



Submission of **The Environmental Defense Fund** (www.edf.org) on paras. 79-86 of the Durban Decision on various approaches, including opportunities to use markets

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The Environmental Defense Fund (EDF), an 800,000-member non-profit, non-governmental, non-partisan, accredited observer organisation that has participated in the climate treaty talks since their inception, respectfully presents this submission on the matters referred to in paragraphs 79 - 86 of the Decision of the Conference of the Parties (COP) of the UN Framework Convention on Climate Change (UNFCCC), taken at Durban in 2011, on the outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), including opportunities to use markets, and on the consideration of a framework for various approaches to enhance mitigation action, including the new market mechanism defined at Durban.

1. Executive Summary. EDF strongly supports the COP's Decision that approaches to enhance the cost-effectiveness of, and to promote, mitigation actions, must "*deliver real, permanent, additional and verified mitigation outcomes, avoid double counting of effort and achieve a net decrease and/or avoidance of greenhouse gas emissions,*" and that a framework establishing (a) standards, (b) processes for evaluating whether the standards have been met, and (c) mechanisms for accountability and consequences if the standards have not been met, is the best way forward. Recognising that each Party retains sovereign prerogatives to design its own approaches, EDF believes that the role of the COP can and should be to establish standards for transparency so that the Parties can assess whether they are meeting the UNFCCC objective. Core standards would apply to all approaches, with additional standards for market approaches. After reviewing lessons learned from non-market and market approaches, this paper proposes minimum elements for market mechanisms and new proposals to enhance effectiveness.

2. Experiences, Positive And Negative, and Lessons Learned

Experience over the past twenty-five years with a range of non-market and market approaches to reducing emissions of pollutants has been varied. Many reviews have been conducted with a view to developing lessons learned. The reviews have found that program effectiveness varies greatly across pollutants, media, environmental endpoints, program design, implementation, and other variables. Non-market approaches have included "command and control" regulation, technology standards, voluntary programs, and others. Variation in market approaches has also developed. Overall, the results in many jurisdictions indicate that where market-based approaches can usefully be developed,¹ well-designed market-based approaches have been more environmentally effective, and more cost-effective, than many non-market approaches.²

In particular, the evidence indicates that well-designed market mechanisms that pair strong quantitative limits on total pollution emissions with flexibility for emitters in how, when and where to meet those limits, can be remarkably successful in reducing pollution. This effectiveness occurs in part because such mechanisms stimulate innovation, particularly in the private sector, to develop better, faster, more cost-effective ways of cutting emissions while maintaining economic growth.

It's worth recalling that market-based approaches can be grouped loosely into two main categories - price-based approaches, and quantity-based approaches. In general, price-based approaches seek to achieve reductions in the quantity of pollution by raising the price (P) of pollution sufficiently high so as to require emitters to internalize the costs of pollution and therefore reduce their pollution in the face of the strong price signal. Such programs depend for their effectiveness on the political will to accept taxes, the strength of the price signal, the price of comparable less polluting activities, etc.³ Australia and the Canadian province of British Columbia have recently introduced carbon taxes. Other nations await the outcome of the Australia and British Columbia experiences. It may be noted, however, that in the early 1990s some nations enacted carbon taxes in an effort to reduce greenhouse gas emissions. During the mid-1990s, the price of fossil fuels fell, swamping the effect of the taxes on reducing demand for fossil fuels. Consequently, the taxes proved to be solid money-raisers for governments, but not effective in driving emissions down.

¹ Market-based approaches may not be suitable for some pollutants, for example where high local concentrations of a particular pollutant can lead to adverse environmental or health effects. But for pollutants that mix relatively smoothly e.g. in the atmosphere, such that reductions in one location are environmentally equivalent to reductions in another (as is the case with carbon dioxide and most other greenhouse gases), market-based approaches may be suitable.

² See, e.g., Environment.Gov: Transforming Environmental Protection for the 21st Century (U.S. National Academy of Public Administration 2000), text available at <http://www.epa.gov/evaluate/pdf/environdotgov.pdf>.

³ Some programs have also achieved notable environmental improvements simply by providing a price signal, even if very small, on polluting behavior that was previously "free." Environmental policy-makers have much to learn about designing effective policy instruments by drawing on the new science of behavioral economics. See, e.g., Dan Ariely, Predictably Irrational: The Hidden Forces That Shape Our Decisions (2010).

