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The Political Economy of the Clean Development Mechanism (CDM) Governance System¹

Abstract:

In spite of the exponentially increasing volume of the CDM system of the Kyoto Protocol, very few have so far come up with scholarly political economy analysis of its governance system. Based on interviews with the CDM system's main stakeholders as well as through scrutiny of CDM related documents, this paper will contribute to filling this hole. In this respect, it is assumed that the political economy analysis can be based on two analytical concepts: First, the CDM governance system has to be legitimate (the political side of the system), i.e. seen as broadly acceptable and accountable by its stakeholders as well as the broader public. Second, the CDM governance system has to be efficient (the economic side of the system), i.e. involve as few transaction costs as possible. Based on these concepts, the paper analyses the present balances of the CDM governance system.

Key words: CDM, climate policy, legitimacy, efficiency.

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Abbreviations:

AP: Accreditation Panel

AT: Assessment Team

CDM: Clean Development Mechanism

CERs: Certified Emission Reductions

CMP: Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol

DNA: Designated National Authority

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DOEs: Designated Operational Entities

EB: Executive Board

GHG: Greenhouse gasses

IETA: International Emission Trading Association

LoA: Letter of Approval

MAP: Management Plan

M&Ps: Modalities and Procedures

NGO: Non-Governmental Organisation

PD: Project Developer

PDD: Project Deign document

RIT : Registration and Issuance Team

UNFCCC: UN Framework Convention of Climate Change

VVM :Verification Manual

1. Introduction

How does the system of Clean Development Mechanism (CDM) function in political economy terms? In order to analyse the Clean Development Mechanism (CDM) system, this paper will utilise the overarching concept of governance. Hence, the paper will not (as is often the case²) evaluate the CDM system with regard to its contribution to environmental, social, and economic sustainability. Neither will I explicitly analyse the potential impact on the developing countries (see instead Del Rio 2007; Cosbey et al. 2005; Sugiyama et al. 2005). Instead, it will analyse the CDM system in general and the multiple functions of the Executive Board of the CDM system in particular due to the fact that this institution seems to be quintessential to the governance structure of the CDM.

It is assumed that the analysis of this paper can be based primarily on two analytical concepts: first, the CDM governance system has to be legitimate, i.e. seen as broadly acceptable and accountable by its stakeholders as well as the broader public, and second the CDM governance system has to be efficient, i.e. involve as few resources or transaction costs as possible.³ In spite of criticism, the CDM system has also been acknowledged as an original innovation of the Kyoto Protocol (Matsuo 2003; Lesolle 2008). However, no matter what, the CDM system is in itself an experiment in international governance without the strong backup of states. As such it is an interesting societal phenomenon that could contribute to our general understanding of the scopes and limits of mainly non-state based international governance.

There is a line of literature evaluating whether or not the CDM system should be abolished altogether or not (e.g. Del Rio 2007; Michaelowa and Joko 2005). It is not the aim of this paper to contribute to this literature. Instead, the CDM system is taken for granted as an example of how to promote international governance through mainly private actors.

In fact, CDM has shown itself to be an important tool in order to create a dynamic market for reduction of GHG emissions. From 2005 onwards more than 5000 projects have been included in the pipeline of the CDM governance system. It is estimated (in 2010) that by 2012 the CDM

² See, for example, Olsen (2007); Lesolle (2008), and Murphy et al. (2008).

³ One could claim that if the CDM governance system is both legitimate and efficient it is also effective, i.e. able to achieve the set of goals that its founders have set for it.

governance system will have contributed to a reduction of 2.9 billion tonnes of carbon dioxide equivalents (CDM Statistics 2010).

The paper is structured as follows: Section 2 presents the institutions of CDM, in Section 3 the conceptual framework of the paper is presented, and in Section 4 and Section 5 this framework is exploited in the analysis of the CDM governance system. Section 6 entails the conclusion.

2. Institutions of CDM

The CDM is set up by Article 12 of the Kyoto Protocol under the UN Framework Convention of Climate Change (UNFCCC) as a compromise between developed and developing countries (Matsuo 2003).⁴ The CDM mechanism is based upon development of project activities in developing countries that result in real, measurable, and long term benefiting emission reductions, which are to be additional to any activity that would occur in the absence of the project activity. Emission reductions are certified and subsequently transformed into tradable carbon credits (the so-called CERs – Certified Emission Reductions).

The CDM is subject to the authority and guidance by the conference of Kyoto Parties (called CMP – Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol). However, the CDM mechanism is mainly ‘supervised’ by an Executive Board. Projects are registered and credits are issued by the Executive Board on the basis of validation and verification reports respectively, which are elaborated by independent ‘Designated Operational Entities’ (DOEs), especially accredited by the Executive Board (and confirmed by CMP) for that purpose.⁵ According to Article 12 (paragraph 9) participation in the CDM may explicitly involve private and/or public entities. Each Party (i.e. country) involved in project activities shall approve its voluntary participation. By definition the host country of the project activity will always be involved (Lee 2004).

⁴ Decision 1/CP.3: Adoption of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 1997 (<http://unfccc.int/resource/docs/convkp/kpeng.pdf>)

⁵ The crediting period is either 7 years with the possibility of renewing this period two times or a maximum of 10 years.

In Marrakech in 2001, the Conference of the Parties adopted a set of Modalities and Procedures (M&Ps)⁶ with the aim of ‘ensuring transparency, efficiency and accountability,’ according to Kyoto Article 12. The M&Ps constituted the Executive Board⁷ and were the starting point of the implementation of the CDM.⁸

Countries participating in CDM activities have to set up a government authority (called by its acronym: DNA – Designated National Authority), which declares the country’s voluntary participation in a letter of approval (short: LoA).⁹ According to the M&Ps, the objective of assisting in achieving sustainable development is the prerogative of the (developing) host country and consequently has to be confirmed in the letter of approval by that country.¹⁰

As mentioned, the condition - which generated emission reductions - has to be real, measurable, verifiable and additional. This is the foremost purpose of the CDM system set up to achieve and safeguard this goal pursuant to the Kyoto Protocol and in line with the mandate given by the CMP (see Section 4 below).

