## **CDM Policy Dialogue Stakeholder Consultations:**

## **Questions to Project Participants**



# 8 May, 2012

# Response provided by the Project Developer Forum

The Project Developer Forum (PD-Forum) is a collective voice to represent the interests of companies developing greenhouse gas (GHG) emission reduction projects in international markets under the Clean Development Mechanism (CDM), Joint Implementation (JI) and other carbon emission reduction schemes and programs. See our members at <a href="http://www.pd-forum.net/page.php?m=2&s=3">http://www.pd-forum.net/page.php?m=2&s=3</a>

This response relates to the questionnaire as published on the website of the CDM Policy Dialogue <a href="http://www.cdmpolicydialogue.org/public\_input/questions2pp.pdf">http://www.cdmpolicydialogue.org/public\_input/questions2pp.pdf</a>

#### GOVERNANCE AND EFFICIENCY OF CDM

1. Do you have specific suggestions on how the efficiency and cost-effectiveness of the CDM project cycle may be improved without compromising the environmental integrity of the mechanism?

The CDM project cycle has improved significantly over the last few years and the EB and Secretariat are to be commended for the work they have done and the positive impact this has had on the processing of requests for registration and issuance. However, direct and indirect costs for validation and verification have increased substantially over the years as reviews and incompleteness messages have dramatically increased the workload on DOEs, and the accreditation standard increased their cost. Additionally, the inherent risk and delays caused by the ever-increasing, often immaterial, detail being requested at both validation and verification is also leading to increasing transaction costs. With increasing costs and decreasing prices, the CDM is no longer cost-effective in many circumstances. Therefore, many areas for improvement remain, some of which are already work in progress. The PD Forum has submitted multiple proposals and suggestions as to how these issues can be improved / implemented. Particular areas which still need to be addressed, including:

- materiality;
- greater reliance on the recommendations of the DOEs with less duplication of work by the Secretariat and EB;
- definition and implementation of common practice and first of its kind guidance;
- revision of the treatment of monitoring plans, in particular the requirement to define the monitoring plan at validation and references to the "registered monitoring plan" and flexibility to make changes to the monitoring plan;
- liabilities for DOEs; significant deficiencies and the lack of an appeals process; and
- training for all participants so that we all interpret the guidance in the same way.

All of these issues can be resolved in a manner which will enhance or at the very least not detract from the environmental credibility of the CDM. Indeed, PD Forum has made many suggestions on how to implement these changes. For more details, please refer to our document download page at http://www.pd-forum.net/page.php?m=6&s=14 where the titles of the documents indicate the subject areas. Also see the presentations given at the First Joint Coordination Work Shop in Bonn in March including our comments and proposals on the implementation of materiality in the CDM, treatment of significant deficiencies, additionality and PoAs.

Specific cost reductions may be achieved through, for example:

- Simultaneous validation and verification, in particular for small scale projects; this takes away the certainty that PPs get from registration, but that risk can be offset against the sometimes significant cost (both monetary and time) of validation.
- Expansion of the list of automatically additional project types (positive list); there can be little disagreement that solar PV is additional, irrespective of the size of the project, or offshore technologies. However, there are many more (renewable energy) technologies which have very low penetration and could be considered automatically additional; such a list may be reviewed every few years (3 to 5 years?) to take account of developments.

- Removal of the (micro/small-scale) limits on project types employing technologies at household level, such as cookstoves and waterfilters; there can be no justification for limiting the size of a project installing efficient cook stoves for households, while greater size can reduce the cost of the project implementation.
- Greater use of defaults and standardised baselines, reducing both the complexity of the PDDs and of monitoring; for example, most cook stoves do not have moving parts or other elements that deteriorate and affect the efficiency. Therefore, the requirement to carry out hundreds of Kitchen Performance Tests is a complete waste of resources which should be directed at achieving further reductions instead.

2. Do DNAs fulfill their roles in the project cycle efficiently? How objectively are sustainable development criteria applied by DNAs? What are best practices in the role played by DNAs in different countries?

There is a great variety in the efficiency of DNAs, with each DNA defining and implementing their own procedures and no single approach prevailing. These range from DNAs with sophisticated software applications and clearly defined procedures, others which have adopted an UNFCCC style assessment and approval process, to those which barely follow any particular procedure and have very little certainty around either the timing or the outcome of the process. For example, China is relatively predictable and efficient, which, greatly facilitated the development of projects by publishing investment benchmarks and a grid emission factor, which is used to determine at least part of the baseline in almost all Chinese projects. At the other extreme, other countries have historically been slow in processing applications.

Some countries require extensive documentation in local languages or even that the validation process and report is to be completed prior to requesting the LoA. This sequential approach is especially onerous as it adds to the total process time, which not only causes significant delays, but frequently implies that CDM Methodologies expire as the 8 month period is not enough to conclude submission. This is especially complicated if LoAs are specific to the version of the PDD and Validation Report as Project Participants as well as Validator are prevented from revising the documents and need to submit outdated project documentation which was prepared before the lengthy LoA process. Many DNAs also assess projects for factors which are beyond their remit.

Strictly speaking the DNA should assess and attest the project's contribution to sustainable development according to the host nation's criteria, authorise the participation of the entities and their voluntary participation in the CDM. However, assessments of projects for the issuance of LoAs often extend to areas such environmental impact assessments and legal compliance – areas which are the remit of other government departments. These additional requirements create the need for cross ministerial meetings which in turn greatly slow the process. On top of that some DNAs even assess additionality and the project's compliance with the CDM rules, as well as the literal consistency between the English PDD and its translation to the host countries' language. This obviously generates significant additional costs for project developers and DOEs, not speaking of the delays caused by such processes.

With regards to the important issue of the definition of sustainable development criteria and the assessment of the projects, it is to be emphasized that this is an issue of national sovereignty and we as project developers respect that and seek to adjust our projects to satisfy the needs. Now in general most countries perceive that projects that generate renewable energy, enhance energy or resource efficiency or improve the treatment of waste and effluents have an inherent contribution to sustainable development, which in our view makes sense and dispenses with the need for a complex discussion. In addition to that, many countries face difficulties to mobilize the large capital sums needed to build clean energy infrastructure and commonly rely on fossil fuels

to satisfy growing energy needs of their society. In these cases the contributions of CDM are most valuable as it helps to finance assets which eliminate the purchase of fossil fuels in the long run and thus reduces the burden on the balance of payment. Also such projects reduce the risk of having to bear the cost of substituting GHG intensive assets in the future. In addition there are important spill over effects from the experience gained with such projects which translate in regulatory improvements, national support policies and the creation of infrastructure and support services that are needed for the further expansions of the solutions introduced by the CDM.

In addition to this we also believe that the global nature of CDM itself contributes to the education and propagation of the concept of Sustainable Development, as well as to the development of best practices for investors and regulators. Not only do host governments and DNA engage themselves in interchange of experiences, but global acting project developers such as our members and DOEs are constantly seeking to improve their practices and transfer them among countries. In addition the CDM has established a new line of stakeholder engagement not only on local, but also on global level, which also generates input for host country DNAs to improve their practices. And last but not least, the requirements of companies and countries that wish to use the CERs as offset is generating and additional driver to improve practices and criteria for the assessment and enhancement of project sustainability.

For this reasons we believe that the CDM has and will be generating important input and contributions to host countries' competence for the enhancement and judgment of sustainability, but we also emphasize that the effective definition and judgment must remain a sovereign right of the respective host countries.

Regarding best practices, we have already cited China's steps to prepare benchmarks for investment analysis and a grid emission factor. Some other countries such as India have followed suit with the grid emission factor. Some Latin American DNAs have invested in studies to help define common practice. Project developers have a concern, however, that requirements for defining standardized baselines will stretch the capacity of many DNAs and actually detract from their work on the processing of existing CDM projects.

In our opinion, best practice from DNAs would amount to the publication and implementation of clear and efficient procedures for the issuance of LoAs within a reasonable timeframe and before or in parallel to the validation process to avoid additional delays and redundancies. State of the art practices would include publication of resources for the preparation of PDDs including investment benchmarks, grid emission factors, sector and industry studies which help to define, for example, common practice and first of its kind technologies. We also expect that more and more countries will seek to integrate their own mitigation and adaptation policies, which are being developed in the context of their NAMAs as communicated to the UNFCCC, in their LoA assessment in order to make sure that the CDM effectively supports them in their efforts for GHG mitigation, sustainable development and climate resilience.

3. Do you have any concerns about the current process for validation and verification, including with the role of DOEs?

Currently, our members are concerned about the ability of DOEs to complete the validation process of projects in time to meet the EU's imposed deadline of registration by the end of 2012. On top of this, we face the risk of immaterial, inconsequential or simply incorrect questions from the Secretariat that could trigger a "kick out" from the registration process which could in turn trigger a number of events such as the need to reapply for registration under new procedures, use of new templates and in the process, incur more significant delays and ultimately result in the registration of the project after the deadline. PD Forum and others have

already requested the EB and Secretariat to look again at the deadlines for the adoption of new standards and templates and to respect the 8 month grace period which is generally applied to the introduction of other new guidelines, templates and procedures.

We are also concerned about DOEs' capacity and their ability to withstand the impacts of the current low prices. We expect the number of validations to decrease and if low prices continue, verification frequency may also decrease resulting in less work for the existing DOE cadre, which may in the end result in the loss of DOE capacity, and in particular, the experienced lead assessors and sector experts which are the most important element of a good assessment team.

We are also concerned by DOEs' inability to make any kind of judgment call because the confines of their accreditation contracts are so restrictive and they are very concerned about liability and the concept of significant deficiencies. As a result, whenever they come across something which is not clearly defined in the guidelines, they either insist on requesting a deviation (a slow and often un-predictable process) or adopting the most conservative stance. It is our expectation that implementation of materiality guidelines will give DOEs more flexibility to apply their professional judgment in future, although this is not yet confirmed. This situation is exacerbated by often unclear guidelines from the Secretariat and varying interpretations of guidelines by different participants, caused by the lack of any form of common training across all participants in the CDM.

4. What is your view on the function of DOEs? Do they discharge their duties effectively? Do you have any suggestions for how to improve their function and efficiency, including with regard to how they are hired and paid by the project developer?

DOEs are currently contracted by Project Participants to undertake validation and verification engagements. The fact that they are paid by those for whom they are creating business has given rise to concerns about the independence of DOEs among critics. However, this concern is over-rated because the concept of third party verification or auditing is very well established and regulated in international business circles, and these kinds of services enable the vast majority of commerce to proceed. Additionally, while the contract for payments for these services is between the DOE and the project participants, the main contract for carrying out the business as DOE is between the DOE and the EB, i.e. the accreditation.

Many of the companies which provide DOE services, and all of the early movers amongst the DOEs (e.g. SGS, DNV, the various TUVs, LRQA and BVQI), also provide other forms of third party inspection associated with global trade – quality and quantity assessments, certification of production and management systems, chain of custody and so forth. The same model is also applied to the verification of annual emissions under the EU ETS, which is a much larger scheme compared to the CDM. Many of the European DOEs are also accredited for EU ETS verification. Third party verifiers are also deployed in other national schemes such as the Indian PAT scheme and they will have a role to play in the Australian CPL and other domestic and voluntary programs.

The DOEs have very strict rules around conflict of interest, including provision of other services to clients and independence of audit teams, which ensure that the final decision on an engagement is made independent of any commercial pressures. Contracts with DOEs are very clear that payment is made irrespective of the outcome of the assessment, and Project Developers and Project Participants know, understand and accept these concepts (see also question 6).

