

**Views on D. Various approaches, including opportunities for using markets**

CMIA and PD Forum joint submission to SBI in response to paras 48 and 52 of Decision – /CP.18 Agreed outcome, March 2013

**Key messages from experience with existing approaches and mechanisms**

- **Market-based mechanisms** are the most cost effective route to achieve the objective of the Convention;
- The global carbon market has been highly successful. The CDM has mobilized investments of **USD 215 billion** in emission reductions<sup>1</sup>, mostly from the private sector. Registered CDM projects are estimated to achieve **850 million tCO<sub>2</sub>e reductions annually**, which is equivalent to more than 5% of non-Annex I CO<sub>2</sub> emissions.<sup>2</sup>
- There is an existential **crisis of demand**, caused by the lack of ambitious targets, the recession in developed countries, and regulation severely limiting demand for international emission reductions (import limits);
- The private sector needs a demand for emission reductions (i.e. targets), fungibility of efforts (i.e. tradability) and confidence in the longevity of the UN process-backed market-based approaches in order to invest – a lack of demand, restrictions in trade and loss of confidence in the system is currently limiting further investment;
- The limitations of the current mechanisms need to be addressed through both reform and expansion, and the development of new market-based approaches;
- While new mechanisms develop, it is of paramount importance to **maintain continuity** of the current market by adopting ambitious, clear and credible long-term commitments;
- It has taken more than a decade to build up the **infrastructure of the system**, other approaches need to utilize this infrastructure or face a similarly lengthy learning period. Indeed, the new approaches are meant to be wider and larger, reaching areas almost untouched by the current mechanisms, which means that these new approaches will be exponentially more difficult to agree on;
- The **building blocks** of the CDM, such as the MRV system, methodologies, and DOEs work, and should be adopted, with adjustments, as the common building blocks for the new architecture of new mechanism and approaches;
- The overarching architecture proposed provides the common currency which gives the fungibility between the approaches and the global demand (targets);
- Greater capacity of the host country or sector allows the use of market-based mechanisms offering greater flexibility, thus achieving greater economic efficiency, and thus greater participation by the private sector.
- 'A strong CDM is necessary to support the political consensus essential for future progress [towards a truly global carbon market]. If nations permit the CDM market to disintegrate, **the political consensus for truly global carbon markets** may evaporate along with much of the world's developing country carbon market capacity. The collapse

<sup>1</sup> 'Benefits of the CDM up to 2012', UNFCCC (2012), see [http://cdm.unfccc.int/about/dev\\_ben/ABC\\_2012.pdf](http://cdm.unfccc.int/about/dev_ben/ABC_2012.pdf). The UNEP Risoe CDM Pipeline (March 2013) suggests that investments related to registered projects alone amount to over USD 350 bn.

<sup>2</sup> Annual reductions from registered CDM projects from UNEP Risoe CDM Pipeline (March 2013). The whole pipeline would result in 1.6 bn tCO<sub>2</sub>e reductions annually. 2010 non-Annex I CO<sub>2</sub> emissions from IEA CO<sub>2</sub> Emissions from Fuel Combustion (2012).

of the CDM could seriously set back international climate cooperation, with potentially devastating consequences for all.’<sup>3</sup>

## Introduction

The Project Developer Forum (PDF) and Climate Markets & Investors Association (CMIA) welcome the opportunity to submit our joint views on the “[Section] D 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”. This submission includes our view on both sub-sections 1 and 2, the Framework for Various Approaches (FVA), defined in paragraphs 41 to 49, and the New Market-based Mechanism (NMM), defined in paragraphs 50 to 53. In our view these two subjects cannot be seen in isolation from each other and thus a combined submission is most appropriate. Indeed, these subjects cannot be seen in isolation either from the Review of the existing mechanisms under the Kyoto Protocol, including both CDM and JI. Both the new approaches are still largely undefined, and the existing mechanisms are expanding their scopes and the review could further widen their reach. Also there are many (potential) areas of overlap in procedures, definitions and governance. By developing these areas together – despite some being under the Convention and others under the Protocol – it will be possible to avoid duplication of effort during the establishment or review of the various approaches and mechanisms and double counting once operating.

This submission aims to:

- respond to the specific issues raised in this call for input;
- summarise and further substantiate our previously submitted views on an overarching architecture for the carbon economy, which is included in [annex 1](#); and
- summarise a new proposal for a common building block for mechanisms and policies under the Framework for Various Approaches umbrella, which is included in [annex 2](#).

## Scope for new approaches

CMIA and PDF support market-based mechanisms to mitigate greenhouse gas emissions, and believe that such mechanisms are the most cost efficient route to achieving the ultimate objective of the Convention and effectively and efficiently incentivising appropriate mitigation actions. We believe in a “carbon-constrained world” where global emissions need to be reduced and which requires an ever-greater proportion of those emissions to be covered under some market-based mechanisms placing a price on carbon emissions. Therefore, we support the ultimate development of a global carbon market as one of the key means to effectively and efficiently incentivise appropriate mitigation actions.

We believe that there is considerable potential for the development of a Framework for Various Approaches (FVA), a New Market-based Mechanism (NMM) and a reformed CDM. Indeed, in our proposed Carbon Market Architecture we propose five partially-overlapping levels of market-based mechanisms, building on the existing structure which can help expand the scope of GHG emission management while creating incentives to reduce emissions across a larger proportion of the global economy. In order to reach the ambitious goals of limiting temperature increases,

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<sup>3</sup> Report of the High-Level Panel on the CDM Policy Dialogue.

we need to define procedures and guidance that allow for flexibility in the implementation of mechanisms at the national and regional level that respond to and function within national circumstances.

At present, only a proportion of the global economy outside Annex I is able to participate in the existing mechanisms of CDM and JI due to their current structure (costs and practicality of implementation, a project based approach, restrictive methodologies, limited approaches to additionality, etc.). The Review of the existing mechanisms should expand the scope of them, while NMM and FVA may encompass a wide variety of approaches build on, but going beyond, the existing mechanisms.

We believe that there is significant synergy between all the various approaches under the Convention (and Protocol). CDM, JI, POA, ETS, QELRC and the new NMM and FVA are not distinct approaches but a continuum of climate change policies, which all (should) use the same basic building blocks. This needs to be embraced as an opportunity, with new approaches being able to build on the successes of the existing mechanisms and incorporating the existing infrastructure and capacity. It allows sectors and countries to graduate from one mechanism towards the more economically efficient approaches as their abilities increase.

#### **Precondition: demand for reductions**

While there is currently an existential lack of demand for reductions, successful implementation of NMM and FVA (and CDM reform) may lead to a willingness to create more demand. These new approaches and reform may provide the basis for increased participation by developing countries through part-crediting and part own-effort. This, in turn, should provide the basis for a willingness by developed countries to increase their efforts beyond current levels. However, the balance between the additional supply created through the new approaches and the additional demand encouraged by these developments is important: markets need scarcity.

The creation of these new markets rests solely on governments, as the fundamental demand (reduction targets) is created by governments, but the private sector can play an important role in the further development. However, a major constraint to the development of any new approach is the lack of demand for the reductions from such an approach. The current depression in demand is impacting strongly on the prospects for the CDM post-2012. Without ambitious commitments by Parties, it is unclear when the demand for CDM, or any new approach, will strengthen. Without continuity and clear commitment much of the investment and human capacity will be directed to other (i.e. non-GHG related) activities. This will delay implementation of GHG mitigation actions hence making mitigation and adaptation to climate change more costly.

#### **Key ingredients: continuity, flexibility, oversight and private sector involvement**

It has taken nearly a decade to build up the CDM to its current scale including the infrastructure within the UNFCCC, National Authorities, and support industry, such as third party auditors, technical experts and consultants. New mechanisms will be more complex to agree within the UNFCCC forum and require a greater involvement of national authorities and domestic entities. It cannot be expected that these new mechanisms would be operational, at *any* scale, within a shorter timeframe unless they utilise and build on the existing knowledge and systems to a large

degree. Therefore, while new mechanisms develop, it is of paramount importance to maintain continuity of the current market by adopting ambitious, clear and credible long-term commitments.

While flexibility and much greater host country involvement will be required in the implementation, new approaches would still demand oversight. Oversight will be particularly relevant where resulting reductions are used for compliance with quantified commitments through offsetting or own use (less strict oversight may be acceptable where reductions are counted towards any non-quantified commitment).

The COP rightly acknowledged that various approaches are already being developed and implemented by Parties without there being a framework for them. Such approaches will need to meet minimum standards. The FVA and NMM should guarantee those minimum standards, and will make it possible for efforts to be compared and, in the case of NMM, reductions being fungible. This apparent contradiction between required flexibility to capture wide-ranging activities and (strict) oversight to guarantee standards will be at the heart of the challenges that will be faced with the implementation of these approaches. Agreement at COP-level on the building blocks of (if not the specific approaches proposed under) NMM and FVA will be critical for the confidence in those reductions achieved.