By contrast, the core purpose of market-based approaches that use "cap and trade" is not to "put a price on pollution." Rather, the purpose is to place a cap or limit on the total quantity (Q) of pollution, and then stimulate competition to meet the cap most cost-effectively. In this type of approach, emitters are required to ensure that at the end of each compliance period, the total amount of pollution each emits does not exceed its quantitative limit on allowable pollution. Each emitter is allocated tradable units of allowable pollution, and has flexibility to meet its quantity limit by reducing emissions to its quantity level, or by purchasing surplus units from another emitter that is able to reduce its pollution below the number of units it holds. Emitters can choose the technologies and processes for meeting their pollution limits, decide when, where and how to meet their caps, and can save surplus tradable units for use in the future when caps tighten.

Crucial to the success of cap and trade programs is the assurance that tradable units are comparable, that is, each tradable unit represents a comparable amount of allowable pollution. In most programs that comparability is assured by requiring that each tradable unit represent one tonne of allowable emissions. Inter-pollutant fungibility can be assured if the science allows comparison of different pollutants with the same environmental endpoints. For example Global Warming Potential allows comparison of different global warming gases relative to carbon dioxide, so that reductions in one can be compared (traded) with reductions in another.

The extent to which cap and trade programs are effective in reducing pollution does not necessarily depend on having a high "price" for pollution so as to send a signal to emitters that they must internalize the costs of pollution and therefore shift their behavior in the face of the price signal. Rather, the effectiveness of the program depends on whether the cap is sufficiently stringent in level and duration over time so as to send a signal to emitters that they must change their behavior and ensure that pollution reduction obligations are met.

In the sixteen years since the UN Framework Convention on Climate Change Ad Hoc Group on the Berlin Mandate (AGBM) first began considering options for policies and measures and market-based approaches, the world has seen some highly successful market approaches implemented at national levels, such as the U.S. sulfur dioxide emissions trading program to control the precursors of acid rain,⁴ and the European Union's Emissions Trading System (EU-ETS).⁵ Both of these programs have reduced emissions even more successfully than their stated targets, at a cost far less than ex ante predictions.

The U.S. Congress constructed the U.S. acid rain program to control sulfur dioxide emissions by establishing a firm emissions cap and giving electricity generators a variety of compliance options, including emissions trading. In addition, an important element of this construct was an automatic penalty of \$2,000 per ton of excess emissions. The

⁴ See, e.g., the progress reports on implementation of the U.S. acid rain trading program, available at <http://www.epa.gov/airmarkets/progress/ARPO9.html>.

⁵ See, e.g., Research Program on the Ex-Post Evaluation of the European CO₂ Market, results available at <http://www.cdclimat.com/Research-program-on-the-ex-post.html?lang=en>.

amount, so much greater than the actual cost of achieving an incremental ton of reduction, compelled all sources to achieve or acquire through trading the reductions necessary to be in compliance. "Paying to pollute" was simply not a rational option under the SO₂ program. The current European Union ETS was designed on a similar template.

The world has also seen some market-based approaches that, because of poor design features, failed to achieve their stated goals. For example, as part of its effort to comply with the Kyoto Protocol (KP), Canada nominally instituted a domestic market-based program aimed at large-emitting installations nation-wide. The program created a kind of cap and trade system based not on reducing total emissions, but based on reducing emissions intensity (i.e., emissions per unit of economic output, e.g. carbon dioxide per kilowatt-hour of electricity, or carbon dioxide per ton of steel produced).

It created a trading market, but it gave emitters an easy "out": the government promised emitters that if the price of traded units ever exceeded \$15/tonne, the government would simply print more units (breaking the emissions cap) and selling the units to industry at the artificially low price. The result of this "cost cap" was that emitters thought in terms only of reducing their emissions per unit of production, not their total emissions. Emitters did not invest in new strategies to comply with even their intensity limits, because they counted on government to bail them out with the sale of cheap tradable units. Emissions did not go down. Consequently the only entity available to try to purchase emissions units to help Canada meet its KP cap was the Canadian taxpayer. And taxpayers demonstrated at the polls that they were unwilling to subject themselves to a carbon tax. So, poor design features doomed the Canada domestic program and Canada's nominal effort to participate in the KP.

California also had a bad experience with a poorly designed RECLAIM program, which purported to establish a cap and trade market for local sulfur dioxide and oxides of nitrogen (NO_x) emissions in Southern California. In that program, sources' initial allocation of marketable emissions permits was high, to the point of being inflated, relative to their actual emissions. (Phase I of the EU-ETS, from 2005-2007, suffered from the same defect.) At the same time, the RECLAIM program virtually prohibited "banking" or saving of surplus allowances from one compliance period to the next. As a cost cap would, the inflated allocation created a weakened demand signal for investment in low-cost reductions. That signal was further blunted by the fact that the ban on banking reduced the marketability of extra reductions. In response, sources in the program invested little in creating extra, low-cost NO_x reductions. The result of this thin investment pattern (and of the expiration of trading permits at the end of each year or season) was that when economic activity increased and the emissions cap tightened, the market price of NO_x reductions skyrocketed. Insufficient investment in emissions reductions resulted in an insufficient supply of permits to cover emissions increases. Prices reached such astronomical levels that the program was suspended temporarily by local authorities.

