

The Future of the CDM

[Paper for a Roundtable Discussion on 15-16 September 2014]

I. Background

1. The CDM is a pioneer in international environmental policy. Tangible achievements include over 7,500 projects, almost 1.5 billion credits, and more than 200 methodologies. Intangible contributions include enhanced capacity, especially in developing countries, greater support for transformational climate policies, including from constituencies that might otherwise be unengaged, and closer and denser networks of stakeholders and governments.
2. The founding principles of the CDM – that emitters should be able to achieve their climate targets in a flexible manner, and reducing emissions should go hand-in-hand with pursuing other policy objectives – are now embedded in mainstream thinking. Although the CDM is not appreciated by all, as suggested by debates over its environmental integrity and sustainable development impacts, no reasonable observer disputes the value of the lessons learned from its experience as a first mover or the potential of mechanisms in helping the world meet the climate change challenge.
3. But past performance is no guarantee of future results. Following a disappointing 2013, CDM activity has fallen still further in 2014: only 87 projects have been registered, fewer than 60 million credits have been issued, and the price of a CER has languished below EUR 0.40 and is now under EUR 0.20, less than 1% of its high-water mark in 2008. Previously, the CDM was a major avenue for delivering climate finance; now, most investment has dried up. Good projects are stranded, capacity is evaporating, only the most resilient players remain engaged, and new alternatives are emerging. The world is moving on.
4. The question confronting the CDM is: what now? The post-2020 climate regime is to be agreed next year in Paris, meaning that fundamental decisions regarding the CDM's future are due to be taken.

II. Options

5. At one end of the spectrum of possible decisions, the CDM could be wound down. This option assumes that the CDM is too complex, poorly regarded, and difficult to change to meet the needs of the post-2020 world, that it would be easier and better to start again with a clean slate, and that the world's future needs would be better served by another mechanism or mechanisms – or indeed no mechanisms at all.
6. This paper argues against this option. The CDM is too valuable to be simply discarded. Its components are all fully operational, including methodologies for the authoritative measurement, reporting, and verification (MRV) of mitigation outcomes, a registry for enabling the issuance of units and tracking their subsequent transfers, an assessment apparatus, an accreditation procedure for third-party validators/verifiers, and a governance structure. In particular, the role of the CDM as an MRV instrument should not be under-stated. Each of these

components is a potentially valuable piece of the post-2020 architecture, with wide and influential applications. In addition, the CDM as a whole has maintained its legitimacy among Parties as a multilaterally agreed tool, and it has extended the depth and breadth of its networks in many developed and developing countries.

7. At the other end of the spectrum, the CDM could be preserved in more or less its present state. This option assumes that the chief challenge facing the CDM is a lack of demand arising from insufficient mitigation ambition, that the Paris agreement will bring renewed demand that can be satisfied through the use of the CDM, and that the mechanism will therefore return to favour.
8. This paper also argues against this option. Although Parties are still to ascertain the post-2020 role of mechanisms, indications suggest that it is unlikely to resemble exactly the pre-2020 world into which the CDM was born. Parties may seek to use new mechanisms, including those developed under the UNFCCC (such as the New Market-based Mechanism (NMM)) and those developed outside it, and these mechanisms may or may not incorporate aspects of current mechanisms such as the CDM. Such aspects might include, for example, the MRV apparatus of the CDM, which has been historically tied – but does not necessarily need to be tied in the future – to the achievement of Kyoto Protocol commitments. Ultimately, such questions are the prerogative of Parties to answer, but maintaining a static CDM in the face of evolving external circumstances would appear to pose its own set of risks.
9. Based on the above, this paper looks to an option between these two ends. It affirms that the best path forward involves identifying the future needs of the world and then enhancing the ability of the CDM and its constituent parts in helping to achieve them. This option is not about preserving the CDM for its own sake, but is motivated by the sense that there are roles to be played by mechanisms after 2020 and that the CDM could beneficially fulfill some or all of them. Possible steps along this path would be aimed at optimizing the performance of all aspects of the CDM and readying their adaptability for multiple possible uses in the future. The question of whether the CDM itself would then employ them, or whether these components could be used more broadly under a range of initiatives (e.g. MRV of mitigation outcomes, delivery of climate finance, transfer of technology, and building of capacity), would be a matter for subsequent consideration by Parties.
10. This paper assumes that readers are familiar with the trajectory of the CDM to date. The annex sets out a theoretical model for reflecting further about this trajectory, juxtaposing the nature of human expectations with the nature of innovation, and notes that current views about the CDM in the broader world appear to be mixed. The application of the analogy of the model to the CDM, however, shows that actions are required to give the CDM new capabilities, in order to overcome the current challenges.

