A Home for All: Architecture of a Future Framework for Various Approaches
September 2013

Submission of **Environmental Defense Fund** (www.edf.org) on para. 4(a) of the SBSTA Draft Conclusions proposed by the Chair on the Framework for Various Approaches (FVA), taken at Bonn in June 2013, relating to market and non-market mechanisms under the Convention.

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 paragraph 4(a) of the SBSTA Draft Conclusions proposed by the Chair on the Framework for Various Approaches (FVA), taken at Bonn in June 2013, including information, experience and good practice relevant to the role and technical design of the FVA, and the FVA's links to other relevant matters under the Convention.[i]

I. EXECUTIVE SUMMARY

A successful 2015 agreement under the UNFCCC will need to address to the satisfaction of the Parties a well-identified set of issues, including mitigation, adaptation, finance, and capacity building, among others. This submission focuses on the intertwined issues of mitigation and how to finance mitigation. EDF believes that an aggressive approach to mitigation that mobilizes public and (much larger) private finance flows[ii] is essential to achieving the objective of the Convention: "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[iii]

Focused on mitigation and links to finance, this submission proposes a structure for the 2015 agreement that draws on lessons learned from other multilateral processes, as well as current matters under the Convention, particularly the work under SBSTA on a "framework for various approaches" (FVA).[iv] Specifically, a framework for mitigation action that establishes the following three items can provide a useful way forward to Paris in 2015:

1. a core set of **standards** as building blocks for both market and non-market mitigation approaches (a "Climate Integrity Checklist");
2. additional standards that would apply to any cross-border trading of carbon market units for compliance (a "Climate + Market Integrity Checklist"); and
3. mechanisms for domestic or international accountability and consequences if the standards have not been met, coupled with capacity building for improvement in domestic enforcement and compliance processes.

Measuring, reporting, and verifying emissions and sequestration are essential to achieving the objective of the Convention for at least 6 reasons:

1. they help individual Parties and the global community clearly understand the scope of the climate challenge;
2. they are essential for developing a good strategy to address the problem;
3. they allow policymakers and stakeholders to assess the extent to which policy interventions are succeeding - both at the jurisdictional level and globally;
4. they give public and private actors confidence in calculating the costs and benefits of addressing rising emissions;
5. they provide confidence to investors, particularly when supported with a long term signal of willingness to address the problem;
6. they support meaningful and informed global negotiations to address climate change.

Jurisdictions around the world have varying levels of capacity to measure, monitor, report, and verify their greenhouse gas (GHG) emissions and sequestration. An effective framework for mitigation must offer a series of flexible pathways for sovereigns and sectors to improve measuring, monitoring, reporting, and verification, and in the process improve their capacity to efficiently address the climate change challenge – either through non-market or market options. We anticipate that sovereigns will choose a mix of options. Some will apply proven market-based solutions to address emissions from significant sectors of their economies, since such approaches are often cost effective and efficient. Recognising that each Party retains sovereign prerogatives to design its own approaches, EDF believes that a key role of the Conference of the Parties (COP) in advancing mitigation **can and should** be to **establish a framework of standards** which can:

- serve as guideposts for the design of domestic programmes which choose to follow them,
- facilitate environmentally sound market linkages among programmes that choose to utilize market mechanisms, and
- provide means for comparing the efficacy of various domestic programmes in meeting the UNFCCC's objective.

Non-market approaches that meet progressively higher "tiers" of rigor in measurement, reporting, and verification (MRV) of emissions and sequestration could be matched with correspondingly higher "tiers" of access to public and private finance. This access could in turn improve the effectiveness and mitigation potential of such non-market approaches.

Drawing on the benefits to Parties of sound domestic MRV systems, this approach could establish a stepwise set of incentives for aggressive mitigation, while providing clear pathways for leveraged use of limited public funds. COP-established criteria that recognise and reward early, additional mitigation action before 2020 would allow the framework to provide pre-2020 mitigation incentives as well.

If the COP is not able to agree to establish a framework of standards for market- and non-market-based mitigation approaches, individual sovereigns could still be guided by such standards as they:

- evaluate whether to establish domestic market approaches;
- assess the mitigation effectiveness of other sovereigns' programmes;
- identify other sovereigns for potential market linkage; and
- make objective decisions to allow emitters operating within their jurisdictions to tender, for compliance purposes, units that arise within the jurisdiction of other sovereigns.

Reviewing experience with market and non-market approaches in light of the principles of the Convention, this paper identifies key issues that could usefully be decided by the Parties as part of a 2015 agreement. Resolution of these issues promises to help the Parties achieve their mitigation ambitions, unlock disparate sources of private and public climate finance needed to foster sustainable low-carbon development, and assess performance against the objective of the Convention.

II. PURPOSE AND SCOPE OF 2015 AGREEMENT

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." The primary purpose of a 2015 agreement, and related work under the Convention, must be to achieve the objective of the Convention.

EDF believes that *the fundamental challenge that UNFCCC Parties face is to develop a legal framework for a 2015 agreement that attracts and encourages sovereigns to voluntarily place effective, durable limits on the greenhouse gas (GHG) emissions of entities in their jurisdiction,*

to enforce those limits, and to generate sustained financing to support efforts to mitigate and adapt to the changing climate.

a) Tools that incentivise increased mitigation and participation

As discussed in EDF's previous submissions to the UNFCCC on ambition[v] and on market mechanisms,[vi] a *legal architecture that incentivises increased mitigation and participation while respecting the principles of the Convention, requires a laser-like focus on three aspects:*

- Incentives to strengthen commitments and actions to limit and reduce total global GHGs, including incentives that encourage early action (i.e., prior to 2020);
- Incentives to broaden participation, with a view to enrolling jurisdictions and entities constituting 80% or more of global GHG emissions in efforts to meet the UNFCCC's objective; and
- Incentives to extend these commitments and actions well into the future, given the long time horizons for capital stock turnover and persistence of GHGs in the atmosphere for decades to centuries.

Enforceable legal instruments and robust MRV systems embedded in well-designed market and non-market approaches are crucial tools in the climate policy toolbox, if the Parties are to mobilize the significant private and public finance needed to achieve deep reductions in global GHG emissions. In Section 5 below, we elaborate on a design for the 2015 agreement that incorporates these essential tools.

b) An architecture rooted in the principles of the Convention

A successful 2015 agreement must be *flexible enough* to accommodate the national circumstances of a wide array of countries, while finding practical ways to apply the principles of the Convention, particularly the principle of "common but differentiated responsibilities and respective capabilities" (CBDRRC). It must also recognise that many countries have significant potential to mitigate emissions. An effective architecture will therefore incentivise the ambitious participation of both developed and developing countries, recognizing that the decision to participate in any particular mitigation option is a decision taken voluntarily by each sovereign through its domestic processes.

