate benefits. Moreover, CCB Standards Director Joanna Durbin points out that there is no universal definition of improvements in various co-benefits (personal communication 2010). Therefore, it is beneficial to allow a degree of flexibility in the way that project developers demonstrate co-benefits, as long as they can publicly justify and transparently demonstrate that those co-benefits are genuine and lasting (*Ibid.*). Another difference between the CCB Standards and the GS is that while the latter only imposes ongoing monitoring of non-neutral indicators, the former requires all indicators to be monitored for the duration of the project (Sterk *et al.* 2009: 65). As yet, there is no indication that this requirement is particularly onerous for project developers.

Finally, projects can receive a 'gold' label under the second edition of the standards if they demonstrate that they comply with one of the three following optional requirements: climate change adaptation benefits, exceptional 'pro-poor' community benefits, and exceptional biodiversity benefits conserving areas of high conservation priority. The extent to which a gold label designates an outstandingly high quality project might be open to question, given that 15 out of 19 projects validated to date have been awarded a gold label, and three given a silver label (which was available under the first edition of the standards). Joanna Durbin points out that the majority of these gold labels were awarded under the first edition of the standards, which used a more generous scoring system and criteria (personal communication, 2010).

The inclusion of adaptation benefits is another substantive difference from the GS, which does not include this issue in its sustainable development matrix. Some analysis of the ways that adaptation benefits are claimed is quite insightful. For example, the Kasigau Corridor REDD project in Kenya claims that it contributes to local adaptive capacity by attempting to wean farmers away from shifting agriculture, which is likely to become highly vulnerable to more frequent droughts caused by climate change (CCB PDD – Kasigau 2008). This would be done by providing off-farm opportunities, such as in a newly established clothing factory established by the project developer, Wildlife Works. In addition, Wildlife Works is exploring the possibility of promoting jojoba, chilli pepper and citrus trees as crops that could be more resistant to increasingly arid conditions. As these crops require less land, it is expected that it will be possible to use a new pipeline being built by the Government to irrigate them, which would not be feasible for maize (Kasigau PDD 2008: 95).

Meanwhile, in Peru, the Madre de Dios project makes a positive contribution to local adaptation through its adaptive management plans, which are designed to continually monitor the effects of climate change on wildlife and the mortality and regeneration rates of

tree species, and through policies to ban the use of fire, prevent trespassing, train forestry staff, etc. (Madre de Dios PDD 2009). The Forest Again project in Kakamega assists the local community in making the transition to zero grazing by cattle (fed by purchased grasses), which would relieve pressure on land; and points out that trees grown by the project would help control extreme rises in temperature (CCB PDD - Kakamega 2009).

4.5 CCB Standards projects and sustainable development contributions

Whilst it seems clear that the majority of CCB Standards projects will indeed make positive contributions to co-benefits and sustainable development, the extent to which these are significantly enhanced by certification *per se* is ambiguous. On the one hand, Jansson-Smith argues that it is a 'dynamic' standard that does more than simply identify high quality projects (personal communication, 2010). Joanna Durbin, claims that there is a marked difference in project design before and after the CCB Standards process, and that the certification process does lead to substantial improvements in project design (personal communication 2010). Moreover, Jeff Hayward affirms that while project developers may have positive intentions from the outset, the process of being evaluated against these standards helps identify and then address issues that may have been overlooked (personal communication 2010). According to Jansson-Smith, Conservation International had initially assumed that their normal practices would be sufficient when they began implementing CCB certified forestry projects, but implementing the CCB Standards made them aware of gaps and failings in their conventional procedure (personal communication 2010). If this is true for an NGO, we might expect the effect to be even stronger for other project developers. Even so, it is hard to say whether this is usually the case, as all three project developers interviewed for this study claimed that they had already given strong consideration to the main issues before the certification process began (Bradley, Ribenboim of Fundacio Amazonas Sostenivel, Gomez-Caviglia, all personal communications, 2010). They maintain that good, well-designed forestry projects should, virtually by definition, generally comply with the CCB Standards anyway (*Ibid.*).