III. Future context

11. The following are likely characteristics of the post-2020 world that may be relevant to the CDM, based on observations of current trends.

12. First, **access to flexibility mechanisms, whether under the UNFCCC or otherwise, will be essential:**
- a. Interest in flexibility is growing. Government policies that give emitters flexibility in meeting climate targets are proliferating, including emissions trading systems (e.g. EU, New Zealand, Kazakhstan, South Korea, California, Quebec, China), carbon taxes that recognize emission units as alternative forms of payment (e.g. Mexico, South Africa), regulatory measures involving cap-and-trade (e.g. the US power sector), and other domestic/international crediting mechanisms (e.g. Japan's joint crediting mechanism). Corporate and NGO interest in offsetting unavoidable emissions is also increasing, with significant actions expected to follow the climate summit in New York.
 - b. Flexibility will almost surely be a necessary component of any Paris agreement. Many Parties, including almost all developed countries and a critical mass of developing countries, are voicing the necessity of integrating flexibility into the agreement, most likely as an operative reaffirmation of the flexible (or "joint" or "cooperative") fulfillment of contributions.
13. Second, **there is growing interest in using flexibility mechanisms to pursue other policy objectives in parallel**, such as delivering climate finance and technology and achieving sustainable development, in addition to mitigation:
- a. Reliable methods to disburse scaled-up levels of climate finance are needed. These include multilaterally agreed funding sources, such as the Green Climate Fund. These also include domestic climate finance sources, such as development funds interested in better understanding their on-the-ground mitigation impacts (e.g. results-based finance). To be conducted responsibly, this will require standards and processes for selecting activities to support and for measuring, reporting, and verifying mitigation outcomes.
 - b. Appreciation is growing for the link between climate actions and sustainable development. For many, the need to address climate change is accompanied by the need to address development imperatives such as access to clean air and water, food, and energy. As such, avenues for investing in mitigation and adaptation actions are rightfully seen as opportunities for pursuing these development imperatives as well.
14. Third, **a comprehensive accounting framework for all flexibility mechanisms, whether under the UNFCCC or otherwise, will be required:**
- a. Appreciation is growing for the need to ensure accurate and consistent accounting of the generation, transfer, and use of mitigation outcomes worldwide. Recent interventions in the negotiations have cited the need for a comprehensive accounting framework. Discussions on this issue are expected to intensify and to form a major component of the implementation package that will be needed to operationalize the Paris agreement.

- b. Infrastructure will be needed to make flexibility work in practice. The mechanics for achieving this generally require a suite of tools, including trusted MRV processes, registries, and tracking systems.
15. Fourth, **users of flexibility mechanisms will expect choice:**
- a. Some governments are restricting their acceptance of credits to domestically sourced credits (e.g. China, Mexico, South Africa, South Korea) for reasons such as domestic political pressure or a belief that investment should be kept within their own boundaries.
 - b. Other governments are creating filters by project type. Some filters are relatively broad, allowing most types of units while listing certain exclusions (e.g. EU Emissions Trading System). Other filters operate in the opposite direction, requiring credits to come from specific project types (e.g. California, Quebec).
 - c. Some users, particular in the corporate social responsibility field, are motivated by reputational concerns, and seek “charismatic” credits with high sustainable development benefits, typically involving third-party verification, for which they tend to favour other mechanisms (e.g. Gold Standard).
 - d. Many users, governmental and non-governmental alike, are increasingly attracted to REDD+ credits, which the CDM is barred from considering, other than afforestation/reforestation (A/R).