The condition mentioned above is implemented in the M&Ps requiring each project to be based upon a baseline and monitoring methodology. Basically, the baseline is the situation without the project, and the achieved reductions are the baseline emissions minus the project emissions. The methodologies shall be approved beforehand by the Executive Board.¹¹

Projects are registered and CERs are issued automatically on the basis of reports submitted by DOEs after a certain time span, unless three members of the Executive Board or a Party involved

⁶ Decision 17/CP.7 contained in FCCC/CP/2001/13/Add.2 (<http://unfccc.int/resource/docs/cop7/13a02.pdf#page=2>) as confirmed by decision 3/CMP.1 contained in FCCC/KP/CMP/2005/8/Add.1 (<http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=6>)

⁷ M&Ps section C. “Executive Board”.

⁸ Decision 17/CP7 paragraph 1 (prompt start).

⁹ M&Ps section F. Participation requirements.

¹⁰ Fundamentally, the aim of this letter is to safeguard the legitimacy of the CDM project in the host country. There are no specific provisions about how to safeguard project activities assistance in achieving developing countries contribution to the ultimate objective of the convention. This objective therefore might be seen simply as a spin off of the development of climate friendly projects.

¹¹ M&Ps paragraph 38.

requests a review, in which case the Executive Board decides whether to register/issue or to undertake a review. In the latter case, the Executive Board will decide upon the case in the following meeting on the basis of findings of a review team composed by Executive Board members.¹²

3. A framework for the analysis of CDM governance

As mentioned in the introduction, in order to analyse the CDM system, this paper will utilise the overarching concept of governance. In the literature, there are a large number of definitions of this concept, however, the World Bank broadly defines governance as ‘the exercise of political authority and the use of institutional resources to manage society’s problems and affairs’.¹³ More specifically, governance relates to decisions that define expectations, grant power, or verify performance. In the following, this paper will use this definition.

The CDM is a governance instrument allowing Annex I (industrialised) countries to invest in projects that reduce emission in Non-Annex I (developing) countries as an alternative to more expensive projects in their own countries. Hence, the mechanism makes more cost-effective emission reduction projects possible simply because emission reduction projects in developing countries are often easier and cheaper than projects with an equal effect in industrialised countries. The argument is that industry and other activities that cause emission in developing countries are often less technologically developed and less energy efficient than industry in industrialised countries.

As also mentioned in the introduction, it is assumed that that governance rely on aspects covered by legitimacy and efficiency where “legitimacy” covers the political aspects of CDM governance and “efficiency” covers the economic aspects of CDM governance. The literature on international political economy often stresses the dilemmas and (sometimes) trade-offs between legitimacy and efficiency as far as international governance is concerned (see, e.g., Cottarelli 2002; Page 2002;

¹² M&Ps section G. Validation and registration and I. Verification and certification.

¹³ World Bank 1991. ‘Managing Development – The Governance Dimension.’ Washington D.C.

Depledge 2005). This paper will follow up on that literature and take it to an area of extreme difficult governance conditions due to the lack of a strong backing of states, namely that of CDM governance.

In the CDM governance system, successful projects are awarded with positive consequences in the shape of CERs according to the achieved emission reduction during the crediting period. Each unit represents the reduction in emission of one tonne of carbon dioxide into the atmosphere and thus permission to emit the same amount elsewhere. Furthermore, CERs are tradable on a global market allowing projects to sell CERs to highest bidder.

Clearly, this type of mechanism requires supervision, coordination, and development in order to be considered legitimate. This is attempted to be provided for by the organisational structure of the CDM. The CMP has given the Executive Board a key role mandating it to exercise both legislative, executive, and in a certain sense, judiciary power since the Executive Board has the prerogative of reviewing and taking final decisions on cases submitted for registration or issuance after final validation/verification by a DOE (Leuget and Elabed 2008).

In his classical seminal book on political systems, David Easton (1965) defined legitimacy as an essential input that the specific political community granted to a political order. The system is sustainable only as far as the community endorses a certain degree of legitimacy belief.

Input legitimacy is the legitimacy created for the political system through various representative procedures. Output legitimacy, on the other hand, is based on the political system's deliverance of public goods like, for example, an atmosphere with – *ceteris paribus* – less GHGs.

Efficiency, on the other hand, is related to the cost of running the CDM governance system which involves transactions costs. In other words, the fewer transaction costs, the more efficient the governance system is. In a global perspective, according to the Stern Report (2006), global warming is the biggest market failure for human civilisation so far. At the same time, when following Kenneth Arrow's (1969) observation that 'market failure is not absolute; it is better to consider a broader category, that of transaction costs, which in general impede and in particular cases block the formations of markets', we are led to the concept of transaction costs.

According to Williamson (1985: 1), a transaction ‘occurs when a good or a service is transferred across a technologically separable interface.’ In other words, transactions are equivalent to frictions in the physical system.

Ronald Coase’s famous article (1960) points out that if transaction costs can be reduced to zero, decentralised market outcomes will be efficient or Pareto optimal. However, transaction costs are unavoidable. Markets cannot function without institutions that – at a minimum – enforce contracts, disseminate information, and resolve disputes. In other words, governance is needed.

As far as the CDM governance system is concerned, as Michaelowa and Jotzo (2005) have pointed out, transaction costs of the CDM system strongly depend on the institutional framework. Transaction costs will be higher in countries with an efficient regulatory framework and will lead to a competitive disadvantage vis-à-vis other countries (Michaelowa and Jotzo 2005: 512). In other words, the key to increased efficiency of the CDM governance system is to design the adequate institutional framework. In this respect, all institutions of the CDM governance system might be important even though the Executive Board’s role is paramount.