Greenox, the project proponent for the Madre de Dios project in Peru, had already gained FSC certification before applying for the CCB Standards (the Madre de Dios project is a combination of REDD and sustainable forestry), which meant they already complied with most CCB Standards requirements (Gomez-Caviglia, personal communication, 2010). The CCB Standards did, however, lead Greenox to consider certain issues they had previously overlooked, such as the impacts of the buffer zone and the need to include indigenous people who were outside the limits of the project, but who might nonetheless be affected by it (*Ibid.*). Similarly, in the Oddar Meanchey project in Cambodia, the NGO PACT Cambodia was already working hard to settle land tenure issues before the certification process began (Bradley, personal communication, 2010). While it seems that the promise of REDD did have a positive effect in resolving these issues, this cannot necessarily be attributed to the CCB Standards (*Ibid.*). In the case of the Juma Sustainable Development Reserve, the main changes that came about due to certification were related to the methodology for additionality and leakage, rather than co-benefits (Ribenboim, personal communication, 2010).

Finally, it is not entirely clear how many of the extra measures taken by project developers trying to claim that they are contributing to local climate change adaptation were actually existing practices framed in terms of adaptation, rather than significant breaks from standard practices. The Kakamega and Kasigau projects both claimed to be contributing to adaptation, largely on the basis that they were reducing dependence on traditional shifting agriculture (CCB PDD - Kasigau, 2008; CCB PDD - Kakamega, 2009). The Madre de Dios project referred to its role in constantly monitoring any changes in plant mortality and regeneration rates, while prohibiting the use of fire (Madre de Dios PDD 2009). These measures are not necessarily wrong, but they do seem to be fairly conventional conservation

policies and may simply have been rebranded as 'adaptation'. Perhaps the only truly additional adaptive measure undertaken in these three projects were the moves by Wildlife Works, which developed the Kasigau project, to promote more drought-resistant crops that could be irrigated by a new government-built pipeline.

In summary, it is hard to say without further study how much the CCB Standards have actually added value and promoted co-benefits that would not have occurred anyway. Nevertheless, the Standards clearly have a role to play in encouraging project developers to go further in order to gain the 'gold' label, and to consider issues such as adaptation that would otherwise be ignored. According to Till Neef of the carbon management firm Ecoscurities, the main impact of the CCB Standards in terms of co-benefits is the requirement to quantify co-benefits (Neef, personal communication, 2010). This is clearly important, as it guards against the temptation to generalise about positive impacts and make assumptions. Furthermore, the process of quantifying these issues and using verifiable indicators can increase the project proponent's engagement with the process.

5 Market attraction and prospects for future growth

5.1 Introduction

In order to flourish, carbon standards need to be attractive to market actors as well as to civil society. Fortunately, the controversies and doubts surrounding carbon finance may help them in this respect. Because offsets have come in for strong criticism from the media and certain sectors of civil society, buyers need to ensure that their purchases will not be undermined or attract negative publicity at a later date. Indeed, the development of the voluntary market shows that having certification from a standard system has become a basic pre-requisite for carbon projects. In 2009, 93 per cent of credits bought in the over-the-counter (OTC) marketplace were verified by a third party (Hamilton *et al.* 2010: 54). The most popular standard was the Voluntary Carbon Standard, which accounted for 35 per cent of those certified VERs (*Ibid.*).