Private sector involvement in the development of the current mechanisms has been substantial, the CDM has mobilized investments of USD 215 billion in emission reductions<sup>4</sup>, mostly from the private sector – a size beyond the possibilities for the public sector to achieve. However, the continued involvement of the private sector depends on three key aspects: (1) Demand for the resulting reductions, as without demand, there is no market. (2) Fungibility between reductions achieved through all the different actions that can be part of this mechanisms or mechanisms, as without such fungibility, the scope for involvement is too narrow and there can be no competition between approaches. And (3) confidence in the longevity of the UN process-backed market-based approaches, and thus that value can be derived from it, because without confidence that the UN process is honouring its historic commitments to market-based mechanisms, the private sector would not invest again. If the current mechanisms are not continued to be supported by the process, a decade of building and investing in capacity and infrastructure would be lost, and with it the credibility of the UN process as the basis for market-based approaches. We set out our vision for an overarching architecture for climate mitigation in annex 1.

Here we discuss the specific issues that the COP Decision requested to be addressed for both FVA and NMM, respectively.

### ***Specific issues regarding the Framework for Various Approaches:***

#### **46 (a) The purposes of the FVA;**

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<sup>4</sup> 'Benefits of the CDM up to 2012', UNFCCC (2012), see [http://cdm.unfccc.int/about/dev\\_ben/ABC\\_2012.pdf](http://cdm.unfccc.int/about/dev_ben/ABC_2012.pdf). The UNEP Risoe CDM Pipeline (March 2013) suggests that investments related to registered projects alone amount to over USD 350 bn.

In accordance with para 41, the purpose of the approaches is to enhance the cost-effectiveness of, and to promote, mitigation action. Para 43 also affirms that the use of these approaches facilitates an increase in mitigation ambition, particularly by developed countries.

Therefore we understand that the FVA (1) reduces costs of mitigation, (2) reduces costs of mitigation approaches, and/or (3) effectively shares mitigation effort between Parties.

A market-based mechanism will help achieve reduced costs, however, the language on FVA does not include tradable credits (yet), which therefore would limit the working of market forces. If specific mitigation approaches are developed under the FVA and experiences shared, the cost of the application of such approaches elsewhere will be reduced. For example, experience with a feed-in tariff or minimum emissions standard in one country may be used in other countries. However, benefits of this are limited as much experience is already shared, and the difficulties often lie in the exact national circumstances.

Therefore, we believe FVA is mainly meant to effectively share effort between countries, bearing in mind different circumstances of developed and developing countries. For example, an agreement on emission standards for steel production between various countries would create a (more) level playing field, which could facilitate an increase in mitigation action; without agreement only low-cost standards are likely to be set by any country individually. The exact emission levels may be differentiated between the countries, but such co-operation could facilitate developed (and advanced developing) countries to set higher standards.

In our proposed Carbon Market Architecture (annex 1) we propose that the framework provides the common building blocks for various approaches. The building blocks include MRV standards, baseline methodologies and 'carbon accounting', a governance structure, independent verification (DOEs), registries and ITL, and a mitigation share (see annex 2 for more detail).

Each of the existing project mechanisms, CDM and JI, as well as the NMM would fall under the umbrella of the FVA. NAMA and other policies and measures may also fit in the framework. The use of the same building blocks for all these approaches would aid comparability and fungibility between approaches, and prompt start, while avoiding duplication of work to design and operate the required regulatory and institutional infrastructure.

Where approaches qualify under FVA, reductions can be quantified clearly and accurately, in a manner that is comparable globally. Indeed, this approach may even be used to quantify the mitigation impact of for example ODA, or other donor support, host country policies, etc. Quantification would be possible for all approaches under the FVA; crediting of the reductions would only occur in the mechanisms. The registry would ensure that double counting is avoided.

#### **46 (b) The scope of approaches to be included under the FVA;**

The scope of approaches should not be limited at this stage. Limiting the scope would limit the potential benefit over the long run. As explained above and in our proposed Carbon Market Architecture (annex 1), FVA provides a framework of common building blocks that need to be applied in all mechanisms, and could be usefully applied in many approaches. As within the CDM, learning by doing will slowly, but surely, fill more gaps and increase the reach of the FVA



to more sectors and more countries. We recommend that a few approaches are started from the outset, for example, with some taken from CDM lessons, others from the EU ETS.

**46 (c) A set of criteria and procedures to ensure the environmental integrity of approaches in accordance with decision 2/CP.17, paragraph 79;**

Paragraph 42 of Decision –/CP.18 and Paragraph 79 Decision 2/CP.17 states that FVA “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”. These requirements are similar to CDM, and double counting is already an issue addressed through JI. Therefore, we recommend that criteria and procedures from these existing mechanisms are used initially and improved over time. Indeed, with regards to these standards, the existing mechanisms could be seen as a “service provider” to certify “real, permanent, additional and verified” reductions achieved in a specific country or sector.<sup>5</sup> Indeed, as explained above and in our proposed Carbon Market Architecture (annex 1), FVA provides a framework of common building blocks that need to be applied in all mechanisms, and could be usefully applied in many approaches. The guiding principles of the new approaches are similar to those of the existing mechanisms. The building blocks needed to operate the new approaches are also similar. Therefore, the building blocks under the FVA should be extracted and adjusted from the existing mechanisms, thus allowing the existing infrastructure, including institutional capacity, to continue and serve the new approaches without delay. The overarching architecture provides the common currency which gives the fungibility between the approaches and the global demand.

While the COP Decision recognises that various approaches may be being undertaken by Parties, only approaches that comply with these standards are acceptable and could fall within the framework (FVA) that may (or may not) be agreed by the COP.

However, the desire that FVA deliver a “net” emission reduction is new. If FVA is successful net reductions are likely to be achieved by the increased ambition the Parties are willing to take on, but this may not be an acceptable interpretation of this language. Rather this means that reductions achieved through FVA cannot be used (fully) to offset emissions elsewhere, but that (some of) the reductions should remain ‘unused’. This could be achieved either through conservative baselines and baselines taking into account own-effort (i.e. not available for offsetting), or by making the ‘net’ reductions share of the reductions explicit. PDF/CMIA advocates that real accurate baselines are used, with the own-effort or ‘net reductions’ element being made explicit ex-ante. For example, if one approach is the introduction of a renewable portfolio standard in the electricity sector of a particular developing country, raising the share of renewables from 0% to 10%, the own-effort could be agreed to be a 5% renewables share over the same period. The mitigation share is further elaborated in a separate paper (annex 2).

**46 (d) Technical specifications to avoid double counting through the accurate and consistent recording and tracking of mitigation outcomes;**

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<sup>5</sup> The mostly project-by-project approach to additionality under the CDM may not always be applicable.

It is essential for the credibility of the system that double counting is avoided. A publicly available and up-to-date registry of the approaches agreed under FVA would be the first and best step to avoid double counting. We also believe that interactions with other approaches should be clearly stated and accounted for, rather than tried to be designed out. For example, a project may fall under a specific approach while claiming credits through the CDM, or the project was already a CDM project before the approach was agreed under FVA. Neither of these would lead to double counting where this link is explicit.

#### **46 (e) The institutional arrangements for the FVA;**

With a wealth of experience through CDM and JI, both the Secretariat and the Designated National Authorities (DNA, or DFPs under JI) should be given clear roles. We also propose that the CDM Executive Board becomes the Mechanisms (Supervisory) Board, with executive powers handled by the Secretariat, including an executive director, and standard setting power delegated to working groups/panels. This would in turn free up time for the Board to take on the role of (Supervisory) Board for FVA (and NMM), although the added responsibilities may require a few more members, as there will be more working groups on specific issues which the Board members serve on along with external experts.

The CDM Executive Board and expert panels provide the basis for a prompt start of this governance structure. Using existing experience and 'infrastructure' would aid the prompt start of FVA (and NMM). As suggested above, we believe that the existing mechanisms could take on a "service provider" role to the new approaches, through the common building blocks, in particular with regards to the carbon accounting where they already have established the rules and procedures and have infrastructure in place.

Both the Secretariat (operations) and the working groups (standard-setting) will report to the (Supervisory) Board, and the Board to the COP, with the COP the ultimate decision maker.

Further detail is proposed in our Carbon Market Architecture submission (annex 1).

#### ***Specific issues regarding the New Market-based Mechanism:***

#### **51. (a) The NMM operation under the guidance and authority of the Conference of the Parties;**

As mentioned in 46 (e) above, the Mechanisms (Supervisory) Board would be able to supervise all the market and non-market approaches under the FVA, thus including NMM and CDM. The CDM Executive Board and expert panels provide the basis for a prompt start of this governance structure. As mentioned, executive powers shall be delegated to the Secretariat. Expert panels under the Board will have the standard setting responsibility and be composed by external experts and members of the Board.

Both the Secretariat (operations) and the working groups (standard-setting) will report to the (Supervisory) Board, and the Board to the COP, with the COP the ultimate decision maker.