Each step in the process adds costs that do nothing to remove additional GHGs, but are essential to ensure that CERs on the market have scientific credibility and are, thereby, legitimate to project host countries. In the theory, *ex ante* costs are described as the costs of drafting, negotiating, and safeguarding an agreement (Williamson 1985: 20). In this respect, safeguards can sometimes be fashioned to signal so called credible commitments.

Ex post costs of contracting takes several forms. ‘These include (1) the mal adaption costs incurred when transactions drifts out of alignments’ [...] ‘(2) the haggling costs incurred if bilateral efforts are made to correct *ex post* misalignments, (3) the set up and running costs associated with the governance structures (often not the courts) to which disputes are referred, and (4) the bonding costs of effecting secure commitments’ (Williamson 1985: 20).

An elaborate project cycle may increase up-front transaction costs but reduce them ex post. Hence, rules that also enhance transparency will be crucial to reduce search costs, even if they entail ex ante costs.

Economies of scale are the most important determinant for the share of transaction costs in total costs. In Michaelowa and Jotzo (2005: 514), estimates for transaction costs were 0.1 euro/t for large projects, 0.9 euro/t for wind projects, 75 euro/t for smaller projects and 750 euro/t for very small projects.

The study of economising transaction costs also entails an examination of alternative ways to govern exchange interfaces. Again, according to Williamson (1985: 129), in general terms governance occurs in three broad ways: (1) through top-down methods that primarily involve governments and the state bureaucracy, i.e. through hierarchies; (2) through the use of market mechanisms whereby market principles of competition serve to allocate resources while operating under government regulation; and (3) through networks involving, for example, public-private partnership or with collaboration of community organisations, i.e. mixed modes of governance. Clearly, the CDM governance system is a mixed mode of governance involving both private and public actors.

CDM transaction costs are especially important because the financial sustainability of CDM projects is so closely linked to the size of the CER revenue stream. In general, transaction costs involved in the CDM governance system are components in the price of a CER that cannot be attributed to either: 1) the physical process of removing GHGs from the atmosphere; or 2) the level (or changes in the level) of demand for CERs (Chadwick 2006).

In order to function legitimately and efficiently, both in relation to its stakeholders and in relation to the wider international community, the CDM is dependent on a variety of incentives. They include environmental accountability and profitability from a business perspective, i.e. output legitimacy. Transparency is an overall requirement in terms of legitimising the system to the outside world (i.e. input legitimacy).

On the basis of the concepts introduced in Section 3, now follows an analysis of the CDM governance system focusing on the CMP, the Executive Board, and the DOEs.

4. Analysing the CDM governance system

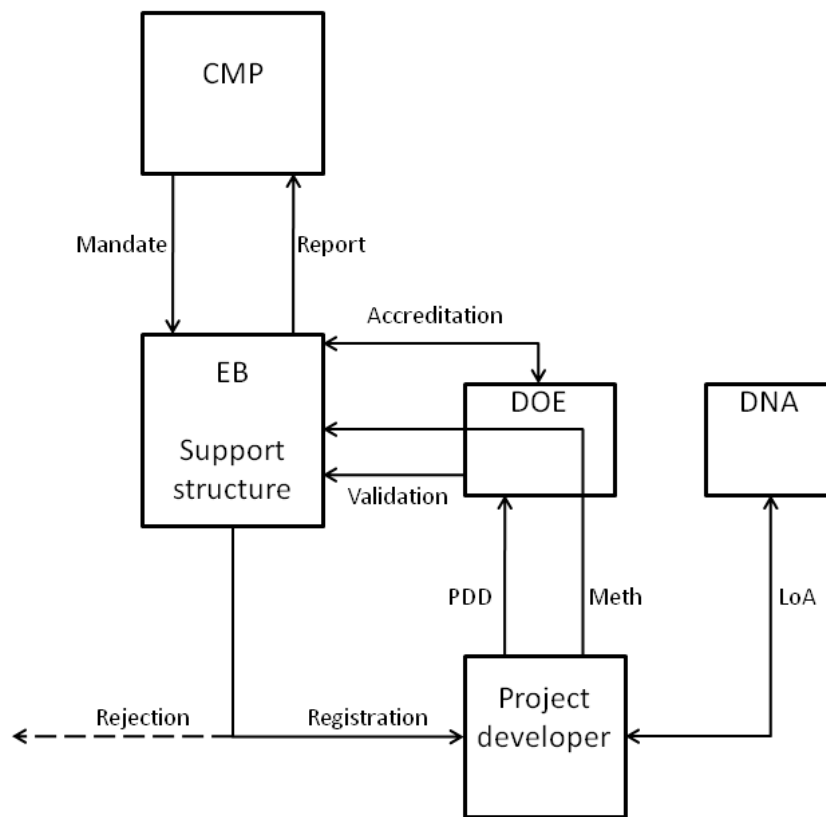
The CMP

The CMP is formally the supreme authority of the CDM governance system setting out the regulatory framework conditions in the form of the M&Ps and subsequent decisions. The CMP has established the political needs and desired outcomes of the CDM governance system. Hence, it provides the CDM governance system with legitimacy as far as representation and legal bases are concerned. However, with a few exceptions like the formal designation, i.e. confirmation of the Executive Board's accreditation of DOEs, the CMP is not supposed to take case-specific decisions. Unless explicitly stated, it cannot change case specific decisions by the Executive Board. However, as supreme body it can decide to take over matters which it has mandated to the Executive Board, such as specific methodological issues. In addition, the Executive Board can refer issues to the CMP for further guidance and decision-making. In general, the CMP can amend the Kyoto Protocol but cannot take decisions with effect for Parties outside the Protocol.

