Figure 1. Projects and issuance of certified emission reductions

Figure 2. Registered project activities by host party. Total: 4,884

Figure 3. Distribution of registered project activities by scope

For important decisions go to <http://cdm.unfccc.int/Reference/COPMOP/index.html>.
See especially 3/CMP.1, Modalities and procedures for CDM and 4/CMP.1, which includes simplified modalities and procedures for small-scale CDM.

The CDM Executive Board’s detailed annual report to the Parties to the Kyoto Protocol is available at <http://cdm.unfccc.int/Reference/index.html>.

All figures are as of 30 October 2012.
The body of the book covers the reporting period 15 October 2011 to 26 October 2012, in accordance with decision 1/CMP.2, paragraph 11, and decision 2/CMP.3, paragraph 7.
Photo by: Andreas Wallin Karlsen
CDM Project 4491: Wastewater treatment with biogas system in palm oil mill at Saikhueng, Surat Thani, Thailand
TABLE OF CONTENTS

REASONS FOR OPTIMISM
DESPITE DEMAND UNCERTAINTY 4

CDM DEMONSTRATES WHAT IS POSSIBLE WITH POLITICAL WILL 5

CDM SEES STRONG GROWTH INTO A CHALLENGING FUTURE 7

CDM MATURE, WELL-FUNCTIONING TOOL FOR INTERNATIONAL CLIMATE CHANGE ACTION 9

FOCUS REMAINS ON IMPROVING, POSITIONING MECHANISM IN FACE OF CHALLENGES 11

CDM OFFERS SHORTCUT TO SUCCESS FOR EMERGING MARKET APPROACHES 13

COMPREHENSIVE POLICY DIALOGUE TAKES STOCK OF THE CDM 15
The year 2012 saw the clean development mechanism pass two significant milestones: issuance of the mechanism’s 1 billionth certified emission reduction and registration of its 4,000th project.

Now, as the Kyoto Protocol approaches the end of its first commitment period, the CDM faces twin challenges of diminished demand for its CERs and uncertainty as to the level and timing of future demand.

As the Chair of the body charged with supervising this important, ground-breaking mechanism, I draw optimism from the fact that the CDM is a fully formed, well-functioning product of many years of improvement and evolution demanded of it by countries and private and public sector stakeholders. And, of course, I draw optimism from the considerable progress made by Parties, specifically their agreement in Durban on a second commitment period under the Protocol.

One can also draw optimism from the fact that market-based systems and approaches to combat climate change are taking shape in countries around the world. Having worked so hard and invested so much to create the CDM – which is currently the only market-based mechanism under the Convention developing countries could make use of and has already delivered a billion tonnes of emission reductions and spurred some USD 215 billion in investment – countries will surely want to make full use of their creation.

Again this year, as urged by Parties and stakeholders, the CDM Executive Board refined and improved the CDM to better deliver on its objectives of climate change mitigation and sustainable development.

The Board remains committed to further improving the CDM and positioning it for the future. That effort will be informed by, among others things, a comprehensive, independent review of the mechanism conducted in 2012, and, as always, will be inspired by Parties, CDM stakeholders and the future generations who rely on a successful international response to climate change.

Duan Maosheng, Chair
CDM Executive Board
“Learning by doing” has been somewhat of a catchphrase in the short life of the CDM. As the first commitment period draws to a close it is worth reflecting on what has been learned and what has been done. Emission reductions are being made available at scale and more cheaply than most people had imagined they could be, with careful regulation market forces can be directed to the global common good, and international cooperation can inspire widespread action by diverse actors on climate change.

There are some hard lessons too, few of them confined to the CDM alone. The business of assessing whether an emission reduction is real when compared with “business as usual” can be both complicated and contested. The impact of significant incentives on economic behavior needs careful assessment to avoid perverse results. International regulation of emission reduction activities can draw the regulator into local controversy that it is not immediately equipped to address.

Any mechanism involving action on climate change, markets and international cooperation will attract critics, those with fundamental problems with the basic propositions as well as those that feel the instrument is inadequate to its tasks, questioning whether climate changes needs addressing, whether markets can be regulated and market intervention is a valid means to address climate change, and whether international cooperation can work fairly and transparently to deliver results.

Few would disagree that much more needs to be done to avoid the worst effects of climate change. Likewise few would disagree that the CDM has made a significant start, demonstrating in a very concrete way what is possible with political will. The Report of the High-Level Panel on the CDM Policy Dialogue has presented challenging recommendations for the forthcoming review of the CDM. As Parties meet to discuss the future of the Kyoto Protocol and further action on climate change, I hope they can reflect on that report, what the CDM has delivered, and what more is possible.