Canada's experience illustrates the importance of understanding the purpose and nature of intensity-based targets and greenhouse gas (GHG) "benchmarking" proposals. Benchmarking uses an objective indicator of efficiency (a benchmark) to compare facilities or operations to their industry standard or best practice. In a cap and trade market, initial allocations of allowances can be distributed to emitters on the basis of benchmarks, such that those emitters that have already invested in achieving emission reductions (and therefore score better on the benchmark) receive a greater allocation of allowances than those emitters that have lagged behind.

For example, in constructing the EU-ETS, the European Union initially allocated emissions allowances on the basis of historical emissions baselines for each emitter. To develop its system further, the EU decided to phase in the use of benchmarks to assess and reward the relative efficiency of the operations of emitters covered by the EU emissions cap. Under the benchmark system of allocation, *ex ante*, companies that are already operating more efficiently will benefit, relative to less efficient companies, by receiving a larger allocation of allowances in relation to their emissions than less efficient companies receive. The result is that companies that are less efficient will need to purchase relatively more allowances, while more efficient companies likely will have some surplus allowances to sell. In the EU ETS the introduction of benchmarking as a tool for allocating emissions has therefore served the purpose of helping companies transition, over time, into a more ambitious program.

In constructing a wholly new greenhouse gas emissions reduction policy, benchmarks could in principle be used as a policy tool to encourage companies to improve their emissions-per-unit-of-output relative to the government-established benchmark. However, using such benchmarks in the absence of a cap on total emissions does not assure that overall emissions in that sector will be reduced or even limited, since increased production will lead to increased emissions. Furthermore, benchmarking without a cap will also fail to reward some activities that otherwise reduce emissions: a high-emitting power plant that reduces emissions by operating less frequently, for example, would not be recognized under a pure benchmarking system.

In other words, a key lesson learned is that a policy instrument based on benchmarks may increase efficiency but it does not guarantee effectiveness in achieving the emissions reductions necessary to avoid dangerous climate change, unless the benchmark is combined with an ABSOLUTE emissions cap.

Reflecting on the programs described above, it is impossible to prove that design differences in the Canada and California programs would have yielded a different result. But these experiences do illustrate how responsive environmental markets are to the policy signals created by poor program design.

There is, however, an example which proves the importance of design differences. In 2005-2007, the European Union created a pilot emissions trading system to prepare emitters for the use of an ETS as part of the EU's compliance strategy for implementing the KP's 2008-2012 emissions caps. Because the EU did not already have robust historical emissions data for individual emitters, the EU started in 2003 asking emitters how much they would likely emit during 2005-2007. Emitters responded with inflated

projections of their likely emissions. The EU issued emissions allowances based on these projections. When during the second year of the pilot phase actual emissions data were released, the fact that allowance issuance had been inflated became obvious, and market prices predictably fell sharply. Moreover, since the KP did not allow crediting of early reductions achieved prior to 2008 (except via the Clean Development Mechanism (CDM)), allowances from the ETS pilot phase were not "bankable" into the 2008-2012 commitment period. So, toward the end of 2007, the already depressed price of pilot phase allowances fell to zero.

The EU learned many lessons from the ETS pilot phase. Many of design defects have been corrected in the EU ETS as it stands today, and those corrections have helped make the EU ETS by far the world's largest and most successful environmental market.

3. The role of sovereigns and the role of the COP: A framework of standards

The diversity of market and non-market approaches to reducing pollution emissions that has developed across nations and sub-national jurisdictions suggests that as it looks forward, the COP should recognize that *each Party retains its sovereign prerogatives to design its own national, subnational or regional approaches to enhance the cost-effectiveness of, and promote, its own mitigation actions, including market-based and non-market-based approaches of its own choosing*. Where the role of the COP becomes vital is in providing *a framework to assure transparency of results, so that Parties and stakeholders assess whether the sum total of the mitigation results achieved by the various approaches is sufficient to meet the objective of the UNFCCC*.

Establishing international standards in such a framework does not mean that all, or even most, aspects of each Party's domestic market- and non-market approaches to nationally appropriate mitigation actions can or should be regulated by the COP. Instead, we suggest that the Parties consider, as a vision for the role of the COP, the creation of a framework that is strong enough to provide durable standards for ensuring transparency in non-market and market approaches, and that is capacious enough to support and foster great variability and innovation in the market and non-market approaches chosen by individual sovereigns.

a. Transparency standards for all approaches

In Durban, the COP's decision on the need for standards for various approaches, including markets and non-market approaches, was taken as part of the COP's work on Long-Term Cooperative Action *under the Convention*. *What is crucial for the COP to define, however, is the minimum requirements for **transparency***.

