



**A “prompt start” for the CDM? Lessons from early experiences from South Africa.**

**Shirene Rosenberg**

**The City of Cape Town**



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

THIS CITY WORKS FOR YOU



## **A “prompt start” of the CDM? Lessons from early experiences from South Africa.**

Shirene Rosenberg<sup>1</sup>

### **Executive Summary**

The CDM is a crucial part of the Kyoto architecture for developing countries. Its core mission is to ensure that GHG reduction opportunities go hand in hand in supporting developing countries achieve their sustainable development priorities. It was conceptualised, to a large extent by developing countries, as a project-based mechanism that could help achieve quantified emission reductions. This was without developing countries taking on binding national targets.

The CDM will be a focal point of discussion at the Montreal meeting of the Parties to the Kyoto Protocol (COP/MOP) for two reasons. First, Parties are already starting to take stock of experiences gained from the “prompt start” of the CDM, initiated by the 2001 Marrakech Accords, to see if operational improvements to the CDM can be made. Second, many proposals for post 2012 evolution of the climate regime question the desirability and practicality of developing countries putting all their emissions reduction potential “eggs” in the project-based CDM “basket.” The key issue in these “next steps” debates is whether the CDM should be the only or dominant form for achieving GHG emission reductions for developing countries and, if so, whether an expanded/alterd form of CDM can play a more fruitful role in the transition to sustainable development.

Based on early CDM experiences from South Africa, this paper presents insights and recommendations addressing developing countries concerns about the limited contribution the CDM is currently able to make to sustainable development as well as contributing to broader discussions about the long term role of the CDM in post 2012 period.

The main conclusions of the paper are that the CDM can make a larger contribution to sustainable development for developing countries. This will however require a review

---

<sup>1</sup> The author is a Manager, Resource Management Branch, Environmental Planning Department at the City of Cape Town (CCT) (contact: [Shirene.Rosenberg@capetown.gov.za](mailto:Shirene.Rosenberg@capetown.gov.za)). The Resource Management Branch in the Environmental Planning Department at the City of Cape Town deals specifically with issues of Climate Change, Energy and the CDM, as well as renewable energy, Local Agenda 21 and Sustainable Procurement. Before joining CCT, Ms. Rosenberg, was a project manager with the SouthSouthNorth Group active in the facilitation and design of two pilot CDM project in South Africa. This paper was prepared as part of the BASIC Project (Building and Strengthening Institutional Capacity for Climate Change in Brazil, South Africa, India and China) funded by the EU Commission, Environment Directorate. The BASIC project brings together a team of 40 individuals from over 10 countries, the majority based in Brazil, India, China and South Africa. The author wishes to thank the BASIC Team, in particular, Farhana Yamin, Erik Haites, Jan Corfee-Morlot and Paul Curnow for providing comments on earlier drafts. The views expressed in this paper are her sole responsibility and do not express the views of the EU, the City of Cape Town or other members of the BASIC Team. Further information about BASIC, go to [www.basic-project.net](http://www.basic-project.net) or visit [www.ids.ac.uk](http://www.ids.ac.uk).



of the CDM that goes beyond mere procedural tweaking of the modalities of the CDM project cycle. After adopting the Marrakech Accords, policy-makers in Montreal are urged to focus on devising new mechanisms to support the emergence of local designated operational entities (DOEs) as a way of reducing transaction costs and improving long term viability of the CDM in generating host country benefits in countries like South Africa. Developing countries also need to look more closely at the how well their newly established Designated National Authority (DNA) structures are functioning and whether domestic procedures and criteria on, for example, what constitutes sustainable development, can be improved.

Another critical aspect relates to building capacity and providing technical and financial support to developing countries to enable them to engage a much wider set of actors in taking forward CDM project activities. The focus of attention of CDM policy discussions has been on engaging the private sector at the neglect of the significant and positive role being played by public sector bodies in developing countries in taking forward CDM opportunities. Supporting public sector bodies, like the City of Cape Town, engage in the CDM and examining the lessons learnt by other local authorities experience of CDM activities will help engage a critical body of actors in the CDM. Crucially it might help to connect carbon markets with the day to day business of delivering core public services that are vital to the achievement of sustainable development such as more efficient housing, waste and other local amenities which generally fall within the remit of local authorities.