Martin Hession, Vice-Chair
CDM Executive Board
CDM SEES STRONG GROWTH INTO A CHALLENGING FUTURE

MECHANISM PASSES MILESTONE BILLIONTH CER ISSUANCE, APPROACHES 5000TH REGISTERED PROJECT

The clean development mechanism continued to grow over the reporting period, with the number of registered project activities reaching 4,601 in 78 countries by the end of the reporting period. In early September 2012, the number of certified emission reductions (CERs) issued passed the significant milestone of 1 billion CERs. Approximately 3,275 further projects are undergoing validation, a step prior to submission to the CDM Executive Board for registration (figure 1).

The reporting period also saw continued growth in the number of programmes of activities (PoAs). There are now 34 registered PoAs in 21 countries, with a total of 1,171 component project activities. Under a PoA, an unlimited number of component project activities across a country or region can be registered under a single administrative umbrella. The use of PoAs contributes greatly to scaling up and extending the reach of the CDM, especially in underrepresented regions.

The number of project activities submitted for registration during the reporting period reached 1,679. Such a surge in new projects in 2012 had long been anticipated ahead of rules coming into effect in the European Union (EU) from 2013. These rules exclude the use, for compliance in the European Union Emissions Trading System (EU ETS), of CERs from projects other than those hosted in least developed countries (LDCs) or other countries with bilateral agreements with the EU, unless the projects were already registered in 2012. These rules also exclude the compliance use of CERs from certain project types.

Transactions involving CERs were valued at approximately USD 25.2 billion in 2011. Despite the fall from a peak in market value of around USD 33 billion in 2008, largely as a result of declining CER prices under domestically legislated emissions trading systems, most significantly in Europe, the CDM remains today the world’s largest generator of carbon offset credits.

The considerable work done to date by the Board to improve the regional distribution of projects, together with the decision taken by the EU ETS, can be expected to affect the geographical distribution of projects, as more projects under development reach the registration phase (figures 2–4).

All of this said, the drop in the number of new projects entering pre-validation development, noted by market participants in 2011, continued in 2012, despite a decision at the international level to agree a second commitment period of the Kyoto Protocol and to negotiate a new, comprehensive climate change agreement by 2015.
CDM MATURE, WELL-FUNCTIONING TOOL FOR INTERNATIONAL CLIMATE CHANGE ACTION

COUNTRIES AND CRITICS NEED TO TAKE A FRESH LOOK AT AN EVOLVED, MUCH-IMPROVED CDM

From its origins in a page and a half of text in Article 12 of the Kyoto Protocol, the CDM has grown into a mature and well-functioning tool for the collaboration of countries in mitigating climate change. The CDM has been a pioneering mechanism; as such, it has faced numerous challenges and not infrequent criticism. Over time, the rich experience gained has been fed into refining the existing CDM guidance and developing new and innovative approaches.

The rapid development of projects and growth in demand for certified emission reductions (CERs) quickly overtook the expectations of many of the mechanism’s original designers. The mechanism incentivized not hundreds, but thousands of projects, and in the process created an industry producing and trading the world’s first international environmental currency.

Whereas the CDM Executive Board’s initial priority focused on creating standards to ensure the environmental integrity of the mechanism – each CER must represent a true emission reduction – the Board soon had to add to this imperative the need to increase the efficiency of its work. It scaled up its principal support structure, the UNFCCC secretariat, pursued refinements to increase the clarity and objectivity of its methodologies, rules and processes, and worked to increase the understanding of CDM requirements among stakeholders. While there remains more progress to be made, the success of the CDM is now being shown in serving its integrity and efficiency goals in parallel.

From the beginning, the Board and the secretariat have worked to improve the geographical distribution of projects. Capacity has been built through the designated national authorities’ forum and other stakeholder activities. The secretariat has established a loan scheme to assist with project development in countries underrepresented in the CDM and the first loans were approved during this reporting period. These and other initiatives have sought to remove barriers to participation and have benefited from cooperation with stakeholder groups and partner agencies, for example under the banner of the Nairobi Framework, a partnership of UN and other agencies and institutions dedicated to extending the reach of the CDM.

Today, the number of projects in underrepresented countries is on the rise. The groundwork has also been laid, for example through establishing the programme-of-activities approach and adopting rules governing standardized baselines and the treatment of suppressed demand, to enable a significant scaling-up of the CDM.