Alternative proposals have been made whereby the EB would appoint DOEs to undertake validation and verification services. Whilst this might address some concerns, it is unlikely to lead to an efficient or effective deployment of resources. Project Participants chose DOEs on the basis of a range of criteria including price; but also the availability of experienced teams and for complex projects, experienced sectoral experts; past performance in general; and past performance in other contracts with the PPs. At times, PPs may choose particular DOEs because of their knowledge of the PPs previous projects or their monitoring and reporting systems. PPs may also engage DOEs to perform a series of audits during one visit to a given country, thereby reducing travel time and costs. If the EB or Secretariat were to appoint DOEs, none of these kinds of considerations could be taken into account.

DOE performance is variable, often driven by availability of individuals (team leaders, sectoral experts and technical reviewers / decision makers), such that a DOE may perform well on one engagement (usually judged by delivering a validation opinion within the expected time frame and registration/issuance without incompleteness) and perform badly on a subsequent engagement for an essentially similar project. Many of their problems are related to the volume of work such that new DOEs with empty order books can often deliver in good time at the outset, but become increasingly slower as time goes on.

DOEs are by nature extremely conservative and although the CDM dominates our world, the CDM represents a very small part of the global revenues of some of the larger independent inspection companies. Moreover, there is a real concern that CDM will be considered too high risk, particularly if DOE liability is increased, for the continued involvement of the big DOEs. Relying on small or young companies to provide DOE services risks the long term viability and credibility of the CDM, as such companies may simply go bankrupt if they are ever called to account for previous mistakes.

Amongst the concerns that the DOEs face are the continual internal pressures to secure enough work to maintain their teams. Externally they face very high levels of pressure from the accreditation team and the secretariat over "black marks", surveillance visits and suspension of accreditation – large DOEs can have spot checks and surveillance visits taking place at any given time, absorbing massive amounts of DOE time and incurring very significant costs. Impending rulings on the treatment of liability and significant deficiencies are a major concern for DOEs and as yet, there is no agreement between DOEs and the EB on how to deal with these very significant issues. Recent changes to the requirements for sectoral experts had a very significant impact on DOEs' ability to undertake validation and verification of complex projects; continually changing rules, guidelines, templates etc create a very high maintenance burden, requiring continual training and retraining of staff and consultants. Depending on the outcome of these various decisions, project developers fear a mass exodus of DOEs from the CDM.

5. Do you think that country specific DOEs (DOEs specialized within one country) could improve project registration? If so, in what way?

No. What is important for project registration is to have a good assessment team. This can be made up of one or more local assessors with experience in the country in question (who can be contractors) and experienced lead assessors and sectoral experts who can be sourced from elsewhere. Bringing in a team from, for example a regional centre, adds to the costs of the validation in form of travel time and flights, but on the other hand, it also ensures that the lead assessor is experienced and is in possession of current knowledge of rules and procedures. There is a danger that a small DOE in a country with few CDM projects will lack the capacity to complete the project on time and arrive at the correct conclusions with a good quality validation or verification report. Poor quality reports, even though they reach the right recommendation, often cause delay

and requests for reviews. To this extent, Project Developers are not particularly committed to the development of local DOE capacity. We are quite happy to work with large well known DOEs, who are likely to remain in the space in the long term and have the ability to contract with and train local assessors.

6. Is it reasonable to hold a DOE liable for damages (e.g. due to delays) that are based on negligent conduct of this DOE? What are, in your experience, the options to appeal a decision of a DOE?

Yes. It is reasonable for a PP to hold a DOE liable for damages if based on DOE negligence. This is managed between PPs and DOEs within existing contracts. This is a general principle that holds true for any contracted entity that causes damages through negligent conduct. This in no way undermines the DOE's accreditation obligations in abiding by the rules of CDM.

However, DOE contracts, generally speaking, exclude virtually all liabilities, with no possibility of deviating from the standard terms. Such commercial conditions are common to all DOEs in the market and ground on the fact that the CDM bears imponderabilities and potential liabilities vis a vis the UNFCCC that are disproportionate to the usual contract value of auditing services under the CDM. Indeed, our members have no experience of a PP successfully holding a DOE liable for damages, for any reason. Nor, indeed, of appealing against a validation decision of a DOE.

In terms of holding a DOE liable for damages related to a negative validation, the PP has no influence on a DOE's final decision, as decisions are based on the DOE's interpretation of the rules of the CDM - in particular the accreditation "contract" between the DOE and the UNFCCC - and not by contractual conditions between the PP and DOE. Under current conditions, the market of CDM auditing services is a seller's market, where there is much more demand for such services than there is capacity. This is specifically true in the run up to the end of the first Kyoto Period, and specifically true for geographies with poor infrastructure, such as the LDCs. The DOEs under such circumstances are not competing for customers, but they rather fear the risk of spot checks by the UNFCCC or even a suspension. This results in DOEs tend being extremely cautious, i.e. conservative, in their validation decisions.

In terms of holding a DOE liable for delays, whilst contractual conditions to incentivise speedy validations exist, in practice these conditions are rarely enforced, as faults for delays are almost impossible to prove. Additionally, any appeal is likely to simply lead to greater delay rather than any helpful outcome. In addition, CDM has been characterised by a severe shortage of quality DOE capacity, so PPs are unwilling to damage their reputation with a given DOE, by making DOEs liable for delays, for fear they will no longer take on further projects.

And while there is a requirement under the CDM accreditation for there to be an appeal panel or complaint resolution body within the DOE that PPs can go to, the reality is that (1) the appeal panel is not sufficiently independent (or knowledgeable of the circumstances), and (2) it is virtually impossible to prove such negligent conduct. A CDM validation/verification is not an exact science but an opinion, an interpretation of the rules. And as there is a difference of opinion between EB members about interpretations, between the EB and the secretariat, and between all others involved too, appeals are not likely to have a satisfactory outcome.

As long as the auditing activities comprise the interpretation of rules while there is no unambiguous guidance, for such cases it will be factually impossible to prove any misconduct, be it under an appeals procedure, be it under a complaint resolution body. Please see our thoughts on the appeals process for the CDM in question 9.

7. Under what circumstances and for what damages (excess issuance, environmental and sustainability aspects, etc.) would you accept that project proponents can be held liable? What entity would bear the liability (project owner, consultant, CME, etc.) and what impacts on the business operation could be foreseen?

PPs are already fully liable under existing national regulations for a great variety of issues, including environmental and sustainable development aspects of a project, as well as compliance with all other national laws and regulations. All projects under the CDM must achieve host country approval, demonstrating they comply with the host country laws. These laws vary across regions, and countries have been unwilling historically to allow international organisations to infringe on their sovereignty and dictate what constitutes sustainable development within their jurisdiction. More practically, it would be unrealistic for the UNFCCC to become effectively a global police force, and global judiciary, investigating and deciding whether a project meets or breaches UN-defined sustainability criteria. These decisions are currently, and should continue to be, taken at the local level.

With regards to CDM-specific documentation, many DNAs require the project participant to confirm that all documentation in the project design document is true. If a PP is proven to have committed fraud, the PP can, and should, be prosecuted at the national level.

However, with regards to submission to the UNFCCC of CDM-specific documentation and information, the DOE has validated and confirmed that all documentation is in line with EB rules. DOEs have accepted this role and responsibility (and therefore the resulting liability). Project developers believe that DOEs should continue to fulfil this role as independent third party, but if DOEs are unable to accept the responsibility that comes with their role, we might as well do away with the DOE role completely and let PPs deal direct with the EB.<sup>1</sup>

8. Overall, is the current stakeholder consultation process adequate? Otherwise, do you have any suggestions on how the current stakeholder consultation processes can be improved (in particular for projects that have attracted criticism)?

The stakeholder consultation process (both local and global) under the CDM is adequate. It is important to remember that stakeholder consultation is a country-specific activity and in Durban, the Parties strongly opposed any form of guidelines which would intervene with their own stakeholder processes. Some countries have existing consultation built into their own regulations and others leave it to the PPs to organise their own consultation.

Not only is stakeholder consultation country-specific, it is also project-specific. It would also make more sense to recognise different stakeholder consultation requirements for projects in remote and sparsely populated areas such as wind farms in desert areas and, for example, an industrial project in a city centre factory. The former should be able to apply a light touch consultation process with less emphasis on transporting people significant distances just for the sake of holding a meeting, whereas the latter may need to carry out extensive consultations which could involve hundreds of stakeholders.

<sup>&</sup>lt;sup>1</sup> However, there are circumstances where project developers could foresee cases where PPs could take on roles that currently pertain to the DOEs, specifically in the case of CMEs that might conduct CPA inclusions on their own, without a DOE verifying; a direct relationship between the CME and the UNFCCC and the related responsibilities and liabilities that go with this could be acceptable.

The CDM has already delivered progress in numerous CDM host countries, where CDM stakeholder consultations have broken new ground and given genuine stakeholders a voice. This progress should be applauded, and further evolutionary progress being made and being encouraged through CDM project activities.

DOEs should be empowered to apply their expertise and judgement. The local experts on the assessment team are the ones who are best placed to judge whether or not a consultation process has been adequate taking into consideration local customs and experience and CDM requirements.

Also where comments are received the current process is adequate. First, the DOE is responsible to assure that global stakeholder consultation has been conducted according to the rules of the CDM and that the local stakeholder process was conducted in transparent manner according to the rules and principles of the sovereign host country and that due account of the comments has been taken. This implies that the DOE is responsible to follow-up on any CDM process or rule related comment and to assure that the project developer addresses any CDM related concern which was raised by a stakeholder. With regards to contributions to or impacts on local social or environmental issues, it is effectively the host country's responsibility to address and judge the project's compliance with national law and principles of sustainable development and that stakeholder comments were taken into account. Thus, it is the DOEs responsibility to assure that all CDM stakeholder consultation processes have been conducted in transparent manner and that the relevant governmental entities and the DNA are aware of the comments and the respective responses and measures taken. However, neither the DOE nor the EB can question the host government's judgment about the project's compliance with the country's own principles for sustainable development or legislation. While the PD Forum wholeheartedly supports the statement that CDM projects should do no harm, a formal "do no harm assessment" as is being proposed in the discussions, is likely to infringe host country's sovereignty in regards to defining sustainable development.

There have been suggestions to deploy the double consultation process which has been pioneered by the Gold Standard. The PD-Forum would not support such a move. The double consultation process may be applicable to meet the higher standards set by the Gold Standard regarding the monitoring of sustainable development benefits but this is not appropriate to the CDM in general because, as discussed above, sustainable development is the preserve of the host country. In addition we believe that this would quickly lead to stakeholder exhaustion for many projects where there are relatively few social or environmental impacts (such as an energy efficiency project in an industrial facility, or a wind farm in a desert) and more so amongst the government departments that are invited to attend such events. In addition, such a requirement would increase costs and delay the validation process further at a time when we are trying to make the process more efficient.

9. What is your view point on an appeals process for registration and issuance decisions (e.g. scope of review)? What according to you is the reason for delay in its adoption?

The PD Forum will be submitting its position regarding appeals to the Parties. Below the latest draft:

### Submission by Project Developer Forum to the Parties (Draft) Scope of, and modalities and procedures for, an appeals process under the CDM

The scope of the appeals process has long been a source of intense negotiation and debate, with host Parties, project participants and investors generally lining up in support of a narrow scope restricted to negative decisions by the EB only (i.e. rejections of requests for registration and issuance, rejection of meths etc) raised

by involved entities (Parties, PPs, DOEs) and NGOs and some Annex 1 Parties supporting a broader based process whereby any decision by the EB could be appealed by any interested stakeholder.

Three factors are now affecting the debate, and prompting this further input:

to be financially viable or overcome other significant barriers.