The long term issues will require a more dedicated process to be set up by the international CDM community. The COP/MOP meeting in Montreal can help by establishing a “next steps” process to ensure negotiations on the second commitment period can begin in 2005 as set out in the Protocol as this will give crucial early signals to CDM markets that investments in CERs will have a value post-2012. It will also signal to a wide range of actors that time and effort spent on the CDM “learning curve” will be rewarded.

This paper puts forward specific recommendations aimed at assisting developing countries in meeting development objectives in a manner that is less emissions intensive and climate friendly. These recommendations are focussed on the main stakeholders active in the implementation of the CDM, the Executive Board (EB), DOEs, the DNA and project proponents.



## **Introduction**

Based on early CDM experiences from South Africa, this paper presents insights and recommendations addressing developing countries concerns about the limited contribution the CDM is currently able to make to sustainable development as well as contributing to broader discussions about the long term role of the CDM in post 2012 period. This is based on a review of the status of activity with regard to some of the major role players, i.e. DOEs, the DNA, and project owners, in the implementation of the CDM in South Africa. Potential barriers in ensuring the delivery of sustainable development through the implementation of the CDM will be highlighted, in each of the instances. Through the identification of these barriers it is intended to explore how climate change mitigation policies can assist developing countries in meeting development objectives in a manner that is less emissions intensive and climate friendly.

### **1 The CDM and Sustainable Development: The International Debate**

The CDM is the first multilateral trade mechanism to mandate a contribution toward the sustainable development (SD) of the host country. This is stated in Article 12 of the Kyoto Protocol, which reads that the CDM is to “...assist Parties not included in Annex I in achieving SD and in contributing to the ultimate objective of the Convention.”. This paper, however, supports the international debate that there is a lack of tangible and direct sustainable development benefits in the current portfolio of projects registered by the Executive Board (EB) of the Clean Development Mechanism.

The CDM has had a difficult genesis. It was conceived by developing countries as a means of making quantified emission reductions without taking on “Kyoto” style national binding targets. Furthermore its global nature and project based focus has required the establishment of an array of national and international institutions which had to be put in place in a very short space of time. Since the withdrawal of the US from Kyoto in 2001, these institutional structures have had to emerge against a backdrop of a much reduced international budget given the United States lack of contribution to Kyoto along with a substantial revision of estimates of the value of international carbon markets.

The Marrakech Accords places a responsibility for assessment of the contribution to sustainable development on the host Party. This was accepted at the insistence of developing countries. Each host country can adopt a national policy relating to the types of projects it will approve as a means of increasing the contribution to sustainable development. As noted by Sterk and Wittneben (2005), there are no formal measures in place to support host countries in the formulation, monitoring and enforcement of sustainable development criteria. They further indicate that projects that foster sustainable development are not necessarily rewarded. Carbon finance thus seems to be funnelled into projects that generate large volumes of CERs cheaply to the neglect of much needed projects in the areas of renewable energy and energy efficiency. Pearson (2005) indicates that the CDM is “most notably not financing



projects that help in the long-term transition of developing country energy sectors towards renewable energy technologies.”

A reason for this non-delivery of sustainable development benefits, specifically in the sectors mentioned above, has been ascribed to the fact that the CDM is a project-based market mechanism, as well as the fact that the project-based approach may miss many reduction opportunities (Pearson(2004), Brown et al(2005). As a strict market mechanism with international oversight focussing solely on the GHG reduction component of projects, the CDM encourages the development of low cost emissions reductions at the expense of projects that might deliver more sustainable development benefits.

Overall this paper argues that ensuring the CDM makes a significant contribution to sustainable development, will require a review and potentially changes in the rules guiding the operation of the CDM.

## **2 Host Country Implementation of the CDM**

As a Party to the UNFCCC and the Kyoto Protocol, South Africa supports international action to combat climate change and has established a Designated National Authority (DNA) for the CDM. Further elements of importance to the implementation of the CDM include the national legal and policy framework and the identification of opportunities for integrating development priorities with concerns around GHG mitigation and climate change. These elements can be undertaken as part of the process relevant for the preparation of national communications and national climate change programmes. Such programmes would help in defining the sustainable development criteria and priorities that the DNA might find useful in approving projects at the domestic level.