The development of the CDM to date, together with the substantial investment of Parties to the Kyoto Protocol and other stakeholders, leave the CDM well established and well placed to continue as a channel for collaborative action to meet the mitigation goal agreed by the Parties:

- The CDM enjoys a multilateral mandate provided by all Parties to the Kyoto Protocol and wide acceptance by governments the world over;
- Channels for flows of finance, technology and capacity-building are well established;
- The CDM also enjoys widespread support and ownership among stakeholders, including in the private sector, as a credible and workable system;
- The extensive institutional experience and memory is now well established and provides a strong basis on which to build and innovate the mechanism;
- A broad range of credible and internationally accepted standards is in place concerning the monitoring, reporting and verification of emission reductions and removals, and is already widely used by programmes and stakeholders outside the CDM;
- Large numbers of projects, both registered and under validation, and their improving geographical distribution, bring diversity and necessitate adaptability;
- The mechanism’s approach to governance embodies transparency and openness to observers.

When they meet to discuss the evolving international response to climate change, countries and stakeholders need to take a “fresh look” at today’s much strengthened and improved CDM.
FOCUS REMAINS ON IMPROVING, POSITIONING MECHANISM IN FACE OF CHALLENGES

DIMINISHED DEMAND TESTS STAKEHOLDER CONFIDENCE, THREATENS HARD-EARNED GAINS

The CDM continues to face many challenges. First and foremost, and outside the control of the Board, is a lack of demand for certified emission reductions, which is reducing incentives for mitigation among existing and potential users of the CDM. The resulting dampening of CER prices is diminishing the mechanism’s ability to spur private and public-sector action on climate change and sustainable development. As for the health of the mechanism itself, there is an increasing risk of the CDM losing its momentum, and with it, losing the intellectual and institutional capacity that has been built up among Parties and other stakeholders in the CDM.

This contributes to a loss of confidence, in particular among the private sector participants that have invested a great deal in the growth of the CDM, the designated national authorities (DNAs) of developing countries that have invested time and resources to make the CDM a part of their development strategies, and civil society stakeholders that have helped build the mechanism and have contributed to its continual improvement. Their engagement and capacity, once lost, may be difficult to bring back as and when Parties are able to agree on strong levels of ambition for climate action, and this can be expected to have implications for future engagement not only in the CDM but also in any further market instruments that Parties may agree to at a later stage.

In addition, several other challenges within the CDM system itself still require further attention and continue to be prioritized by the Executive Board:

• **Sustainable development.** There is a need to do more to make visible the sustainable development co-benefits of CDM projects. Sustainable development is part of the two-pronged objective of the CDM, as stated in Article 12 of the Kyoto Protocol, and yet it has been less visible than the emission impacts of projects. For the Board to ensure that the CDM makes an impact on sustainable development, it is crucial that DNAs set related criteria and ensure that they are met in the projects they approve;

• **Regional distribution.** Further increasing the accessibility of underrepresented countries to the CDM, and further improving the geographical distribution of CDM projects, remain important challenges. The Board and secretariat have been implementing concrete measures to address this issue and continue to explore further measures and collaborative programmes;

• **Simplicity and efficiency.** Despite progress, for example on programmes of activities, standardized baselines, suppressed demand and streamlining and consolidating rules, there remains a need to further simplify the requirements of the CDM and increase the objectivity of both the rules and the assessments they necessitate. This can and must be achieved without compromising the environmental integrity of the CDM. Simplicity and efficiency will enable the scaling-up of the mechanism and increase its accessibility to underrepresented countries.
CDM OFFERS SHORTCUT TO SUCCESS FOR EMERGING MARKET APPROACHES

COUNTRIES NEED TO GIVE A CLEAR SIGNAL ON THE VALUE OF THE CDM IN THE CONTEXT OF FUTURE INTERNATIONAL ACTION ON CLIMATE CHANGE

Support among Parties and stakeholders remains strong for market-based approaches to combat climate change. Parties have agreed to develop a new market mechanism under the UNFCCC and numerous countries are investigating or implementing their own instruments. The CDM should continue demonstrating its relevance and effectiveness for Parties and stakeholders, and be responsive and adaptive to Parties’ needs. In ensuring that the mechanism is “fit for the future”, the Board sees its role as making the CDM ready to align with any directions that Parties decide upon for its future use.