Further detail is proposed in our Carbon Market Architecture submission (annex 1).

**51 (b) The voluntary participation of Parties in the NMM;**

With a much greater involvement of the DNAs in the design, development and operation of NMM, voluntary participation of Parties will be guaranteed.

During the development stage of the NMM, DNAs could be requested to indicate their voluntary participation just like the LOAs under the current mechanisms. This would seem quite superfluous since any NMM submission by a DNA should be considered confirmation of voluntary participation. However, a “NMM LOA” could add greater certainty if it included the agreed benchmark or reference levels, any own-effort share, and timeframe for validity of these numbers and updating them, and if they are considered a declaration of state<sup>6</sup>.

Additionally, host Parties should confirm the contribution to sustainable development, if required, and secure the integrity of the system, through appropriate stakeholder consultation and grievance procedures and appeals being in place.

**51 (c) 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;**

The minimum eligibility criteria for a sector to participate in a market-based mechanism, involving credits is:

- National institutional capacity.
- Access to accurate and transparent sectoral (historical and current) data.
- Determination of a baseline/target/benchmark, including the definition of own-effort and/or additionality.
- Implementation of accurate and transparent monitoring, reporting and verification for all sector participants.
- A (national/sector) registry.

Where such information is not available at the sector-level projects are limited to CDM, with similar eligibility criteria applicable to the project. The advantage of a baseline-and-credit mechanism is that emission reductions are generated and verified before they are issued, creating a built-in performance guarantee. With the development of the various provincial emission trading schemes, the Chinese schemes could be prime candidates for each being component-NMM<sup>7</sup>. However, these are pilot phases, and are still only helping to build up the capacity we believe is required before a scheme could be NMM.

While a trading scheme based on allowances, such as the EU ETS, is more efficient than one based on baseline and credit, it also requires significantly greater institutional capacity. An allowance-based market mechanism would additionally require:

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<sup>6</sup> See concept note on the suspension of withdrawal of letters of approval, EB68 annotated agenda annex 18.

<sup>7</sup> It is foreseen that NMM would be made up of various “component-NMM”, each covering their own sector, or country/region, and each probably requiring acceptance within NMM.



- Very strong institutional capacity to enable effective enforcement, policing of the scheme, with sufficiently high penalties etc.

Implementing an allowance-based ETS requires the distribution of state-owned assets (the allowances) either through (free) allocation or auctioning. Many states do not have the capacity to distribute such assets in a fair and transparent manner. Therefore, we propose that allowance-based schemes should probably only be used in Parties with national caps and eligible for using the mechanisms. (Then any problems occurring with the scheme would not affect the environmental integrity of the whole system, but only create difficulty for the Party to comply.)

In principle, credits from other schemes could be allowed to be used as offsets within any of these schemes, creating a safety valve for the sector covered, fungibility across schemes, and a global carbon price.

Under-developed sectors in an economy (i.e. economic sectors lacking basic infrastructure) can probably only participate in the CDM/reformed CDM. Sectors with access to sufficient verified performance data may engage via a benchmark mechanism (or reformed/standardised CDM), which should reduce the transaction costs compared to project-by-project CDM. Economic sectors with complete reporting are invited to participate in crediting baseline mechanisms with non-binding international targets, which should reduce the costs even further where a suitable baseline is agreed.

The desire that NMM deliver “net” emission reductions is new. This could be achieved either through conservative baselines and baselines taking into account own-effort (i.e. not available for offsetting), or by making the ‘net’ reductions share of the reductions explicit. PDF/CMIA advocates that real accurate baselines are used, with the own-effort or ‘net reductions’ element being made explicit ex-ante. In a component NMM (a sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the host country’s own-effort, which is quantified in this manner and may be credited to the host country’s account. Therefore, the mitigation share of proceeds allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions. The mitigation share is further elaborated in a separate paper (annex 2).

For example, if one proposed component NMM is the introduction of (dynamic) emission limits on (large) power plants, the agreed emission limit could be the own-effort, with any reductions below this limit in principle available for offsets.

In order to benefit fully from the market the private sector participation, reductions should be available to individual operators covered by the agreed NMM. If individual installations are not responsible for – and rewarded for – compliance with the NMM targets, but are reliant on others in the sector who are also covered, market forces will not deliver cost effective reductions but rather will result in a tragedy of the commons, because no-one is rewarded, no-one is responsible for the sector targets.

**51 (d) Requirements for the accurate measurement, reporting and verification of emission reductions, emission removals and/or avoided emissions;**

Accurate carbon accounting, MRV, has already been established under the CDM. We propose that this building block is used in NMM or acts as service provider to the NMM.

The MRV system must provide a consistent agreed international system, avoiding different accounting rules in each constituency. A consistent system is the basis for comparability and fungibility, both required to maximise the cost effectiveness of markets.

One of the proposed common building blocks is the Net Mitigation Share, which may vary among different approaches and different countries. It would be expected that Advanced Developed Countries would set higher rates of own-effort mitigation, and LDCs lower rates. Rates may also vary over time, for example claiming higher own-effort after several years of crediting. With greater commitments of host countries, accounting may be simplified without jeopardizing the environmental integrity of the system. The mitigation share is further elaborated in our Carbon Market Architecture (annex 1) and a separate paper (annex 2).

**51 (e) Means to stimulate mitigation across broad segments of the economy, which are defined by the participating Parties and may be on a sectoral and/or project-specific basis;**

To stimulate mitigation across a broad segment of the economy, a wide range of sectoral benchmarks and reference levels should be proposed. Initial benchmarks could be set at levels that would enable rapid take up, while being fine-tuned and tightened soon after to avoid the creation of excess supply.

It may be possible to extrapolate from sectors with large number of CDM/JI projects, or sectors where standardised baselines are currently being developed under the CDM. Also, several methodologies already use benchmarks, which could be used for NMM. While CDM baselines are often a conservative interpretation of “business as usual”, NMM sector baselines should include an own-effort element. As proposed above, we advocate accurate monitoring to derive the real reductions achieved from all approaches followed, and believe that the own-effort element should be quantified as the mitigation share. The mitigation share is further elaborated in our Carbon Market Architecture (annex 1) and a separate paper (annex 2).

In principle all sectors may be covered in NMM, but data availability is likely to restrict the initial proposed sectors to those with the largest GHG emissions and greatest energy use. In practise, even after NMM is effectively running, smaller emission sources are likely to be covered under other approaches.

Initially NMM could be proposed in some sectors with high emissions and large point sources, for example the power sector, cement, iron and steel, fertiliser, etc. It would seem unlikely that there is one single NMM, but rather there are various component NMM being proposed and being built up over time, with some sectors and countries graduating from the other approaches.

**51 (f) Criteria, including the application of conservative methods, for the establishment, approval and periodic adjustment of ambitious reference levels (crediting thresholds**

**and/or trading caps) and for the periodic issuance of units based on mitigation below a crediting threshold or based on a trading cap;**

We believe accurate baselines are important for the credibility of the system, and for encouraging take up by sectors, rather than unnecessarily or randomly conservative baselines, wherever possible. Own-effort could then be explicitly stated and would not need to be unnecessarily discounted for conservativeness. These reductions towards own-effort are of course not tradable or bankable, so there cannot be any impact on the environmental integrity of the commitments made by Parties.

We propose to include a common building block for Net Mitigation Share (NMS)

- In a component NMM (a sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the host country's own-effort, which is quantified in this manner and may be credited to the host country's account. See the illustration below. Therefore, the net mitigation share allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions.
- It is accepted that the mitigation effort needs to be shared globally, taking into consideration different circumstances of developed and developing countries. It is expected that under the Durban Platform many countries will pledge some mitigation efforts. Outside NMM, such efforts will be made in part through policies that also fall under the FVA, as they are designed to enhance the cost-effectiveness of, and to promote, mitigation actions. Therefore, host countries could introduce an own-effort share, with these reductions counted towards the host's pledged targets.
- It would be expected that Advanced Developed Countries would set higher rates, and LDCs lower rates. Rates may also vary over time, for example claiming higher own-effort after several years of crediting. With greater commitments of host countries, accounting may be simplified without jeopardizing the environmental integrity of the system.
- The net mitigation share would guarantee that activities deliver net mitigation. This is relevant for all approaches under the FVA.

The net mitigation share is further elaborated in our Carbon Market Architecture (annex 1) and a separate paper (annex 2).

**51 (g) Criteria for the accurate and consistent recording and tracking of units;**

Procedures for accurate and consistent recording and tracking of units already exists under the ITL/CDM/JI, as well as in the EU ETS, and there should be no need to re-invent such criteria. It will be necessary to allocate reference numbers to (component) NMM and specific entities, but similar reference numbering is already used for POAs and CPAs. Registries and ITL would be necessary common building blocks.