In particular, the principle of CBDRRC can be respected in legal instruments in ways that address the fundamental concerns of a wide range of nations, if a strategic and dynamic set of MRV tools is made available that will allow Parties to harness their most efficient mitigation policy options - whether market or non-market approaches, or a combination of the two, as is often the case.

III. LESSONS LEARNED FOR DESIGN OF A 2015 AGREEMENT, AND LINKS TO OTHER PROCESSES UNDER THE CONVENTION

a) Lessons learned from other multilateral processes, and market and non-market experiences

The year 2012 marked the twentieth anniversary of the UNFCCC. EDF, working with colleagues and partners around the world, has informally taken stock of the history of efforts to mitigate climate change. Drawing on lessons learned from these efforts, and recognising, as noted above, that the crucial challenge is to create incentives for nations and other jurisdictions to participate in mitigation, EDF offers the following insights as context for the design elements that we propose in the next section:

- The first insight is that without effective measurement, reporting and verification mechanisms, it is impossible to know if efforts to tackle the climate challenge are succeeding. MRV systems provide benefits to countries pursuing both market and non-market approaches to mitigation. Without these systems, Parties are unable to make informed decisions on whether and where to use market or non-market interventions to achieve their mitigation goals.

- The second insight is that while a wide range of domestic policies (e.g., energy efficiency policies, renewable energy policies, removal of fossil fuel subsidies, and others) can and should usefully be applied across a range of sectors, the development of domestic and regional market-based approaches has demonstrated that well-designed emissions trading systems have great potential to attract and maintain the voluntary participation of sovereigns and the economic actors in their jurisdictions.[vii] According to the World Bank, over 40 national and 20 sub-national jurisdictions have either implemented or are considering market-based mechanisms that put a price on carbon.[viii] In fact, 10 percent of the world's population and a third of its GDP now come from areas implementing caps on carbon pollution. From China to California, South Africa to Australia, new market-based initiatives are emerging. EDF and the International Emissions Trading Association (IETA) recently completed a series of case studies outlining and comparing key design elements of emissions trading programmes currently operating or launching around the world.[ix]

  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. For example, independent analyses of the largest such programme addressing GHG emissions, namely the European Union's Emissions Trading System (EU-ETS), have concluded that the system has been effective in driving emissions down at costs far lower than had been anticipated.[x] Crucial to the success of these markets,

however, are the minimum elements of effective market-based mechanisms and the core standards described in Section IV below.

- A third insight is that, while the COP will seek to craft new instruments that all Parties can join, not every nation needs to be a Party to a new instrument. Carefully designed legal provisions which allow the participation of non-Parties[xi] who domestically enforce the minimum elements for high-integrity market- and non-market-based mechanisms, can provide powerful incentives for sovereigns to participate in mitigation, *even if those sovereigns do not formally become Parties to a new instrument or formally subscribe to international standards*. Such an approach is common in other fields (see, e.g., the recently negotiated Minimata Convention on Mercury; the Montreal Protocol on the Ozone Layer; the Convention on International Trade in Endangered Species; and the Basel Convention on Hazardous Wastes).

- A fourth insight is that a dynamic, durable agreement requires more flexible amendment procedures that can welcome the upgrade of commitments and the participation of more Parties. Learning from experience with the Kyoto Protocol, a commitment regime under the new 2015 agreement should set at least two 5-year commitment periods, so that there are clear consequences in the already-agreed second period for failure to comply with the first 5-year target, and so that the next set of two 5-year targets is in place before the first 5-year period expires. The system should include an adjustment procedure similar to the adjustment procedure under Article 2.9 of the Montreal Protocol that allows Parties to increase their ambition without triggering complicated and lengthy amendment and ratification procedures.

b) Links to other processes under the Convention

To guide the ADP's development of an enforceable legal instrument that incorporates the insights above, the Parties can look to current work under SBSTA on a "framework for various approaches" (FVA). The FVA is intended to enhance the cost-effectiveness of, and promote, mitigation action. EDF believes the FVA offers a promising opportunity to elaborate a **durable architecture for high-integrity market and non-market approaches to mitigation** under a 2015 agreement. This new architecture will be needed to broaden participation and generate the sustained finance necessary to support global mitigation efforts. In turn, guidance from the ADP to SBSTA on the development of the FVA could help integrate the FVA into a new 2015 agreement, and stimulate both pre and post 2020 mitigation action. Whether the further work in this field is done through the development of a framework by the SBSTA, or by the ADP, the Parties need to be able to build a participatory and ambitious mitigation architecture while assuring each other that the UNFCCC's objective is being met.

Building on these insights from the Convention and other processes, we propose a set of minimum elements that the Parties could embed in a 2015 agreement, to broaden participation and ensure the integrity of market and non-market approaches to mitigation. The section below elaborates these elements, and provides examples of how they could be applied in accordance with the principles of the Convention.

IV. WHAT STANDARDS MUST BE ESTABLISHED TO ENSURE THE ENVIRONMENTAL INTEGRITY OF MITIGATION APPROACHES?

a) The minimum elements of effective market- and non-market-based approaches to mitigation

EDF strongly supports the COP's Durban Decision that says 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*."[xii] In their work to create a 2015 agreement, the Parties could establish a set of core standards whose minimum elements can be envisioned as a "Climate Integrity Checklist" for a variety of domestic approaches. These core standards would apply to all mitigation approaches, with additional standards for market approaches. The complete set of standards can be called a dual "Climate + Market Integrity Checklist."

Under this model, non-market approaches that met progressively higher "tiers" of rigor in measurement, reporting, and verification (MRV) of emissions and sequestration could be matched with correspondingly higher "tiers" of access to public and private finance. This access could in turn improve the effectiveness and mitigation potential of such non-market approaches.

Domestic market-based approaches – in both developed and developing countries –that satisfied the "Climate + Market Integrity Checklist" would secure access to international carbon markets, should sovereigns with such approaches choose to do so.