In terms of the CDM, the country’s strategic focus is centered around the opportunity the CDM provides in meeting varied domestic objectives (South African Trade and Industry Chamber, 2004). The objectives include:

- § A lever for FDI related employment creation in sectors able to achieve emissions reduction.
- § The promotion of policy initiatives able to contribute toward emission reduction, i.e. energy, renewable energy, air quality management, cleaner fuels, transport, agriculture, industry and the transfer of technology.
- § A lever for the transfer of technology (hardware, software and organizational processes) to achieve policy objectives.

The following section will provide a review of CDM project implementation in South Africa focusing on the major stakeholders, i.e. DOEs, the DNA, as well as project owners, in the process. In each of these instances the potential barriers in ensuring the delivery of sustainable development through the implementation of the CDM will also be highlighted.



## **2.1 Designated Operational Entities (DOE)**

An accredited DOE validates, verifies and certifies the reduction in emissions resulting from a CDM project activity. The validation, verification and certification of CDM project activities constitute a significant proportion of the overall project transaction cost.

The current accreditation process for DOEs relies on a centralised system overseen by the EB via its accreditation panels and teams (generally developed country based). At both host country level (through the DNA or via the sub-regional processes) as well as the level of the EB, measures need to be explored, beyond the current concessions from the EB, to encourage the application of DOE candidates from developing countries.

In South Africa the prevailing situation is that there is only one local DOE who is in the process of gaining accreditation with the EB. Project proponents are therefore generally reliant on the service of a DOE based outside the country, thereby adding to the cost of project development, specifically because this cost is pegged to strong foreign currencies. South Africa has a competent skills base with regard to potential DOEs, but there are indications that the cost of accreditation has been prohibitive for most of the potential candidates from South Africa.

A similar picture appears when looking at other developing countries. According to a report prepared in 2004 by the South African Trade and Industry Chamber the experience of the Indian CDM promotion in this regard, indicated that there has been some reluctance from local DOEs to pursue registration, due to the operational risk of assessments being compromised and the exposure to penalties from the EB at a later stage. The Indian government has a mechanism to support local firms with training and technical capacity if an application is made for registration as a DOE. Currently, the issue of locally based DOE accreditation has received little consideration in terms of the promotion of CDM project activity in South Africa.

## **2.2 Designated National Authority and Climate Change Institutional Context**

The establishment of the South African DNA<sup>2</sup> can be viewed as a first step in moving toward the integration of climate change policy and national development objectives. The South African DNA has an Advisory Committee comprising of the Department of Science and Technology, Department of Trade and Industry, Department of Water Affairs and Forestry, Department of Transport, Department of Environmental Affairs and Tourism, National Treasury and the Department of Foreign Affairs. The operations of the DNA is currently funded from monies provided for in the budget of

---

<sup>2</sup> The initial National Communication under the UNFCCC for South Africa was submitted in 2003. In October, 2003, a South African Cabinet decision placed the DNA under the auspices of the Department of Minerals and Energy. In October 2004, the Cabinet approved a National Climate Change Response Strategy from the Department of Environmental Affairs and Tourism, making the DNA a priority at the national government level. The DNA for South Africa was established in late 2004. On 24 December 2004, the Minister of Environmental Affairs and Tourism published draft regulations under 25(3) of the National Environmental Management Act (NEMA) 107 of 1998: Establishment of a Designated National Authority for the clean development mechanism. These regulations were gazetted on July 2005 thereby providing the enabling framework for the activity of the DNA.



the Department of Minerals and Energy, as well as donations received by the Department of Minerals and Energy on behalf of the DNA from any source.

Sustainable development criteria<sup>3</sup> for the South African DNA has been defined in the National Environmental Management Act (NEMA). This definition of sustainable development will inform the approval process of the DNA. Critics state that the current rules are not sufficiently stringent as any new development will need to adhere to the provisions of NEMA, in any event. This concern is highlighted in a report prepared for the National CDM Criteria for Malaysia (Ministry of Water, Energy & Communication, 2005), which states that it is important to recognize that if a CDM project is not implemented, a business-as-usual or baseline scenario will be implemented. The baseline scenario will also have an impact on the sustainable development. As a consequence, the impact of the CDM project on the sustainable development indicators should be compared to the impact of the baseline scenario on the sustainable development indicators. The project should be approved if it has a more favourable impact on sustainable development than the baseline.