**51 (h) Supplementarity;**

There should be own-effort by both host and buyer. The complementarity principle applies to the existing mechanisms too. However, while the current mechanisms are (were) – with the exception of the conservativeness of the baselines used – a zero-sum trade, i.e. a pure offset, but one without which the agreed targets would not have been accepted, the NMM (and FVA) require net mitigation, in which case increased use of the new approaches would increase global mitigation, and thus contribute to more to the Convention’s objective than the application of the complementarity principle. We have proposed the Mitigation share to be one of the common building blocks to enable quantification of the net reductions.

Where own-effort is required in a sectoral scheme, a similar level of own-effort could be demanded from the buyer too. However, we also believe that credits from other schemes could be allowed to be used as offsets within any of these schemes, creating a safety valve for the sector covered, fungibility across schemes, and a global carbon price.

**51 (i) A share of proceeds to cover administrative expenses and assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation;**

As under the CDM, these fees should be levied separately. The level of the share of proceeds for adaptation is a political decision, whereas the share of proceeds for administrative expenses should only cover those expenses, and should be kept to a minimum. There should be clear rules established for the administrative expenses, in particular with regards to any surplus build up (as under the CDM). Such rules on surplus are not relevant for adaptation levy.

Additionally, in order to facilitate prompt start, administrative fees should initially be waived. Once the mechanism is established and working adequately, and only if proven necessary, should a (very low) “offset” fee be introduced, i.e. only levied on the share of reductions transferred by participants to compliance accounts for offsetting; there should be no fees for own-effort, adaptation, net contributions, or voluntary cancellations.

**51 (j) The promotion of sustainable development;**

NMM should promote sustainable development. In principle any GHG reductions are a contribution to sustainable development. It should be down to the host party to decide – and confirm – whether a scheme fits their sustainable development requirements. In the existing mechanisms, host parties indicate such confirmation in their LOA. DNAs have build up experience on this subject through the existing mechanisms, and NMM should build on this experience.

The Policy Dialogue proposed that the Secretariat develop general criteria and assist host countries in establishing and applying appropriate criteria. Indeed, the EB has developed a voluntary tool for the reporting of sustainable development impacts. This idea could similarly be applied for NMM too, since the criteria should be the same.

**51 (k) The facilitation of the effective participation of private and public entities;**

Experience with facilitating effective participation of private and public entities is already available from the existing mechanisms. Indeed, the private sector participation is crucial to gain

the size needed. While the public sector played an important role in the early stages of the development of the existing mechanisms, the private sector has led the growth and represents more than 90% of buyers.

In order to benefit fully from the market the private sector participation, reductions should be available to individual operators covered by the agreed NMM. If individual installations are not responsible for – and rewarded for – compliance with the NMM targets, but are reliant on others in the sector who are also covered, market forces will not deliver cost effective reductions but rather will result in a tragedy of the commons, because no-one is rewarded, no-one is responsible for the sector targets.

Additionally, clarity is required regarding eligibility of approaches and applications of baselines, fungibility between different approaches, and demand.

### **51 (I) The facilitation of the prompt start of the NMM;**

The guiding principles of the new approaches are similar to those of the existing mechanisms. The building blocks needed to operate the new approaches are also similar. The reason is that the existing mechanisms have proven to be efficient, but there is a desire to move beyond their boundaries.

In our proposed Carbon Market Architecture (annex 1) we propose that the framework provides the common building blocks for various approaches. The building blocks include MRV standards, baseline methodologies and ‘carbon accounting’, a governance structure, independent verification (DOEs), registries and ITL, and a net mitigation share (see annex 2 for more detail).

Each of the existing project mechanisms, CDM and JI, as well as the NMM would fall under the umbrella of the FVA. NAMA and other policies and measures may also fit in the framework. The use of the same building blocks for all these approaches would aid comparability and fungibility between approaches, and prompt start, while avoiding duplication of work to design and operate the required regulatory and institutional infrastructure.

*About CMIA*

The Climate Markets & Investment Association (CMIA) is an international trade association representing firms that finance, invest in, and provide enabling support to activities that reduce emissions. CMIA's membership accounted for 75 per cent of the global carbon market in 2010, valued at approximately USD 120 billion. See [www.cmia.net](http://www.cmia.net).

*About PD Forum*

The Project Developer Forum (PD Forum) is a collective voice to represent the interests of companies developing greenhouse gas (GHG) emission reduction projects in international markets under the Clean Development Mechanism (CDM), Joint Implementation (JI) and other carbon emission reduction schemes and programs. PD Forum members account for almost 50% of all registered CDM projects and one third of all issued CERs. See [www.pd-forum.net](http://www.pd-forum.net).



## Annex 1: Carbon Market Architecture

CMIA and PD Forum joint submission to SBI, March 2013

### Key points

- **Market-based mechanisms** are the most cost effective route to achieve the objective of the Convention;
- The global carbon market has been highly successful. The CDM has mobilized investments of **USD 215 billion** in emission reductions, mostly from the private sector. Registered CDM projects are estimated to achieve **850 million tCO<sub>2</sub>e reductions annually**, which is equivalent to more than 5% of non-Annex I CO<sub>2</sub> emissions.
- Building on our previous proposal and the existing high-successful structure, **an over-arching carbon market architecture** is proposed, including each of the existing and newly proposed mechanisms, identifying common building blocks and providing fungibility between approaches.
- The proposed architecture consists of approaches of **increasing stringency** with regards to levels of emission reductions, monitoring and compliance, but also delivering increasing economic efficiency and reduced cost. Participation in the mechanisms would be voluntary: there is no mandatory migration through the mechanisms, but reduced transaction costs should make successive mechanisms more attractive and ambitious. Therefore, there is a **natural incentive for progression** towards more stringent commitments.
- **Each mechanism helps to build the technical capacity** and institutional infrastructure necessary for the next mechanism. **Transition through each mechanism may happen over a period of decades**, giving ambition, capacity and development time.
- This vision is dependent on three critical developments. First, **ambition has to dramatically increase** in the climate regime. If there is no demand for emission reductions, no approach will ever be attractive. Second, **investors must be rewarded** for their own achievements and not be penalised for others' failure. Third, a **continuing strong commitment to the carbon market** is necessary; if nations permit the CDM to disintegrate, the political consensus for truly global carbon markets may evaporate along with much of the world's developing country carbon market capacity, and thus the possibility of implementing this vision.

### Introduction

CMIA has previously put forward an over-arching architecture for the management of GHG emissions in the global economy, with an increasing share of emissions covered over time. With new approaches having been proposed and defined, the detail of our proposed architecture has evolved, while still maintaining the overall philosophy of increasing coverage and graduation depending on capacity.

The original Kyoto architecture included two levels, (1) national targets with emissions trading, and (2) the two project-based mechanisms, one in a capped environment (JI), and one in a uncapped environment (CDM). The existing climate change policy architecture has already expanded beyond Kyoto's levels (EU emission trading schemes (ETS), POAs, NAMAs, and arguably CDM standardised baselines). First suggested in Bali, and then in Cancun, the COP

defined a New Market-based Mechanism (NMM) and considers establishing a Framework for Various Approaches (FVA), acknowledging that various approaches are being implemented by Parties. While both NMM and FVA are still scarcely defined, the carbon market architecture under the UNFCCC has expanded far beyond the original design.

At the same time as expanding the architecture, the Kyoto model is under review following the end of the first commitment period under Kyoto. Additionally, negotiations have already started for another potentially major overhaul with a new global agreement in 2015. Therefore, it is good to take stock of the architecture we already have and which we are currently designing, and ensure it is fit for purpose.

### *Taking stock*

There are currently 4 mechanisms defined, International Emissions Trading (Article 17), Joint Implementation (Article 6), Clean Development Mechanism (Article 12), and a New Market-based Mechanism (Cancun). There are also a number of approaches that are applied within the UNFCCC, including POAs, NAMAs, benchmarks and standardised baselines, and outside the UNFCCC, including ETS. Further, the COP is considering whether to establish a framework to cover the various approaches (already) used (FVA).

There is also significant experience that should be taken into consideration when reviewing the overall architecture. The key messages are:

- The global carbon market has been highly successful. The CDM has mobilized investments of USD 215 billion in emission reductions<sup>8</sup>, mostly from the private sector.
- Registered CDM projects are estimated to achieve 850 million tonnes of CO<sub>2</sub>e annually, which is equivalent to more than 5% of non-Annex I CO<sub>2</sub> emissions.<sup>9</sup>
- Market-based mechanisms are the most cost effective route to achieve the objective of the Convention.
- A market-based approach is only ever as good as the target it is designed to meet. The main barrier to efficient operation of the carbon market, and achievement of emission reductions, is the current crisis of demand. 'Mitigation targets are so modest that they no longer create strong incentives for investment'.<sup>10</sup>
- The private sector needs demand for emission reductions (i.e. targets), fungibility of efforts (i.e. tradability) and confidence in the longevity of the UN process-backed market-based approaches in order to invest.
- Incentives need to be available directly to individual operators in order for market forces to work; rewards must be directly related to success (compliance) and failure (missing target) must be penalised. If individual operators are not directly rewarded for their own success (compliance), but are reliant on others in their sector, market forces will not deliver cost

<sup>8</sup> 'Benefits of the CDM up to 2012', UNFCCC (2012), see [http://cdm.unfccc.int/about/dev\\_ben/ABC\\_2012.pdf](http://cdm.unfccc.int/about/dev_ben/ABC_2012.pdf). The UNEP Risoe CDM Pipeline (March 2013) suggests that investments related to registered projects alone amount to over USD 350 bn.