- In Durban, in particular, Parties have started to express a desire to exercise some form of control over projects' contribution to sustainable development in the host country. Although Non-Annex hosts have the right to request a review of requests for registration or requests for issuance, this option has seldom, if ever, been utilized and there have instead been proposals to make LoAs conditional or subject to some form of on-going approval by the host Party. Whilst we understand and recognize concerns about the way projects are ultimately implemented, such a change to the modalities and procedures would take away one of the very fundamental foundations of the CDM. CERs are a sovereign commodity and it is through the LoA process that they are allowed to be transferred offshore without further intervention from host governments. The CDM is the first international instrument to ever allow such access to a sovereign right and it is one of the fundamental reasons why the CDM has been so effective where other forms of development assistance have failed. Even Joint Implementation, in many ways simpler than the CDM, has been less successful, arguably because of the role of the Host Party in the issuance of ERUs. Issuance of an LoA is the final step in the investment process and is often the trigger for financial closure and the release of funds to start construction. If the LoA is made conditional, then the risks of CER delivery will become much greater, possibly so great as to significantly reduce private sector investment - bearing in mind that these are projects which rely on the additional revenues from CERs
- The on-going discussions and the preparation of draft procedures for the treatment of significant deficiencies has highlighted the fact that an allegation of a significant deficiency in the registration of a project or the issuance of CERs is in fact an appeal against a positive decision by the CDM EB. With the exception of fraudulent behaviour or registry errors, the current registration and issuance processes (which includes local and global stakeholders consultation, country approvals, independent third party verifications, EB oversight, and conservativeness as a design parameter) effectively rule out any significant deficiencies. While errors need to be corrected, and fraudulent actions addressed, the environmental integrity of the mechanism is unlikely to be helped significantly by the proposed procedure whilst it is likely to cause many DOEs to restrict their activities within the CDM or totally cancel teir DOE status.
- 3) In order to protect the existing investments and ensure that the private sector remain committed to the CDM, it is necessary to ensure that in the event that any projects are found to have failed to meet the requirements of the CDM which were current at the time of the relevant decision, have a fair opportunity to correct the necessary elements and remove any suspension of registration or issuance.

In the light of these developments, Project Developers would like to reiterate the stated need for one single fair, transparent and fact-based appeals procedure; where decisions by the appeals panel form binding and persuasive precedents for future decisions of the appeals panel and EB respectively; with the requisite checks and balances to ensure that the system is not abused and that costs of successful and unsuccessful appeals are fairly apportioned; which covers the decisions by the CDM EB; which is carried out by an Independent Appeals Panel made up of external experts and Secretariat staff as appropriate; and which ensures a form of direct communication through which the directly affected stakeholders can interact with the appeals panel.

Consequently, we request the SBI to instruct the Executive Board to develop procedures which address the above design criteria and develop a process which works to strengthen the longevity, environmental credibility and integrity of the CDM.

10. Do you think the current guidelines for assessing additionality of CDM projects are adequate and effective? Otherwise, do you have any suggestions, possibly in the following areas, on how they can be improved?

The current guidelines are adequate and effective, but continuing improvement is possible, in line with the learning by doing approach of the CDM. A simple look at the numbers collated by the UNEP-Risoe CDM Pipeline (May-2012) reveals that 29% of all completed projects has ended in a failure/rejection (rejected by the DOE, terminated by the DOE, rejected by the EB, or withdrawn by the PP); in our opinion this is quite a high failure rate.

We do not agree with many of the concerns raised about additionality of certain CDM projects or project types by some of the CDM critics. It is important to understand that projects are assessed against the current version of the additionality tool at the time they seek registration. This assessment is performed by DOEs who are accredited under the UN process as being competent and independent. In our opinion, if the DOE determines that the project fulfils the rules, and judges it to be additional, and the CDM EB proceeds to register the project, then as far as the rules of the CDM are concerned, it is additional. A re-assessment of the project at a later date, against new and different rules, applying new and different information and knowledge, does not deliver a credible verdict on the original project's additionality as it was not part of the decision whether or not to go ahead with the project.

This is not to be confused with a broader debate about how we ensure that the rules (e.g. the additionality tool) are continually improved to help us get better at accurately predicting the future. The additionality tool and associated guidelines are continuously being revised and have come a very long way since the first CDM projects were registered. Project developers, including many of our members, have contributed significantly to these improvements. Many constructive submissions on the topic of additionality, financial guidelines, first-of-its-kind and common practice can be found on our website.

Furthermore, we welcome further improvements to the additionality tool moving forward. In particular we welcome the positive additionality tests for pioneering technologies such as offshore wind, solar PV, and tidal power, and hope to see these expanded to other pioneering technologies, regardless of scale. In addition, where the income from projects is only from emission reductions (e.g. methane capture in agricultural facilities without electricity generation), these projects should also be assumed to be additional. This would greatly increase investment certainty.

The PD-Forum believes that efficient global carbon market instruments are an important instrument to allow a smooth transition to clean and sustainable economies, while providing an immediate incentive. The CDM is the only mechanism of this kind to date. However, the current practice for the judgement of additionality falls short of capturing the broader economic concept, but applies an extremely rigorous and short sighted definition of additionality, which reduces the question of additionality to discussing a project's financial attractiveness, de-facto ignoring any other barriers. While the premise that any project which is economically attractive would be readily developed may be true according to financial theory, this does not hold true in reality and especially in the context of developing countries, and is extremely conservative:

- Only projects which have demonstrated that they are not financially viable without the CDM (or applicable national support policies as discussed below) are accepted. This must be demonstrated by showing that their financial return is below their financial cost of opportunity for all reasonable scenarios.
- The principle of conservativeness is being applied in the context of the CDM investment analysis, which implies that all uncertain revenue variables should be estimated at their maximum, and all costs, including financing costs at their minimum level. This leads to a complete distortion of financial theory as higher revenue estimates lead to higher risk, which should be discounted at a higher rate, but this is not accepted under the CDM. As a consequence projects with higher uncertainties, which should deserve the CDM incentive most, suffer most difficulty to demonstrate their additionality.
- The financial analysis considers that capital is readily available, while the regulation to demonstrate
  lack to access to capital under the barrier analysis often does not provide a practical approach to
  demonstrate additionality because it depends on an in depth understanding and judgment of the DOE.
- The financial analysis does not recognize that additionality is often not related to long term financial attractiveness, but often to short term necessities of project developers and host countries. For example countries may recur to thermal energies not because they are cheaper in the long run, but because they require low capex, can be build and commissioned in a short time frame and provide high energy security. Moreover the long term operational costs are often of secondary interest to governments with a short time priority to assure energy supply.

In conclusion, we believe that the current practice of evaluating additionality is extremely conservative and that the projects which are registered under the current rules have demonstrated their additionality on the basis of the strictest standard possible. Indeed, we believe that the current practice could be improved by broadening the additionality check from the narrow financial additionality assessment only for the majority of projects, as this is too narrow and stymies projects that need CDM revenues most.

### Additional note regarding business as usual

The CDM was established partly to realize cost effective mitigation in developing countries and to effectively curb the growth of their GHG emissions which, in absence of recent applicable national mitigation policies as discussed below and the CDM would follow a "business as usual" (BAU) expansion. This is in fact still being observed in many developing countries as well as during the past industrialization of the Annex I countries. To effectively change this development trajectory today must be the overriding objective of any global climate policy, as the IPCC reports are unequivocal in showing that the 450 ppm mitigation pathway requires GHG reduction also in developing countries, especially the emerging countries which represent a high growth in GHG emissions far beyond the mitigation capabilities of developed nations. The nature of the challenge can further be understood on the basis of the data provided by the International Energy Outlook 2009<sup>2</sup>:

- Energy is responsible for 66% of global GHG emissions;
- Non OECD countries account for 100% of the growth in energy related GHG emissions;
- Under Business as Usual (BAU) conditions which will lead to massive climate change 26 trillion USD (1,6% of global GDP p.a.) are needed until 2030 to satisfy global growing energy needs. 80% of this investment are required to take place in non OECD countries; and

<sup>&</sup>lt;sup>2</sup> Available from http://www.worldenergyoutlook.org/media/weowebsite/2009/WEO2009.pdf

• Under a mitigation pathway an additional 10.4 trillion USD are required to limit climate change to a maximum of 2°C.

From the numbers presented it is obvious that developing and emerging countries face considerable challenge to finance and assure adequate growth of secure energy supply for their economic development, not speaking of efforts necessary in other relevant sectors like agro-forestry, food production or waste and effluent treatment. This objective requires immense volumes of capital which is still scarce and expensive in developing and emerging economies, a fact which usually leads to the establishment of more reliable, readily implementable and less capital intensive fossil fuelled generation assets, even when other options are available or even cost competitive in the long run. Thus the question and challenge is to establish financing mechanisms that are capable to finance the incremental capital which is needed to assure a clean expansion right from the start and thus to avoid that non OECD countries continue to establish the same GHG intensive infrastructure which OECD countries today struggle to substitute at high cost.

Based on this concept we would like to provide some further important statements before we enter into a detailed discussion of additionality:

- The observed continuing growth in GHG emissions and GHG intensive infrastructure confirms the validity of the BAU assumption. The CDM and emerging national and international climate policies so far made important and relevant contributions but need to be reformed, broadened, complemented and improved to have the desired effect.
- A large share of GHG reductions achieved in emerging and developing countries are of structural nature as they are related to the decision to implement new clean infrastructure instead of long term GHG intensive assets which define the emission trajectory of developing countries for decades.
- Once implemented the clean infrastructure promoted in developing countries will provide long term
  emission reductions independent of the evolutions of the CDM and the carbon price. On the other hand
  most of the Emission reductions achieved in the EU ETS are related to operational decisions which lead
  to the dispatch of natural gas instead of coal and thus emissions rise again when the carbon price falls.
- If the world fails to promote a clean growth in emerging countries they will continue establishing GHG intensive assets which lead to a GHG intensive technological lock in and to very high mitigation cost in the future.

In conclusion we believe that efficient global carbon market instruments are an important instrument to allow smooth transition in OECD countries while providing an immediate incentive for clean and sustainable expansion of developing and emerging countries. Rational and sustainable GHG mitigation from global perspective implies that any expansion of infrastructure is as clean as possible, while existing infrastructure is gradually substituted. This allows minimum economic cost as it avoids stranded assets today in the OECD and in the future for developing and emerging economies. CDM is today the only mechanism of this kind and the work of the CDM Policy Panel to evaluate its reform for a broader role in the future is of high relevance.

a. Consideration of national sectoral policies (E+/E-) and ODA

E+/E-

The subject of E+/E- is a difficult issue. This is a particularly complex area and in our opinion, the CDM EB has never provided clear guidance as to what the E+/E- issue actually is. We understand that this failure is due to the fact that different people / EB members have different and sometimes contradictory interpretations of

the issue. The failure to clearly define and then apply good guidance on E+/E- is evident from the fact that having published guidance in 2005 (EB22) the EB has never again applied it to any projects. The fact is, there is non-consensual understanding of the issue or they have failed to articulate their understanding.

The purpose of the E+/E- rule was to remove the perverse incentive that the CDM might discourage governments from implementing emission reducing policies or encourage them to introduce emission increasing policies. The published guidelines allow for the baseline to be determined counterfactually excluding any new emission reduction policies introduced (to avoid the perverse incentive that any policy would reduce the potential for CDM projects), but no project, to our knowledge, has ever successfully referred to this rule as part of their additionality test. For example in around 2008, China introduced rules prohibiting the venting of concentrated methane (>30%) from coal mines. Instead of simply pointing out that this was a E- regulation, PPs had to go to significant lengths to demonstrate that the regulation was not being implemented by showing that the local and provincial EPA offices did not have the resources, that there were no incentives to help the coalmines meet the costs and there were no implementing guidelines published, and therefore that there was widespread non-compliance with the policy (which was only meant as an aspirational target, rather than a minimum requirement). Proving these things is not easy to do.

As a result, projects which could and should be applying for CDM registration are not doing so and are not being developed and implemented.