CMP consists of 175 sovereign states working with a consensus decision-making process. The CMP, like all UN bodies, is traditionally divided into industrialised countries and developing countries (the so called Group of 77 plus China) in order to secure its legitimacy. The EU acts as a unitary actor. Other countries act more or less in concert in the UN regional groups and other groupings with particular interest in the issues (i.e. OPEC, Small Developing Island States, and Sub-Saharan Africa). These groups have different interests and priorities of how to pursue the issue of climate change, how to share the burden of actions and commitments (e.g. between industrialised and developing countries), how to promote capacity building, how to deal with adverse impact, etc. However, in order to safeguard the overall legitimacy of the CDM governance system, it is essential that all the actors mentioned are represented to a certain degree (Olsen and Fenhann 2008).

The simplified existing governance system for registration of projects is as outlined below in Figure 1.

Figure 1. The governance system for registration of projects



Source: Compiled by Hans Jürgen Stehr and the author.

The CMP guidance in recent years can be characterised as emphasising the need for consolidation. This seems to be reasonable in a phase where the CDM is continuing to grow exponentially and, thereby, continuously challenging its governance system. The priorities to consolidate by the CMP are illustrated by the general request to the Executive Board to continue to improve the efficient, cost-effective, transparent, and consistent functioning of the CDM by continuously keeping the management plan under review and adjustment. At the same time, the CMP encouraged all stakeholders, regulatory and private, to make every effort to contribute toward a more transparent, equitable, consistent, and predictable CDM system.¹⁴

¹⁴ See the footnote above.

In short, the CMPs wish for consolidation sets a framework for initiatives that would strengthen the efficiency and legitimacy of the CDM governance system. With that political background what is attempted is an evolution that strengthens the implementation of these two concepts as far as the CDM governance system is concerned.

The Executive Board

However, the most important key to the governance with the CDM system is the Executive Board. It is super-ordinate within the framework given by the CMP in the M&Ps and subsequent decisions. The Executive Board is really a ‘non-executive governance board’. According to the mandate given by the CMP, the Executive Board with its support structure referred to below constitutes the centralised level of the governance system of the CDM. At the decentralised level, we find the DOEs and the Designated National Authorities (DNAs). The DOEs are needed to provide the technical expertise and the DNAs to ensure the support from member states’ governments. However, the Executive Board does not seem to have efficient means of enforcement or assurance.

It is within this centralised and decentralised institutional framework that the private actors play their role developing and implementing CDM projects, thus entering into the legal rights and obligations of the system.

Besides its executive role, the Executive Board also has a regulatory as well as an executive role to play. As a regulatory body, the Executive Board adopts rules of substance as well as procedural rules.

The first set of rules is the approved baseline and monitoring methodologies as the basic eligibility requirement. Guidance and clarifications of how methodologies should be understood are also perceived as de facto binding decision to be taken by the Executive Board. Methodological tools, such as the additionality tool, are not binding unless incorporated in a methodology, which will often be the case.¹⁵ Thus the Executive Board provides rules constituting what is and is not allowed and determines the legal position of a stakeholder (UNFCCC 2010).

¹⁵ See below on the definition of the additionality concepts.

The latter consists of procedures for the approval and revision of methodologies, for accreditation, supervision, etc. of DOEs, for submission of requests for registration and issuance and for review of cases for registration and issuance and for administration of the CER registry.

In general, the Executive Board provides procedural rules that govern participation in the administrative process, communication top-down and bottom-up, the decision-making process itself and any administrative review of decisions.

As an executive body the Executive Board accredits DOEs; registers projects, including undertaking reviews and as appropriate rejecting registration; similarly it issues or rejects issuance of CERs; it manages the CER registry; and last but not least, it manages its own work, support structure, and budget through the Management Plan (MAP).¹⁶ Decisions by the Executive Board, e.g. on registration and issuance, are final in the sense that they cannot be challenged at another superior body.¹⁷ The *raison d'être* of this is to safeguard its decision-making efficiency.

The DOEs and project developers can address issues raised prior to the meeting following the request for review, at which time the Executive Board decides whether to register possibly with corrections or to proceed. In the latter case, the scope of the review is defined and a review team is set up. At the following meeting the Executive Board takes a final decision on the basis of a recommendation by the review team prepared by the Secretariat taking into account the response by the DOEs and project developers. The Executive Board can choose to register, to register with corrections or to reject registration.¹⁸ The procedures for review of a request for issuance follow *mutatis mutandis* the same line. In general, it appears as if the Executive Board is a strong

¹⁶ Decisions 7/CMP.1 paragraphs 9-10 (<http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=93>), decision 1/CMP.2 paragraphs 6-10 (<http://unfccc.int/resource/docs/2006/cmp2/eng/10a01.pdf#page=3>) and decision 2/CMP.3 paragraph 6 (http://unfccc.int/files/meetings/cop_13/application/pdf/cmp_guid_cdm.pdf) (guidance by CMP1, 2 and 3 respectively). The latest version (2008v1) of the MAP has been approved by the 37th meeting of the Executive Board 30.1.-1.2.2008 (http://cdm.unfccc.int/EB/037/eb37_repan23.pdf)

¹⁷ However, upon the request of three members or a Party involved, the power to review cases for registration or issuance and subsequently decide upon these cases might in itself be compared to judiciary power or an appeal system since the subject is the validation or verification undertaken by the DOEs on behalf of the regulatory system.

Requests for review of a submission for registration shall be related to issues associated with the validation requirements, and the review shall be finalised no later than at the second meeting following the request for review.

¹⁸ See <http://cdm.unfccc.int/Reference/COPMOP/08a01.pdf#page=54>

hierarchical command and control regulator trying to run all the functions of the CDM governance system. This is also the governance method often recommended in order to minimise transaction costs (cf. Williamson 1985). However, this might be at the cost of the legitimacy side of the equation.

The Executive Board is served by the UNFCCC Secretariat, which in turn is compensated through the CDM income. Before 2007, the Executive Board was dependent on voluntary contributions by Parties, in particular before the Kyoto Protocol came into force in early 2005. The UNFCCC core budget could not be used for implementation of the Protocol because of some UNFCCC Parties not wanting to be part of the Protocol. Under these conditions staff planning was difficult, therefore in the early years considerable work was provided by a very small staff (UNFCCC 2010).