Further concerns raised by various stakeholders, including Climate Action Network of South Africa (SACAN) and Business Unity South Africa, are that the rules governing the DNA Approval Process are vague, open-ended and not sufficiently focused on sustainable development. This is an issue which would need to be addressed in a review of the processes and functions of the DNA.

At present, the DNA's focus is on the evaluation and approval of potential CDM projects in accordance with section 40(a) of the Marrakech Accords. It is however anticipated that the functions of the DNA will be extended to include the facilitation and promotion of CDM projects of a developmental nature and in line with national priorities. The National Climate Change Response Strategy (NCCRS) highlights the fact that although the Department of Environmental Affairs and Tourism has been designated as the lead agency for climate change response in South Africa, the issue of climate change is cross cutting and that it has ramifications for diverse activities in other government departments. Therefore the response to climate change needs to be addressed in such a way as to complement or be in parallel with the service delivery objectives of these departments. However, currently there is no crosscutting legislation relating to climate change. The nature of the CDM positions the DNA to

- 
- <sup>3</sup>
1. Does the project conform to the National Environmental Management Act principles of sustainable development?
  2. Does the project have an approved environmental impact assessment if the project activity requires one under the relevant EIA legislation?
  3. Does the project mitigate global climate change?
  4. Does the project contribute to national economic development?
  5. Are the jobs associated with the project more likely to be more sustainable than if the project did not go ahead?
  6. Does the project contribute to any one or more of the following?
    - a. the Government's renewable energy target; or
    - b. The Government's energy efficiency target; or
    - c. Government approved exotic or commercial forestry or reforestation programme/s; or
    - d. Regeneration of indigenous vegetation not prohibited by any sphere of Government.



be a lever in government for the integration of policy and strategies across a wide range of policy areas.

This will be achieved through an efficient secretariat for the DNA, properly skilled and resourced, so that it is able to ensure a smooth approval process and the establishment of an environment which provides support for a wide range of activities relating to CDM projects. The DNA should further be able to take on an extended role in the co-ordination and integration of policy, as well as the facilitation and promotion of CDM projects. The latter includes clarification, education and training for project proponents and other players about the CDM's rules, in particular clarifying host country approaches to specific controversial rules. The review of the operation and functions of the DNA, should be informed by significant best practices in countries such as Brazil, India and China.

Currently<sup>4</sup> the projects listed in the table below have been submitted to South Africa's DNA and are at either the PIN or PDD stages. Not all of the projects at the PDD stage have yet completed the validation process and therefore have not yet been made available for public comment by the DNA.

**Table 1: List of projects submitted to the South African DNA**

Project Description/Name	Initiator/Parties involved	Status	Tonnes CO <sub>2</sub> e
Thermally Efficient Housing (Kuyasa): The installation of solar water heaters, insulated ceilings and compact fluorescent light bulbs in approximately 2300 low income households in Kuyasa, Cape Town.	City of Cape Town	Registered	138 194 over 21 years
Bethlehem Hydro-electric Power Project: Generation of hydro-electricity, through the development and operation of a 4MW hydro power capacity within the boundaries of Dihabeng in the Free State Province, for distribution into South Africa's grid. The project will generate 28.6 GW/h annually and is comprised of two generating facilities, i.e. AS River (2.3 MW) and Saulpoort (1. & MW).	Bethlem Hydro (Pty) Ltd/ International Bank for Reconstruction and Development (IBRD) acting as trustee for the Community Development Carbon Fund (CDCF)	PDD	180 158 over 7 years
Lawley Fuel Switch Project: The thermal fuel conversion from coal to natural gas in clay brick baking kilns at Lawley Brick factory, owned by Corobrik (Pty) Ltd, South Africa.	Corobrick	PDD	107 403 over 7 years
Rosslyn Brewery Fuel Switch: Replacement of coal by natural gas and biogas, which is currently flared.	South African Breweries	PDD	751,820 over 7 years
Ethekweni Landfill Gas: The enhanced collection of LFG at three landfill sites of the Ethekweni municipality for electricity production. The produced electricity will be fed into the municipal grid, replacing electricity currently bought by the municipality from other suppliers.	Ethekweni Metropolitan Municipality /Prototype Carbon Fund	PDD	3,204,032 over 21 years
Bellville, City of Cape Town Landfill Gas: The capture and recovery of LFG that would otherwise have been emitted and percolated to the atmosphere, for use in adjacent industrial area.	City of Cape Town	PDD	1 196 090 over 10 years
Industrial Energy Efficiency	* Formal information not yet available.	PIN	12,400,000, crediting period not available
N <sub>2</sub> O Reduction	* Formal information not yet available	PIN	4,360,000, crediting period not available

<sup>4</sup> September 2005. Note: these are provisional estimates submitted by project developers.