#### Critical interaction between E+/E- and NAMAs

The fundaments for the definition and understanding of the E+/E- regulation were defined at CMP1, but on the basis of the evolution around the concept of Nationally Appropriate Mitigation Activities (NAMAs) the concept is gaining a vital role for both the effectiveness of the CDM and the evolution of the mechanism into more comprehensive approaches such as sectoral crediting or crediting of NAMA policies. Despite the difficulties that we know exist, we believe that the adequate treatment and clarification of this concept is of urgent priority as it offers a solution to the difficult discussion of additionality, a valuable opportunity to promote further national mitigation policies in developing countries and convergence of global climate policies at the international level.

In the context of the development of NAMAs that are being implemented by many countries as per examples described below, the concept of E- Policies are of key interest as an adequate treatment under the CDM could lead to important synergies which can enhance the CDM's capacity to effectively curb the growth of emissions in developing countries. As many of the national policies also represent some sort of financial incentive, their adequate treatment under the investment analysis is required. To guide this objective, the Additionality Tool<sup>3</sup> and the Combined Tool<sup>4</sup> make clear reference to the E+/E- decisions (EB22) and allow the project developer the option of excluding specific subsidies and incentives from the investment analysis.

<sup>&</sup>lt;sup>3</sup> The "Tool for the demonstration and assessment of additionality (Version 06.0.0)" defines that for investment analysis "all relevant costs and revenues (excluding CER revenues, but possibly including inter alia subsidies/fiscal incentives) shall be taken into account and Footnote 11 clarifies that the "EB guidance on the consideration of national/local/sectoral policies and measures for the baseline setting" shall be taken into account.

<sup>&</sup>lt;sup>4</sup> Footnote 11 of the "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 04.0.0)" defines that "Note that according to guidance by the EB (EB 22, Annex 3), subsidies and incentives may be excluded from consideration in certain cases. Available from: http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v6.0.0.pdf

However, these definitions are imprecise and there has been a discussion about the proper treatment of the issue.

The impact of the lack of agreement and understanding of how E+/E- needs to be dealt with became apparent when the Executive Board in 2009 decided to reject the registration of ten Chinese wind projects, because it was not satisfied with the feed in tariffs from the Chinese government applied in the investment analysis. The Executive Board believed there was a reduction in the level of the feed in tariffs and construed this as an E+ policy, despite still offering significant incentives for wind power over the average grid price, i.e. still being a clear E- policy. As a consequence of this decision, which has been proven to have been erroneous, the matter involving the treatment of national policies gained emphasis at the Conference of the Parties (CMP15, in Copenhagen), and resulted in the formulation of clear guidelines to the Executive Board<sup>5</sup>:

- Affirms that it is the prerogative of the host country to decide on the design and implementation of policies to promote or give competitive advantage to low greenhouse gas emitting fuels or technologies;
- 11 Requests the Executive Board to ensure that its rules and guidelines related to the introduction or implementation of the policies referred to in paragraph 10 above promote the achievement of the ultimate objective of the Convention and do not create perverse incentives for emission reduction efforts;
- Requests the Executive Board to consolidate, clarify and revise, as appropriate, its guidance on the treatment of national policies;

Based on these instructions from the CMP, it was expected that the Executive Board would produce improved guidelines to assure that the establishment of policies that present a comparative advantage for mitigation activities do not impair their CDM eligibility and explain how such policies need to be addressed by the CDM projects themselves. However, draft guidelines<sup>6</sup> which were discussed at EB52, 53, 54, and 55, when finally it was "agreed not to continue the consideration of the treatment of national and sectoral policies in the demonstration and assessment of additionality. The Board also agreed that possible impact of national and sectoral policies in the demonstration and assessment of additionality shall be assessed on a case by case basis."

While the most pressing issue for the projects affected – all Chinese wind and hydro projects – was partially resolved by the publication of the "Information note on the highest tariffs applied by the Executive Board in its decision on registration of projects in the People's Republic of China" in June 2010<sup>8</sup>, the lack of new guidance further increased the uncertainty with regards to E+/E- in the investment analysis. This uncertainty itself de facto represents the perverse incentive to developing countries to avoid incentive policies, and in discussions that our members have with policy makers in developing countries it is common to hear concerns that GHG mitigation policies would lead to loss of CDM eligibility, a fact that certainly hinders the important process of defining such policies.

<sup>&</sup>lt;sup>5</sup> Available from http://unfccc.int/resource/docs/2009/cmp5/eng/21a01.pdf#page=4

<sup>&</sup>lt;sup>6</sup> EB 52, Annex 3 "The application of E+/E- Policies in the assessment of additionality - Working paper for policy discussion by the Executive Board", available from <a href="http://cdm.unfccc.int/EB/052/eb52annagan3.pdf">http://cdm.unfccc.int/EB/052/eb52annagan3.pdf</a>.

<sup>&</sup>lt;sup>7</sup> EB 55, para 27.

<sup>&</sup>lt;sup>8</sup> This Information Note finally made transparent the flawed information on which the projects had been rejected, mistakes which were only corrected a year later in the revision of the Information Note.

Therefore, the guidance of CMP15 has still not been addressed, and E+/E- approach still needs to be urgently clarified to ensure that the evolution of national mitigation policies is effectively promoted, rather than hindered as we observe today. As evidenced from the lengthy discussions in the EB, the issue is not straightforward, but may be resolved in a less politicised environment. The PD Forum elaborated at length on its views to the EB<sup>9</sup>, and we appreciate the opportunity to raise the issue again in the expectation that the CDM Policy Dialogue understands the importance of safeguarding the synergy between the CDM and NAMA policies as a basis for the development of more comprehensive and ambitious global mitigation mechanisms.

#### ODA

ODA is the original reason for the inclusion of "additionality" in the Kyoto Protocol text, as Parties agreed that these projects needed to be in additional to existing ODA flows. While this original meaning is no longer used, CDM projects still need to indicate whether any funding from Parties is involved in the project. However, the consequences for the project of any such funding being involved are unclear.

Therefore, the PD Forum recommends that definitions are to be improved. There are an increasing number of climate funds<sup>10</sup> and development banks<sup>11</sup> which offer preferential financing for many CDM project activities. These initiatives are extremely important to make projects viable as the CDM per definition is not capable to provide up-front financing. On the other hand we see a clear analogy to the definition of E- policies and suggest that such international policies to promote GHG mitigation should be treated in line with national policies in order to assure maximum synergy between the instruments.

b. Timing of assessment – i.e., only at the time of investment decision or continue to post-implementation (e.g., reassessing additionality due to change in project design from the registered PDD)

Additionality is by definition defined at the start, at the investment decision. For the majority of projects, once the decision to go ahead is made, an investment is made and there is no turning back. Once a wind farm is built, the additionality can not be re-assessed – of course, once commissioned it's the most economic option to operate the project; therefore a annual re-assessment would lead to the meaningless conclusion that once installed it is the most economical decision to operate the project. Only if there were a fuel (or feedstock) switch project with no conversion costs at all, and only the input prices need to be considered, then the decision of switching could be made again every day.

Of course, for major changes in project design, which would have significantly affected the original additionality assessment, we should consider post-registration checks. Indeed, the project entity will have done a full assessment for their own decision making for such a change. However, not all changes affect the additionality, and the majority of small changes are part of the normal process of implementing a project – a rigorous approach which sets in stone the whole project without any changes being possible is unworkable.

 $http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/CTF\% 204-22-10\_print.pdf$ 

<sup>&</sup>lt;sup>9</sup> Various letters on <a href="http://pd-forum.net">http://pd-forum.net</a>, and specifically <a href="http://www.pd-forum.net/files/6d3e4783b8f1dc9424f05a630fbfb767.pdf">http://pd-forum.net</a>, and specifically <a href="http://www.pd-forum.net/files/6d3e4783b8f1dc9424f05a630fbfb767.pdf">http://www.pd-forum.net</a>, and specifically <a href="http://www.pd-forum.net/files/6d3e478ab8">http://www.pd-forum.net/files

<sup>&</sup>lt;sup>10</sup> For example the Climate Investment Fund:

<sup>&</sup>lt;sup>11</sup> For Example the European Bank for Reconstruction and Development has established the Sustainable Energy Initiative to scale up finance for climate change mitigation and its credit lines have been important to support many CDM projects.

We believe greater clarity with regards to the requirements at the point of the renewal of the crediting period is urgently required. Without better guidelines, DOEs tend to be more conservative and demand unnecessary reassessments. At the renewal point, only the emissions baseline should need to be reassessed, not the additionality.

However, it may be possible to reassess the duration of the crediting periods. Some projects types may not require up to 21 years, while others may need longer. It may also be useful to consider whether projects should be registered for the whole period, rather than needing to go through a renewal of the crediting period, while of course the emissions baseline may still need to be redefined – perhaps in line with the baselines in sectoral crediting.

c. Certain CDM projects/project types for which concerns about additionality have been raised (e.g., industrial gas projects, large hydro and coal projects)

#### Industrial gas

Industrial gas projects are generally highly additional. There is significant expenditure, but no income whatsoever, except CER revenue. There can be no genuine additionality concern regarding these projects. We believe the concerns for these projects are two-fold:

- (1) The reductions achieved are very large while the costs on a per tonne basis are limited. Therefore, industrial gas projects have proven to be highly profitable for the project participants involved. There have been concerns raised for the impact on potential more expensive renewable energy and energy efficiency projects. However, that is not an additionality concern, but the proper working of market forces, seeking out the cheapest reductions.
- (2) There were concerns about the level of the baseline set by the projects, which were however validated by a third party and approved by the Executive Board. An over-estimate of the baseline increases the potential emission reductions that can be achieved. The latest version of the methodology is meant to address this issue, and probably significantly under-estimates the baseline (but due to the volumes involved, may still be economically viable).

Large hydro

See our answer to 18.

#### Coal

The concerns about coal projects are probably as much about environmental philosophy as additionality: a new coal plant locks in the use of coal for 30 years or possibly more. On the one hand, this is argued that it cannot be squared with the sustainable development requirement of the CDM. On the other hand, however, the methodology applicable to coal projects is limited to economies where coal is the dominant fuel, and therefore reliance on coal will continue for a long period irrespective of CDM or any other policy. If coal is being employed, it better to use the highest possible efficiency. If this highest efficiency is not economically attractive, lower efficiency plant will be constructed instead. By approving the methodology, the decision had been made by the Board that reductions achieved by more efficient coal-plants could in principle be CDM.

While some concerns have been raised about estimated reductions being very large<sup>12</sup>, the reality to date is that no reductions have been issued at all. Additionally, because of the conservativeness of the methodology actual reductions that may be achieved for some of the projects is far smaller than estimated ex-ante and may turn out to be 0, as the baseline is updated annually to account for newly added plants.<sup>13</sup>

d. Appeals process (for registration and issuance decisions) and liabilities for negligent conduct and excess issuance (including allocation between the PP and DOE)

See our answer to 9 above.

- e. Other (Pls. identify, if any)
- 11. Do you agree that there is a need to verify the additionality of CDM projects after registration? Why/Why not? What events and circumstances could change additionality after registration?

No. The additionality is by definition defined at the start, at the investment decision, and reflects the decision basis at that time. For the majority of projects, once the decision to go ahead is made, an investment is made and there is no turning back. For example, once a wind farm is built, the additionality can not be re-assessed – of course, once commissioned it's always the most economic option to operate. Only if there were a fuel (or feedstock) switch project with no conversion costs at all, and only the input prices need to be considered, then the decision of switching could be made again every day.

Additionally, a re-assessment of the project at a later date, against new and different rules, applying new and different information and knowledge, does not deliver a credible verdict on the original project's additionality as it was not part of the decision whether or not to go ahead with the project.