Completion of the checklists for effective domestic approaches would entail analysis of the following 8 questions:

<u>Questions for Both Market and Non-market Approaches (Core "Climate Integrity Checklist"):</u>

1. **Does the domestic approach provide for *transparent and comprehensive accounting for total emissions and sequestration***, using broadly accepted accounting rules and independent verification of emissions reports? National reporting of all emissions and sequestration, on a regular basis, using established international standards, and with international review of the results, is essential to determine whether the objective of the Convention is being met.

   <u>Domestic Benefits of Robust MRV and Carbon Accounting</u>

   Comprehensive accounting and robust monitoring, reporting, and verification (MRV) benefit countries by creating a structure that encourages investment, innovation, and finance for low-carbon development. Comprehensive accounting and MRV rules are a fundamental pillar of policy effectiveness in both the non-market and market contexts: they provide the certainty needed to ensure commitments are being achieved, and incentivise

public and private sector investment in mitigation action, in part by assuring the environmental integrity of the carbon "currency" established by market-based approaches.

Even when emissions reductions are not traded, the ability to compare performance allows for evaluations of the cost-effectiveness of non-market approaches and public finance.[xiii] When comparability is achieved in reporting and accounting, countries can more easily communicate their efforts in a way that allows an assessment of the overall equity of the commitments – an important principle to be addressed in a successful ADP outcome.

2. **Is the approach *enforceable*?** Domestic systems must hold emitters accountable for meeting clearly established goals and targets, with known-in-advance consequences for failure to do so. Enforcement systems may also exist at the international level, if the COP agrees upon such a framework and a jurisdiction decides to subscribe to international enforcement. Or the systems may be wholly domestic.

3. **Is the approach *durable, with clear and consistent rules* that foster long-term investments?** 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 a framework, particularly a market-based framework, they should change those rules seldom and only via previously announced procedures for doing so.

4. **Credit for Early Action (optional element):** for those approaches that choose to encourage voluntary greenhouse gas emission mitigation actions prior to the commencement of binding rules, **does the approach establish clear and predictable incentives for action by individual emitters**? For those jurisdictions choosing to implement early action programmes under market-based caps, **does the approach include *rigorous standards for the setting of baselines* for forward-allocation of tradable allowances**?

   Delaying necessary action to reduce global warming pollution until 2020 will quadruple costs to the global economy, according to the International Energy Agency.[xiv] Early Action programmes are designed to give domestic emitters the incentive to voluntarily reduce emissions early, when it may be less expensive for them to do so, rather than requiring them to wait until binding rules are in place.

<u>Additional Questions for Market-Based Approaches:</u>

5. **Does the domestic approach include some type of *cap on total (absolute) emissions,*** including provisions to address emissions leakage? 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 standard specifies that for international carbon market access, the cap should be framed in absolute (total) emissions terms (as compared with "intensity"

targets, or caps on emissions per unit of economic output). Such a programme should also contain effective provisions to address displacement of emissions to sources in uncapped sectors or jurisdictions ("leakage").

Without such a cap, a Party could not be eligible to participate in international market-based approaches. However, least developed countries (LDCs) and other developing country Parties with low emissions could be afforded a substantial transition period, in accordance with the principles of the Convention.

Canada's experience illustrates the importance of understanding the purpose and nature of emissions caps vs. intensity-based emissions targets. As part of its effort to comply with the Kyoto Protocol (KP), in 2002 Canada nominally instituted a domestic market-based programme aimed at large-emitting installations nation-wide. The programme 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).[xv]

The Canadian system's poor design features, including an easy "out" for emitters if the price of units ever exceeded $15/tonne, meant that emissions did not go down, undermining Canada's domestic programme and Canada's nominal effort to participate in the KP (from which it has since withdrawn).

<u>The Potential Role of "Benchmarking" in a Capped Market</u>

In a cap and trade market, initial allocations of allowances can be distributed to emitters on the basis of "benchmarks." Benchmarking uses an objective indicator of efficiency (a benchmark) to compare facilities or operations to their industry standard or best practice, 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. Such an approach is used in the EU's emissions trading system, for example.

Emissions intensity "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 recognised 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.

6. **For the portion of the approach that has an absolute cap, does the approach *premise its cap on historical emissions*** rather than on reductions below Business-as-Usual (BaU)? What matters to the climate is total emissions released 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 perverse increases in total emissions.[xvi]

   Requiring caps to be premised on historical levels does not mean that emissions of every country choosing to adopt a cap must be below historic levels; under the Kyoto Protocol, for example, some countries committed to emissions caps at levels more than 100% of their base year. Even if a cap allows future growth in emissions, stating an emission cap in reference to measured, historic levels instead of BaU has the advantage of increasing transparency and facilitating comparison of effort among similarly situated Parties. Attempts to objectively assess a nation's estimates of its future emissions or BAU will likely be extremely difficult and may be perceived as overly intrusive, while use of existing emissions data provides a common and verifiable starting point for analysis of mitigation effort.

7. **How does the approach address the *definition and fungibility of tradable units*?** Strong standards are needed to ensure that domestic market-based programmes clearly define any traded units and the rules for trading and banking, so that a tonne of allowable emissions in one jurisdiction in a given time period can be fungible with a tonne of allowable emissions in another jurisdiction or another time period. Inter-pollutant fungibility can be assured *if* (and only 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.

   In the case of domestic approaches that allow for credits/offsets to be earned in uncapped sectors, the framework should establish standards requiring that domestic programmes must have means of demonstrating that such offsets "*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*."[xvii] These standards should include procedures for assessing leakage, updating of baselines, and provision of independent reviews and verification.

8. **Does the approach require *transparent tracking and reporting of tradable emissions* units and transactions?** Standards must be in place to ensure that tradable units have not previously been used to comply with any foreign, international, or domestic greenhouse gas regulatory programme.

b) The role of sovereigns and the role of the COP in enforcing the minimum elements for market- and non-market-based approaches

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 recognise 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 – through the Parties' work in the ADP or the FVA – is in providing *a framework to assure transparency of results,* so that Parties and stakeholders may 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 can or should be regulated by the COP. In light of some Parties' resistance to the creation of an international regulator for compliance with the minimum elements above, the Parties themselves must assume a larger role in ensuring the integrity of units entering the international carbon market, while recognizing the useful role the COP can continue to play.