<sup>9</sup> Annual reductions from registered CDM projects from UNEP Risoe CDM Pipeline (March 2013). The whole pipeline would result in 1.6 bn tCO<sub>2</sub>e reductions annually. 2010 non-Annex I CO<sub>2</sub> emissions from IEA CO<sub>2</sub> Emissions from Fuel Combustion (2012).

<sup>10</sup> "Climate Change, Carbon Markets and the CDM: A Call to Action", Report of the High-Level Panel on the CDM Policy Dialogue, 11 Sep 2012, see <http://www.cdmpolicydialogue.org/report/rpt110912.pdf>.

effective reductions; rather this would result in a tragedy of the commons: because no-one is rewarded for success, no-one is responsible for failure.

- The building blocks of the CDM, such as the MRV system, methodologies, and DOEs work. This existing market infrastructure needs to be preserved, and can be adjusted where necessary, for use under future approaches.
- The institutional and legal capacity required to implement a workable industrial emission trading scheme is enormous. A baseline and credit system is likely to be more appropriate for many constituencies.
- The land-use sector is very different from the main CDM, even delivering different credit types (tCERs or ICERs) which are not widely accepted. It is proposed that land-use projects are separated out from the CDM as soon as practicable, and merged with and grandfathered into a REDD+ mechanism.
- The programmatic approach is very different from the main CDM. It is proposed that programmatic approaches are separated out from the CDM as soon as practicable, and merged with and grandfathered into a (credited) NAMA mechanism.
- 'A strong CDM is necessary to support the political consensus essential for future progress [towards a truly global carbon market]. A robust CDM, furthermore, is necessary to bring the benefits of carbon markets to developing countries now. If nations permit the CDM market to disintegrate, the political consensus for truly global carbon markets may evaporate along with much of the world's developing country carbon market capacity. Developing countries and the private sector are unlikely to see sufficient benefits to justify aggressive emissions mitigation steps in those nations. The collapse of the CDM, in short, could seriously set back international climate cooperation, with potentially devastating consequences for all.'<sup>11</sup>

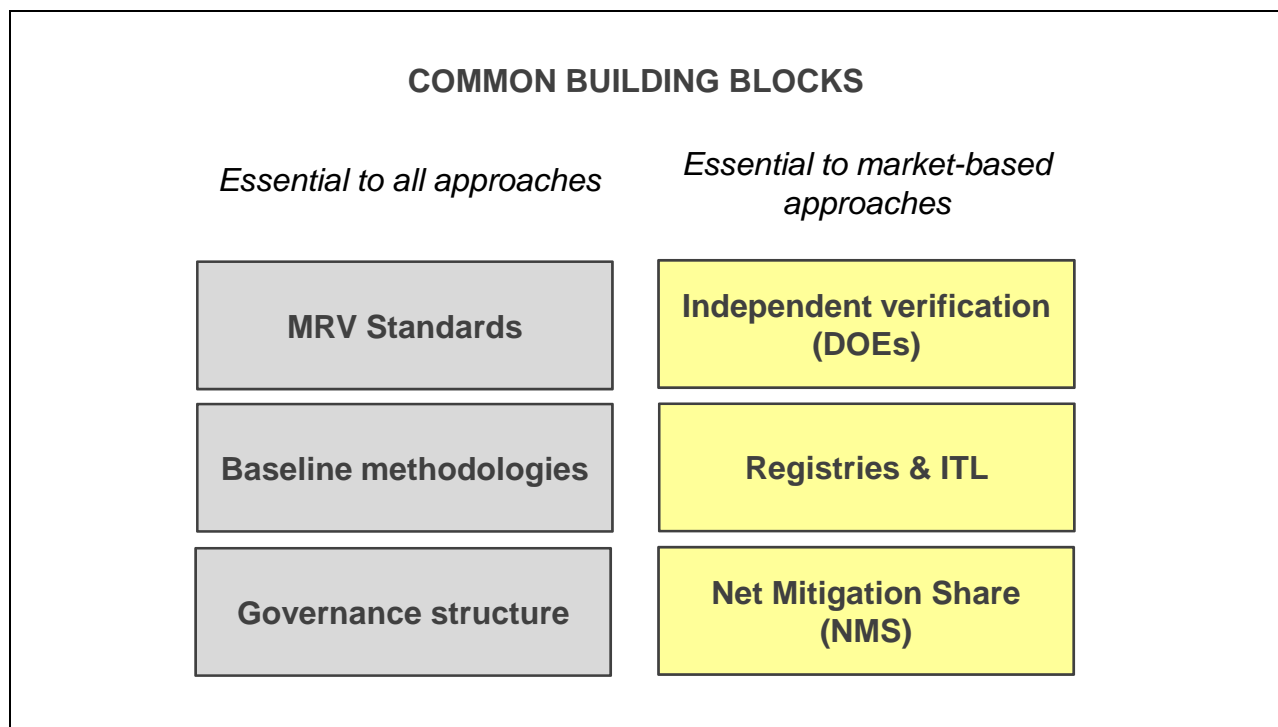
### *Building blocks*

The guiding principles of the new approaches are similar to those of the existing mechanisms. The building blocks needed to operate the new approaches are also similar. The reason is that the existing mechanisms have proven to be efficient, but there is a desire to move beyond their boundaries. A thorough review and re-alignment of the existing mechanisms, in particular expanding their boundaries, could negate the need for the new approaches, but politically that seems to be difficult.

We propose guiding principles and the building blocks of the carbon market are seen as the framework for the approaches including the mechanisms. Some of the building blocks can be extracted from the CDM and JI, thus allowing the existing infrastructure, including institutional capacity, to continue and serve the new approaches without delay. The overarching architecture provides the common currency which gives the fungibility between the approaches and the global demand.

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<sup>11</sup> Report of the High-Level Panel on the CDM Policy Dialogue.



Building blocks that may be part of the framework, and applied by all mechanisms, should include at least:

- **MRV system**  
The monitoring, reporting and verification system of the CDM is proven and has delivered over 1.2 bn tonnes of greenhouse gas emission reductions. Without transparent MRV it is not possible to account for all emission reductions. In addition, MRV allows incentives to be available direct to individual operators, without this market forces cannot work effectively to deliver cost effective reductions.
- **Baseline methodologies and (emission reduction) accounting**  
The CDM has provided a wide range of credible baseline methodologies, nearly 200 methodologies covering almost every sector<sup>12</sup>, providing the best resource for accurate carbon accounting for projects and approaches. It would be unnecessary in many cases the re-invent the wheel with new methodologies, as many sector-wide and/or standardized methodologies have already been developed or are under development. The JISC already adopts the same methodologies; it allows alternative approaches – but this is possible because the JI operates in a capped environment. Some further standardization and/or simplification may be needed to be applicable under other approaches, and greater host country commitments may allow for such simplification (as under JI).
- **Governance**  
We propose a single supervisory board for the mechanisms, with membership along the same lines as that of the Green Climate Fund, including representation from civil society NGOs and business. The Mechanisms Board should fulfill a supervisory role, with the

<sup>12</sup> As well as a number of A/R methodologies.

executive functions delegated, probably to the UNFCCC secretariat, including an Executive Director. Expert Panels, chaired by and including representatives of the Board, would be responsible for much of the policy development/standard setting. The CDM Executive Board and expert panels provide the basis for a prompt start of this governance structure, although the EB would need to be more supervisory and less executive. Also, the governance structure must include a satisfactory appeals process to guarantee due process for all participants. More detail is available in our submission on the Review of the CDM Modalities and Procedures.

- **DOEs and the accreditation (standard)**  
Both CDM and JI already use DOEs (AIEs under JI). Any approach would benefit from independent verification. And to ensure comparability of effort, and fungibility between approaches, they should all be subject to independent scrutiny. The JISC already adopts the CDM's DOEs; we propose the CDM accreditation standard is used throughout as the global standard.
- **Registries (and ITL)**  
Recording and tracking already exist through registries and the ITL and should be used to link all approaches. The open and transparent listing of projects, programmes, NAMAs etc., and allowing explicit multiple approaches, is the most effective way to eliminate double counting. There is no danger of double counting for a CDM project which is also explicitly stating that it's part of a NAMA; there *is* a danger where this information is deliberately held back and where there is a lack of transparent registry of approaches.