Table 1 sets out projects already submitted to the DNA, and or already in the international CDM process. It is therefore not a full reflection of CDM project activity as a number of projects are in preparation or not formally submitted to the DNA. It is apparent that apart from the Kuyasa thermal efficiency project (see Table1), the remainder of the project pipeline submitted to the South African DNA, reflect the global market trend in the development of CDM projects, with a lack of renewable energy and energy efficiency projects and the predominance of projects with a high CER yield, low abatement cost and low or no significant sustainable development contribution.

This highlights the need to ensure that future development of CDM projects in South Africa is geared toward meeting national priorities in a manner that is sustainable. In achieving the latter, it is essential that local capacity is facilitated for the preparation of CDM project proposals to the PIN and PDD level. Along with the technical skills, there is also a need to understand how to incorporate possible gains and additional fixed costs associated with trading Certified Emission Reduction Units (CERs) and the CDM, into the project finance when considering potential CDM projects. It is recommended that the DNA undertake and co-ordinate the above mentioned project development concerns and actively seek to support local entrepreneurs in the development of CDM proposals to the PIN and PDD level to attract interest of purchasers of CERs.

### **2.3 The Public Sector: Barriers to CDM project development**

In South Africa CDM project development is currently being led by the public sector - three of the projects in the current pipeline have local authorities as the project participant (See Table 1). To date, much of the CDM literature has focused on the role of the private sector in taking forward the CDM. But, as is the case for most developing countries, the public sector holds a number of opportunities for CDM project development, particularly in relation to housing, waste management, energy efficiency measures and the use of renewable energy.

This highlights the potential of the CDM as a tool for public authorities to finance the above mentioned interventions aimed at decreasing overall GHG emissions, whilst contributing to sustainable development and service delivery objectives. This section discusses some of the key lessons from the Kuyasa CDM project activity in South Africa with the City of Cape Town (CCT) as project proponent, including some of the barriers specific to CDM project development for public sector institutions, such as local authorities or government sectors.

South Africa's first CDM project activity, the Kuyasa Low-income Housing Energy Upgrade project has been registered by the CDM Executive Board on 27 August 2005, with the City of Cape Town as the project owner. This is the first CDM project that has gone through South Africa's Designated National Authority approval procedures. This is also the first African CDM project to be registered by the CDM Executive Board and the first small-scale Gold Standard CDM project to be validated.

**Financial:** In contrast to the private sector, the public sector requires bridging finance or external funding for CDM project activity development and implementation, as these activities are usually not directly supported by existing budgets and priorities.



The CCT was able to facilitate the development and design of the Kuyasa thermal efficiency upgrade project, but has been unable to finance the initiative from existing budgets.

**Legal:** Due to the legal status and constraints of public authorities, its bureaucratic make-up and the speculative nature of the carbon market, direct participation in the market is often difficult. The intention of the CCT in developing CDM project activities is to promote sustainable development, not to engage in profit making activities. Therefore, although the involvement of the CCT in the promotion and facilitation of CDM project activities contributes toward the promotion of social and economic development, which is one of the constitutionally mandated objectives of local government, the management and marketing of the CDM does not fall within the core remit of the CCT.

**Institutional** The public sector does not have the institutional capacity to act as the CDM project proponent is limited, i.e. decision-making relates to a bureaucratic process resulting in time delays, which are not optimal for the transaction of projects and/or the trading of CERs. Furthermore, the risks associated with CDM project development, make it difficult for the public sector to manage or undertake CDM projects on a significant scale.

**Dedicated Resources:** Due to the fact that climate change and the CDM are not viewed as central to the development objectives of local authorities, no dedicated resources are available for the design, management, and implementation and monitoring of CDM project activities. The CCT has, however, responded to this challenge by recognising the need for a pro-active approach toward climate change and its linkage to development, thereby dedicating specific resources toward these concerns.