To accomplish its tasks, the Executive Board has set up several subcommittees or panels (presently Accreditation Panel, Methodologies Panel, Deforestation & Reforestation Working Group and Small-Scale Working Group) as well as a Registration and Issuance Team (short: RIT), which, through the Secretariat, assists Executive Board members to address validation and verification issues. Chair and vice-chair posts of expert panels and working groups are selected from the Executive Board in order to prepare for Executive Board decisions and to secure the decision-making efficiency.

The RIT was originally set up as a roster of experts assisting Executive Board members in their task to assess whether or not to request review of registration or issuance cases. After the full development of the Secretariat the role has changed and the RIT member now submits his or her report to the Secretariat that afterwards provides a briefing note to Executive Board members attaching the RIT member findings.¹⁹

Together the Secretariat and the panels, working groups and the RIT make up the support structure of the Executive Board. It appears that the basic organisational structure of the Executive Board is safeguard an efficient governance structure.

¹⁹ See Terms of reference and procedure for a registration and issuance team (RIT).
http://cdm.unfccc.int/Reference/Procedures/reg_proc02_v05_1.pdf

As far as membership is concerned, the Executive Board is composed of ten members and ten alternates, in practical terms working as a team of 20. Members (and likewise alternates) are elected in their personal capacity by the CMP for two-year terms with the possibility of re-election for a further term in the same function (as member or alternate). In order to promote the input legitimacy of the CDM governance system, candidates are nominated (one each) by the regional UN groups (Western European and Others, Eastern Europe, Asia, Africa and Latin America plus Small Island Development States). Two more candidates are nominated by Annex I and two by Non-Annex I countries. Thus, of the ten members, six are from developing countries and four from developed countries. Chair and vice-chair are, according to the M&P, elected by the Executive Board itself for one-year terms altering Annex I and Non-Annex I representatives.²⁰ Membership is unpaid.²¹

In order to maximise transparency, and, thereby, increase input legitimacy, meetings of the Executive Board are broadcast directly on the World Wide Web unless the Executive Board deals with confidential matters, e.g. specific cases, and virtually all non-confidential documentation is publicly available.

Since early 2007, the CDM has been de facto self-financing, mainly through shares of proceeds paid in as a registration fee variable to the expected level of CERs, giving the Executive Board full control of developing and implementing an appropriate support structure.²² In principle, this should contribute to its efficiency.

The participation of the private sector (project developers, investors, etc.) is voluntary. In order to participate, the private actors have to adhere to the rules, and, via the DOEs, submit projects for registration at the Executive Board.

There is no restriction to participate once the rules are met and all requirements are fulfilled. The participation will be negatively sanctioned if the private actor does not behave according to the rules, i.e. registration or issuance will be rejected.

²⁰ Cf. footnote 5. See in particular paragraphs 7- 12.

²¹ Members/alternates are granted a daily subsistence allowance that is 40% more than the standard UN rate. Cf. decision 7/CMP 1 paragraph 17.

²² However, the question of possible remuneration or compensation of Executive Board members besides the Daily Subsistence Allowance is considered the competence of the CMP as the body institutionalising the Executive Board.

The role in the system is limited to activities that are endorsed by the super-ordinate power (Executive Board and with allocated powers, the DOEs). In other words, the role given to private actors may first and foremost be interpreted as an attempt to enhance the efficiency of the system, i.e. reducing its transaction costs (UNFCCC 2010; Del Rio 2007).

Even though the present organisational structure of the Executive Board seems to be efficient, the Executive Board has been criticised from various sides on the basis of legitimacy arguments. One type of criticism is that the Executive Board has taken up roles without a mandate. In other words: Are the roles already given to the Executive Board in accordance with governance the CDM system aimed at optimising the legitimacy of the system? However, according to the statement in the 2007 IETA status of the CDM, the criticism that both the Executive Board and its Bodies deviated from the established structure and assumed responsibilities not assigned to them, resulting in decisions that are inconsistent and/or outside the mandate given, is not substantiated according to various interviewees.

Secondly, another criticism concerns the lack of transparency and predictability when applications are accepted or not. According to this criticism there is a lack of systematic enquiry as to which projects are accepted by the Executive Board due to the fact that both sector affiliation and used methodology seems to be significant for the result (Leuget and Elabed 2008: 78). In effect, if this criticism is justified, it will certainly hurt both the legitimacy and the efficiency of the CDM governance.

Thirdly, in addition, it has been questioned whether the Executive Board's decisions depend on political considerations which would – if this was in fact the case – undermine the predictability of the CDM decision-making system, and, thereby, its legitimacy (Maosheng 2008: 103).

All types of criticism mentioned above constitute the backdrop of the analysis of this paper of the legitimacy and efficiency of the CDM governance system.

Designated Operational Entities (DOEs)

Accreditation is the formal recognition of competence given to qualified organisations, which are then granted the ability to validate (and/or verify/ certify) that the requirements of the system for which they are accredited are met.

This function is within the CDM system mandated to the Designated Operational Entities (DOEs), which consequently are at the decentralised level of the regulatory system. Without inclusion of accredited DOEs, the relevant functions had to be taken by the Executive Board or a subsidiary body. By validating projects (via Project Design Documents – the PDDs) and verifying performance their role is to safeguard the output legitimacy of the system. Projects are automatically registered and CERs automatically issued on the basis of a DOE validation or verification unless three members of the Executive Board or a DNA requests a review (UNFCCC 2010).

There is no possibility of appeal against a positive or negative validation and/or verification elaborated by DOEs. However, as described above, a review by the Executive Board can ultimately lead to the rejection of the requested registration or issuance which means that the Executive Board has the right of undertaking a quasi appeal or judiciary role on its own initiative.

The Executive Board accredits DOEs on the basis of procedures which have been developed by the Executive Board itself within the mandate of the M&Ps and which have been revised a number of times taking into account experience gained. In general, the procedures of accrediting DOEs appear to be sufficiently efficient to potentially secure the CDM governance system.