The potential role of the COP and Parties in implementing the eight elements for the successful operation of market- and non-market-based approaches is identified in the following table:

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

Note: Core standards for both market and non-market approaches appear in **bold**, with additional standards applicable to market approaches in ***bold italics***

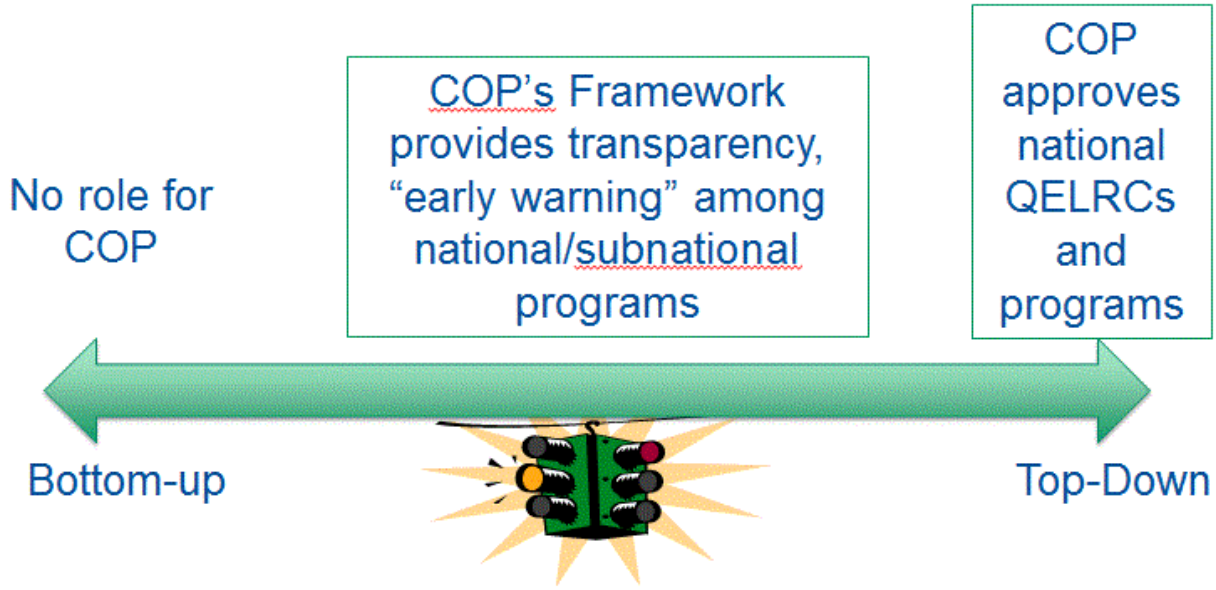
	Framework Element	Apply to Markets?	Apply to Non-markets?	Role of COP	Role of Host Government with jurisdictional or sectoral, or national emissions cap	Role of Host Government without emissions cap
1	**Transparent accounting for total emissions + sequestration**	Yes	Yes	Establish and promote broadly agreed best-practice standards for emissions accounting, and monitoring, reporting, and verification (MRV).	Monitor, report, and verify national emissions and sequestration.	Monitor, report, and verify national emissions and sequestration.

	Framework Element	Apply to Markets?	Apply to Non-markets?	Role of COP	Role of Host Government with jurisdictional or sectoral, or national emissions cap	Role of Host Government without emissions cap
2	**Enforcement/ Compliance**	Yes	Yes	COP can provide international legally binding framework for those Parties that choose to join it. Alternatively, the COP may facilitate transparency and "best practice" guidelines for domestic enforcement.	Domestically legally enforceable, with bar on international trading in case of non-compliance. Party may also choose to join international legally binding framework.	Party may choose to inscribe its commitments in COP framework and/or domestic law.
3	**Consistency**	Yes	Yes	Facilitate periodic scientific reviews of performance; establish best practice guidelines for predictable evaluation and revision of programmes.	Establish clear, predictable rules for domestic programmes. Change rules seldom and only in accordance with previously announced procedures for doing so.	Helpful but not required.
4	**Credit for early action (optional)**	Yes	Yes	Adopt clear standards for establishment of effective, high-integrity early action programmes.	If early action is chosen as part of the domestic approach, set rigorous rules for setting of baselines.	If early action is chosen as part of domestic approach, establish clear incentives.
5	***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. Account for possible leakage of emissions to other uncapped sectors or jurisdictions.*	*Not applicable*
6	***No large-scale crediting of reductions below Business as Usual (BaU)***	*Yes*	*No*	*Adopt standards that domestic approaches should meet to preclude large-scale crediting of reductions below BaU.*	*Base domestic programme on actual historic emissions data.*	*Not applicable*
7	***Definition and fungibility of traded units, including offsets***	*Yes*	*No*	*Establish clear standards for traded units, including rigorous standards that domestic offset programme units must meet to trade across borders.*	*Set rules for tradable units in domestic programme, including clear standards for acceptance of, and restrictions on, offset credits.*	*Not applicable*
8	***Transparent tracking and reporting of emissions units and transactions***	*Yes*	*No*	*Establish transparent international transaction log.*	*Monitor, report, and verify transactions and units, subject to standards.*	*Not applicable*

How could such a system operate? One possibility is that Parties could establish the COP as both the framework designer and an "early warning system" to facilitate evaluation of various

approaches against the framework. This concept is illustrated in Figure 1 below. In this role, the COP would promote and recommend durable standards on each of the minimum elements, and collect and disseminate information from Parties' about their various approaches, but would refrain from attempting direct regulation or approval of domestic approaches.

Figure 1: Possible roles for the COP in assessing various approaches



Drawing on lessons learned from the Montreal Protocol's Multilateral Fund,[xviii] other successful capacity building efforts, and pre-existing institutions, the COP might also establish a "best practices" hub to assist countries that wished to develop the capacity and infrastructure for domestic market- or non-market-based approaches. The "checklists" provided by a COP framework could help guide the development of these new domestic approaches.

c) Using the framework to evaluate potential linkage of market systems: the role of sovereigns in promoting the minimum elements

Those Parties that develop the infrastructure needed to participate in the international carbon market could make regular submissions to the COP indicating how their domestic programmes meet the framework criteria, and the COP could conduct a facilitative analysis of conformity with the combined "Climate + Market Integrity Checklist." Other Parties could take those submissions and the COP's analysis into account in deciding whether to allow linkage. Connecting these domestic markets via "linkage" means that compliance units (i.e., emission allowances and offset credits) issued by one jurisdiction could be used interchangeably for compliance in another jurisdiction. Parties' submissions should also include information about foreign sources of allowances and credits in their domestic system, which would help facilitate the integrity of linkage arrangements and the creation of anti-circumvention standards.[xix]

Taken together, these eight "minimum elements" could be adopted as part of a COP-established global framework under the 2015 agreement, or under the FVA. Alternatively, if the COP has not yet established a full framework, these elements could serve as criteria by which sovereigns that choose to adopt emissions caps and establish domestic market approaches could evaluate other sovereigns' programmes for potential bilateral or plurilateral linkage.