There needs to be more clarity on the fact that the additionality should not be reassessed at the renewal of the crediting period. DOEs are making demands for reassessment that do not tally with the guidelines.

12. What is your overall view on the role of the CDM Executive Board in the CDM Process? Does the EB discharge its responsibilities effectively? Otherwise, can you suggest ways in which the EB performance can be improved?

Great strides forward have been made in the last few years. However, there is still significant scope for improvement.

We would like to highlight the inefficiency of the process whereby a near-full second validation/verification takes place, as the Secretariat effectively double checks the work performed by the DOEs. We look forward to the time when the DOEs are again trusted to make the recommendations and the Secretariat and EB can concentrate on running the CDM and protecting its integrity.

<sup>&</sup>lt;sup>12</sup> There are 6 projects registered with a total ex-ante estimated reduction of nearly 9 million tonnes of CO2e per year, and another 36 projects still in the pipeline, with a total of 32 MtCO2e/y reduction.

<sup>&</sup>lt;sup>13</sup> We have seen the same happen with some gas-fired plants, where the updated baseline due to the commissioning of additional hydro plants leads to the project receiving no reductions whatsoever.

The CDM EB's part-time status remains a problem. Considering the volume of work that is being undertaken, as evidenced by the extensive annotated agendas, it is surely clear that the EB should be a full time body. We would like to see better control over conflicts of interest. Many EB members are also negotiators for their countries and we believe that this has a tendency to politicize decision making and detract from concentrating on the issues of assessing projects against rules and methodologies. Thus we would like to see membership of the EB broadened out from the usual sources of members to include other stakeholders, which the Joint Implementation Supervisory Committee (JISC) already does. We would also like to see more use of voting and a better sense of proportion such that other major decisions on the agenda are not delayed whilst the Board debates immaterial issues.

13. Please comment on the secretariat as a body in the CDM process. Does the secretariat discharge its responsibilities effectively?

The Secretariat is doing a good job but of course there is still room for improvement. Interaction with stakeholders (as noted above) has improved and the new procedures associated with the Project Cycle Procedure will no doubt improve the process. There remain areas where the PD-Forum has continued to ask for better rules, including (but not limited to) direct interaction on project-based issues; common practice and first of its kind guidance; materiality; better adherence to timelines etc.

We would also note the very high level of technical expertise that has been built up within the Secretariat, which is a great asset for the CDM and the UNFCCC in general.

We would like to see a stronger commitment to maximizing the value of the market, which per se includes a strong commitment to environmental integrity.

14. Does the current system, in your view, provide for effective means of communication between various stakeholders in the CDM process, e.g., between DOEs and Project Proponents, Project Proponents and EB, EB support structures and DOE/Project Proponents, and Secretariat and other stakeholders etc.). Can you suggest any improvements?

Communication could be improved. However, we would like to note the good progress made in recent years, in particular the various roundtable workshops held by the Secretariat since January 2011. These workshops have provided PPs with good opportunities to meet with Secretariat staff and contribute, hopefully constructively, to the development of better modalities and procedures. We believe that these workshops have greatly contributed to the better working of the Secretariat and EB.

Unfortunately, we have experienced that the communication between the Secretariat and DOEs is lacking. Many times when we seek a simple clarification from a DOE their response is that they have to check with the Secretariat; and responses can take a very long time. There has been the need for PPs to circumvent the DOE-Secretariat communication line to avoid both delays and misunderstandings.

However, we are well aware that the new procedures provide for better communication and we look forward to their full implementation. In particular we strongly support the introduction of a direct phone line between the EB and DOEs, which is scheduled to have started in May 2012. As usual, the PD-Forum will take the opportunity to provide feedback on these new procedures as and when we can.

#### **IMPACT OF CDM**

15. What is, in your view, the main purpose of the CDM? Should the CDM contribute to net mitigation of greenhouse gas emissions or is it simply a pure offset mechanism? Which of the following additional objectives should CDM aim to achieve, and why?

"The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3."<sup>14</sup>

The CDM therefore has three objectives, each of which the CDM is contributing to. While the CDM acts as an offset mechanism for its third objective, it also contributes to net mitigation of emissions in the following ways:

- The conservativeness of the baseline methodologies and development, and the conservative choice of parameters and default factors leads to an under-estimate of the baseline emissions compared to the actual situation. Therefore, emission reductions credited are less than the emission reductions achieved. For example, the requirement to use the emission factor at the lower level of 95% confidence interval, rather than the IPCC's best estimate of the average value, when calculating the grid emission factor is likely under-estimating the factor by about 5% to 10%. In other applied methodologies reductions could be 10% to 30% under-reported.
- CDM projects help overcome financial and other barriers within their sectors, and help shift the baseline to higher efficiencies and lower emission alternatives. For example, the implementation of renewable energy CDM projects will help increase further, autonomous penetration of renewables within the electricity sector.
- The Kyoto Protocol targets were accepted within the whole package of the Protocol. The mechanisms played an important role in reducing the perceived cost of the mitigation targets, and therefore without the access to the mechanisms, the targets would have been (even) less ambitious if it had been possible to reach agreement in the first place, which given the negotiation politics in Kyoto in December 1997 would have been highly unlikely. The Kyoto Protocol owes its very existence in part to the CDM.

We are aware of the debates surrounding the issue of the CDM as offset mechanism, and its contribution to net emission reductions. While we believe this is mostly misguided, for the above reasons, a discussion about ambition of effort of both Annex I and non-Annex I is necessary. Ambition needs to be increased, and longer-term ambition needs to be agreed, with targets for 2020 and beyond long overdue. The lack of future targets is highly detrimental to the Carbon market.

We believe that the CDM is a good framework within which ambition can be increased. Those Parties that have taken on emission reduction targets, do so legitimately with the possibility of the CDM as a source of emission reductions. Similarly, developing countries can increase their ambition with the help of the CDM, for example by actively taking part in CDM projects, or by claiming part of the reductions as domestic effort.

However, we want to highlight two aspects. First, any limitation on the actual reduction that may be claimed by a CDM project will reduce the incentive to initiate the mitigation effort of the project; this would result in

<sup>&</sup>lt;sup>14</sup> Article 12, paragraph 2 of the Kyoto Protocol.

some project types dropping out. Second, from a methodological point of view, it is problematic to have different baselines for additionality (business as usual) and emissions (baseline scenario); it furthermore requires the EB and the parties to determine such a synthetic baseline, as it cannot be validated by any DOE.

#### a. Sustainable development

In accordance with Article 12 of the Kyoto Protocol, the CDM should contribute to sustainable development. Project developers believe this is correct. However, under the UNFCCC emission reductions must be considered to be a contribution to sustainable development; therefore, it can be concluded that all CDM projects meet this criterion. Indeed, each registered project has been confirmed by the host country to be contributing to sustainable development.

While the Project Developers Forum (PD Forum) is happy with the requirement of contributing to sustainable development, two potential pitfalls must be avoided: (1) The CDM can not be considered as, or demanded to be, the "miracle cure" which will provide all elements of sustainable development as well. (2) The quantification of the contributions of any project to sustainable development is not an exact science; therefore, it is not realistic to expect CDM projects to provide an indisputable assessment of their contribution to sustainable development.

#### b. Technology transfer

There is no requirement in the Kyoto Protocol for CDM projects to contribute to technology transfer. We believe that this is correct, there should be no requirement for technology transfer as it risks the CDM becoming a technology export subsidy mechanism, which would fail many other objectives.

However, technology transfer is defined as 'a broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders'. Using this definition, there are many examples where CDM has contributed to technology transfer.

#### c. Regional distribution (of benefits associated with CDM projects)

The CDM is a market-based mechanism. Therefore, CDM projects will take place where they are most economical to be carried out. This is not necessarily an equal distribution between each developing country. We do not believe it is the role of the CDM to enforce a more equal distribution, however that is defined.

Depending on the metric used, the distribution can be seen to be more, or less, equal. For example, LDCs may have a relatively high share of the CDM on a tonnes reduced per capita basis (as a result of a few very large associated gas projects); and China may be considered under-represented if economic growth since 2000 is taken as the metric.

However, project developers are eager to develop projects in countries where there are few projects. Current efforts to encourage CDM in some countries, LDC, SIDS and countries with less than 10 projects, is helpful. However, the lack of CDM projects is generally not a sign of a problem with the CDM, but a problem with the investment climate in that host country, or the scope for reductions. The CDM can not help to overcome

<sup>15</sup> http://unfccc.int/essential\_background/glossary/items/3666.php.

issues such as a highly unattractive investment climate due to for example civil war, hyperinflation, or lack of rule of law.

16. Do you think the CDM has contributed to sustainable development in host countries? If so, in your view, what aspects are most significant (e.g., increased renewable energy supply, demand-side energy efficiency, employment and income generation, etc.)? Do you have any suggestions for how such contribution could be enhanced?

Yes, the CDM has contributed to sustainable development. It has been confirmed by the host countries that each registered CDM project is contributing to sustainable development. The CDM has resulted in a massive uptake of renewable energy and energy efficiency projects. This has provided large amounts of additional jobs, reduced the use of fossil fuels and often reduced the host country's reliance on imported fossil fuels. In some cases, the CDM has stimulated some sectors significantly. For example, since the operationalisation of the CDM in China, the Chinese wind sector has gone from relying almost completely on demonstration projects and ODA-funded projects, to being the biggest wind market in the world, including the biggest turbine manufacturers.

The most commonly used definition of sustainable development comes from the Brundtland Commission and talks about meeting the needs of people today without impacting upon the ability of future generations to meet their needs. If you believe that GHG emissions are changing the climate and that changes in the climate will impact upon future generations' ability to meet their needs, then any action which reduces GHG emissions contributes to sustainable development. Even though the output from the CDM (certified emission reductions) is predominantly used as offset mechanism, it is an essential part of the flexibility mechanisms which enable the Annex 1 Parties to the Kyoto Protocol to sign up to binding targets, as well as reducing mitigation costs. On this basis, the CDM has made a very significant contribution to sustainable development at a global level.

At the level of the host countries, firstly it is important to remember that contribution to sustainable development is a sovereign issue and therefore each host party has the right to determine whether, in their opinion, a project contributes to their sustainable development. This is still very much the belief within the Parties as negotiations in the CDM contact group in Durban reaffirmed – i.e. the resistance from Parties to accept any form of guidance on the assessment of sustainable development benefits.

Having said that, it is difficult to envisage a CDM project which does not deliver sustainable development benefits. Renewable energy projects, the most common project type under the CDM, decrease an economy's reliance on fossil energy, extend grid power to more users and improve the reliability of power supplies. In fact, providing renewable energy to an economy is quite possibly the single greatest sustainable development benefit that an investor can bring to a country. Other CDM projects which for example utilize methane for power generation or promote energy efficiency in cook stoves, better transport or waste heat recovery all help an economy to reduce its reliance upon fossil fuels or unsustainable biomass and therefore act to help future generations meet their needs. Even industrial gas projects, which are often criticized as delivering no sustainable development benefits, have a huge impact on GHG emissions, generate revenue for the host and host country governments through fees and taxes and contribute to the CDM EB's SOP/admin fund.

Finally, the CDM brings in jobs, FDI, local government tax revenue and infrastructure improvements, all of which contribute to sustainable development. However, the CDM cannot be considered as, or demanded to be,

the "miracle cure" which will provide all elements of sustainable development in each of its projects. It is first and foremost a mechanism to reduce emissions in the developing world.

Should the CDM contribute to sustainable development – yes, we believe that it should but, based on the above, we note that a requirement to contribute to sustainable development is not an effective screen for CDM projects because there are very few if any technologies applied to CDM projects which cannot be shown to contribute to sustainable development. In other words, we do not know of any projects which have been rejected on the basis that they do not contribute to sustainable development.