IV. Actions for the future

16. To help make the CDM a relevant and effective tool for the future world, the following steps may be advisable, noting that some may require decisions by Parties or the CDM Executive Board:
17. First, **link the MRV component of the CDM to multiple purposes, particularly the delivery of climate finance:**
- a. **Emphasize the CDM as a tool for delivering results-based finance.** The CDM can provide a solid basis for the delivery of results-based climate finance (e.g. via the GCF or domestic development aid budgets), as it provides a ready-made architecture for identifying activities to be supported and for assessing the quality and quantity of their mitigation outcomes. The modalities of this approach would need to be better modelled, and the strengths of this approach would need to be communicated, both internally and also externally with relevant partners.
 - b. **Simplify and enhance the cost-effectiveness of the CDM to serve purposes other than offsetting.** Whereas units used to offset emissions are held to justifiably tough requirements in order to uphold environmental integrity and prevent higher global emissions, units used for other purposes might be suited for simpler and more cost-effective options.
18. Second, **broaden the coverage of the CDM:**
- a. **Target sectors with significant untapped mitigation potential, including buildings and transport.** The buildings sector includes both

the retrofitting of existing building stock as well as measures for improving new building stock. Regarding transport, the CDM could help to promote the compact development of cities, non-motorized modes of transport and mass public transport systems like bus rapid transit schemes. Both sectors have struggled to meaningfully engage with the CDM to date.

- b. **Abolish temporary/long-term crediting for A/R activities.** Temporary credits (tCERs) and long-term credits (lCERs) are complex and impose buyer liability in perpetuity. As a result, they are unattractive, resulting in low levels of participation. Alternative methods of accounting for reversals, such as buffers or those designed for carbon capture and storage activities in the CDM, could be implemented.
- c. **Expand into other LULUCF activities, particularly REDD+ activities.** The limitation of the CDM to A/R activities makes it irrelevant to the large numbers of Parties and stakeholders wishing to pursue other REDD+ activities. Methodologies could be developed to overcome concerns raised by some in relation to including REDD+ in the CDM, which is a limitation that serves to channel investment away from the CDM and towards other mechanisms.

19. Third, **broaden demand for the CDM:**

- a. **Create a voluntary sustainability certificate.** Some potential users of the CDM seek greater assurances about the sustainable development benefits of projects, seeking third-party monitoring and verification of such benefits. A similar principle applies to engagement with local communities. Current efforts to elaborate and promote the use of the sustainable development tool are good first steps, but are understood to be inadequate to provide many users with the assurances that they seek. The idea behind a certificate system is that projects could voluntarily seek third-party monitoring and verification of benefits, thereby putting them on an equal playing field with the CDM's competitors and better meeting the interests of potential users.
- b. **Further facilitate voluntary cancellation.** There is significant potential for CERs to be bought and cancelled on a voluntary basis, particularly for corporates and individuals to meet climate neutrality targets. Efforts to make neutralizing emissions even easier and simpler, such as an online system, could be accelerated.
- c. **Promote the CDM as a tool in domestic climate policy.** This includes the role of the CDM as a compliance instrument in emissions trading systems (as well as a tool for indirectly linking them) and as a payment instrument under carbon taxes.