**Policy Vacuum:** CDM development in the CCT and in most other local authorities in South Africa has proceeded in the absence of national policy guidance. The South African National Climate Change Response Strategy highlighted the need to create a synergy between climate change and the primary government objectives, i.e. job creation, the provision of basic services and infrastructure development, the alleviation of poverty, and the provision of housing. No clear guidance exists on how this synergy is to be achieved or how local authorities should be involved in this national response to climate change. This aspect therefore needs to be incorporated in a follow up to the Response Strategy. In the instance of the CCT the development of two pilot CDM projects (see Table 1) has initiated the preparation of a draft energy and climate change strategy.

These barriers mentioned above has highlight the need to explore best practices and other measures such as additional guidance to facilitate public sector institutions access the potential benefits of the CDM.

#### **2.4 The Private Sector: Barriers to CDM project development**

In terms of CDM project development in the private sector there has been significant inertia amongst many private companies in South Africa to identify the potential for



CDM project development. Apart from the general lack of technical skills required for CDM project development, there is also a need to understand how to incorporate possible gains and additional fixed costs associated with trading Certified Emission Reduction Units and the CDM, into the project finance when considering potential CDM projects.

### 3 Conclusions

In order to achieve an increase of projects with a greater sustainable development dividend in the CDM pipeline, this section sets out recommendations specific to each of the stakeholders.

***Host Country Sustainable Development Goals:*** The CDM has the potential to influence and contribute toward sustainable development, by stimulating development in areas specifically related to renewable energy, energy efficiency and transportation.

In South Africa, as well as in most developing countries, there is a significant need for access to reliable, affordable and clean energy services and infrastructure. However because of high market barriers, energy efficiency is low in the industrial sector, in the provision of low-income housing and in the transportation sector. Furthermore there are high levels of suppressed demand for energy services because of poverty or lack of infrastructure. The potential therefore exists to avoid large quantities of emissions through the provision of cleaner (than the baseline) energy services at the time of access. This point of departure provides definite opportunities for integrating development priorities with concerns around GHG mitigation and climate change.

Witneben and Sterk (2005) have put forward options around policy based and clustered sectoral approaches to the delivery of CDM projects, in contrast to the current project by project based approach. This is one approach, which would be useful in stimulating CDM activity in specific sectors, crucial for sustainable development in developing countries. Witneben and Sterk (2005) indicate that the “sectoral CDM” has the potential to turn an instrument that was originally targeted at private investment into a tool for governments to finance climate-friendly policy measures.” In South Africa this approach would facilitate the implementation of energy efficiency and fuel switching measures in specifically the residential and transportation, commercial and industrial sectors. This approach would not require a radical change in the existing modalities and procedures, but could be adopted through a review of and reinterpretation of existing modalities if Parties so wished.

*Recommendations:*

- a) *Guidance could be provided by the Executive Board and/or the COP/MOP to clarify the role and scope of sectoral project activities, baselines and methodologies.*
- b) *Alternative approaches to the case by case “bottom up” approval of methodologies are also needed and could potentially be developed with the assistance of external sources; methodologies could be developed in a “top down” process that minimises cost and time delays might prove more attractive to Parties in the future.*



**Designated Operational Entities:** The Executive Board should review the regional spread of DOEs and consider specific measures to ensure wider developing country representation which should go beyond the current measures regarding payment of fees.

*Recommendations:*

- a) *The EB should encourage Parties to take affirmative action with regard to increasing the number of DOEs within DCs to ensure in-country support and benefits (e.g. building local knowledge, employment, reducing delays etc.). This could be done by, e.g., devising training and information packages, for potential DOE applicants from developing countries to ensure they receive all the technical assistance they need to put together applications.*

**The DNA:** With its first project registered the South African DNA now has some experience in the evaluation of CDM project activities. An important suggestion is that the role of the DNA should be expanded toward enabling CDM project development and ensuring the delivery of sustainable development benefits in terms of its outputs and structure. The DNA also needs to have competent, well resourced staff and efficient approval procedures that can support a future sectoral approach to the CDM, as well as engage project promotion and brokerage functions and assistance with the provision of technical and legal advice.

