

DEMAND AND SUPPLY IMBALANCES IN THE CDM MARKET

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The Market Today

The Clean Development Mechanism (CDM)¹ as established in the Kyoto Protocol is a “project-based” market mechanism. As such, the CDM market depends highly on a) the quality of projects registered and b) the market conditions. Good CDM market conditions would be characterized by a sufficient amount of healthy projects generated under a sound framework that provides enough liquidity for transactions to efficiently take place. As a consequence, the market clearing price level for CERs -that which would guarantee liquidity in the carbon market- would have to be high enough to induce project developers to undertake investments and bring CERs to the market, and attractive enough i.e., the lower cost alternative, to buyers that have commitments under the Kyoto Protocol.

A number of factors have influenced the speed and degree of development of the CDM as a market mechanism so far. These factors have prevented the market from reaching desired levels of liquidity and development. The most relevant of these have been implementation uncertainty and regulatory uncertainty. Implementation uncertainty because until very recently it was not certain whether the Kyoto Protocol would enter into force and as a consequence it was risky to investment in CDM projects. Once the Kyoto Protocol entered into effect –in February 2005- the source of uncertainty turned institutional in nature.

Uncertainty nowadays revolves around the capacity of United Nations (UN) institutions to regulate and facilitate an efficient market for carbon emissions. Institutional malfunctions and procedural difficulties have prevented regulators from fully complying with the requirements that the Marrakech Accords inflicted upon them. As a result, very few projects have been registered and in general the number of emission reductions produced by registered projects is quite

¹ The CDM process took off following the Marrakech Accords (Nov. 2001) which set the ground rules for project development and approval.

small.² Under this context, it is worth mentioning two obvious sources of procedural inefficiencies. On the one hand those related to the methodology approval mechanism and on the other, to the registration process. In terms of methodology approvals, market participants are suffering from overextended analytical delays and inconsistencies in decisions taken across methodologies. The registration process has furthermore deepened delays by questioning the decisions taken by accredited Designated Operational Entities (DOEs).

The aforementioned implementation and institutional/regulatory risks have contributed towards generating an imbalance between supply and demand in the carbon market. The imbalance is due to excess demand, which derives from developed countries' imminent commitments under this framework, and to a CER-supply shortage as projects are taking too long to reach the registration stage.

Other exogenous factors that are contributing, in a greater or lesser extent, to the market's imbalance are linked to: 1) limitations inherent to emerging markets, such as lack of investment capital for projects; 2) technical problems inherent to projects as innovative technologies are needed to reduce CO₂ equivalent emissions; and 3) confusion, due to the plethora of unreliable and overly-optimistic/pessimistic information made available to potential market participants.

These three factors are discussed in detail below:

- 1) Limitations inherent to emerging markets. CDM projects are developed in emerging markets and as such these projects suffer from regional as well as from country specific risks that limit the availability of private financing necessary to make them a reality. Lack of financing and/or delays in securing financing has translated into millions of CERs that have so far been lost.

² There are two exceptions to this comment. Two HFC projects have been registered and they are very large in terms of CO₂ equivalent emissions reductions.

- 2) Technical problems inherent to projects. Some CDM projects involve the development and/or the transfer of innovative emission-reduction-technologies to developing countries. The installation and application of untested technologies in these countries adds to project risks. A case in mind is that of landfill gas (LFG) capture and flaring or use as energy which is common in many industrialized economies but still uncommon in developing countries. Furthermore, mathematical models for LFG production, developed and calibrated in industrialized countries, are not directly applicable to developing countries where the waste composition and climate are usually quite different. Other project areas that require the use of highly innovative technologies, to reduce CO₂ equivalent emissions, are HFC, N₂O and PFC. In these cases, for example, technologies can be so innovative and diverse that potential project sponsors are forced to undertake long delays to consider all options as well as their potential side effects.
- 3) Confusion: CDM is a new concept and as such it is difficult for potential project sponsors to understand and weight its benefits and risks. This situation is further convoluted by the abundance of inconsistent information that interested parties bring to the table. Information on CER prices, for example, hides vital information on contractual terms and payment conditions that could seriously distort a final CER price reading. Unfamiliarity with carbon market terminology also generates a high degree of confusion that leads to misunderstandings between buyers and sellers in the market. For example, differences in prices and degree of marketability between VERs, CERs and EU-ETS trading allowances – the bread and butter of the carbon market- are still not clearly understood by many market players. Last but not least, an additional factor that has generated confusion with potential project sponsors is the belief that CDM would address all present and future financial needs instead of being considered an “additional” source of revenue to that of their main business activity. Municipalities in developing countries, for instance, tend to ask for large compensation in order to authorize landfill gas

recovery projects -in the form of royalties or additional investment- that simply turn CDM projects unviable.

A look ahead

The market witnesses a great deal of activity on the project development side and very little activity on the transaction side of CDM. There are many players chasing selective projects and few transactions taking place. The lack of transactions is the result of various market imperfections that have in general caused delays in projects implementation and CER issuance. These difficulties have prevented projects from coming to fruition because CDM as an “additional” activity has not been able to show that the benefits clearly outrun the risks and complications of the market.

During the eighteen months however, we expect, that the institutions will become more efficient, that more projects will be registered, that issued CERs will be freely traded and that the market will be close to attaining desired levels of liquidity. One fundamental issue of concern, that unless it is quickly addressed might hamper the potential of the carbon market as we see it, is the uncertainty of what will happen to CDM beyond 2012. This uncertainty might become the most important factor limiting the price of CERs in the near future. CER prices beyond 2012 have no value or have very low value because there are no set rules or guidelines to assess future demand levels. This issue will affect the number and type of projects that will enter the market during the coming years because their investment recovery window is shortening as we write.