20. Fourth, **reduce complexity and transaction costs:**

- a. **Use the work on standardized baselines to enhance the scalability of the CDM.** Standardized baselines allow countries to collaborate and build custom-made instruments by combining the CDM and national policies. These can enhance efforts to achieve net mitigation, to create domestic carbon markets, and to address the issue of cherry-picking (i.e. crediting high-performing facilities in sectors that are under-performing). It also

provides incentives to transform the performance of entire sectors, including both better performing facilities and under-performing facilities. As a first step, the identification of sectors and countries where these could be road-tested would be useful, along with a short synopsis of achievements to date and ongoing work in this area.

- b. **Simplify baseline and additionality requirements while ensuring environmental integrity.** Possible measures could include: (a) developing standardized approaches for baseline development and additionality demonstration (sector-specific and country-specific); (b) simplifying programme of activity (PoA) requirements through (i) the top-down development of standardized eligibility criteria in selected methodologies that are frequently used and (ii) the application of multiple methodologies to PoAs; and (c) simplifying monitoring and sampling requirements.
- c. **Make the project cycle more efficient and predictable.** Possible measures include the digitization of all forms, simplifying the registration process for projects deemed automatically additional, and the development of further checklist-type templates.

V. Questions for discussion

21. The following questions may be useful in guiding discussion:
- a. What roles do you foresee for the CDM, both pre-2020 and post-2020?
 - b. Improving the CDM does not only mean launching new activities: it can also mean eliminating existing activities. Are there any existing activities that are insufficiently worthwhile or require rethinking? What activities should be prioritized for the short term (2015-2016) versus the medium term (from now up to 2020)?
 - c. Would it be desirable for the MRV functions of the CDM to have a broader application than meeting mitigation targets under the UNFCCC? If so, how could this be achieved?
 - d. Are there any obstacles to the implementation of actions relating to the options set out in this paper? What are some strategies for addressing them?

**Annex:
A theoretical model for the trajectory of the CDM**

1. Theoretical models can help in understanding the development of innovations, including policy instruments such as the CDM. While no model is perfect, they can provoke thinking about past development and frame choices for the future.
2. A model developed by Gartner, an information technology firm, may be useful in this regard. It juxtaposes two factors. The first relates to human expectations: people are rapidly excited when an innovation is announced, and are just as rapidly disillusioned after its inevitable early missteps. The second relates to the nature of innovation: it progresses incrementally towards a more mature state. These factors do not move in sync. An innovation rarely delivers on its promise when people are most excited about it; conversely (and perversely), by the time that an innovation can fulfill its promise, people have usually lost interest in it. That said, if expectations are managed, and if the innovation is appropriately recalibrated, the two factors can align, leading to responsible and justified growth.

Figure 1: The two components of the Gartner model

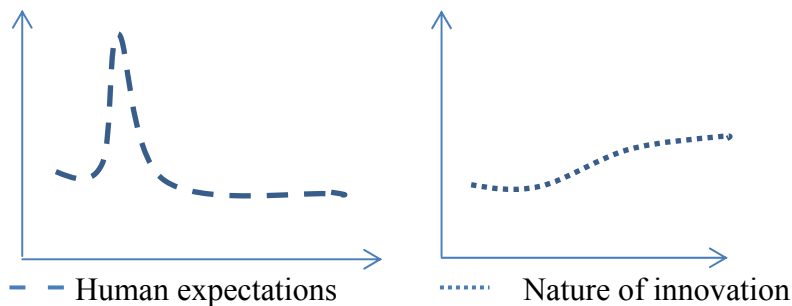
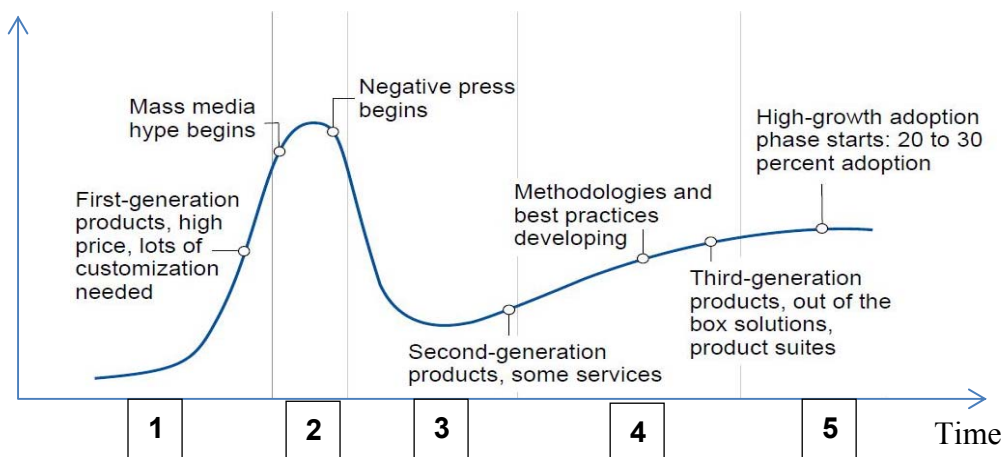