We propose to include an additional common building block:

- **Net Mitigation Share (NMS)**  
Enclosed is a separate paper with details, but the key points are summarized as follows and illustrated below<sup>13</sup>:
  - In a component NMM (a sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the host country's own-effort, which is quantified in this manner and may be credited to the host country's account. See the illustration below. Therefore, the net mitigation share allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions.
  - It is accepted that the mitigation effort needs to be shared globally, taking into consideration different circumstances of developed and developing countries. It is expected that under the Durban Platform many countries will pledge some mitigation efforts. Such efforts will be made in part through policies that fall under the FVA, as they are designed to enhance the cost-effectiveness of, and to promote, mitigation actions. Therefore, host countries could introduce an own-effort share, with these reductions counted towards the host's pledged targets.
  - For example where host countries provide a feed-in tariff, or other support, the DNA may claim its own-effort share. This means that host countries could be credited for

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<sup>13</sup> Note, the PD Forum has also proposed a Host Country Mitigation Share of Proceeds (MSOP) which is similar to the NMS but specifically designed for the CDM. See the PD Forum submission on the review of the CDM M&P or [www.pd-forum.net](http://www.pd-forum.net) for more details.

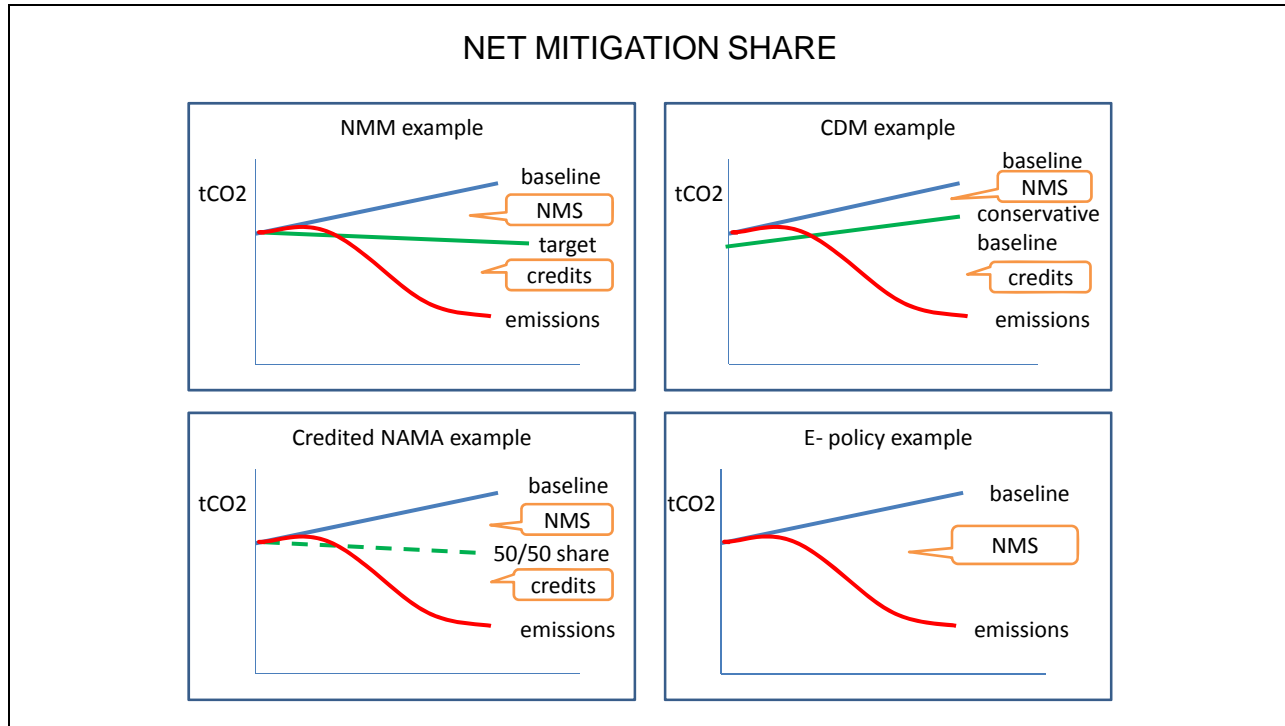
their E- policies, which would remove any perverse incentives currently perceived to exist. It may also simplify accounting of E+/E- policies, in particular if a database is established with E+/E- policies by each DNA. The host country NMS can be used in a similar way to allocate credited NAMAs (example shows 50% credited NAMA). See the illustration below.

- It would be expected that Advanced Developed Countries would set higher rates, and LDCs lower rates. Rates may also vary over time, for example claiming higher own-effort after several years of crediting. With greater commitments of host countries, accounting may be simplified without jeopardizing the environmental integrity of the system.
- The net mitigation share would guarantee that activities deliver net mitigation. This is relevant for all mechanisms, as it could also be applied by host countries under the CDM, but as a default it would be expected that the host country's NMS would be 0%.
- To improve accounting a single conservativeness factor should be introduced in methodologies, with this conservativeness retired in a special account, allowing a better appreciation of the net mitigation achieved through projects.<sup>14</sup> We believe that the best estimated reductions should be accounted for, even if then conservatively discounted with the conservativeness NMS and then retired. The introduction and quantification of this conservativeness provides an estimate of the net mitigation achieved. This would have no impact on the volume of credits that may be achieved by CDM projects, but calculates more fairly the best estimate of reductions achieved, and it provides for a standardized calculation among all approaches under the FVA umbrella. See illustration below.

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<sup>14</sup> For example, enclosed flares are normally more than 99.9% efficient in the destruction of methane, yet the methodology gives a default of only 90%; low enclosed flares are penalised with an additional 10% discount even if the efficiency is (accurately) measured. This may be conservative, but does not reflect reductions achieved by the underlying projects accurately.





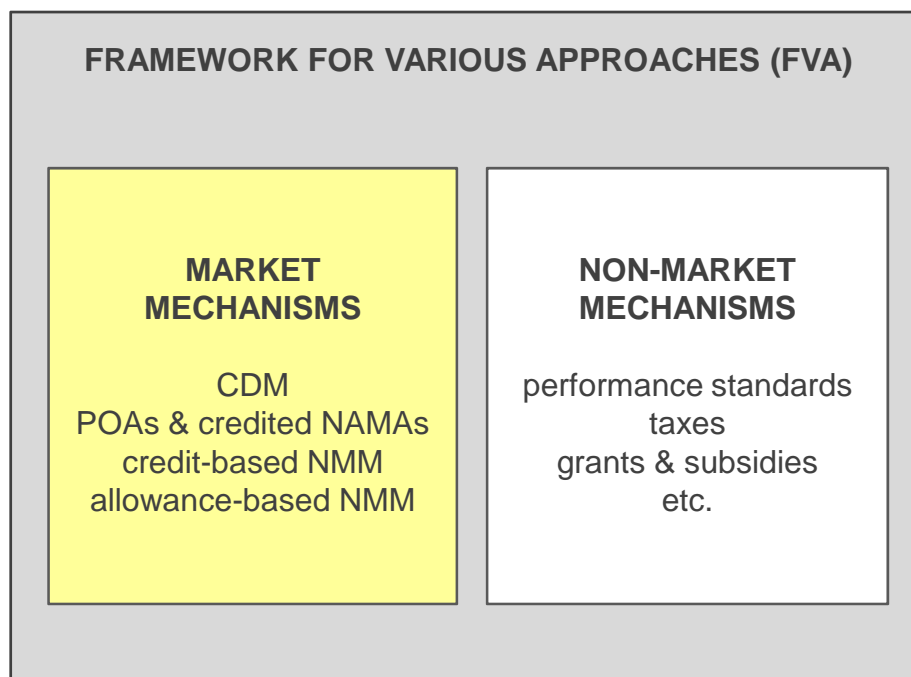
Each of the former building blocks is necessary within each of the approaches. The NMS would allow greater standardisation between all the various approaches and mechanisms – both NMM and FVA specify that they must lead to net mitigation. The CDM also leads to net mitigation by the application of its conservative approaches. Additionally, the Durban Platform should lead to commitments from developed and developing countries alike from 2020 onwards and therefore there should be a way for these mechanisms and approaches to be used by each of the countries to contribute to their commitments.

#### *Framework for Various Approaches (FVA)*

FVA is still scarcely defined. We propose that the building blocks above provide the framework. Each of the existing project mechanisms, CDM and JI, as well as the NMM would then fall under the umbrella of the FVA. NAMA and other policies and measures may also fit in the framework. The use of the same building blocks (under the FVA) for all these approaches would aid comparability and fungibility between approaches, and prompt start, while avoiding duplication of work to design and operate the required regulatory and institutional infrastructure.

Where approaches qualify under FVA, reductions can be quantified clearly and accurately, in a manner that is comparable globally. Indeed, this approach may even be used to quantify the mitigation impact of for example ODA, or other donor support, host country policies, etc. Quantification is possible for all approaches under the FVA; crediting of the reductions would only occur in the mechanisms. The registry would ensure that double counting is avoided.

However, not all possible approaches, however laudable, would necessarily qualify or could be claimed under this FVA umbrella.



### *New Market-based Mechanism (NMM)*

NMM is defined to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries, and which may assist developed countries to meet part of their mitigation targets or commitments under the Convention. Therefore NMM needs crediting.