The Parties' work on a framework is being undertaken by the AWG-LCA. Related work may be undertaken by the Parties through the development of a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties, by the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP). In both cases, the work is being undertaken "under the Convention." Under Article 2 of the Convention, the Parties' ultimate objective - including the objective of

"any related legal instruments that the COP may adopt, is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system...within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner." Whether the further work in this field is done through the development of a framework by the AWG-LCA during its one year extension of work, or by the ADP, the Parties need to be able to assure each other that the UNFCCC's objective is being met.

So, in its work on both market- and non-market approaches, it is incumbent upon the COP to establish and promote common standards for emissions monitoring, reporting, accounting and verification (MRV) that can enable meaningful assessments of whether both non-market-based and market-based approaches demonstrate "real, permanent, additional and verified mitigation outcomes, avoid double-counting of effort, and achieve a net decrease and/or avoidance of greenhouse gas emissions," and the UNFCCC objective is being met. National reporting of all emissions and sequestration, on a regular basis, using established international standards, and with international review of the results, is therefore essential. Common accounting/MRV will need to apply to non-market approaches on the same basis as to market approaches; otherwise it will not be possible for Parties to provide the needed full transparency.

Robust and transparent MRV rules benefit countries by creating a structure that encourages investment, innovation, and finance for low-carbon development. MRV rules are a fundamental pillar of policy effectiveness in both the market and non-market contexts: they provide the certainty needed to ensure commitments are being achieved, and incentivize private sector investment in mitigation action.

b. Transparency standards for market approaches

In the case of market-based approaches, transparency includes ensuring that one tradable emissions unit is indeed fully substitutable for another, with no double-counting. So it is incumbent upon the COP to define ***minimum elements for transparency and fungibility in a global market***. Recognizing that national and subnational programs, sectoral coverage, use of offsets, and other elements will differ across jurisdictions based on different sovereign prerogatives, the COP should focus on the minimum elements to assure transparency of emissions results for purposes of determining whether the objective of the UNFCCC is being met.

c. Market approaches: minimum elements

The foregoing discussion leads us, on the basis of experience with carbon markets as cost-effective tools for mitigating GHG emissions and stimulating innovation and investment in low carbon economic development, to propose the following minimum elements for the successful operation of market approaches:

Minimum elements for market-based approaches

1. Transparent accounting for total emissions and sequestration (this element is identical to that needed for transparency for non-market approaches).
2. Cap on total (absolute) emissions. The cap could be on total national emissions, or on the emissions of one or more sectors or political sub-units. The cap could be internationally or domestically binding. What is important is that the cap be framed in absolute (total) emissions terms (as compared with "intensity" targets or caps on emissions per unit of economic output). *Without such a cap, a Party would not be eligible to participate in market-based approaches* (although Low-Emitting Parties would be afforded a substantial transition period, as described below).
3. Caps not premised on Business-as-Usual (BaU): What matters to the climate is total emissions going into the atmosphere. Allowing large-scale crediting of reductions from projected future emissions baselines, is not sufficient and could trigger inflated projections of BaU, resulting in increases in total allowable emissions.⁶
4. Fungibility of tradable units: Strong standards are needed to define the traded units and the rules for trading and banking, so that a ton of allowable emissions in one jurisdiction in a given time period can be fungible with a ton of allowable emissions in another jurisdiction or another time period. In the case of credits/offsets earned in an uncapped sector, each ton must demonstrate that it is real, additional, permanent, verified, and not double-counted. Care must be taken to ensure that no credits are conferred under so-called "no-lose" (non-binding) targets until total sectoral or jurisdiction-wide reductions have been achieved. In such cases, environmental insurance could be provided by pairing credits earned through no-lose targets with surplus allowances from programs with binding caps.
5. Transparent tracking and reporting of tradable emissions units and transactions.
6. Accountability: Systems must hold emitters accountable for meeting clearly established targets, with known-in-advance consequences for failure to do so. The systems may be international if the COP agrees such a framework and a jurisdiction decides to subscribe to it. Or the systems may be wholly domestic.
7. Consistency. Sustained investment in low-carbon development is crucial to the success of mitigation efforts. Investor confidence in the durability of policy is, in turn, crucial to that sustained investment. Consequently, once policy-makers establish the rules of a market-based framework, they should change those rules seldom and only via previously announced procedures for doing so.