The accreditation procedure contains three steps following a preliminary consideration by the Accreditation Panel (AP) of the file for application submitted by the applicant entity.²³ First, a desk review is undertaken by the assessment team (AT) assigned by the AP and composed by an AP member and accreditation experts including secretariat staff. Secondly, an on-site assessment takes place by the AT on the premises of the applicant entity. And thirdly, a number of witnessing activities by the AT as requested by the AP to assess whether the applicant can perform validation and verification/issuance tasks as a DOE in the scope(s) of accreditation it has applied for. Accreditation for validation and verification/issuance respectively can be applied for and granted in

²³ Section III. B. 1-4 Accreditation procedures.

separate consecutive processes. The Accreditation Panel submits recommendations for the Boards decisions on the basis of the findings of the reporting of the ATs. The accreditation procedure can only be interpreted as a way to safeguard the legitimacy of the CDM governance system (cf. Lee 2004: 46-49).

The procedures contain as control measures, according to the M&Ps, the possibilities for Executive Board to do spot checks (unscheduled surveillance) of the performance of accredited DOEs.²⁴ Spot checks can be triggered i.e. by requests for review of reports submitted by the DOE, information about changes affecting the quality or performance of the DOE or a written, substantiated complaint regarding the alleged failure of the DOE to comply with the requirements of its accreditation. A written complaint can be submitted by another DOE, an NGO accredited with UNFCCC, or a stakeholder which in accordance with paragraph 1(e) of the CDM M&P means the public, including individuals, groups or communities affected, or likely to be affected, by the proposed CDM project (Lee 2004: 40-49).

Such spot checks have been undertaken in a few cases resulting in significant corrective actions by the DOEs involved. The proximity of spot checks is essential for the legitimacy of the CDM governance system as it is a way to safeguard that the projects involve the promised additional reductions of GHGs.

In order to provide further confidence about the full implementation and effectiveness of the entire validation and verification system, the Executive Board has introduced a surveillance system according to which regular surveillance visits take place at least once during the three year crediting period comprising two days on-site assessments, supervised by the Accreditation Panel reporting to the Executive Board.²⁵ The surveillance covers in particular the DOEs management responsibilities, resource and organisational management and technical and analytical review processes that are essential to deliver the intended services. Furthermore, the Executive Board is working with the elaboration of more specific standards for the performance of the DOEs.

²⁴ Section III. B. 6 Accreditation procedures.

²⁵ Section III. B. 5 do, see also 2007 EB-report paragraph 25 (b).

The accreditation period is three years after which, again for legitimacy reasons, a re-accreditation has to be applied for.²⁶ The re-accreditation procedure takes into account the performance of DOEs over the previous period and serves to confirm their competence.

For their part, the DOEs report directly to the Executive Board, and they serve generally as an interface between the project developers and the Executive Board. The DOEs do not represent project developer's vis-à-vis the Executive Board.

On the decentralised level, one also finds the Designated National Authorities (DNAs), which are the official CDM responsible bodies of the respective governments. The DNAs of project host countries have to voluntarily approve the country's participation, and the host country DNA is also confirming the contribution to sustainable development.²⁷ Hence, the DNAs are also important for input legitimacy of the CDM governance system. However, in this paper it is the CDM governance system, and not the DNAs that are analysed.

5. The legitimacy and efficiency of the CDM system

In Section 4, a number of critical questions concerning the functioning of the CDM governance system (and the functioning herein of the Executive Board) were pointed out: 1) Are the roles given to the Executive Board really optimising the legitimacy of the CDM system? Is there a lack of systematic enquiry as to which projects are accepted by the Executive Board? 3) Do the Executive Board's decisions also depend on political considerations? The answers to these three critical questions are of significance to both the legitimacy and the efficiency of the CDM governance system.

In this Section the three critical questions are answered in the following way: The first critical question is answered by analysing the institutional challenges of the Executive Board.

The second critical question is answered by analysing the standardisation of methodologies as well as the standard-setting within the governance system.

²⁶ Section III. B. 7. Accreditation procedures.

²⁷ Relevant but outside scope of study, cf. Ellis and Kamel (2007).

The third critical question is partly answered by the answer given to the second question above. Partly, the answer consist of introducing the classical procedure in order to avoid any suspicion about political considerations by introducing an appeal procedure, hence, this question is analysed at the end of this section.

Infrastructural challenges

The Executive Board (EB) has often reiterated that ‘EB members have to collectively provide the professional and regulatory competence needed to supervise the CDM which is a mechanism of substantial size, global spread and sectoral diversity. In addition, it is important to reiterate that members and alternate members need to invest a considerable amount of time to provide their professional service. Currently, EB responsibilities demand an average of four months per year, of which two months are just for attending EB meetings and related travel. Members who assume special roles and functions will need to invest much more time. The Board noted that presently there is no remuneration/compensation for this dedication of time by members.’²⁸

The Executive Board also noted that, ‘against the backdrop of the dynamic development of the CDM, it is important that the terms, mandates, nominations, selection process and tenure of members ensure membership of the Board to carry out the functions referred to above.’²⁹

The CMP in its guidance has encouraged constituencies to nominate members and alternate members who have the required qualifications and sufficient time to perform functions, as indicated in the Executive Board report, to serve on the Executive Board in order to ensure that the Executive Board has expertise in, *inter alia*, financial, environmental and clean development mechanism regulatory matters and executive decision making.³⁰

However, this guidance does not imply any changes of the framework conditions for the work of the Executive Board and Executive Board members. Again, the CMP has chosen the route of consolidation. Consequently, the CMP leaves it to the Executive Board to manage within the present framework by explicitly encouraging the Executive Board to improve and, where possible,

²⁸ E.g. 2007 EB-report paragraph 92.

²⁹ Do. paragraph 93.

³⁰ Decision 2/CMP3 paragraph 5.

simplify the operational aspects of the CDM and in general focus on major policy and system improvements.