If the GS and CCB Standards are to increase their market share, they will depend on the extent to which offset buyers are willing to pay more for superior consultation processes and guaranteed co-benefits, as these are the issues that really distinguish them from the CDM and VCS. Hopes that high quality offsets will prove attractive to buyers are frequently boosted by surveys which show that offset buyers are indeed motivated by the thought of purchasing high quality credits. A recent survey by EcoSecurities (2009: 31) showed that offset buyers were motivated by a variety of factors, including local community benefits (which 75 per cent of respondents saw as 'highly important' or 'important'), and of course the carbon standard used to certify the offsets (80 per cent). Moreover, the majority of respondents claimed to be willing to pay a premium for such credits, something that can be a key way of attracting project developers to certification schemes.¹⁵ However, it is worth noting that there is often a difference between what offset buyers say they want, and what they end up buying (Neef, personal communication, 2010). Moreover, whilst buyers who are well informed about carbon markets may respect the credibility offered by the GS and CCB Standards, surveys still show that there is a significant minority of offset buyers who are uninformed about carbon standards (EcoSecurities 2009: 30). There were specific questions on the standards in the EcoSecurities survey to which a significant number of respondents answered don't know enough – as much as 50 per cent for some questions.

Nor should we forget that it is harder for the GS and CCB Standards to continue to attract the same level of demand in the context of a global economic recession. Overall, both compliance and voluntary markets declined in 2009 as a result of the recession and uncertainty over global climate change agreements. The primary CDM volume fell from US\$6.5 billion in 2008 to US\$2.7 billion in 2009, while the voluntary market transacted US\$387.4 million, 47 per cent less than in 2008, and the overall demand for VERs declined substantially (Ecosystem Marketplace 2010: iii).¹⁶

¹⁵ It should be emphasised that that neither the CCB Standards nor the GS require any premiums gained to be spent on benefits for local stakeholders. This has been discussed within the GS, but until now it has been decided that such a requirement would be overly restrictive for smaller project developers, who may depend on the premium to make their projects financially viable, and many other developers are likely to use the premium for co-benefits anyway (Welch, personal communication, 2010).

¹⁶ Although the Ecosystem Marketplace points out that this still leaves the volume of the voluntary market 40 per cent higher than 2007 levels (*ibid.*).

5.2 Gold Standard and market attraction

It seems fairly clear that the GS has established a reputation for offering the highest quality carbon credits, with 61 per cent of respondents describing it as 'highly desirable' or 'desirable' (Ecosecurities 2009: 29). The GS branding appears to have been successful, and GS officials claim that most project developers approach it to propose projects, meaning that the GS does not have to spend significant resources promoting itself (Fadda and Welch, personal communications, 2010). Moreover, according to Till Neef of Ecosecurities, offset buyers on the voluntary market often approach providers with specific demands for GS credits, something that is far less common with the CCB Standards (Neef, personal communication, 2010). Even so, the fact that a majority of buyers see GS credits as 'desirable' does not mean that they will always be prepared to seek to purchase them, particularly if there are other cheaper credits available. The GS's share of the voluntary marketplace rose from 9 per cent in 2007 to 12 per cent in 2008, still lagging behind the VCS (48 per cent) (Ecosystem Marketplace 2009: 56). Buyers in the compliance marketplace are far more motivated by cost effectiveness, and this continues to be a constraint to the growth of the GS there (Sterk *et al.* 2009: 31).

The desirability of GS credits translates into significant premiums in the voluntary market when compared to most other standards (Ecosecurities 2009: 32). According to Ecosystem Marketplace, Gold Standard credits had an average price of US\$14.4 per tonne of carbon dioxide mitigated in 2008, which fell to US\$11.1 in 2009 (Ecosystem Marketplace 2010:). If we compare this to the average price in the entire voluntary market (US\$7.3 in 2008 and US\$6.5 in 2009) or a more commonly used standard like the VCS (US\$5.5 and US\$4.7), it is clear that GS projects do command a premium (*Ibid.*: 68).¹⁷ These premiums vary, depending on other factors such as project type and location, and marketing strategy, with prices ranging from US\$7-40 in 2008 and US\$7-28 in 2009 (*Ibid.*). Projects in poorer countries, particularly Africa, which provide significant pro-poor benefits, offer especially substantial premiums. On the other hand, the much larger wind farm projects in China and Turkey do not command such high premiums, although they naturally generate far greater VERs. More importantly, it is claimed that the premium is the main incentive for many project developers to register under the GS, and may sometimes even determine whether or not a project is implemented. This is especially true for smaller-scale projects, such as the Solar Aid micro-solar project in Malawi, which collects GB£13 per VER (Sireau, CEO of Solar Aid, personal communication, 2010). According to Dick Jones of the project developer Carbon Aided, a price of GB£20 per tonne is not unheard of (Jones, personal communication, 2010). In general, such premiums are far more common on the voluntary market, which can be a limiting factor for project developers because voluntary market buyers rarely guarantee funding beyond one or two years (*Ibid.*). Developers without other sources of funding (particularly for high start-up costs) often find that the CDM offers lower premiums but a greater guarantee of long-term investment (*Ibid.*).