⁶ See, e.g., "Clean Development Mechanism Rules of Procedure: Standards for the Executive Board and Operational Entities" (Environmental Defense 2002)
http://apps.edf.org/documents/606_CDM_ethics.PDF

Taken together, these seven elements can support existing and/or new international market mechanisms. In the absence of such mechanisms, these elements can support decisions by individual sovereigns to allow emitters operating within their jurisdictions to tender, for compliance purposes, units that arise within the jurisdiction of other sovereigns. The potential role of the COP is identified in the following table:

Table 1: Roles of the COP and Parties in Transparency of Market and Non-market approaches

	Framework Element	Applicable to Markets?	Applicable to Non-market?	Role of COP	Role of Host Government with an emissions cap	Role of Host Government without emissions cap
1.	Transparent accounting for total emissions and sequestration	Yes	Yes	Establish modalities and procedures / standards	Monitor and report national emissions and sequestration	Monitor and report national emissions and sequestration
2.	Transparent tracking and reporting of emissions units and transactions	Yes	No	Establish transparent international transaction log	Monitor and report transactions and emissions, subject to standards	Factor out leakage
3.	Caps on total or sectoral emissions	Yes	If Party chooses	Facilitate willing sovereign decisions to adopt caps	Describe cap (sectors and gases) and implement cap	Not applicable
4.	No large-scale crediting of reductions below BaU	Yes	No	Adopt rules that preclude large-scale crediting of reductions below BaU	Base domestic program on actual emissions data	Not applicable
5.	Fungibility among allowances	Yes	No	Establish clear standards for traded units, with rigorous offset criteria	Set rules for tradable units in domestic program	Not applicable
6.	Accountability	Yes	Yes	COP can provide internationally legally binding framework for those Parties that choose to join it	Domestically legally binding, with bar on international trading in case of non-compliance	Party may choose to inscribe its commitments in COP framework and/or domestic law
7.	Consistency	Yes	Yes	Facilitate periodic scientific reviews; seldom change trading rules and only in accordance with previously announced procedures for doing so	Establish clear, predictable rules for domestic programs. Change rules seldom and only in accordance with previously announced procedures for doing so.	Helpful but not required

d. The Minimum Elements and Linkage.

These elements could be adopted as part of a COP-established global framework. They could include provisions to enable nations that do not ratify the framework to link to its carbon market if they adopt comparable domestic programs. Alternatively, in the absence of a COP-established framework, these elements could serve as criteria by which sovereigns that choose to establish domestic market approaches evaluate other sovereigns' programs for potential linkage.

4. From CDM to new market mechanisms: creative tools for the transition

How can Parties that choose to do so, make the transition from non-market approaches to some participation in market-based approaches (including offset programs, which by definition entail trading of reductions achieved in sectors without emissions caps)? What role can the COP play in facilitating this transition?

First, it is important for Parties to recognize that in terms of its global mitigation benefits, the current Clean Development Mechanism (CDM) is at best largely a zero-sum-game. CDM occurs in countries without national or sectoral emissions caps. A CDM transaction transfers an increment of reduction below Business-as-Usual to an emitter in a jurisdiction with a (domestically or internationally) binding emissions cap, for the latter's use in offsetting an increase in emissions above its cap. Consequently, using CDM to comply with national caps does not lead to a net reduction of global emissions. (By comparison, emissions trading between two jurisdictions with binding caps can help both together meet their caps cost-effectively, if one jurisdiction can reduce its emissions below its capped level and transfer the resulting surplus allowances to the other jurisdiction, which can then use those to cover an increase in emissions above its capped level without breaching the two jurisdictions' combined cap.)

Similarly, market-based approaches that propose to offer "sectoral crediting" by allowing trading of sector-wide reductions below BaU, may increase the amount of available credits, but likely do not achieve net reductions. Moreover, although most developing countries are communicating initial emissions reports, they are far from able to submit the kind of verified sectoral emissions baselines that could bolster the credibility of such "sectoral crediting."