Our concern about the sustainable development impact of the CDM is that it is NOT recognized and that sometime in the future, we will be required to monitor sustainable development impacts. Our experience with such requirements are that unless metrics such as MWh of renewable energy or GHG emission reductions are counted, many SD benefits are both highly subjective and expensive to monitor – for example contribution of income to local economy, training, education and biodiversity.

Some members consider that a simple do no harm assessment could be added to the CDM validation although, as noted above, there are few examples of CDM projects which do harm, and the assessment should not infringe on the host government's sovereign judgements. It should also be noted that monitoring of sustainable development benefits will add further cost to the already lengthy and costly CDM process, to measure what are highly subjective criteria, decreasing the attractiveness of smaller scale projects.

While monitoring of sustainable development indicators defined at the EB (or Gold Standard) level are not going to enhance the CDM projects' contributions to sustainable development significantly, it will add further to the cost of projects. However, the mechanism's contribution to sustainable development will be most enhanced if host countries (DNAs) define more clearly and transparently what their specific requirements are. The contribution to sustainable development is a sovereign issue, as the majority of the aspects are local or national, rather than global. An imposition of demands from "above" is not possible.

17. Do you think that the CDM has contributed - directly or indirectly - to increased renewable energy supply and/or increased demand-side efficiency in host countries? Please explain on what basis you form your view on this matter.

According to the latest UNEP Risoe CDM Pipeline<sup>16</sup>, 68% of CDM projects are renewable energy projects, and 7% are supply side efficiency projects. Each of these projects will have led to an increased energy supply. In addition, the many of the methane avoidance projects, making up 17%, includes the use of methane for energy productions. All these projects have shown to overcome serious barriers to their implementation. The CDM Pipeline directly contributes more than 225 GW of renewable energy supply and nearly 100 GW of energy efficiency measures in host countries. Indirect contributions by the CDM are unknown.

18. Should large scale hydro power plant projects remain eligible in the CDM? What is your view on the criticism that has been leveraged against such projects?

Many of our members have large scale hydro power projects and we believe that these projects have been heavily scrutinized by the EB and been found to be additional against the CDM rules.

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<sup>&</sup>lt;sup>16</sup> UNEP Risoe CDM/JI Pipeline Analysis and Database, May 2012.

It is important to note that much of the potential global hydro capacity is yet to be utilised, this is particularly true in developing countries. In South America less than 25% of hydro power is utilised, in Africa this figure drops to less than 9% <sup>17</sup>. There is a great variety of projects within the hydro sector and the CDM has been very successful at identifying those projects that would not have been constructed without income from CDM and helping to ensure that they are constructed. There are also examples of projects that have been registered as CDM projects, but still failed to find financing for their construction showing that the projects faced even more barriers than anticipated. Thus it is clear that the existence of hydro projects built without the CDM does not undermine the additionality of the registered CDM projects.

We are aware of studies that have criticised large hydro projects in the CDM by considering all projects in the sector rather than only the ones registered as CDM projects. Such an approach is flawed due to the variety in the sector as described above. To date there is no concrete evidence that any non-additional projects have ever been registered as CDM projects.

Hydro power projects can contribute to sustainable development of the host country by providing clean and reliable electricity, and therefore they have a place in the CDM.

While the application of the WCD criteria should be a matter for the host country approval process – probably within the environmental and social impact assessment, as it is in many countries which have signed up to the WCD – for any dams project, we understand the desire for this assessment to be separately included within the CDM for some projects. Unfortunately, the transaction costs associated with third party assessment can be quite high. Therefore, we do not believe the third party assessment should be required for all large scale projects, for example where these requirements are already applied by the host country in the project planning approval process, or for large-scale run-of-river projects do not create large reservoirs and the costly WCD assessment is unlikely to add any useful information.

Large scale hydro power projects are one of the most relevant project types under the CDM and many of our members are involved as investors or CDM project developers to broaden the use of this fundamental renewable energy source to satisfy the fast growing energy demand of developing countries where fossil fuelled generation often is the only alternative. In addition, hydropower is also essential to allow the growth of other intermitting renewable sources, such as wind and solar, as it provides the necessary back up and energy storage capacity. Again, fossil fuelled generation capacity is the only alternative to provide back up to those energy sources.

The importance of hydropower as GHG mitigation technology is also recognized by the recent IPCC SRREN report <sup>18</sup>. The publication identifies that hydropower offers significant potential for emission reduction and for catalyzing sustainable development, but that its participation in global energy supply has been dropping from 21% in 1973 to 16% in 2008 and that this process will continue unless appropriate policies to facilitate financing are being established. The report clarifies that long construction times, high upfront costs, uncertainties in relation to geological circumstances, difficulties and risks in relation to environmental licensing and thus risks for unexpected cost overruns and delays of completion are key obstacles for the development of hydropower. As one of its recommendations to facilitate the development of such projects, the report highlights the use of carbon market instruments to support the financing of such investments.

<sup>18</sup> Special Report on Renewable Energy Sources and Climate Change Mitigation, Chapter 5 – Hydropower, published by the IPCC in 2011, available from http://srren.ipcc-wg3.de/report.

<sup>&</sup>lt;sup>17</sup> Journal on hydropower and dams 2009

The report also discusses local socio-environmental aspects and emphasizes that hydropower in the past has shown to be an important inductor of socio-economic development on the basis of many co-benefits which generate indirect economic benefits of 0.4 to 1 USD per each USD invested. In relation to the local environmental impacts the publication highlights that "one large-scale hydropower project of 2,000MW located in a remote area of one river basin might have fewer negative impacts than the cumulative impacts of 400 5MW hydropower projects in many river basins", a concept that illustrates that large is not necessarily equivalent to worse.

It is also of interest to realize that there is a strong correlation <sup>19</sup> between a country's economic development and the degree in which it uses its hydropower potential. Accordingly, developed countries such as France (100%) Germany (83%) as well as the US, Norway, and Japan (~60%) and Sweden (55%) have developed a high degree of their hydropower potential, while South America on average has developed less than 25% of technically feasible hydro power potential, while in Africa this figure drops to less than 9% <sup>20</sup>. These numbers do not only show the important economic benefit that developed countries have obtained from hydropower, but also the potential and central role that hydropower could play for the clean sustainable economic development of many of the developing countries.

In spite of these clear references, we are aware about the studies and voices that criticize hydropower for alleged lack of additionality and contribution to sustainable development. But contrary to the often superficial and flawed arguments, which imply that hydropower projects would be developed in any case, developing countries struggle with the high upfront costs, the huge uncertainties in relation to construction cost and completion time and the resulting difficulties to attract investors, a fact that leads them to install long term fossil fueled generation assets to address immediate need for energy which cannot wait until hydropower projects are eventually made viable.

In this context the CDM was and remains a key incentive for many investors which are attracted by a project type that generates enough CER volumes to compensate the cost and effort of the CDM process and also remunerate the additional cost and risk they are taking with this project type.

In fact the CDM has been very successful at identifying hydropower development opportunities and use the CDM revenues to gradually take them towards effective implementation. This is shown by examples of projects that were effectively commissioned as well as by others that, even after CDM registration, took years to initiate implementation or that still struggle to complete their financing, which shows that the CDM alone is often not able to overcome the massive barriers. More and more we now also see that developing countries establish complementary support policies to catalyze the effective development of hydropower and in such a promising situation it would be the wrong signal to withdraw the important support that CDM is providing to these projects and countries. Rather than questioning and increasing the risk profile of hydropower under the CDM we promote that this project type gains special attention to understand all the economic, institutional, technical and environmental barriers in order to assist developing countries with the competencies and capabilities which allow implementation as well as maximizing socio-environmental benefits and minimizing impacts of such projects.

<sup>&</sup>lt;sup>19</sup> Brazilian Ministry of Mines and Energy (Ministério de Minas e Energia) National Energy Plan 2030 – 3 – Hydroelectric Generation (Plano Nacional de Energia 2030 – 3 Geração Hidreléctrica), available at: <a href="http://www.epe.gov.br/PNE/20080512">http://www.epe.gov.br/PNE/20080512</a> 3.pdf, published in 2007

<sup>&</sup>lt;sup>20</sup> Journal on hydropower and dams 2009

Here it is important to reiterate that our globally acting members are already actively working and contributing to these tasks by establishing standards and procedures to manage, increase and certify the socio-environmental benefits of their hydropower projects and to transfer experiences from one country and region to another, an information and capacity exchange which, in the absence of the CDM, would hardly occur.

Based on these facts and arguments and the results of the CDM registration process of many hydropower projects which have demonstrated their additionality on the basis of investment analysis, barrier analysis and common practice, it is clear that hydro projects often need the additional support to be viable and deserve further support to reduce or eliminate the important barriers they face, which reinforces the environmental integrity of the emission reductions they generate. Furthermore it is important to mention that the usual operational lifetime of 50 or more years exceed the crediting period of the CDM and thus the CER crediting is much lower than the effective volume of emission reductions achieved by these projects. This is also the reason for the fact that hydropower has a much higher energy payback than any other renewable energy source and this long term renewable energy generation capacity makes this project type so valuable for sustainable development.

We therefore conclude that hydropower is among the most valuable project type to promote sustainable development as well as long term emission reductions that exceed by far the amount of CERs that they are being credited with.

With regards to the frequent criticisms that are being raised against hydropower we would like to offer the following views:

Criticism 1: Large HPPs cannot be additional as the CDM is too uncertain and the revenues to small make a difference:

In our view, this comment is incorrect. Small revenues can still make a big difference, as illustrated using a simple example:

- Considering a specific Capex of €2 million/MW installed capacity, three year construction time, a grid emission factor of only 0.5 tCO2/MWh, and a load factor of only 60%, the CER revenues over the project life correspond to €136,000 net present value at a 10% discount rate, which is about 7% of the total Capex per MW installed capacity, assuming a CER price of €8.
- If 70% loan financing is available, which is fairly conservative, the CER revenue corresponds to 23% of the equity to be invested.
- Even using the current low prices, CERs still provide a significant financial contribution for large scale projects as CDM transaction and management costs are diluted.

We hope that this illustrates the importance of CDM for hydropower, but we also reiterate that a reduction of the CDM registration risk is of key importance to assure that hydropower can be developed to avoid the ongoing expansion of thermal power even in regions with large hydropower potential.

Criticism 2: Large HPPs do not deserve CDM as they already receive support from national policies

The fact that Large HPPs need support policies to be viable has already been stated by the IPCC, which emphasized that such policies are to be widened to make sure that large hydro can develop its mitigation

potential. Now it is also true that more and more countries start to establish such support policies on the back of their NAMAs and there is in fact a strong synergy with the CDM to make projects viable. In line with the concepts already described above, we see this as a clear proof of the additionality of large hydropower projects.

19. Did CDM contribute to technology transfer in the projects assessed by you? Do you see any trends in how specific sectors or countries have benefited from the technology transfer? Are there ways in which such trends can be improved or replicated in other sectors and countries?

Yes. There are many examples where CDM has contributed to technology transfer. Technology transfer is defined as 'a broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders'.<sup>21</sup>

In some cases investors import "equipment", and in many other projects know-how and experience are transferred. Some general examples:

- Some of the industrial gas reduction projects apply specific catalysts or proprietary processes, which are transferred from Annex I.
- The early coal mine methane capture and destruction projects were using foreign equipment and know-how to overcome the barriers. More recently, domestic equipment can also be used for these project types. Therefore the CDM has not just led to some imported equipment, but has contributed to the establishment of a whole new industry in the country.
- The Chinese wind sector has grown dramatically since the start of the CDM. While in the early years much of the equipment was imported, domestic manufacturing has been established and some manufacturers are now among the biggest in the world. Some of the domestic manufacturing is by foreign companies, others are joint ventures and many of the rest are employing Annex I technology under license or joint developed the technology. Therefore the CDM has not just led to some imported equipment, but has contributed to the establishment of a whole new industry in the country.