For example, even if Parties are unable to agree on a new market mechanism (currently being negotiated in SBSTA), the COP's framework would still be useful for Parties wishing to design and use innovative market mechanisms to meet their own domestic or international legally binding emissions reduction commitments.

Under this approach, each jurisdiction would determine whether another's system was sufficiently ambitious and enforced to qualify for linkage. The UNFCCC could facilitate these determinations through the effective use - and necessary improvement - of MRV and ICA/IAR processes in order to provide sufficient information to assess compliance with the minimum framework elements above.

This structure could incentivise nations to pursue ambitious mitigation policies, since those policies would be necessary prerequisites to linking with other ambitious jurisdictions. The success of any linkage depends on the responsible domestic regulatory entities employing equivalent rigor in designing and implementing their respective programmes. For example, California and Québec are able to link their respective market-based programmes because both programmes incorporate the minimum elements above and share many identical features, including similar levels of stringency. Both legislatures plan to implement regulations to harmonize their programmes.[xx]

To promote cooperation, reduce transaction costs, and ensure the environmental integrity of the trading system, Parties engaging in trading could agree to form a regulatory "carbon trading club" that could recommend suspension of trade with those domestic systems that fail to meet the framework's minimum elements, and with any other system that continues to trade with that system. Those in the trading club could also mutually agree to refrain from applying border carbon adjustments to each other, which could also serve as an important incentive to maintain the integrity of individual systems and membership within the club.

This transparency and trade suspension mechanism has successful parallels in several other international agreements, including the Convention on Endangered Species of Wild Fauna and Flora (CITES) and the Montreal Protocol. CITES regulates international trade in endangered species through an extensive import and export permitting process overseen by each Party's designated scientific and management authorities. CITES is notable for its Standing Committee, with its ability to promote compliance with the basic trading requirements of the treaty. If any trading nation is not upholding CITES standards, the Standing Committee is empowered to recommend trade suspensions to the Secretariat, who then transmits them to the Parties. Though technically only recommendations, adhering to trade suspensions is a widely-prevailing norm among CITES Parties. While far from perfect, CITES enjoys the significant participation of 175 Parties, and those Parties by and large adhere to the trade recommendations of the Standing Committee.

In this way, a COP framework could promote information sharing among Parties to support effective analysis, operation, enforcement, and supervision of the market for tradable market-based compliance units.

d) FVA standards can unlock access to "tiered" levels of support for non-market approaches

Some sovereigns may choose to use non-market approaches for mitigation in various sectors or for certain gases. Indeed, it is likely that both non-market and market approaches would co-exist within a jurisdiction. As indicated above, when a Party chooses a non-market approach, only some of the "minimum elements" of the FVA will apply to that approach, particularly those elements related to MRV. More robust levels of MRV will be required to ensure the integrity of market approaches and attract private investment. Regardless of whether a Party chooses a market or non-market approach, however, measurement, reporting, verification and accounting of total emissions and sequestration will be essential to determine if the objective of the Convention is being achieved.

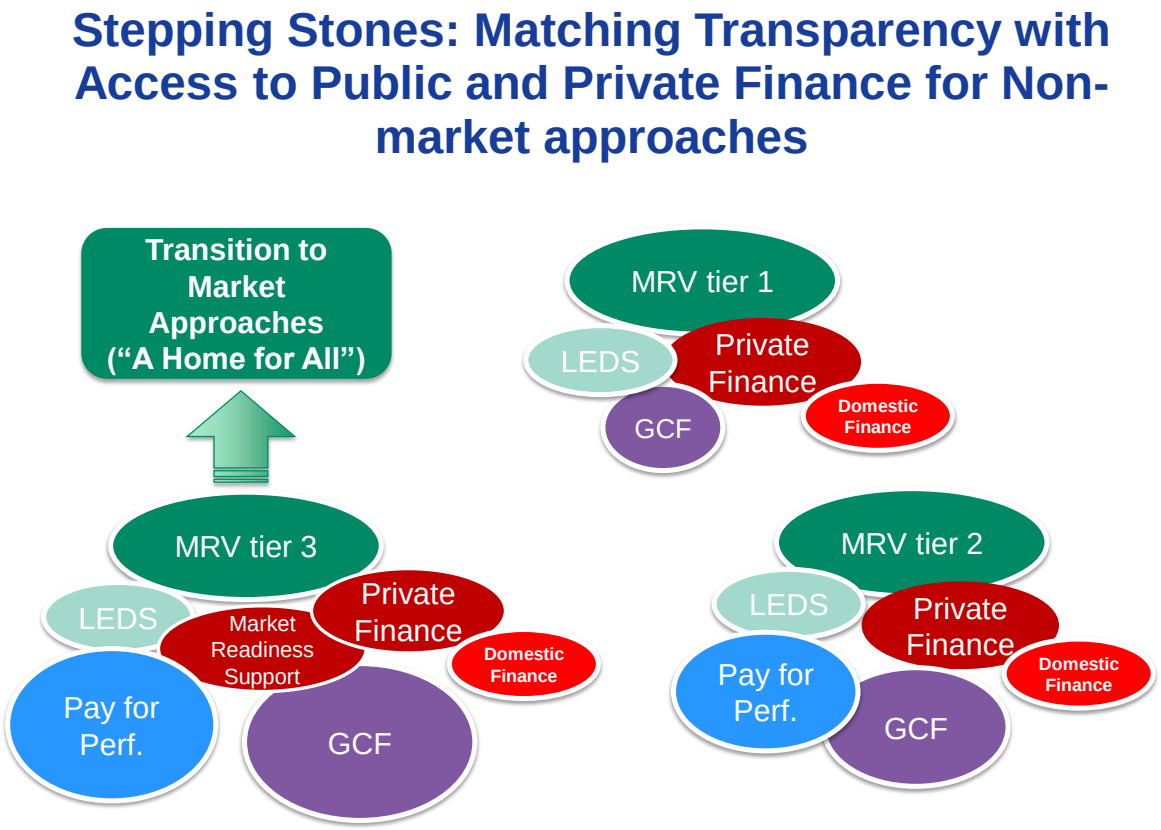
Our emphasis on comprehensive accounting and robust and independently verified emissions reporting should not be misinterpreted as a call for all domestic approaches to account for and measure their emissions in the same way. Differences in MRV capacities and policy choice will continue to exist well into the future, even as all countries make progress toward accepting greater responsibility and improving their capabilities. Accordingly, the MRV and accounting systems in a future agreement (applicable to all) should be flexible enough to accommodate different categories of actions that would be tied to different types of market and non-market financing. The system should also create incentives for countries to take on more responsibilities and improve their capabilities.