The COP's definition of NMM is still very broad. We understand that NMM are sector-based approaches using targets, benchmarks, standardised baselines or allowances. They key candidates for NMM should be large point sources or fossil fuel users, such as power plants, industrial sites, refineries, oil/gas flares, and possibly also planes and ships. Disaggregated or under-developed sectors are not suitable for sectoral schemes, for example the agricultural sector, but can be effectively addressed through the project-based approach of the CDM.

The minimum eligibility criteria for a sector to participate in a market-based mechanism, involving credits is:

- National institutional capacity.
- Access to accurate and transparent sectoral (historical and current) data.
- Determination of a baseline/target/benchmark, including the definition of own-effort and/or additionality.
- Implementation of accurate and transparent monitoring, reporting and verification for all sector participants.
- A (national/sector) registry.

Where such information is not available at the sector-level projects are limited to CDM, with similar eligibility criteria applicable to the project. The advantage of a baseline-and-credit mechanism is that emission reductions are generated and verified before they are issued, creating a built-in performance guarantee. With the development of the various provincial emission trading schemes, the Chinese schemes could be prime candidates for each being component-NMM<sup>15</sup>. However, these are pilot phases, and are still only helping to build up the capacity we believe is required before a scheme could be NMM.

While a trading scheme based on allowances, such as the EU ETS, is more efficient than one based on baseline and credit, it also requires significantly greater institutional capacity. An allowance-based market mechanism would additionally require:

- Very strong institutional capacity to enable effective enforcement, policing of the scheme, with sufficiently high penalties etc.

Implementing an allowance-based ETS requires the distribution of state-owned assets (the allowances) either through (free) allocation or auctioning. Many states do not have the capacity to distribute such assets in a fair and transparent manner. Therefore, we propose that allowance-based schemes should probably only be used in Parties with national caps and eligible for using the mechanisms. (Then any problems occurring with the scheme would not affect the environmental integrity of the whole system, but only create difficulty for the Party to comply.)

In a component NMM (a sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the host country's own-effort, which is quantified in this manner and may be credited to the host country's account. See the illustration on NMS above. Therefore, the mitigation share of proceeds allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions.

In principle, credits from other schemes could be allowed to be used as offsets within any of these schemes, creating a safety valve for the sector covered, fungibility across schemes, and a global carbon price.

While NMM is seen as a sectoral trading scheme, incentives and penalties need to be available directly to individual operators. If individual operators are not directly rewarded for their own success (compliance), but are reliant on others in their sector, this would result in a tragedy of the commons: because no-one is rewarded for success, no-one is responsible for failure.<sup>16</sup>

### *Overall architecture*

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<sup>15</sup> It is foreseen that NMM would be made up of various "component-NMM", each covering their own sector, or country/region, and each probably requiring acceptance within NMM.

<sup>16</sup> A good rather than a bad outcome, "comedy of the commons", is only likely when the cost of the contribution is less than its value over time. If the targets set under the NMM require real effort, the costs are not 'much less than its value', and thus a good outcome is implausible. See: [http://en.wikipedia.org/wiki/Comedy\\_of\\_the\\_commons](http://en.wikipedia.org/wiki/Comedy_of_the_commons).

The over-arching architecture for reducing global GHG emissions that we propose consists of five partially-overlapping levels of market-based mechanisms, building on the existing structure. The different levels have increasing stringency with regards to the level of emission reductions, monitoring and compliance, but also delivering increasing economic efficiency and reduced cost. Therefore, there is a natural incentive which can lead to a natural progression, graduation, towards (taking on) more stringent commitments, as will be required to achieve the objective of the Convention. Ultimately all emissions need to be effectively capped and reduced, both in developed and developing countries, but this will take time and effort, and the proposed architecture allows for achieving this step-by-step. Building on the existing mechanisms, and expanding from the current situation, the five levels of market mechanisms are:

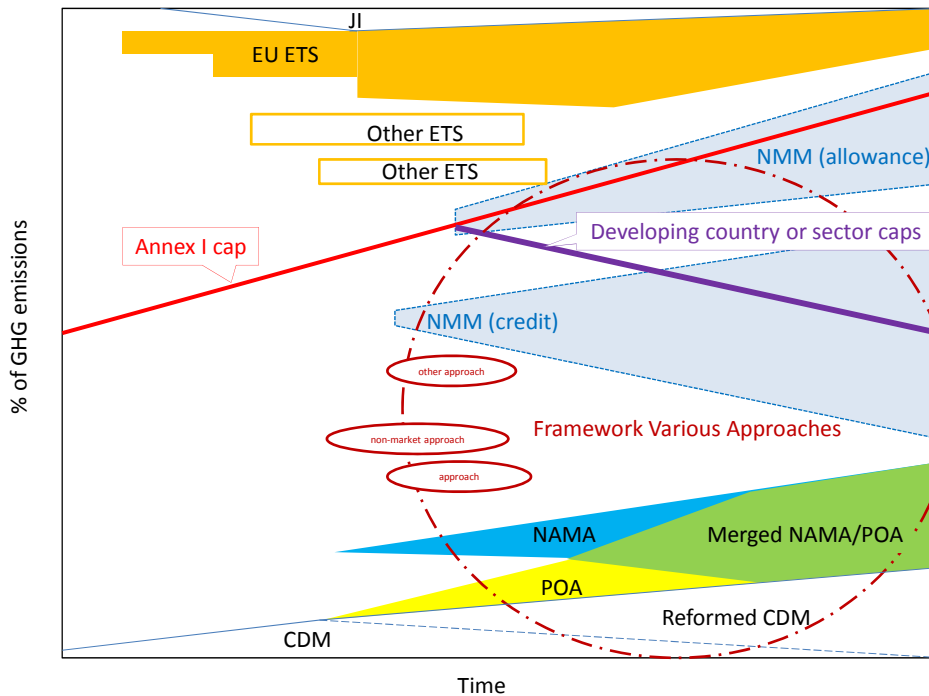
- 1) Project-based mechanisms. Reformed project-based mechanisms CDM & JI, including the greater use of standardised baselines, but maintaining the flexibility for project-specific approaches. CDM would be operational in the uncapped environment, whereas JI would operate under caps (see level 6 below). With a mitigation share (of proceeds) being introduced, host parties could also account (voluntarily) for their own-effort.
- 2) Programme-based approaches POA and (credited) NAMA. POA would be split out from the CDM as soon as possible (but obviously grandfathered where already registered), and merged with NAMAs. POA is following a very different approach from the CDM, using different crediting periods etc. so we believe it would be more efficient to treat this as a different approach altogether. Under credited NAMAs part of the mitigation could be the host Party's own-effort, with the remainder credited, while non-credited NAMAs could be fully counted towards the host country's mitigation.
- 3) Land-use based approaches.<sup>17</sup> AR projects would be split out from the CDM as soon as possible (but obviously grandfathered where already registered), and merged with any new approach to REDD+. These are very different approaches from the CDM, receiving different credit types, using different crediting periods, traded in a different market, etc. so we believe it would be more efficient to treat this as a different approach.
- 4) a. New Market-based (credit) Mechanism (NMM). This would be primarily a benchmark- or baseline-and-credit approach, covering sectors, or larger parts of the economy. For example, the power sector could be one component-NMM. The sectoral approaches could potentially be derived from benchmarks or standardised baselines already used, in particular where a significant share of the sector is already taking part.
  - b. New Market-based (allowance) Mechanism, i.e. cap-and-trade. Allowance-based NMM, providing even greater efficiency, should be limited to the capped environment or to constituencies with particularly strong enforcement capabilities. An example of an allowance-based NMM is a trading scheme such as the EU ETS. However, where the system operates under economy-wide targets or agreed (legally-binding) sectoral targets under the Durban Platform (see level 6 below), it would be unnecessary for this to be separately defined as NMM.
- *The levels 1, 2, (maybe 3) and 4 would be under the umbrella of Framework for Various Approaches (FVA), providing common building blocks, guaranteeing consistent accounting, comparability, fungibility, environmental integrity and avoiding doubling counting.*

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<sup>17</sup> The various other levels of the carbon market are listed in progressive order, but the land-use based approaches should be seen more in parallel to the other 4 levels.

- 5) Economy-wide targets (e.g. Kyoto targets), and agreed (legally-binding) sectoral targets under the Durban Platform. These targets would provide the regulatory environment for achieving reductions at the greatest economic efficiency, as they would provide maximum flexibility. International emissions trading (Kyoto Article 17) would be allowed under these caps. In principle each of the approaches above is possible under the economy-wide targets, for example the implementation of the EU ETS, as well track 1 of JI and a Green Investment Scheme. The host Party's responsibility to meet the agreed target provides the guarantee for the environmental integrity: any approach is as strong as the host Party's agreed target, and therefore doesn't need prior approval through the UN process. Therefore, there is an incentive which can lead to a natural progression, or graduation, towards (taking on) more stringent commitments, as will be required to achieve the objective of the Convention, and higher levels in the carbon market architecture.