Technology transfer encompasses many different aspects, not just engineering technology. For example, in addition to engineering technology transfer, many CDM projects have also contributed to the development of financial capacity through demonstration of innovative financial models; training and education of staff and contractors including in the implementation of monitoring systems, and health and safety systems; the development of business models including improved EPC and servicing contracts. These kinds of technology transfer are very important in helping an economy get ready for its own domestic emission reduction legislation.

For example, deployment of coal mine methane utilization technology in China has contributed massively to technology transfer to the mine in question, both in terms of engineering and other aspects, including: improved mine drainage technology; training in health and safety and a reduction in methane related downtime; construction, operation and maintenance of a state of the art integrated methane power and flaring system which is designed to optimize methane utilization and maximize methane destruction. None of these technology transfer benefits would have arisen had the CDM not lead to the investment, which is entirely funded from revenues from CERs.

<sup>&</sup>lt;sup>21</sup> http://unfccc.int/essential\_background/glossary/items/3666.php.

Even when CDM projects use locally manufactured equipment, they can contribute to technology transfer. In many cases, CDM project engineers work with local suppliers to improve the reliability of locally manufactured machinery; in many cases, some parts of the equipment are manufactured locally whilst other parts, typically control systems or critical components are imported. In the process, local manufacturers learn the benefits of better quality equipment, for example the impact of quality on the costs of spare part inventories and downtime.

For example, in the Chinese wind sector projects initially relied on imported machinery, but over time a domestic industry has grown, with domestic manufacturers supplying the equipment. In addition, these domestic Chinese producers still use foreign machinery in their production facilities, as well as using imported components, particularly control systems. Whilst the nameplate on the turbines may be Chinese, a significant amount of technology has still been transferred in order to construct such a wind farm.

One of the difficulties with technology transfer, however, is quantifying the benefits. For the most recent examples of the benefits of the CDM, please refer to the "Meet the Beneficiaries" event hosted by IETA in Brussels in March this year.

20. Do you consider that the CDM has leveraged new and additional financing for mitigation? If so, are there any particular sectors or countries where you find technology transfer being more prominent? What do you think are the barriers and enabling factors for technology transfer?

According to the latest UNEP Risoe CDM Pipeline<sup>22</sup>, 195 billion dollars worth of investment in registered emission reduction projects has been leveraged, with a further 290 billion not yet registered.<sup>23</sup> The vast majority of the CDM projects in the pipeline have proven to be additional, using the investment analysis. Therefore, the CDM is by far the most successful international instrument for leveraging new and additional finance for mitigation.

Clearly in pure abatement projects where there are no other revenues, the CDM leverages all of the financing. In a typical wind or small hydro project, CER revenues represent 15-20% of total revenue, a significant portion of the overall revenue. In other cases, even where the contribution of CER revenues is relatively small, leverage can still be very high. This is because CERs offer a revenue stream with a completely different risk profile than that from the underlying project. As a result, it is sometimes possible to raise equity on the back of the expected revenues from CERs which can then be used to raise debt for the project. These points have been made to the CDM EB in the past, and below is an extract from the PD Forum's submission on the annotated agenda to EB  $66^{24}$ :

"Finally, the PD Forum noted discussions in Durban around the eligibility of capital intensive projects and projects where CER revenues only form a small component of overall revenues. It was proposed that such projects were unlikely to be influenced by CDM revenues and that therefore it was not credible to claim that these projects were going ahead a result of the Kyoto Protocol.

The PD Forum considers that this proposal amounts to a significant change to the nature of the additionality test and we have listed the following points as reasons why the CDM can stimulate the development of capital intensive projects, even when the revenues are small:

<sup>&</sup>lt;sup>22</sup> UNEP Risoe CDM/JI Pipeline Analysis and Database, May 2012.

<sup>&</sup>lt;sup>23</sup> The investment amount is only listed in the UNEP Risoe CDM Pipeline for projects using the investment analysis.

<sup>&</sup>lt;sup>24</sup> http://www.pd-forum.net/files/ddd28d051fbfc61e9a8cd89ae45de96d.pdf

- There is no requirement in the additionality tool to show that CER revenues raise performance above a certain threshold, only that they contribute to the project's returns
- Investment decisions are made on the basis of a wide range of variables and a weighting of a number of risks alongside pure financial returns. The value of a second or additional cash flow in EUR or USD which can be repatriated without interference from the host government (at least for now) cannot be under-estimated in this decision making process
- The assessment of the contribution of carbon revenues to overall revenues is made against projected prices. Often a value of USD10 is used in the "with-project" analysis. Many developers remain optimistic that prices will increase and over a 21 year project lifetime, or even a 10 year project life, there is considerable scope for appreciation in revenues. In which case it is not possible to accurately estimate the full extent of carbon revenues compared to other revenues. This is a judgment which individual investors must make themselves.
- In many cases, the existence of an "upside" for an investment is sufficient to trigger an otherwise marginal investment decision. Portfolio managers often manage risk by ensuring that they have a strong likelihood of making a very modest return to at least get their money back with a low rate of interest on all of their investments and if only a proportion of projects deliver an upside they can still meet their expected returns overall.
- Many projects have used the existence of an ERPA to secure debt financing for projects, so the very existence of the CERs makes the financing possible.
- Others which are funded purely by equity, often use the demonstrated revenues from the operating (built) project's deliverables plus the carbon revenues to re-finance with debt and release the equity for reinvestment. (When the project is operational, revenues are flowing and the majority of risks have been negated, cheaper debt financing becomes available. Such debt finance is typically unavailable for new technologies and projects in unfavourable locations because of the perceived risks exactly the kind of projects which the CDM encourages). Thus, the fact that CER revenues will help to release equity is more important than the relative magnitude of predicted CER revenue streams. The CERs "oil the wheels" that make the financing possible in a way that would not have happened without the Kyoto Protocol.
- The CER revenues may be pledged to senior equity investors who are required to provide a proportion of the capital before debt financing can be raised. In many cases, therefore, it may be more accurate to evaluate the magnitude of the CER revenues against the equity invested and not the total cost of the project. In this way, the CER revenues are leveraged and may carry much more weight than would otherwise be apparent.

Financing of projects is a complex exercise, and more so as projects get more capital intensive. Suggesting that CER revenues could not influence an investment decision on a capital intensive project grossly over-simplifies the investment process.

We hope that these inputs are helpful in your discussions going forward. Should there be any questions regarding our comments, please do not hesitate to contact me through the contact details provided above."

With regards to the specifics on whether there are any particular sectors or countries where technology transfer is more prominent and what the barriers and enabling factors are, it would be difficult to give a comprehensive answer without a detailed study. However, many CDM project PDDs will be describing the barriers (and maybe the enabling factors). We can list a non-exhaustive list of technologies that have seen dramatic uptake since the start of the CDM:

- Efficient cook stoves
- Manure management

- Agricultural residues utilisation
- Coal Mine Methane (CMM) and Ventilation Air Methane (VAM) utilisation
- Landfill gas utilisation
- Wind
- Waste heat recovery
- HFC23 incineration
- 21. How should the CDM Executive Board aim at increasing the regional distribution of projects and mitigation activities? Do you see PoAs making a difference?

See our answer to 15.c above. The CDM is a market-based mechanism. Therefore, CDM projects will take place where they are most economical to be carried out. This is not necessarily an equal distribution between each developing country. We do not believe it is the role of the CDM to enforce a more equal distribution, however that is defined.

However, project developers are eager to develop projects in countries where there are few projects. Current efforts to encourage CDM in some countries, LDC, SIDS and countries with less than 10 projects, is helpful. However, the lack of CDM projects is generally not a sign of a problem with the CDM, but a problem with the investment climate in that host country, or the scope for reductions. The CDM can not help to overcome issues such as a highly unattractive investment climate due to for example civil war, hyperinflation, or lack of rule of law.

PoAs are helpful for certain project types, in particular where the individual activities are small but the number of activities can be large, such as efficient cook stoves or CFL. Whereas the larger scale "normal" CDM projects are likely to be more restricted to the larger and/or more developed host countries, the PoA project types are relevant in all CDM host countries; therefore PoAs will aid the regional distribution.

22. What factors influence CDM implementation in particular countries, and constrain CDM investments in underrepresented regions such as LDCs?

See our answer to 15.c above. The lack of CDM projects is generally not a sign of a problem with the CDM, but a problem with the investment climate in that host country, or the scope for reductions. The CDM can not help to overcome issues such as a highly unattractive investment climate due to for example civil war, hyperinflation, or lack of rule of law.

Host country infrastructure and DNA capacity are important factors for successful implementation of CDM projects. For example, China greatly facilitated CDM investment by setting benchmarks to demonstrate additionality and publishing a grid emission factor, and the DNA issues LOAs with reasonable predictability. Many LDCs present the opposite of the Chinese example, with DNAs lacking capacity to support project developers, data to establish additionality and baselines hard to get and often of low quality, causing problems during validation and verification, and complex and uncertain DNA processes.

Arguably more important is the underlying emissions of a country. In China and India, because of the massive amount of emissions, large industrial base, huge population and reliance on GHG-intensive coal-fired power stations, it is easier to find CDM opportunities. By contrast, in LDC emissions are so low that it is difficult to generate emission reductions.

Complex methodologies and technology risks also are often key barriers to investment. At present, the current low prices for CERs substantially restrict investment. Finally, the credibility and stability of any subsidy, such as the CDM, is critical for investment in a project. Without clear policy stability, projects that require CDM financing are unlikely to be implemented.

Another important factor is the perceived success of early CDM projects and there are many examples of where successful early projects have been replicated at scale. These in turn influence the ability to recycle revenues back into new projects. In this respect, the role of development banks and DNAs are very important in influencing successful CDM implementation.

- 23. To what extent has suppressed demand for energy and other services been recognized in carbon accounting and operationalized as a source of avoided future emissions?
- 24. Are suppressed demand and standardized baselines pertinent issues for the future of CDM? What are the implications if these are taken into account, and how should CDM procedures be reformed to realize this?

Please see our submission to the EB on this subject: <a href="http://www.pd-forum.net/files/41e6b5ce877a94d5ba00a0ebfbf15da9.pdf">http://www.pd-forum.net/files/41e6b5ce877a94d5ba00a0ebfbf15da9.pdf</a>.

#### **FUTURE CONTEXT OF CDM**

25. What is your overall view regarding the future of the CDM? Will it continue to play an important role in future carbon markets?

While the future, and the present, look distinctly bleak due to a lack of demand, we very much hope that the CDM will play a strong role in the future markets however we do have very strong concerns about the lack of markets in the short to medium term and the impact this will have on the investment community and project developers, consultants, DOEs etc. Many companies have consolidated, significantly reduced staff or even closed; many projects are not moving forward with implementation or are scaling back on second or subsequent phases of development and / or verification. The low prices and general squeeze on costs are also reducing the time which our own members are able to devote to stakeholder issues such as this consultation. There is a very real likelihood that this period of low prices will lead to a significant loss in capacity within the market.

We are also concerned that the talk about a new market mechanism is a distraction to policy makers. There is a belief that the CDM is over-complicated, bureaucratic and lacking in environmental integrity. We have a concern that stakeholders will think that starting with a clean sheet of paper will resolve these problems. In fact, the CDM is complex and bureaucratic for good reason – it is not easy to deal with the concept of additionality, establishment of baselines, registration, monitoring and reporting. (A) new mechanism(s) will face exactly the same problems and whilst they may call them by different names, the fundamental challenges will not change: the grass always seems greener on the other side. By the time we find this out (unlikely to be any time before 2020), the CDM will have been abandoned and left to wither.