The GS clearly has more limited scope to command premiums on the compliance market, where project developers estimate them to be around 10 per cent (Burgi, personal communication, 2010). Buyers are generally far more concerned about finding cheap CERs on the compliance market, and because they often depend on gaining premiums, it can be hard for the GS projects to compete with much less expensive ones from HFC gas capture or large hydropower projects. In the early years of the GS, compliance buyers showed very little interest in GS credits, and Sterk *et al.* report that this is essentially still the case because it makes no legal difference whether their CERs are GS or not (2009: 31). In this context, premiums may be a disincentive to buyers: one GS CDM project in Nicaragua has

¹⁷ VCS projects have historically been cheap due to a far greater availability of credits than the GS, as well as the fact that offset suppliers are still offloading older VCS offsets from cheap industrial gas offsets.

struggled to sell its CERs for this reason (Ruiz, Madrid Callejas, cited in Sterk *et al.*, 2009 p.131). Natalie Gorina of Essent Trading believes this situation is unlikely to change unless the EU establishes some qualitative criteria for surrendering CERs in its Emissions Trading System (ETS) post-2012 (2010). In the meantime, only 18 of the 2,062 registered CDM projects (0.9 per cent) are registered under the GS (Gold Standard Registry 2010; UNEP Risø 2010), and Michael Schlup's ambitious goal of accounting for 20 per cent of all CDM projects by 2012 is unlikely to be met (cited in Sterk *et al.* 2009: 97).

Where demand for GS CERs does exist, it is driven by two main sources: governments that want to demonstrate best practice, and large energy companies aiming to meet their ETS obligations by combining large amounts of cheap CERs with some high quality ones to show to their shareholders and clients (Welch, personal communication 2010). In addition to demonstrating good practice, risk mitigation is another key motivation for buying GS CERs. While there have been cases where CDM projects have not been fully implemented due to disputes with local people and lack of proper consultation, GS CERs provide much greater certainty that this will not occur (Olsen, personal communication, 2010). The GS may also be used to ensure that such credits will be accepted if the rules change in the future (for example, if the market believes that the EU may establish qualitative criteria for surrendering CERs after 2012). In Turkey, it can be used to guarantee that VERs will be accepted under any future compliance scheme (Burgéap Group and Mavi Consultants, 2010: 8)

5.3 Future expansion of the Gold Standard

The issues that will affect the future development and expansion of the GS can be categorised into those that are internal and within its control, and external issues over which it has little influence. The former are as follows:

- Ability to balance conflicting perspectives and interests. Since its foundation, the GS has had to tread a fine line between ensuring the quality of its standards and making the rules flexible enough to enable project developers to use them. These two different priorities are voiced by different sectors: NGOs involved in the GS want to ensure that high quality standards are objective, unambiguous and complied with, whereas project developers worry about their operations being strangled by excessive regulations and monitoring. There are tensions over the exclusion of certain projects from GS certification, such as waste management and forestry; and ongoing discussions about the extent to which the criteria for 'sustainable development' should be imposed from above, as well as their flexibility. We have already seen that GS requirements to provide data on apparently irrelevant issues can be a source of frustration, delay and added cost; with one project developer stating that this could deter them from developing CDM projects under the Gold Standard. Another point of contention is projects involving palm oil: Suyapa Zelaya argues that Honduran project developers are unfairly affected by the requirement for RSPO certification for such projects, claiming that their African palm oil industry is environmentally and socially 'cleaner' than that of South-East Asia (Zelaya, personal communication, 2010). From another perspective, the existence of these tensions could be seen as proof that the GS is indeed a rigorous standard, and it would be unrealistic to expect it to totally satisfy all stakeholders.
- Usability for pro-poor projects. As explained in section 4.3, continual efforts to simplify the methodologies for pro-poor, micro-level projects are crucial for the scaling up and replication of pro-poor projects.
- Resources, capacity and efficiency. Some project developers have criticised the GS for a lack of capacity that has resulted in severe bottlenecks and inefficient and inconsistent

responses to their queries. However, the GS has tripled its staff in the last year, and other project developers report that it has become far more efficient as a result (Pagare, Zelaya, personal communications, 2010). It should also be noted that many of the bottlenecks in the GS process were due to factors beyond its control.

While all of these issues are clearly important, the most significant factors in the future growth of the GS are probably beyond its control, particularly the status of the CDM post-2012. At a global level, much will obviously depend on global climate change negotiations and the extent to which demand for carbon offsets is created by stringent mitigation targets. Beyond this, the following issues will be crucial:

- Rule changes in the CDM or EU ETS. The extent to which the CDM should do more to encourage projects that contribute to sustainable development is currently under discussion. Whilst any significant raising of the bar in this regard is likely to be opposed by China, it is possible that the EU could demand that its companies offset with a higher quality of credit (Olsen, Gorina, personal communications, 2010). In the meantime, doubts on this score could potentially increase demand for GS CERs as offset buyers seek to hedge against the risk of such a rule change. The same issue may also become relevant if the USA adopts a cap-and-trade scheme (Gorina, personal communication, 2010).
- Whether Turkey agrees to a national emissions reduction target. If it does so, it would not be in its interest to sell the cheapest mitigation opportunities as offsets, which means that far fewer GS VERs will come from Turkey than is currently the case.
- Wider questions about additionality. Many analysts have strongly questioned the additionality of hydro-power projects in Asia (such as Victor and Wara, 2008), and this criticism may extend to wind power plants too.¹⁸ Although this study does not focus on the question of additionality, it is certainly a crucial issue, since the legitimacy of carbon finance is heavily dependent on it. The GS uses the same methodology for additionality as the CDM, so it is highly probable that many of its projects may also be non-additional. In fact, Sterk *et al.* found weaknesses in the demonstrations of additionality by all five GS projects covered by their study, although they concluded that three of the projects are likely to be additional. They suggest that the current system of establishing a counterfactual 'story' to deduce that a project would not have happened without carbon finance is unworkable, proposing instead a discount charge to offset the likely non-additionality of a proportion of projects (Sterk *et al.* 2009: 204). Such claims are disputed by project developers, who question the methods used by researchers, and argue that the additionality for the technologies used in most GS projects (modern biomass, solar and so on), which were not used prior to the CDM, is far more certain.¹⁹
- Pro-poor projects such as those promoted by the GS (involving technologies like biogas digesters and energy-efficient cookstoves) could also be encouraged if there is a move towards a programmatic CDM (in which the normal project-by-project process is brought into a broader programme or policy that may include many individual activities),²⁰ and standardised baselines (whereby baselines are calculated for a certain activity and

¹⁸ In 2009, a number of applications for CDM finance for wind farm projects in China were rejected by the CDM Executive Board, due to suspicion that the Chinese government was lowering its subsidies for such schemes in order to demonstrate their additionality.

¹⁹ As Sterk *et al.* point out, this argument cannot be applied to wind, which was used in China and India prior to the CDM (2009: 219).