The Board is presently in a strong financial position and available funds are sufficient for it to continue its work to strengthen the CDM and carry out new mandates given by Parties, despite the expected future decrease in income. As in past years, Parties may wish to request specific strategic improvements.

The CDM has been a leader in creating standards, and in the process has set the benchmark for measurement, reporting and verification of emission reductions and removals for the carbon market. The Board and Parties should now look to how they can ensure that full advantage is taken of the rich body of standards developed under the CDM. The work done under the CDM can provide a shortcut for Parties and institutions needing to account for their emission reductions and removals as part of broader action to mitigate climate change, and in so doing help ensure the environmental integrity of climate action.

In view of the achievements and challenges of the CDM highlighted here, the Board considers it crucial that Parties, in addition to providing urgent clarity on ambitious emission targets, send a clear signal on the value of the CDM within the context of future international action on climate change. The need for such a signal is urgent to maintain the momentum of the CDM, retain the capacity of Parties and other stakeholders, and secure the success of newer market-based measures and approaches. In the view of the Board, it is vital that the Parties to the Kyoto Protocol send such a signal via their decisions at their eighth session.

For its part, the Board is committed to examining how the CDM may be of best use to countries in the future. It is commencing work to develop and submit recommendations next year for consideration by Parties in the context of the mandated review of the CDM modalities and procedures.
COMPREHENSIVE POLICY DIALOGUE TAKES STOCK OF THE CDM

INDEPENDENT, HIGH-LEVEL PANEL ENGAGES STAKEHOLDERS, OFFERS WIDE-RANGING RECOMMENDATIONS

It was against the background of the urgent challenges described in this report that the Board in 2011 launched the CDM Policy Dialogue to:

• review the functions of and lessons learned from the CDM, and
• make recommendations regarding how to best position the CDM to respond to future challenges and opportunities and ensure the effectiveness of the mechanism in contributing to future global climate action.

The recommendations were presented to the Board in September 2012, for its consideration in preparing its annual report and recommendations to the eighth session of the Parties to the Kyoto Protocol in Doha, Qatar.

The Board established a high-level panel to conduct the dialogue in an independent manner under its own responsibility. The Panel was composed of 11 members drawn from a range of constituencies and geographical regions. Members were jointly invited by the UNFCCC Executive Secretary and the Chair of the Board, based on input provided by members of the Board, and the Panel elected its Chair and Vice-Chair.

The Panel commissioned a wide-ranging research programme addressing 22 topics across three main areas comprising: the impact of the CDM to date, the governance and operations of the CDM, and the future context in which the CDM could operate. In addition, the Panel organized a stakeholder consultation programme, holding about 50 formal and informal meetings between March and July 2012 with stakeholders around the world.

The report of the High-Level Panel, presented by its Chair, Mr Valli Moosa, to the Board at its sixty-ninth meeting, highlights the difficult situation facing the CDM and urges Parties to substantially increase their mitigation ambition. The recommendations of the Panel call for urgent measures to be taken to address issues across the full spectrum of CDM activities and the broader context of the carbon market and evolving international climate regime. Some of these recommendations fall within the scope of actions that the Board can consider, while others are more relevant to consideration at the level of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP).

In taking note of the report, the Board thanked the Panel for its hard work and agreed to bring it to the attention of the CMP and Parties. The Board also launched further work to examine the recommendations by requesting the UNFCCC secretariat to undertake an initial analysis of the Panel’s report.
Figure 4. Registered project activities by region. Total: 4,884

- Latin America and the Caribbean: 13.17%
- Africa: 2.05%
- Other: 0.41%
- Asia and Pacific: 84.38%

Figure 5. Certified emission reductions issued, by host Party. Total: 1,030,436,008

- Brazil: 7.20%
- Mexico: 1.63%
- Republic of Korea: 9.04%
- India: 14.66%
- China: 59.97%

Figure 6. Investor parties

- Spain: 3.20%
- Germany: 4.44%
- Sweden: 7.08%
- Netherlands: 9.39%
- Japan: 9.47%
- Switzerland: 20.78%
- Austria: 1.79%
- France: 2.96%
- United Kingdom of Great Britain and Northern Ireland: 31.07%
- Others: 9.80%

Based on authorization for participation in the CDM, i.e. per cent of total letters of authorization issued, by authorizing party. A project can have more than one investor party involved.

All figures above are as of 30 October 2012.
The body of the book covers the reporting period 15 October 2011 to 26 October 2012, in accordance with decision 1/CMP.2, paragraph 11, and decision 2/CMP.3, paragraph 7.