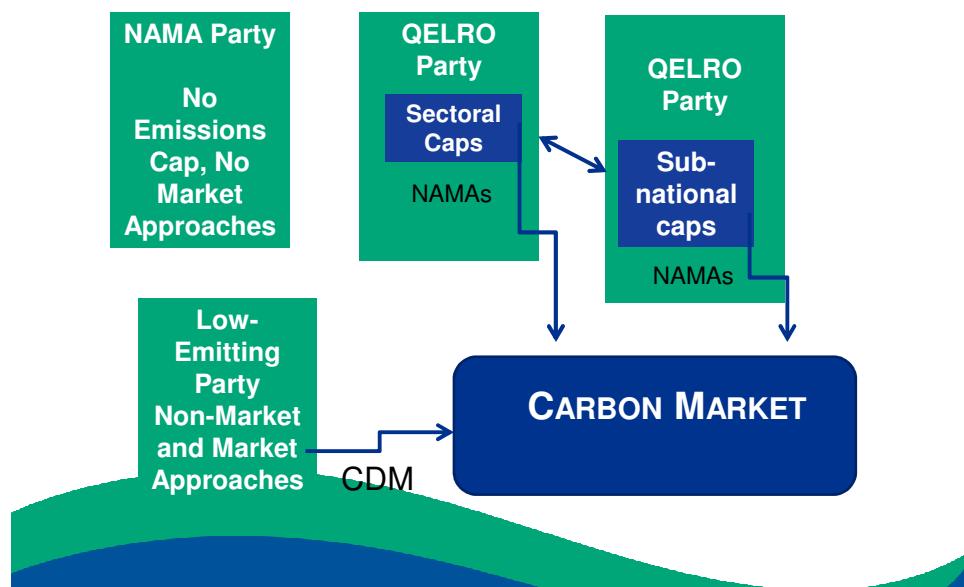
Consequently, any market approach that relies primarily on CDM, or any new market measure that credits reductions in emissions below Business-as-Usual, may reduce the costs of compliance in the jurisdiction having an emissions cap, but likely will not achieve a net decrease in greenhouse gas emissions.⁷

By contrast, trading between and among jurisdictions and sectors with absolute emissions caps helps each jurisdiction or sector achieve its cap and thereby facilitates net global emissions reductions. Therefore EDF has proposed that going forward, market approaches - including participation in the CDM - be limited to those Parties that have adopted quantified absolute emissions limitation and reduction commitments (QELROs) caps for some portion of their national emissions, nation-wide or at sectoral or sub-national level, with an appropriate transition period for Low-Emitting Parties.⁸

⁷ See K. Meng, "Creating a Cleaner CDM," Carbon Finance (September 2007), pages 16-17.

⁸ See Environmental Defense Fund Submission to the Ad Hoc Working Group on the Durban Platform for Enhanced Action, regarding Views on Options and Ways for Further Increasing the Level of Ambition (February 28, 2012).

Various Approaches - Non-Market, Market, and New Market Mechanisms



Against this backdrop, EDF sees the following creative tools in the toolkit to help nations make the transition to new market mechanisms:

a. Sectoral domestic cap-and-trade systems. As part of the new framework, the COP could provide standards to support Parties that wish to adopt sectoral-level domestic cap and trade systems, and offer support to enable Parties to compare efforts under such systems and avoid leakage of emissions from the capped sectors into other sectors of their economies, or into the same sectors that remain uncapped in other Parties. Parties that voluntarily choose to participate in such new mechanisms must adhere to the same robust MRV rules that provide environmental and market integrity for broader cap and trade programs.

b. REDD+ as a New Market Mechanism. The design of REDD+ as a New Market Mechanism should go hand-in-hand with the design and standard-setting of other market based mechanisms. EDF has supported a voluntary REDD+ mechanism for forest nations with robust reference levels that will provide the benchmark against which future GHG emissions and removals can be measured to assess progress in meeting the REDD+ goal. Robust reference levels based on historical emissions can provide sufficient assurances of net reductions so as to enable REDD+ credits achieved by reducing deforestation emissions below reference levels to be transferred to Parties with absolute caps for compliance purposes. Parties that wish to participate in REDD+ as a new market mechanism should adhere to robust MRV rules (see above). EDF believes that on an interim or transitional basis, a new market mechanism utilizing REDD+ could be applicable at a subnational scale, through mechanisms that nest

REDD+ projects into national systems, as long as the same rules are met and environmental integrity is maintained.

Moreover, the UNFCCC can incentivize immediate action if it makes clear that actions undertaken immediately that sustain and deepen reductions in deforestation and other REDD+ activities will be recognized for future results-based financing, even if many of the specific details are still to be determined. One simple way to do this, for example, would be for the UNFCCC to provide guidance on a starting date as of which REDD+ reference levels will be used to measure reductions going forward, even if further criteria are still to be developed. This date should be as soon as possible to create incentives for immediate action and ideally be a date in the recent past. A date in the recent past would avoid creating perverse incentives to game reference levels by increasing future deforestation and avoid penalizing regions that have already undertaken ambitious early efforts to reduce deforestation, particularly since the 13th Conference of the Parties to the UNFCCC in Bali on December, 2007.

c. Credit for early action. Delaying necessary action to reduce global warming pollution until 2020 will quadruple costs to the global economy, according to the International Energy Agency.⁹ Recognising that the Durban Platform commits Parties to reach agreement on a protocol, or amendment, or an agreed outcome with legal force not later than 2015 (and hopefully sooner), and that this new instrument should take effect by 2020, we also recognise the importance of bending the global emissions trajectory downward before 2020 if at all possible. One important tool for achieving this is for a new instrument to offer early access to carbon markets for nations that act before 2020 to become so-called QELRO Parties. The 2020 Agreement can thus include pre-2020 targets and market mechanisms – and as long as the minimum elements above are met - can provide credit for early mitigation. A similar approach was used to enable the Clean Development Mechanism to begin operating on an early-action basis even prior to the entry into force of the Kyoto Protocol.