²⁰ This differs from bundling small projects together because it allows additional activities to be introduced without requiring a further validation process or registration fee, and is thus more suitable for scaling up small-scale projects.

generalised for all such projects, thereby reducing transaction costs). For example, if the same baseline was used across the board for a certain type of project in particular regions, it would allow these projects to be scaled up much more smoothly and make it easier for project developers in areas where there is a lack of available data.

Given the importance of these issues, it could be argued that the GS should take a stronger role in lobbying for changes that would benefit pro-poor carbon finance (Olsen, personal communication 2010), rather than playing a passive role in such discussions as is currently the case (Welch, personal communication, 2010).

5.4 The market attraction of CCB Standards

Joanna Durbin maintains that there has been significant investor interest in the CCB Standards, and that it has surpassed initial expectations (personal communication, 2010). While it was originally imagined that the CCB Standards would be some sort of 'gourmet' standard, she claims that investors are increasingly using them to mitigate risk (*Ibid.*). This is particularly important at this nascent stage of forest carbon markets, when doubts about the social consequences of terrestrial carbon projects are commonplace, and upfront finance is most needed. For this reason, investors may demand that project developers gain CCB certification before they purchase credits (Durbin and Jansson-Smith, personal communications, 2010;). Moreover, the idea that there is significant demand for CCB Standards in the marketplace is supported by surveys. A recent survey by Ecoscurities shows that 67 per cent of respondents claimed that they would be prepared to pay a premium of US\$1 or more for CCB Standard certified credits (Ecoscurities 2010: 28).

Yet the extent to which these claims are borne out in the marketplace is still unclear. An Ecosystem Marketplace survey puts the CCB Standards share of third party standard utilisation at 2 per cent in 2009 (Ecosystem Marketplace 2010: 57), and shows that the average price of CCB Standards credits had dropped from US\$9 in 2008 to US\$5.8 in 2009 (Ecosystem Marketplace 2009, 2010). This is clearly lower than those attracted by the GS, essentially because fewer carbon offset buyers recognise terrestrial offset projects, and they fetch lower prices than energy ones. Nevertheless, it is still higher than the average price for reforestation and afforestation credits (US\$4.6) and avoided deforestation (US2.9\$), which constitute the majority of CCB Standard projects, so this low price could still be seen as a premium when compared to other forestry offset projects (Ecosystem Marketplace 2010: vi)). Other forestry carbon standards such as carbonfix and carbon vivo command higher prices than the CCB Standards, but these are very much 'boutique' standards with small client bases (*Ibid.*: 68).

In terms of reputation, the CCB Standards also lag behind the GS because the perception of forestry projects in the carbon offset market is less favourable. On the one hand, evidence from Ecoscurities surveys suggests that the CCB Standards' brand is becoming more recognisable, with 64 per cent of respondents describing them as 'desirable' or 'highly desirable' when combined with another carbon standard in 2010, up from 46 per cent in 2009 (Ecoscurities 2010). This could mean that there is increased awareness of the benefits of combining CCB Standards with another standard. By comparison, even though 73 per cent of respondents described the VCS as 'desirable' or 'highly desirable', the CCB Standards received a higher proportion of 'highly desirable' classifications (*Ibid.*). Even so, it is important to recognise that the Ecoscurities survey respondents included a relatively large number of carbon offset providers and companies which already had an interest in forestry. Both of these groups are generally more aware of the CCB Standards than the majority of carbon offset buyers (Neef, personal communication). In general, Till Neef reports that many offset buyers are still unaware of the CCB Standards, and that unlike with the GS, they rarely approach offset providers with the specific requirement that their credits should be certified (personal communication, 2010).