Regarding one practical aspect, however, the CMP has not come up with a new option. In its guidance it acknowledged the considerable workload for Executive Board members in between meetings and pointed in that context at the ‘effective use and expansion of the Executive Board support structure and provision of dedicated secretarial and information technology support to Executive Board members’. This means that the Executive Board is allowed through the MAP to provide for local support to members and alternates. Specific options were discussed at Executive Board 39 in May 2008.³¹ In the vocabulary of this paper, the implementation of this recommendation would increase the input legitimacy of the CDM governance system.

Standardisation of methodologies

In general, in order to increase legitimacy and efficiency of the CDM governance system, the Executive Board has continuously simplified and clarified various procedures adapting to lessons learned, experience gained and the development of the mechanism as such.

Thus the Executive Board actively follows up on CMP encouragement to improve and where possible simplify the operational aspects of the CDM, as well as focus on major policy and system improvements in general. The Executive Board also follows up with frequent improvement of guidance and clarifications.³²

Turning to methodologies, the Executive Board has set up a system for deviations and revisions of monitoring plans, allowing flexibility of project administration.³³

The Executive Board has extended the grace period from 8 weeks to 8 months for the submission for validation in which old versions of revised methodologies can still be applied. This extension is another example of flexibility in order to increase the efficiency of the CDM governance system. However, there are limits to the degree of flexibility of the system, as its legitimacy has to be

³¹ See EB 37 report.

³² See as examples 2007 EB-report, paragraphs 37, 74 and 83 on guidance to project developers.

³³ Do. paragraph 79.

safeguarded.³⁴ In sum, as pointed out in Section 2 above, it appears that there is a trade-off between efficiency and legitimacy as far as flexibility of the CDM governance system is concerned.

In addition, the methodology approval procedures have been streamlined considerably including increased possibilities of interaction with project developers before a recommendation is submitted to the Executive Board by the Methodologies Panel. The new procedures have led to general reductions of time taken to approve methodologies and, hence, lower transaction costs.³⁵

The CMP encourages the Executive Board to continue its efforts to broaden applicability of methodologies and further develop generic and user-friendly methodological tools that can assist PDs in designing or applying methodologies and promote simplicity and, thereby, the efficiency of the system. It also encouraged stakeholders to submit new proposals on how to demonstrate additionality for the Executive Board to consider and, hereby, lower transaction costs (cf. Williamson 1985).³⁶

The Executive Board has contributed to standardisation of the efficiency of the CDM governance system by consolidating seven approved methodologies into three consolidated methodologies broadening their application, while – in its own words - maintaining their environmental integrity and applicability conditions as in the underlying approved methodologies. The consolidated methodology for grid-connected electricity generation from renewable sources (ACM0002) covers technologies or measures such as solar, hydro, tidal, wave, wind and geothermal, which makes it the most widely applied methodology used in 40 % of all projects registered.

The additionality tool is of particular interest in order to increase efficiency through reduced transaction costs since additionality is the cornerstone of the CDM concept and since the calculation of baseline emissions are basically counterfactual. The Executive Board has also considered a revision along with guidance on investment analysis. The Executive Board considers it important that the data used are objectively sourced and calculations can be replicated.³⁷

³⁴ Do. paragraph 39.

³⁵ Do. paragraph 40.

³⁶ Decision 2/CMP3, paragraph 18, cf. footnote 12.

³⁷ Report EB 37 para. 2 and EB 38 para.

Standard-setting within the governance system

The CMP wish for consolidation is to be seen on a background where a relatively large number of projects are not automatically registered or credits are not automatically issued. This has revealed discrepancies between the perceptions of quality requirements of on the one hand the Executive Board, and, on the other hand, the DOEs having validated and verified the cases in their role as decentralised parts of the governance system. The signal is that the CMP wants these discrepancies to be solved through the existing design of the system.

Measurability and additionality are core elements of the legitimacy of the CDM governance system. However, they are not static but develop over time as experience is gained. The Executive Board seems to have tried to ensure that registered projects meet the appropriate level of environmental integrity, i.e. the output legitimacy of the CDM governance system. This might sometimes be at the cost of the system's efficiency due to the trade-off that is sometimes found between efficiency and legitimacy (cf. Section 2 above). In short, the way forward is not to repeat past imperfections but to set common standards for the expected performance from in particular the DOEs.

A vital step has been the newly published CDM Validation and Verification Manual (VVM) as a standard for DOE's work. An input to this manual was the identification and communication of key issues resulting in requests for review. Various Executive Board meetings identified particular issues in relation to investment analysis, substantiation of barriers, applicability of small-scale methodologies, completeness of monitoring plans and lack of clarity on the validation conducted.³⁸

The CMP has also requested the Executive Board to continue ongoing efforts to further improve the substantiation of its decisions and increase the understanding of the underlying rationale by users.³⁹ This can be interpreted as a request for increased input legitimacy of the CDM governance system (cf. Easton 1965). Further improvement has to target the needs of DOEs and project participants, which might suggest that DOEs are formally included in the further systemic development as they have been in the development of the coming VVM.⁴⁰ Equally, regular dialogue with the project developers could improve common understanding and development of legitimacy and efficiency requirements of the CDM.

³⁸ EB 36 report, paragraph 74. (<http://cdm.unfccc.int/EB/036/eb36rep.pdf>).

³⁹ Do. paragraph 15 (e).

⁴⁰ Interview with Flavio Gomes BV and current DOE Forum chair.

During the traditional interaction with stakeholders at Executive Board meetings, DOE representatives has stressed the need for further dialogue between the Executive Board and the DOEs both being part of the regulatory system and enhanced interaction on issues regarding i.e. registration requirements.⁴¹

Appeal procedure

As in most governance systems, an important factor of the legitimacy of the CDM governance system is whether or not there is a transparent appeal procedure. The Executive Board's decisions on registration or issuance are final in the sense that a new decision can only be taken on the basis of resubmission. An appeal procedure, arbitration or an ombudsman system is not foreseen by the M&Ps.