Figure 2: Modified Gartner model (adapted from a graphic by Olga Tarkovskiy)

Participation



3. The evolutionary journey of the CDM strongly aligns with the first three phases:
 - a. Phase 1 (pre-2004): An innovation is designed, in this case through the launch of “activities implemented jointly” (1995), the establishment and

operationalization of the CDM (1997, 2001), and the registration of the first CDM project (2004).

- b. Phase 2 (2004-2008): Expectations for the innovation skyrocket, with a sharp increase in the number of requests for registration. This exceeds the reality regarding the CDM's capabilities, leading to an increasing backlog of projects and unsustainable workload. The regulatory body does not have the time to reflect on the direction of the CDM, and insufficient attention is paid to relationships with key stakeholders. Standards and processes are required to be put together with inadequate advance consideration, resulting in chaotic modalities of work.
 - c. Phase 3 (2008-2013): Expectations plummet. Stakeholders become increasingly impatient, and criticisms of the CDM sharpen. Questions arise about the first generation of methodologies, particularly the additionality of industrial gas projects. Sustainable development impacts are directly challenged, including issues relating to stakeholder consultations and human rights. The CDM's ability to scale up mitigation across broad segments of national economies is challenged and even denied. Amid this disillusionment, the CDM begins to stabilize, such as through a streamlined project cycle procedure, the revision of many key methodologies, new initiatives to facilitate project development and communications in underrepresented regions (e.g. Regional Collaboration Centres), and increased strategic thinking about the role of the CDM.
4. As phase 4 begins, the CDM has become a well-functioning tool, albeit one for which there is inadequate demand and deflated expectations. Mixed messages are being sent about its uses:
- a. In some respects, the CDM is being left behind. On the compliance side, the EU ETS no longer needs large numbers of CERs, with limited pre-2020 demand and potentially zero post-2020 demand. Other compliance users prefer other types of units or the use of domestic CERs only. Kyoto targets are widely acknowledged to be inadequate to drive demand. On the voluntary side, the CDM has historically been out-maneuvered by smaller, nimbler providers, although recent initiatives have started to counteract this. In the negotiations, the agenda item on the New Market-based Mechanism (NMM) explicitly contemplates a post-CDM world or, at best, one where the CDM fills a small niche.
 - b. In other respects, the CDM remains stubbornly alive. At Warsaw, Parties unexpectedly decided to "promote the voluntary cancellation of CERs, without double counting" to help close the pre-2020 gap. The CDM remains popular in many developing countries, as stated at recent negotiating sessions, and exemplified by Brazil's use of CERs to offset emissions from the World Cup and upcoming Olympics. Some countries use the CDM as an MRV tool for enhancing climate ambition, channeling aid, and delivering results-based finance, although volumes are still small. The International Civil Aviation Organization (ICAO) has called for the voluntary use of CERs and units from other internationally recognized mechanisms to offset pre-2020 emissions, and is considering the use of CERs, *inter alia*, under its post-2020 global measure.