d. Emissions budgets and "banking" or "saving". Experience with a wide range of market-based programs, including the EU-ETS, the U.S. sulfur dioxide program, and California's RECLAIM program, discussed above, underscores the importance of multi-year emissions budgets and the ability for emitters to "bank" or "save" surplus emissions allowances from one commitment period to the next. Both tools allow emitters to manage emissions flexibly over time. Offering nations the opportunity and the incentive to manage greenhouse gas emissions over time through multi-year emissions budgets and banking of surplus allowances, can help address concerns that nations should not adopt emissions limits, or should choose to adopt only very weak emissions limits, because they cannot predict fluctuations in economic and emissions growth in the future.

Moreover, experience indicates that when offered the opportunity to bank or save surplus allowances for use in the future, most emitters will choose to continue saving,

⁹ International Energy Agency, World Energy Outlook 2011, at 2, available at http://www.iea.org/weo/docs/weo2011/executive_summary.pdf

rather than to use allowance surpluses to cover sharp increases in emissions. Such banked or saved allowances also can serve as important adjuncts to climate finance, providing much-needed environmental security/collateral for green lending to support low-carbon development.¹⁰ Consequently, among the most important roles for the COP could be to define several multi-year commitment periods, and offer nations the opportunity to bank or save emissions allowances from one period to the next.

Taken together, these elements could help provide a useful transition for nations not currently covered by emissions caps into the world of new market mechanisms. In each case, however, care would need to be taken to avoid double counting of emission reductions, particularly where the NMM operates in tandem with existing mechanisms such as the CDM.

5. A New Topic: Using Market-Based Tools to Enhance the Effectiveness of Public Finance. Properly designed, market-based approaches as described above can spur large-scale investment in low carbon development across a wide range of economies. A question also arises as to whether some of the principles and tools of market approaches—such as their focus on the cost-effective use of limited financial resources—could be combined with non-market mechanisms aimed at guiding public finance toward longer-term mitigation actions and market readiness funding.

In particular, applying some of the principles and tools of market approaches could help public funding instruments serve two objectives: leveraging limited public funds as transparently and cost-effectively as possible in pursuit of sustained CO₂-equivalent emission reductions; and enabling developing countries direct, simplified access to these funds.

One possible use of the mitigation portion of the Green Climate Fund (GCF) as well as other plurilateral and bilateral public climate funds could be the direct purchase of emissions allowances/reductions. Such purchases could be focused on certain countries and types of reductions, or could be quite broad. In turn, these purchases could principally be accomplished in three ways that would provide financial support for those undertaking emission reduction programs at national, sectoral, or sub-national levels.¹¹

Simplified, Cost-effective Support for Emission Reduction Projects

One scenario is a commitment to directly purchase properly measured, reported, and verified (MRV) allowances/reductions. Ideally, this purchasing mechanism would

¹⁰ See Environmental Defense Fund Submission to the Ad Hoc Working Group on the Durban Platform for Enhanced Action, regarding Views on Options and Ways for Further Increasing the Level of Ambition (February 28, 2012).

¹¹ See Edwards, Rupert (2011), “The Green Climate Fund and the implementation of Emission Reduction Underwriting Mechanisms,” Climate Change Capital working paper; Arunabha Ghosh, Benito Müller, William A. Pizer, and Gernot Wagner (forthcoming), “Quantity-Performance Instruments for Public Climate Funds,” Oxford Energy and Environment Brief; and William A. Pizer (2011), “Seeding the market: auctioned put options for certified emissions reductions,” mimeo, Duke University.

involve some form of competitive bidding in the form of a reverse auction to insure a cost-effective and transparent use of public funds.¹²

A second scenario sees the fund act as a type of ‘top-up’ instrument, establishing a price floor for MRV reductions. A minimum price guarantee would be provided in advance to qualifying projects, ideally through some type of competitive bidding process. This assumes the existence of a future market, where credits could ultimately be sold and acts akin to an insurance or price guarantee for sellers.

A third scenario sees the seller obtain the right to sell the funder a certain amount of MRV allowances/reductions at a pre-agreed price and future date. This guaranteed ‘option’ to sell emissions reductions later has clear value to the seller, who would in turn be willing to pay a small initial sum for that right to reap larger returns later. These ‘options’ could be auctioned in advance and would then be freely tradable. The small, forfeitable initial sum incentivizes serious bids.