For those sovereigns that wish to transition to market approaches at a later time, the FVA can provide a stepwise pathway for MRV of increasingly ambitious non-market approaches (see Figure 2 and 3 below). As a country pursues more rigorous MRV systems, it steps forward to gain access to additional sources of public finance and necessary capacity building, which may also attract additional sources of private finance. Available types of support may include:

- Institutional capacity building support
- Monetary support
- Technology capacity building support
- Knowledge transfer capacity building support
- MRV system development

This structure opens up the possibility of new incentives for countries that invest in their MRV and accounting systems, while allowing flexibility for those who do not wish to undertake these investments. An indicative illustration of these "stepping stones" to ambitious MRV of non-market approaches, and the public and private support they may attract, is provided below.

Figure 2: Stepping Stones for MRV of Non-market approaches



e) The role of public finance in non-market approaches: new tools for cost-effective climate finance

Properly designed, market-based approaches can spur large-scale investment in low carbon development across a wide range of economies. Finance from public sources also plays an important role, particularly when it helps to establish the institutional infrastructure needed to encourage low-carbon private investment. Some of the principles and tools of market approaches — such as their focus on the cost-effective use of limited financial resources — could also 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 CO_2-equivalent emission reductions; and providing developing countries with 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. These purchases could principally be accomplished through three scenarios that would provide financial support for those undertaking emission reduction programmes at national, sectoral, or sub-national levels.[xxi]

1. **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 involve some form of competitive bidding in the form of a reverse auction to insure a cost-effective and transparent use of public funds.[xxii]

A second scenario would utilize the fund 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 like an insurance or price guarantee for sellers.

In a third scenario, the seller obtains 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 incentivises serious bids.

2. **Mobilizing Climate Finance through Simplified, Direct Access to Public Funds**

The three scenarios 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 scenarios 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.

None of the scenarios described above 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, projects with possible large future upsides need to receive sufficient funding.

The need for the cost-effective use of limited public climate funds is clear. So far, multiple funding channels and numerous 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, these three proposed scenarios should be given full consideration.

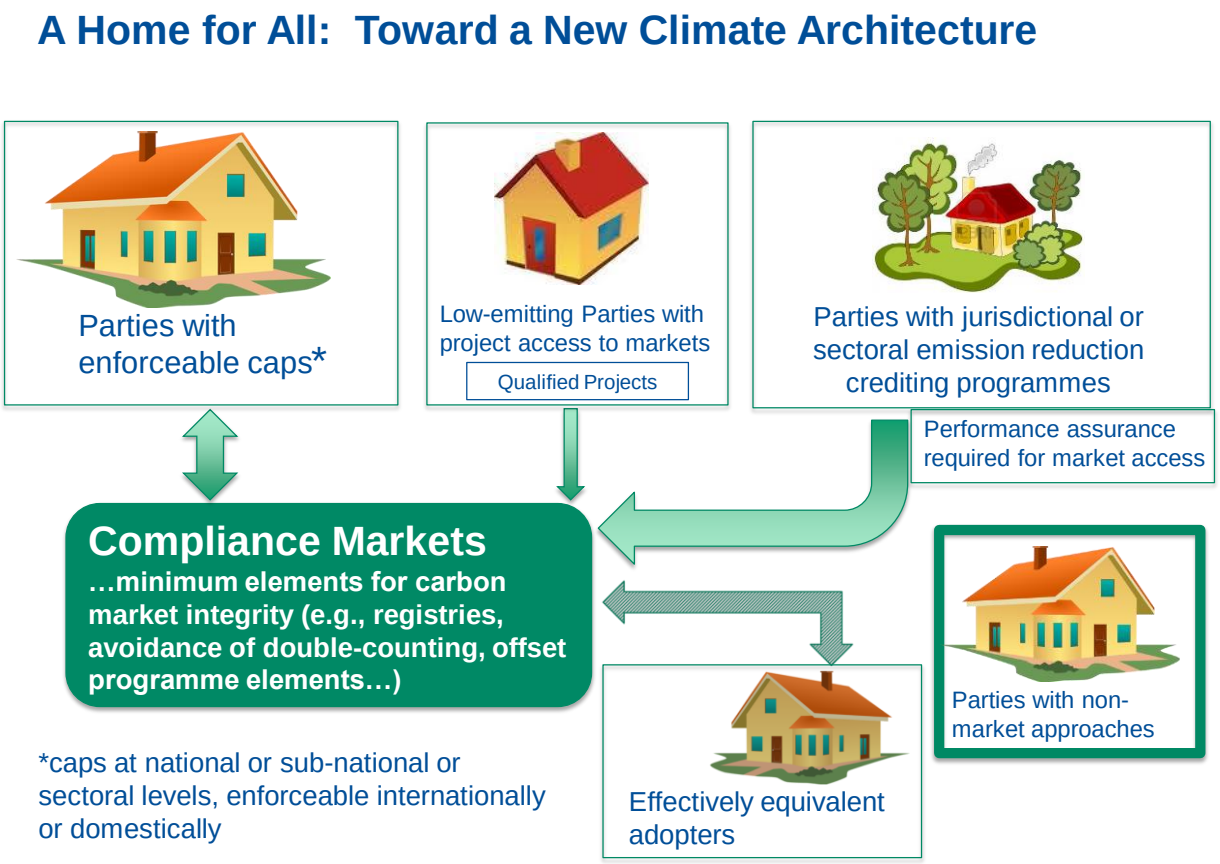
V. STRUCTURE AND DESIGN OF A 2015 AGREEMENT

What kind of structure for a 2015 agreement could deliver the minimum elements described above and unlock private and public finance, while incorporating lessons learned from other multilateral processes?