5.5 Future growth of CCB Standards

As with the GS, the expansion of the CCB Standards is likely to depend largely on factors beyond their control. One of these is the carbon price, which (according to Joanna Durbin) many projects are finding is currently too low to wholly fund high-quality forestry projects without NGO or some other form of finance (personal communication 2010). Moreover, the uncertainty surrounding carbon finance makes it hard to raise the seed-capital to fund the start-up costs (Neef, personal communication, 2010). The other main issue is the possibility of a framework for the integration of REDD into compliance carbon markets that may be established. Given that the CCB Standards are primarily designed with the voluntary market in mind, and that most projects are located there, it is not clear whether the standard would be able to maintain its relevance. Jansson-Smith argues that investors are increasingly seeing the CCB Standards as a means of ensuring that their offset credits are deemed to be of sufficient environmental and social quality to be relevant under any future compliance market in the US (personal communication, 2010). Even when the legislation is finalised, there is likely to be an interim period before environmental and social standards are finally established. It is likely that the CCB Standards could attain increasing prominence during this period as a 'validation pathway' to meet the final regulations (*ibid.*). Therefore, as with the GS, the possibility of future legislation or rule changes that may demand higher environmental social standards could encourage investors to seek certification under the CCB Standards as a means of hedging against risk.

If a compliance market for REDD-Plus projects is established, the relevance of the CCB Standards would depend on the extent to which they are integrated into the regulatory framework, and whether a voluntary market continues to exist alongside the compliance market.

Another issue is the moves by various governments to establish their own national REDD schemes. The CCB Alliance is in the process of creating a set of standards that these governments can use, known as the REDD+ Social and Environmental Standards. Their objective is to create a framework that is relevant beyond the project level, and which can provide governments with a clear reporting framework to demonstrate their respect for social and environmental safeguards and the co-benefits of their REDD+ programme. The hope is that governments will begin to use the standards as a means of increasing their own credibility and securing finance (Durbin 2010; and Jansson-Smith, personal communications, 2010).

Beyond these issues, it is not clear whether the CCB Standards face the same level of discussions and tensions that prevail in the GS. Although this study did not uncover any sources of tension or debate among the actors involved in the CCB Standards, they clearly still have some way to go in order to market themselves as successfully as the GS.

6 Future research

As noted before, this study is only an overview, and as such is limited in its capacity to evaluate various issues. Further understanding of the GS and CCB Standards would require a more in-depth study focusing on certain projects. In particular, the following issues need to be looked at:

- The materialisation and durability of benefits: As Sterk *et al.* observed (2009), simply looking at PDDs and interviewing project developers is not enough to ensure that co-benefits have really materialised. Moreover, because GS and CCB Standards projects have been in existence for just a few years at most, it remains to be seen whether the benefits they promise are enduring: for example, how subsequent monitoring for sustainable development benefits will play out in practice. Therefore, any future study would have to involve extensive interviews with beneficiaries, other stakeholders and local NGOs, and include a number of comparable projects (such as CDM biomass projects in South India).
- The durability of standards over a longer time period. As one project developer pointed out, project developers can be adept at 'learning the ropes' and presenting their projects in a better light, thereby diluting the value of factors like sustainability benefits and consultations (Esteves, personal communication, 2010). Therefore, it is necessary to assess the extent to which the GS and CCB Standards are maintained and to ensure that standards improve over time.
- The extent to which pro-poor projects in particular can be scaled up to benefit larger numbers of people and generate more revenue. A handful of such projects already exist, and there needs to be more in-depth study to analyse the scope for extending and replicating these experiences. It also needs to be seen whether this scaling up can happen without diluting the standards for consultation and co-benefits.
- The ways in which the financial visibility of projects in low- and middle-income countries, particularly in Africa, can be increased in order to help them attract more revenue and market interest.
- The level of local drive and ambition to develop projects, and the existence of incentives for such initiatives. We have already seen how civil society in parts of India has seized the opportunities offered by the CDM and GS, but we also need to see whether such a drive exists in other countries, particularly the poorest ones. This is linked with the potential of civil society networks to facilitate the successful replication of pro-poor projects, an issue that needs to be more widely understood. Local initiatives like the Fair Climate Network in India show tremendous promise by getting local NGOs together and discussing the issues associated with pro-poor carbon finance, but it is not clear whether such networks are as influential in poorer countries.