Mobilizing Climate Finance through Simplified, Direct Access to Public Funds

The three instruments differ in setup, execution, and outcomes. They also differ in how the risk for the projects would be shared by the public fund and the seller. However, all three instruments have one feature in common: they enable developing countries simplified, direct, and automatic access to public funds in pursuit of their own development and emissions reductions strategies without intermediation.

Neither instrument replaces the need for market-based emissions reductions strategies, nor should public funds focus exclusively on any of these instruments at the cost of market readiness and other functions. Moreover, proper safeguards and rules need to be in place to avoid too narrow a focus for the use of public funds within any such automatic funding mechanism. In particular, we need to make sure that projects with possible large future upsides get their proper due.

The need for the cost-effective use of limited public climate funds is clear. So far, the multiple funding channels and the dozens of climate-related funds have largely fallen short on two counts: disbursing funds commensurate with mitigation and adaptation needs; and giving recipient countries greater voice in the governance of and control over the use of public funds. As new funding mechanisms are operationalized, we hope these proposed instruments, in particular the third scenario around a guaranteed ‘option,’ receive proper consideration in light of meeting the broader objectives of climate finance.

¹² A related mechanism would involve the purchase of the opportunity to buy MRV reductions at a future date at a pre-agreed upon price. Rather than an outright purchase, the approach would involve temporarily reserving or renting the reductions with the option to buy them later at the agreed price. Similar to mechanisms two and three discussed here, this approach could help provide a bridge of interim financing until the development of a robust market in the future, providing more cost-effective approaches to mitigation. It could also provide greater flexibility to both the seller and the funder.

Conclusion

The Environmental Defense Fund appreciates the opportunity to share with Parties views and perspectives on the respective potential roles of the COP and individual Parties in developing a framework of standards for transparency of market- and non-market approaches to mitigation; in formulating minimum elements for the successful operation of market mechanisms, including new market mechanisms; in opening discussion about creative new tools for supporting the transition of Parties that wish to enhance their participation in market mechanisms; and in considering ways of bringing market-based tools to bear on the provision of public finance to support low carbon development.

ANNEX

Paragraphs 79-86 of the Durban Decision:

The Conference of the Parties:

Emphasizes that various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries, must meet standards that deliver real, permanent, additional and verified mitigation outcomes, avoid double counting of effort, and achieve a net decrease and/or avoidance of greenhouse gas emissions;

Requests the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to conduct a work programme to consider a framework for such approaches, with a view to recommending a decision to the Conference of the Parties at its eighteenth session;

Invites Parties and admitted UNFCCC observer organizations to submit to the secretariat, by 5 March 2012, their views on the matters referred to in paragraphs 79 and 80 above, including their experiences, positive and negative, with existing approaches and mechanisms as well as lessons learned;

Requests the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to conduct one or more workshops with Parties, experts and other stakeholders, including an in-session workshop at its session held in conjunction with the thirty-sixth session of the subsidiary bodies, to consider the submissions referred to in paragraph 81 above and to discuss the matters referred to in paragraphs 79 and 80 above;

Defines a new market-based mechanism, operating under the guidance and authority of the Conference of the Parties, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries, which is guided by decision 1/CP.16, paragraph 80¹³, and which, subject to conditions to be elaborated, may assist

¹³ Paragraph 80 provides that the COP:

Decides to consider the establishment, at the seventeenth session of the Conference of the Parties, of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions, taking into account the following:

- (a) Ensuring voluntary participation of Parties, supported by the promotion of fair and equitable access for all Parties;
- (b) Complementing other means of support for nationally appropriate mitigation actions by developing country Parties;
- (c) Stimulating mitigation across broad segments of the economy;
- (d) Safeguarding environmental integrity;
- (e) Ensuring a net decrease and/or avoidance of global greenhouse gas emissions;

developed countries to meet part of their mitigation targets or commitments under the Convention;

Requests the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to conduct a work programme to elaborate modalities and procedures for the mechanism referred to in paragraph 83 above, with a view to recommending a decision to the Conference of the Parties at its eighteenth session;

Invites Parties and admitted UNFCCC observer organizations to submit to the secretariat, by 5 March 2012, their views on the matters referred to in paragraphs 83 and 84 above, including their experiences, positive and negative, with existing approaches and mechanisms as well as lessons learned;

Requests the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to conduct one or more workshops with Parties, experts and other stakeholders, including an in-session workshop at its session held in conjunction with the thirty-sixth session of the subsidiary bodies, to consider the submissions referred to in paragraph 85 above and to discuss the matters referred to in paragraphs 83 and 84 above.

(f) Assisting developed country Parties to meet part of their mitigation targets, while ensuring that the use of such a mechanism or mechanisms is supplemental to domestic mitigation efforts;

(g) Ensuring good governance and robust market functioning and regulation;