This section outlines an architecture for a 2015 agreement that can incentivise the ambitious participation of both developed and developing countries, by aligning categories of action with different types of market and non-market financing.

We describe this approach as a "Home for All," and illustrate it in Figure 3 below.

Figure 3: A Home for All



a) A Home for All: Toward a New Climate Architecture

In this framing, it is possible to envision a climate architecture with five "homes" that reflect the sovereign decisions that Parties take to mitigate their GHG emissions and to participate in particular market- or non-market-based mechanisms for climate protection. It is important to note that each "home" is not exclusive: for instance, a Party could simultaneously reside in the "Capped Parties" home and the "Non-market Parties" home if it enforced a cap in one sector of its economy and utilized non-market approaches for another sector. The five "homes" consist of

the following:

1. **The "Parties with enforceable caps" Home ("Capped Parties")**. The "Capped Parties" Home would be for Parties that choose to inscribe internationally binding quantitative emissions limitation and reduction commitments (QELRCs) that take effect as early as possible (but not later than 2020) and that last for a minimum of two multi-year periods (e.g., two five year periods). These Parties could choose to inscribe absolute QELRCs, to be applied on a nation-wide, sub-national, or sectoral level, and to be implemented through domestic market-based measures, which might include tradable allowances and/or offsets. Then, as long as they complied with the minimum elements, the Parties in this "Home" could participate in international carbon market mechanisms under UNFCCC auspices – e.g., joint implementation, emissions trading, the Clean Development Mechanism, and any new market mechanisms the Parties adopt.

Recognising that predictable market rules are important for incentivising long-term investments in low-carbon practices and technologies, Capped Parties could agree that unused carbon units could be saved for use in future commitment periods, in accordance with rules agreed among these Parties, and they could expand available carbon finance by allowing such units to serve as environmental security for carbon lending. Through such a mechanism, Capped Parties could provide incentives to increase the ambition on climate finance, helping reduce project risk, and turning the issue of surplus emission budgets from a potential environmental liability into a climate finance asset.

2. **The "Low-emitting Parties" Home.** LDC's or other developing country Parties whose total emissions did not exceed a specified percentage of global emissions (e.g. 0.5%) would be considered a Low-Emitting Party. Any Low-Emitting Party that wished to become a Capped Party could apply for a grace period (e.g. of ten-years from entry into force of the agreement, with five years to define its QELRC, and five years before it implements its QELRC). During the grace period, these Low-Emitting Parties would be eligible to continue with project-based trading via the CDM or engage in new market- or non-market-based mechanisms. Low-Emitting Parties could also work jointly during their grace period if they wished. Periodic global emissions assessments would determine whether a Low-Emitting Party's status had changed based on its total emissions.

3. **The "Parties with jurisdictional or sectoral emission reduction crediting programmes" Home: the special case of Parties with performance assurance mechanisms.** This home accommodates the special case of a voluntary REDD+ mechanism for forest nations with robust reference levels that provides the benchmark against which future GHG emissions and removals can be measured to assess progress in meeting a REDD+ goal. Robust reference levels based on historical emissions, together with strong emissions monitoring, reporting, and verification rules, 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. On an interim or transitional basis, a market-based approach utilizing REDD+ could be applicable at a

subnational scale, through mechanisms that nest REDD+ projects into national systems, as long as the same minimum elements described here are maintained.

4. **The "Parties with non-market approaches" Home ("Non-market Parties").** The "Non-market Parties" Home would be for Parties that do not adopt quantitative limits on their sectoral, subnational, or national emissions but make *domestically binding commitments* to implement nationally appropriate mitigation activities (NAMAs), in accordance with their common but differentiated responsibilities and respective capabilities. These Parties would face no binding international compliance consequences if their emissions exceeded their NAMAs.

- Non-market Parties could establish their own domestic approaches to meet their NAMAs, but to ensure the integrity of multilateral market mechanisms, Non-market Parties would not be eligible to participate in the CDM or other multilateral market mechanisms to trade carbon units externally, and Capped Parties would not recognise as valid the carbon units of any domestic trading systems of Non-market Parties.

- Non-market Parties that are not included in Annex I of the Convention would commit to monitor and report their emissions subject to international consultation and analysis. The extent to which their actions to implement their commitments would be independently verified is a topic for further negotiation. As described above, a tiered system of MRV of non-market approaches, which the Parties may wish to elaborate under the FVA, could be helpful in attracting public and private finance for non-market approaches while respecting the principles of the Convention.

- Any NAMA Party could move to the Capped Party Home when and if it wished, and readiness support would be provided to aid the move, and enable the Party to apply the transparency and verification requirements of that Home.

5. **The "Effectively equivalent adopters" Home.** A new international architecture would include a space for jurisdictions that have not yet formally joined a new 2015 agreement, but that have established domestic legally binding emissions limits and otherwise meet the requirements of the Capped Parties Home. These "Effectively Equivalent" jurisdictions could link to the Capped Parties via the agreement's multilateral market mechanisms, so that these jurisdictions could trade in emissions allowances and project credits with Capped Parties for compliance with their emissions targets.

Not all Parties may be ready to move into a new agreement, but the lack of readiness of some should not prevent others that are ready to build a new community of climate action. Hence the need for an architecture that is capacious enough to accommodate Parties ready to move at different times.

- Allowing Effectively Equivalent jurisdictions to link to the new agreement if they meet strict eligibility requirements could provide strong incentives for the participation of jurisdictions that have chosen to remain outside the multilateral framework.

- Including a space for those jurisdictions and a mechanism for them to trade with Capped Parties subject to the minimum elements described above would bring the climate legal architecture into line with other successful agreements in the fields of environment and trade.