7 Conclusions

This study attempted to provide a broad overview of many of the issues surrounding the role of the Gold Standard and the Climate Community and Biodiversity Standards in ensuring that carbon offset projects provide co-benefits. Since it was a desk study, it was not possible to examine the issues in depth or analyse the realisation of these benefits on the ground. However, by interviewing numerous actors in carbon markets, it was possible to arrive at some general conclusions:

- Firstly, the GS and CCB Standards are both high quality standards that have established clear frameworks for designing and implementing high quality offset projects. For this reason, they serve as useful tools: on the one hand for project developers seeking a framework and guidance on improving co-benefits for projects, who can then use them to market their projects and gain legitimacy and often price premiums; and on the other for offset buyers, who can use them to hedge against risk and demonstrate their ethical credentials.
- It is hard to assess the extent to which the GS and CCB Standards really ‘add value’ to projects without further study and extensive empirical analysis. What is certain is that the requirement for greater stakeholder consultation and the need to account for sustainable development criteria help increase awareness of these issues among project developers, and also increase the transparency and accountability of the process. On the other hand, as voluntary standards, the GS and CCB Standards cannot be expected to make unsustainable projects sustainable, since these are voluntary schemes and projects that have more profound problems, and are anyway unlikely to engage in the certification process.
- Within the GS, most emissions reductions (and therefore revenues) are generated by projects that provide relatively limited co-benefits, although they are certainly valuable in providing clean, renewable energy. Nevertheless, there are exceptional projects that deliver considerable pro-benefits and that have been scaled up to achieve greater emissions reductions and thereby attract more revenue. A number of things need to happen to increase the contribution of more overtly ‘pro-poor’ projects, such as sharing and disseminating knowledge and experience among project developers and civil society, and creating streamlined methodologies for pro-poor projects.
- The future of the GS and CCB Standards will largely be shaped by issues beyond their control, such as debates about the use of sustainable development criteria in the CDM, standardised baselines and REDD negotiations.

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Web portals

UNEP Risó, CDM Pipeline
www.cdmpipeline.org

The Gold Standard Registry <http://goldstandard.apx.com/resources/AccessReports.asp>

CCB Projects
www.climate-standards.org/projects/index.html

List of interviewees

Olga Alemán, CDM Unit, SERNA, Honduras, email, 03 March 2010
Amanda Bradley, PACT Cambodia, skype, 05 March 2010
Patrick Burgi, South Pole Carbon Asset Management, 08 March 2010
Hector Castro, EECOPALSA, by telephone, on 17 February 2010.
Joanna Durbin, CCB Alliance, telephone, 03 March 2010
Ram Esteves, ADATS, email, 07 March 2010
Mauro Fadda, Gold Standard, by telephone, 23 February 2010
Silvia Gomez-Caviglia, Greenox, telephone, 04 March 2010
Jamal Gore, Carbon Clear, 19 February 2010
Natalia Gorina, Essent Trading, email, 22 March 2010
Jeff Hayward, Rainforest Alliance, telephone, 11 March 2010
Jasmine Hyman, Director, Programs and Partnerships, Gold Standard, telephone and email, 30 April 2010
Toby Jansson-Smith, Conservation International, 03 March 2010
Dick Jones, Carbon Aided, telephone, 05 March 2010
Till Neef, EcoSecurities, 17 March 2010
Karen Olsen, UNEP-Riso Institute, 16 March 2010
Nitin Pagare, Good Planet, telephone, 25 February 2010
Gabriel Ribenboim, Fundacio Amazonas Sostenivel, skype, 16 March 2010
Denise Welch, Gold Standard, skype, 11 March 2010
Suyapa Zelaya, Fundación MDL Honduras, skype, 25 February 2010

Plus two other anonymous project developers.

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