*Recommendations:*

- a) *National bodies need to consider ways to increase the capacities and roles of DNAs to support the increased uptake of CDM opportunities and reduce costs etc and to provide them with appropriate institutional authority to play a promotional and supportive role in CDM project development much more effectively.*
- b) *Host countries should review the processes and functions of their DNA's in order to ensure that approval criteria is consistent national SD priorities.*
- c) *Donor countries need to provide longer term capacity building support for DNAs as these are a crucial part of the CDM machinery.*

**CDM Development in the Public and Private Sector:** A distinction is made between these two stakeholders as the inherent barriers to CDM project development are significantly different.

The barriers to CDM project development in the public sector mentioned above, illustrates that the CDM, as currently conceived, is not the most appropriate vehicle for the public sector to derive significant sustainable development benefits, specifically as the project proponent. Nevertheless there are significant opportunities for CDM project development in the public sector, specifically in relation to waste management, energy efficiency measures and the use of renewable energy. It has therefore become important to explore best practice on institutional and financial



models, as well as the establishment of external partnerships for public sector CDM project activities.

A concern also exists that that given the delays in fully operationalizing the CDM, there are many projects that may not be financially viable if they do not receive the retrospective prompt start crediting incentive. Furthermore, with the hurdle of Kyoto ratification out of the way, another barrier appears: with the approach of 2012 the private sector, in particular, is questioning the certainty of investment in projects beyond 2012.

*Recommendations:*

- a) *Parties should consider ways to increase the capacity building of all users and stakeholders involved in the CDM in both public and private sectors to increase uptake of CDM opportunities and reduce costs.*
- b) *Parties should focus in more detail the barriers to CDM project implementation in the public sector.*
- c) *Parties should consider ways to increase the capacities and roles of DNAs to support the increased uptake of CDM opportunities. It is specifically recommended that the DNA undertake and co-ordinate the above mentioned project development concerns and actively seek to support local entrepreneurs in the development of CDM proposals to the PIN and PDD level to attract interest of purchasers of CERs*
- d) *COP/MOP should extend the "prompt start" retroactive crediting period beyond 31 December 2005, given the delays in fully operationalising the CDM and lateness of Kyoto entering into force.*
- e) *COP/MOP should confirm that any post-2012 framework after the end of the first Kyoto commitment period would not adversely affect CDM projects registered up until the end of the first commitment period and CERS issued prior to 2012 will be considered valid for future compliance purposes.*

These highlighted issues require a dedicated process to be set up by the international CDM community. The COP/MOP meeting in Montreal can help by establishing a “next steps” process to ensure negotiations on the second commitment period can begin in 2005 as set out in the Protocol as this will give crucial early signals to CDM markets that investments in CERs will have a value post-2012. It will also signal to a wide range of actors that time and effort spent on the CDM “learning curve” will be rewarded.

**Acknowledgements:**

The author would like to thank the BASIC Project Team, specifically Farhana Yamin, Erik Haites, Jan Corfee-Morlot and Paul Curnow for their contribution in terms of the provision of time, information, comments and ideas.



**References:**

**Bosi, M and J. Ellis (2005).** Exploring Options for "Sectoral Crediting Mechanisms". Paris: Organisation for Economic Co-operation and Development (OECD)/International Energy Agency(IEA).

**Browne, J, Sabhueva, E, Silsbe, E, Winkelman, S , Zegras, C (2005).** Getting on Track: Finding a Path for Transportation in the CDM. Final Report.

**Cosby, A, J. Parry, Browne, J. Babuy.Y, Bhandari, P, Drexhage, J and D. Ministry of Water, Energy and Communications, Malaysia (2005).** National CDM Criteria – Proposal for Further Interpretation.

**Murphy (2005).** Realizing the Development Dividend: Making the CDM Work for Developing Countries, Phase 1 Report. International Institute for Sustainable Development. <http://www.iisd.org/climate/global/dividend.asp>

IPCC. 2001a. Climate Change 2001 Synthesis Report. Assessment Report (AR4).

**Pearson, B (2004).** Market Failure. Why the Clean Development Mechanism won't promote clean development. CDM Watch.

Pearson, B (2005). The CDM is failing. Tiempo, Issue 56, July 2005.

**Sterk, W and B. Wittneben (2005).** Addressing Opportunities and Challenges of a Sectoral Approach to the Clean Development Mechanism. JIKO Policy Paper 1/2005. Wuppertal Institute.

**Trade and Industry Chamber, South Africa (2005).** Development of an Investment Strategy for the Clean Development Mechanism in South Africa. Fund for Research into Industrial Development, Growth and Equity.