It is important to note that occupants of these Homes would likely change over time, as Parties choose to move from one to another. Recognizing that MRV capabilities vary among developed and developing countries, and those differences may persist for some time, some Parties may initially pursue non-market approaches and transition to market approaches at a later time. Others may occupy multiple homes, since they may choose to implement emissions caps on some sectors or gases, while simultaneously pursuing non-market solutions for other sectors or gases. Ambitious market and non-market approaches could both be accommodated under this dynamic framework.

b) Ways of Defining and Recognising Enhanced Action in the 2015 Agreement

In designing a 2015 agreement, the Parties should discuss how it can promote and encourage early action in domestic mitigation approaches, and thus support – and coordinate with – the ADP's work on pre-2020 ambition. For example, the 2015 agreement under the ADP could provide credit for early mitigation for nations that move more swiftly than 2020 to adopt domestically or internationally-binding emissions caps. 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. Decision text at the COP in Warsaw this year could lay the groundwork by including language instructing the Parties to ensure that successful early actions to reduce emissions prior to 2020 are appropriately incentivised and recognised.

c) Options for legal form

At least two possible legal structures can be envisioned for a new 2015 agreement that would meet the dynamic design parameters above:

1) An international agreement – which could take the form of a legally binding treaty or another form – that establishes the minimum elements for market-and non-market approaches. This agreement would also include provisions enabling any nation that has not yet formally joined the new agreement to provide sufficient information about its effectively equivalent domestic market-based programmes so as to give participating nations confidence that they may link their carbon markets to that nation's domestic programme. It would also include provisions allowing a nation to unilaterally increase the ambition of its domestic approach, and move from one home to the next, without resort to the cumbersome amendment and ratification rules required, for example, for adjustments to national commitments under the Kyoto Protocol; OR

2) A set of agreements by which nations choose to mutually recognise each other's domestic market approaches as the basis for market linkage.

Parties may wish to keep an open mind about possible legal structures at this time, as further exploration and more focused work on legal options is needed to address constraints to full participation in a new agreement.[xxiii] UNFCCC Parties may wish to let the discussions leading up to 2015 consider multiple architectures while the scope of commitments and ambition is being considered on a parallel track. This process should build upon the Copenhagen Accord but significantly raise the level of ambition and accountability.

VI. CONCLUSION

We recognise that the foregoing does not address all of the myriad issues that will need to be addressed on the road to Paris and beyond. We have primarily focused on optimal design of the 2015 agreement and the framework for various approaches, in light of the urgent need for mitigation of GHG emissions and corresponding mobilization of significant private and public finance. We thank the Parties, Observers, and the Secretariat for the opportunity to provide these thoughts on the scope, purpose, and design of a 2015 agreement and the FVA.

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[i] FCCC/SBSTA/2013/L.6. Drawing on links between the work of the FVA and other processes under the Convention, EDF has submitted a similar paper in response to the call for submissions in paragraph 4 of the ADP Draft Conclusions proposed by the Co-Chairs, taken at Bonn in June 2013. See FCCC/ADP/2013/L.2.

[ii] For example, according to the Climate Policy Initiative, in 2010/2011, the private sector contributed the majority of funds to climate finance: $217-$243 billion, or 63% of the total. See http://climatepolicyinitiative.org/wp-content/uploads/2012/12/The-Landscape-of-Climate-Finance-2012-Executive-Summary.pdf. According to Secretary General's High Level Advisory Group on Climate Change Financing, "[a] carbon price of US$20-US$25 could generate around US$100 billion to US$200 billion of gross private capital flows." See http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF%20Report.pdf

[iii] UNFCCC, Art. 2.

[iv] FCCC/SBSTA/2013/L.6.

[v] See http://unfccc.int/resource/docs/2012/smsn/ngo/133.pdf

[vi] See http://unfccc.int/resource/docs/2012/smsn/ngo/231.pdf

[vii] For a more comprehensive treatment of experiences and lessons learned, both positive and negative, from domestic approaches to mitigation, see EDF's prior submission on ambition, http://unfccc.int/resource/docs/2012/smsn/ngo/133.pdf

[viii] See http://www.worldbank.org/en/news/press-release/2013/05/29/domestic-carbon-pricing-initiatives-offer-hope-for-future-market

[ix] See The World's Carbon Markets: A case study guide to emissions trading, available at http://www.edf.org/climate/worlds-carbon-markets.

[x] See, e.g., A. Denny Ellerman, Frank J. Convery, Christian De Perthuis, and Emilie Alberola, Pricing Carbon: The European Union Emissions Trading Scheme (Cambridge University Press 2010). See also Lucas M. Brown, Alex Hanafi, and Annie Petsonk, The EU Emissions Trading System: Results and Lessons Learned (2012).

[xi] The term 'non-party' refers to a sovereign that has not ratified, acceded or otherwise become a party to an international agreement. It is generally recognised that a treaty does not create either obligations or rights for a sovereign without its consent. See Article 34 (General rule regarding third States) of the 1969 Vienna Convention on the Law of Treaties.

[xii] 2/CP.17 para. 79.

[xiii] Ghosh et al. 2012, Mobilizing the Private Sector: Quantity-Performance Instruments for Public Climate Funds. Oxford Energy and Environment Brief: The Oxford Institute for Energy Studies. Available at http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/08/Mobilizing-the-Private-Sector.pdf

[xiv] International Energy Agency, World Energy Outlook 2011, at 2, available at http://www.iea.org/weo/docs/http://www.edf.org/climate/eu-emissions-trading-system-reportweo2011/executive_summary.pdf.
[xv] See Matthew Bramley, Doing Their Bit: Ensuring Large Industrial Emitters Contribute Adequately to Canada's Implementation of the Kyoto Protocol, at 1, 3, and 12 (Pembina Institute, 2003), available at http://bit.ly/14jSTT3.
[xvi] 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
[xvii] 2/CP.17 para. 79.
[xviii] See http://www.multilateralfund.org/default.aspx.
[xix] Anti-circumvention standards ensure that if a programme's tonnes do not meet the standards, trading in their units - and in units fungible with them - can be suspended.
[xx] Letter from James N. Goldstene, Executive Officer, California Air Resources Board, to Governor Edmund G. Brown, Jr., February 22, 2013, http://www.arb.ca.gov/cc/capandtrade/linkage/go-findings-request.pdf. Compatibility criteria for linkage have also been defined in proposed national policies and legislation. See, e.g., the "Waxman-Markey" climate bill, H.R. 2454 (111th): American Clean Energy and Security Act of 2009, 111th Congress, 2009–2010. Text as of Jul 07, 2009 (Placed on Calendar in the Senate), at section 311, subsection 728, text available at http://www.govtrack.us/congress/bills/111/hr2454/text.
[xxi] See Rupert Edwards, "The Green Climate Fund and the implementation of Emission Reduction Underwriting Mechanisms," Climate Change Capital working paper (2011); 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.
[xxii] 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.
[xxiii] For example, while the United States Constitution includes a higher hurdle to treaty ratification than many other nations' domestic approval processes (requiring the consent of at least two-thirds of the Senators present to give U.S. consent to ratification), as a practical matter the U.S. participates in a broad range of international agreements through a variety of means other than treaty ratification.