We therefore suggest that there needs to be a clear "bridge" that connects the design of NMM to the CDM to facilitate a "seamless" scaling-up of carbon market instruments. Without bridging the gap from today to the NMM, the whole infrastructure that has been build through the 15-years of CDM, including DOEs, consultants, financiers, policy makers, etc. will disappear – and without the infrastructure in place, the NMM have no chance of success.

Also, many CDM projects still have most of a potential 21 years of CDM crediting period to go. Indeed, we suggest that the CDM should remain in place and will provide both competition and backup for the NMM. If NMM fulfil its promise to be more efficient, bigger, cheaper, and quicker than the CDM, the CDM will disappear naturally. But this is unlikely to happen within a decade.

In fact, many elements and concepts developed under the CDM should play a key role in the design of such new mechanisms, i.e. MRV procedures, standardized baselines, definition of eligibility criteria under the PoA approach. In addition, there is a natural linkage between mechanisms as a large number of ongoing CDM projects are likely to fall into the scope of new mechanisms and procedures need to be put in place to avoid double counting.

The CDM provides an operational governance framework in many developing countries that took years to be build up. A strong linkage of new mechanisms to the CDM (or the operation of such new mechanisms under a potentially revised CDM governance framework) would facilitate the continued use of regulatory mandates of these authorized entities, facilitating a seamless transition. The CDM has created a qualified workforce of 5,000 to 10,000 professionals, most of which are in developing countries. New mechanisms need to build on this CDM resource pool.

26. What, in your view, are the most important factors that will influence the demand and supply situation in future carbon markets?

Demand is driven primarily by the setting of caps. There is some additional demand from voluntary commitments, but binding caps are the most important. Parties may be encouraged to take on deeper caps if a) they are confident that the costs to their economies will not be too high and will benefit their economies in the long run by reducing the reliance on fossil fuels, and b) that the burden is shared widely including with key developing countries. But they must be comfortable that the offset instruments they use are derived from the sources with high environmental integrity. To this end, the EB and the UNFCCC must continue to highlight the steps they are taking to ensure the environmental integrity of the CDM and to make sure that the CDM is an eligible and qualified instruments to contribute to least-cost compliance with targets in ALL countries that choose to take on a cap (in whatever form). This means that the CDM should be a regulatory instrument that developing countries can use to meet their future (voluntary) compliance obligations (they, as everyone else, is interested in the realization of least-cost mitigation options, which the CDM facilitates).

Supply of emission reduction can continue to come from CDM projects and other types of projects but to ensure investment from the private sector, there needs to be certainty over delivery of CERs, certainty of demand and better prices than we are currently experiencing.

27. In view of the emergence of other carbon market mechanisms (e.g. voluntary, domestic, bilateral, UNFCCC), what do you think is the CDM's comparative advantage? Can the CDM complement or contribute to emerging carbon market mechanisms around the world, e.g. in improving standards for carbon mechanisms?

The CDM has many significant advantages over other carbon mechanisms. It is already a functioning mechanism with thousands of projects in many countries; it is supported by a fully fledged and professional secretariat; it has a massive body of methodological expertise behind it; DOEs are accredited by an Accreditation Panel set up to ensure that the DOEs are competent to meet the challenges of validating and verifying CDM projects; it is stringent and it produces units which are considered fungible with the KP, the EU ETS and other compliance schemes. The CDM is self-funding from the share of proceeds and admin fees charged to projects and is governed by the COP/MOP rather than self appointed NGOs. Since the CDM is an international mechanism, it avoids the risks of double counting of units and the problems of fungibility between different standards and because the CDM is recognized by multiple schemes and there is reasonable demand, there is liquidity in the CER market. The CDM has also already shown its capacity to operate on a scaled-up basis (i.e. sector benchmark based).

Other schemes rely substantially on work undertaken by the CDM infrastructure and leverage off, for example, CDM methodologies and tools and CDM accredited DOEs.

At the same time, competition from other market mechanisms has, in the past, contributed to improving the competitiveness of the CDM itself. So we do believe that a co-existence of mechanisms should be encouraged. The CDM should facilitate such co-existence by ensuring its integration with registry systems to assure the avoidance of double counting. It could also continue to be a standard setter to define benchmarks of environmental integrity. This could potentially include the recognition of units from other systems that meet its criteria for environmental integrity.

28. What is the CDM's comparative advantage amongst the proliferation of mechanisms, and how might the CDM complement or contribute to emerging carbon market mechanisms?

The CDM is 15 years ahead of any new mechanism which is currently being proposed and has already benefited from a huge amount of "learning by doing". As mentioned above, there is considerable experience, a massive body of methodological expertise and very substantial momentum. The system works and has issued CERs which have been used in compliance and voluntary based objectives. The CDM's international compliance grade sets it above all other units and it should always remain the equivalent to the "gold" standard of emission reduction currencies. Its fungibility/wide acceptance in key markets around the world is an important success of the CDM.

The CDM has already contributed hugely to the development of other emerging mechanisms. Many of the mechanisms to date have borrowed heavily from the CDM's toolbox, or relied on the DOE infrastructure. Even those which set their own standards and have different approaches to the establishment of additionality have benefited from the experience and knowledge of early movers in the CDM. In the same way that emission trading started with experience from SO2 trading in the US, the offsetting component of CARB (the California Air Resources Board), for example, now benefits from the experience gained from the creation of the CDM. In addition, most Parties have assigned regulatory authority for dealing with the CDM. This assignment has taken years of parliamentary and executive action. New mechanisms that build onto the CDM can be implemented under such existing regulatory authority.

Going forward, the acceptance of CDM units as a compliance instrument in emerging carbon market mechanisms would create strong future comparative advantages. To facilitate, the rules for the application of the CDM in the context of sector targets or NAMA should be clarified (i.e. this is, amongst other issues, related to the E+E- discussion).

30. Should the CDM have a role in linking future carbon markets and pave the way towards a global carbon market, e.g. by providing common baselines and methodologies, or by allowing CER to be used as a global standard for internationally recognized offsets?

Yes. The CDM is the only current link between future markets, already providing the only commonly accepted baselines and methodologies. Therefore, the CDM is well positioned to continue this role as a standard setter for global emission reduction projects. As mentioned above, it has considerable experience, more projects in more sectors in more countries than any other standard is likely to achieve and a large body of professionals familiar with its use; it is guided by the CMP; because, until recently at least, the CERs were valuable, all participants in the market were able to invest time and resources in working to improve the system which still remains self funding.

The CDM is designed with relevant building blocks that are directly applicable to the design of future carbon markets. This capacity took more than 10 years to develop. Our own analysis shows that some elements are directly applicable and others with minor modifications. We strongly believe that an approach to new carbon markets that is build on this capacity will deliver the most credible global carbon market and only this approach is able to deliver such market infrastructure in time to avoid a market gap.

The EB should show more commitment to one of the fundamental roles of a market regulator, which is to maximize the value of the market it regulates. This usually requires a stronger and balanced involvement of

the entities engaged in trading activities (buyers, sellers, intermediaries). This revised role of the EB needs to recognize that certain regulatory functions need to be de-centralized.

31. Should REDD+ project activities be incorporated in the CDM? What are the options of incorporating REDD+ in CDM so as to build learning-by-doing? What are the advantages and disadvantages of these options?

In principle, the structures and institutions in the CDM are well placed to support the inclusion of REDD+ in the CDM. However, a market for compliance grade REDD+ credits is still lacking. The fact that forestry based credits with tCERs and lCERs has not been successful under the CDM would suggest that there is little appetite for REDD+ credits under the CDM. In fact, as highlighted above, demand for any CDM credits is insufficient and this needs to be addressed urgently.

REDD+ is a project category that requires a strong integration of national policies and targets (i.e. net deforestation rates) on the one hand, and project-based (bottom-up) incentive systems on the other. CDM can only deliver the latter (project-level incentive) but the lack of top-down policies (i.e. to avoid leakage) so far, has meant that projects have not yet taken off. Future mechanisms, which may also be based on the integration of top-down frameworks with bottom-up incentives would have to address this.

32. Should project-by-project offset generation, as currently carried out in the CDM, remain part of the future climate mitigation architecture? Are there sectors or regions where project based CDM is more suitable as an offset generator than other types of carbon market mechanisms?

Yes. Project by project activities should continue, and are likely to be the only possibilities in many host countries, in particular in LDCs where any other mechanism is unlikely to be viable. However, we believe it is important to change the language used in this question. CDM projects generate emission reductions; it is the way in which these emission reductions are used, which determines whether they are offsets or not.

If and when<sup>25</sup> other types of carbon market mechanisms become operational, there will need to be clear procedures to avoid potential double counting. For example, power generation in some (advanced) developing countries may come under an emission trading scheme or receive renewable energy certificates. The interaction between such mechanisms needs to be clarified, but this does not automatically rule out the CDM. Existing CDM projects may need to be excluded from newly-introduced mechanisms, and projects may be allowed to choose to register as CDM using the same baseline as in the emission trading scheme. It is also possible that excess renewable energy certificates can be converted to CERs. There can be various different legitimate interactions between the mechanisms, while always avoiding double counting.

The difference between a CDM project generating emission reductions and sectoral scheme generating emission reductions is the latter is more likely calculated against a baseline which includes some domestic effort to reduce emissions – i.e. not all of the emission reductions are sold into the market. The same can be achieved from a CDM project simply by discounting the CERs prior to cancellation such that, for example, 10% of the emission reductions are credited to the host country.

<sup>&</sup>lt;sup>25</sup> As mentioned before, we believe that it is unlikely that a NMM under the UNFCCC be operational at any serious level before 2020.

Project-based actions and sector-based approaches can therefore co-exist and be integrated into a more aggregate scheme through the creation of simple accounting rules and guidance to ensure that project-based reductions contribute their fair share to reaching targets within the sector they are located in. This facilitates the honouring of rights and title that were already awarded under the existing CDM scheme and thus facilitates a seamless scaling-up transition.

33. Should the CDM remain embedded in the United Nations/UNFCCC? What, in your opinion, are the advantages and disadvantages of operating the CDM under the United Nations / UNFCCC?

Currently the CDM is embedded within the Kyoto Protocol only. It may be useful to extend this to the UNFCCC in general. While the need to follow the UN negotiating rules increases the time that it often takes to make any decision, from relatively insignificant decisions to more important decisions such as the appeals process, we do not see what other body could administer the mechanism and guide it, which has a sufficiently wide membership, given that it is a multinational agreement in which the majority of the world's countries participate.

Being part of the UNFCCC, an internationally accountable body where all countries have an equal standing, the emission reductions from the CDM qualify as compliance grade credits with high credibility and integrity around the world. Additionally, the Secretariat has become self-funding from the success of the CDM and has considerable expertise. While it would be possible to spin out the relevant parts of the secretariat – and the EB – into a stand-alone CDM entity, it is questionable whether such stand-alone entity could preserve the globally perceived integrity gained through the current CMP oversight.

Disadvantages of being within the UN include the slow decision making process, reluctance to use majority voting and the politicization of the CDM EB. Most of these issues can be addressed within the existing governance structure and we would encourage the Parties to strengthen such reform efforts. We believe that within the current governance framework, reforms could be launched to remove the operation of the CDM EB from international climate policy/political influences through the provision of a regulatory mandate that is focused on maximizing market value, the "de-politication" of the appointment of CDM EB members, their full-time appointment to these position and a stronger voice for market stakeholders. These measures would make the CDM more competitive while maintaining is credibility, environmental integrity and market efficiency.

We note that while the CDM could remain under the auspices of the UNFCCC, we do not necessarily need international agreements on targets to reduce GHG emissions. For example, the Copenhagen Accord was not in the end endorsed by the COP/MOP but it could serve as the basis for commitments which could in turn draw on the CDM as a source of emission reductions. However, as stated before, demand for CERs is lacking, and this needs to be addressed urgently if the CDM is to survive.