IETA has pointed to the fact that the CDM system do not have an appeal procedure compared to 'other regulatory markets that have appeal procedures, which allow both the regulator and the regulated party to challenge rulings and interpretations. Depending on the scale of the regulated market these particular appeal processes use national or international court procedures and/or an independent Ombudsman. ...IETA welcomes the introduction of a wider reaching appeals process and it encourages the Parties to request the Executive Board to appoint an Ombudsman. The Ombudsman should be made responsible for overseeing and addressing challenges to decisions/interpretations made by the EB and its Bodies. A detailed and clear framework would need to be developed to dictate the circumstances under which an appeal may be launched and the process to be followed until a binding decision is made.'⁴² In the vocabulary of this paper, the introduction of an appeal process or ombudsman would first and foremost increase the legitimacy of the CDM governance system.

Generally, it might be argued, that a successful implementation of initiatives as referred to in previous sections enhancing substantiation of decisions, communication and top down standardisation in the form of methodology tools might reduce the need currently expressed for some appeal procedures. However, this is not an argument against such procedures. It does not change the role of the Executive Board being able to exercise at the same time a legislative,

⁴¹ Cf. Webcast from EB 37.

⁴² Such proposals were also presented i.e. at side events during COP 13/CMP 3 in Bali December 2007.

executive and quasi-judiciary power. As such, it does not add to the legal rights of the project developers. In short, clearer division of power in the CDM system is necessary to increase its legitimacy.

Normally, an Ombudsman is an official, usually (but not always) appointed by the government or by parliament, who is charged with representing the interests of the public by investigating and addressing complaints reported by individual citizens.⁴³ Introducing an Ombudsman has the disadvantage that his or her findings typically are non-binding recommendations. Consequently, the Executive Board could choose not to follow a recommendation to revisit its decisions. Therefore, it is questionable whether such a model would actually increase the legitimacy of the CDM governance system.

On the other hand, introducing an independent appeal body and a formal appeal procedure on top of the present system with review procedures could increase inefficiency, adding an extra layer to that system and, thereby, adding further transaction costs to the CDM governance system. In all circumstances, the increased inefficiency has to be judged against the possible increase of the legitimacy of the system.

A simpler – and potentially less inefficiency increasing - model could be an appeal procedure covering procedural matters only. Such an appeal procedure is envisaged according to the procedures for accreditation in cases where the Accreditation Panel on the basis of a spot check recommends that a DOE be suspended.⁴⁴ However, such a model might not be satisfactory for PDs contesting the substance of Executive Board decisions on registration or issuance.

Alternatively an arbitration procedure could be set up with representatives of the Executive Board, the PDs, and DOEs, and possibly some independent persons (with legal backgrounds). In such a model, the Executive Board representative would have to judge the justification of his or her own decision in the Executive Board and the project developers, and DOEs would equally tend to defend their original positions. This model, as a consequence, does not seem to be legitimate.

⁴³ See, for example, the homepage of the world's first ombudsman institution: www.ombudsmanden.dk

⁴⁴ Procedure for accrediting operational entities, version 8, annex II (http://cdm.unfccc.int/DOE/cdm_accr_01.pdf)

In conclusion, the most feasible way to increase legitimacy without at the same time increasing transaction costs would be to substitute the review process with an appeal procedure allowing PDs, DOEs, Parties involved and other stakeholders particularly affected, as well as the Executive Board to bring a DOE validation or verification before an independent appeal body. If there is no reaction, i.e. no appeal is launched; the DOE validation or verification will be final which corresponds to the present M&Ps.

6. Conclusion

The aim of this paper is to analyse the legitimacy and efficiency aspects of the CDM governance system.

The primary concern of a legitimate and efficient CDM governance system is to ensure relevant motivation for the private sector in terms of consistency, predictability and profitability and at the same time guarantee environmental credibility. Clear standards and a clear definition of private sector rights as participants' rights can promote both sets of motivation. This is what characterises a legitimate and efficient CDM governance system.

As outlined in previous sections of this paper, the CMP at this stage is aimed at consolidating the present system and requesting the Executive Board to enhance rules and procedures as appropriate in order to ensure the objectives of the mechanism.

The CDM is unique in the sense that its subject is unique. In terms of governance, however, it provides the same kind of output as other regulatory systems. The CDM governance system monopolises legal, executive and quasi judiciary functions in one and the same body impacting incentives for the private stakeholders to participate in the system without necessarily guaranteeing better environmental integrity than through a clearer division of functions.

CDM transaction costs will never be eliminated entirely because the key commodity – CERs – is unusual and requires careful monitoring, verification, and evaluation before anyone would pay for

it. Unlike crude oil, copper, or grain, a CER represents the absence of a quantity of invisible GHG in the atmosphere relative to a theoretical baseline of a project that was, in many cases, not undertaken to begin with. A CER does not have the concrete reality check of an exchange for physical delivery, since it is impossible to deliver an ‘absence’ to a specific holder. If people and governments are expected to pay for CERs, there must be procedures and checks to prevent the many ways one could create meaningless CERs. However, these procedures necessarily create transaction costs. Nevertheless, the transaction costs could and should be reduced in order for the CDM governance system to become an efficient governance system. Therefore, the Executive Board must have efficient means of enforcement and assurances vis-à-vis the DOEs and DNAs.

Critical questions can be and has been asked vis-a-vis the legitimacy and efficiency of the roles played by the Executive Board within the CDM governance system. These questions has been operationalised to cover institutional challenges, standardisation of methodologies, standard-setting within the governance system and the (lack of) an appeal procedure. In all cases, it has been shown that the CDM governance system is able to tackle the legitimacy and efficiency dilemmas. Hence, the paper has demonstrated that – at least in the case analysed in this paper – the experiment in international governance without the strong support of states can be relatively successful. Perhaps we tend to overestimate the necessary strong role of states in international governance.

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