**The evolving Carbon Market Architecture**



Notes: While Annex I emissions represented almost two-thirds of emissions in 1990, its share is less than half in 2010, and the share of Kyoto CP1 parties is only 25%. The Annex I cap, therefore, becomes a smaller share of global emissions over time (going right on the horizontal axis), hence the slope of the Annex I cap. However, the various mechanisms and approaches of the proposed Carbon Market Architecture should progressively cover a greater and greater share of world emissions (vertical axis).  
 The estimated annual emission reductions achieved through the CDM's registered projects is equivalent to almost 3% of world emissions, and more than 5% of non-Annex I emissions.

It is critical to note that to benefit from these various approaches, the market forces need to interact directly with the individual operators. These operators decide whether to invest in creating emission reductions, through new investments or behavioural or other changes.

Therefore, they need to be rewarded directly for success (compliance / emission reductions) and penalised for failure (missing target / rising emissions). If individual operators are not directly rewarded, but are reliant on others before receiving their due reward, market forces will not deliver cost effective reductions; rather this would result in a tragedy of the commons: because no-one is rewarded for success, no-one is responsible for failure.

Over time, this proposed architecture could cover an increasing share of global GHG emissions through one of the mechanisms in order to be able to achieve the objective of the Convention.

Participation in one or more of these mechanisms or to adopt, for example, sector caps or an economy-wide cap is at the discretion of host Parties. Nevertheless, it would be envisaged that stringency, both in terms of limiting emissions and monitoring and verification of emissions/reductions, increases from CDM through to economy-wide targets, but that the economic efficiency of the mechanisms also increases. It is essential to appreciate that different mechanisms require diverse levels of technical and institutional capacity. Therefore greater capacity allows greater flexibility thus achieving greater economic efficiency.

While the participation in these mechanisms itself will build capacity in the country or sector to reach the next level through learning-by-doing as proven in the CDM, dedicated capacity building may further speed-up the expansion into the different levels. However, while sector-based approaches are more attractive in many respects, not all countries will be able to achieve the required additional capacity, nor is it necessarily the best route for all sectors; it has to be assumed that for many sectors the project-based approach will remain the most appropriate mechanism.

It is important that the development of the new approaches should not preclude the use of the existing mechanisms, for example CDM projects should not be forced to migrate to a new mechanism – but with lower transaction costs project participants may opt in voluntarily; also care needs to be taken so that projects/sectors are not refused the use of an existing mechanism before a new mechanisms is truly operational as that would jeopardise investments in the low carbon economy.

### *Conclusions*

There is significant scope for a new market-based mechanism or mechanisms in conjunction with the ongoing reform/standardisation and expansion of the existing mechanisms. For this to materialise the current ambition, demand and vision to incentivise private entities to reduce emission will have to be clear, coherent and credible, with ambition significantly increased: without demand for the resulting reductions any new approaches would fail to deliver.

We have proposed the above over-arching architecture for reducing global GHG emissions that consists of five partially-overlapping levels of market-based mechanisms, building on the existing structure: first project-based mechanisms, then programmes, then NMM and finally caps, with land-use based approaches in parallel to the others. The different levels have increasing stringency with regards to the level of emission reductions, monitoring and compliance, but also delivering increasing economic efficiency and reduced cost. Therefore, there is a natural incentive which can lead to a natural progression, graduation, towards (taking on) more stringent commitments, as will be required to achieve the objective of the Convention.



Within this architecture, each mechanism helps to build the technical capacity and institutional infrastructure necessary for the next mechanism. Transition through each mechanism may happen over a period of decades, giving ambition, capacity and development time. Each successive mechanism is more powerful than the previous one, with the ability to attract more finance, deploy more technology, build greater capacity, have greater sustainable development benefits and contain a greater component of host country action.

Participation in the mechanisms would be voluntary: there is no mandatory migration through the mechanisms, but reduced transaction costs should make successive mechanisms more attractive and ambitious. The mechanisms are open to all sectors of the global economy, dependent only upon national circumstances, institutional infrastructure and ability to implement the mechanism. Once accepted within one mechanism, projects are grandfathered but may opt in into a new approach once that becomes operational, to ensure continuity and predictability for all stakeholders in these markets.

This vision is dependent on three critical developments. First, ambition in the climate regime has to dramatically increase. If there is no demand for emission reductions, no approach will ever be attractive. Second, investors must be rewarded for their own achievements and not be penalised for others' failure. Third, a continuing strong commitment to the carbon market is necessary; if nations permit the CDM to disintegrate, the political consensus for truly global carbon markets may evaporate along with much of the world's developing country carbon market capacity, and thus the possibility of implementing this vision.

The ultimate long-term objective is the adoption of ambitious binding caps on sectors and economies, which break the link between economic growth and growth in GHG emissions. Without this it is likely that the ultimate objective of the Convention will not be met.

#### *About CMIA*

The Climate Markets & Investment Association (CMIA) is an international trade association representing firms that finance, invest in, and provide enabling support to activities that reduce emissions. CMIA's membership accounted for 75 per cent of the global carbon market in 2010, valued at approximately USD 120 billion. See [www.cmia.net](http://www.cmia.net).

#### *About PD Forum*

The Project Developer Forum (PD Forum) is a collective voice to represent the interests of companies developing greenhouse gas (GHG) emission reduction projects in international markets under the Clean Development Mechanism (CDM), Joint Implementation (JI) and other carbon emission reduction schemes and programs. PD Forum members account for almost 50% of all registered CDM projects and one third of all issued CERs. See [www.pd-forum.net](http://www.pd-forum.net).

## Annex 2: Net Mitigation Share

CMIA and PD Forum joint submission to SBI, March 2013

### *Key points*

- NMM and FVA must lead to net mitigation according to the relevant COP Decisions. This cannot be an unquantified and unquantifiable demand.
- A quantified and verified net mitigation share by host countries would enable them to claim the reductions achieved towards their own commitments under the Durban Platform.
- The net mitigation achieved through the mechanisms, or through a host country policy or implemented NAMA can be identified, quantified, monitored over time, reported by the Parties or entities involved, and verified using existing methodologies and independent entities.
- While the CDM has been successful in generating enormous financial flows and numerous projects, it is struggling to fulfill the expectations of some of the stakeholders. There is now an expectation amongst the buyers of credits that the CDM contributes to host country mitigation too. Therefore, this Net Mitigation Share (NMS) does not need to be limited to NMM and FVA, but can be a common building block for each of the approaches under the UNFCCC.
- By creating a transparent net mitigation rule, Parties would create effective net mitigation mechanisms, including NMM, FVA and CDM, but also for application in NAMAs and domestic emission reduction policies, and helping host countries to claim their own-effort in supporting CDM projects.

### *Introduction*

The New Market-based Mechanism (NMM) and any approaches under the proposed Framework for Various Approaches (FVA) must lead to net mitigation. This cannot be an unquantified and unquantifiable demand. Rather, because the Parties have decided that these approaches must lead to net mitigation, a mechanism is proposed here to quantify this achievement.

Additionally, the Durban Platform should lead to commitments from developed and developing countries alike from 2020 onwards, and therefore there should be a way for these mechanisms and approaches to be used by each of the countries to contribute to their commitments. Whereas the existing mechanisms allow for emission reductions to be used for compliance by developed countries towards their commitments, it should also be possible to use a developing country's own-efforts on emission reductions towards its commitment.

Furthermore, while the CDM has been successful, leading to more than USD 215 bn of investments, in more than 6,000 mostly clean energy projects, it is now struggling to fulfil stakeholders' expectations. The original objectives of the CD are to reduce emissions and contribute to sustainable development, but there is now an expectation amongst the users of the credits that the CDM contributes to host country mitigation too.

Therefore, we propose that this Net Mitigation Share (NMS) is not limited to NMM and FVA, but a common building block for each of the approaches under the UNFCCC. With the NMS the net

mitigation achieved through the mechanisms, or through a policy can be identified, quantified, monitored over time, reported by the Parties or entities involved, and verified using existing methodologies and independent entities. Net mitigation cannot be merely a laudable but unquantifiable aim, it should be measured, reported and verified as other commitments under the UNFCCC.

### *Application of the Net Mitigation Share<sup>18</sup>*

It is expected that under the Durban Platform many countries will pledge mitigation efforts. Some policies will be implemented by the host unilaterally, while others may depend wholly or partially on non-host carbon finance. Therefore, the NMS must allow for the net mitigation to be accurately quantified and be fairly attributed to the right party, while allowing the mechanisms to provide carbon financing to enable the actions. Host countries' own-effort share should be counted towards the host's commitments (whether or not they are pledged).<sup>19</sup>

When emission reduction commitments are no longer the Annex I preserve, developing countries need to be able to claim the emission reductions achieved through their E- policies, i.e. policies promoting lower-emission technologies, and count them towards their commitments. This means that host countries could be credited for their E- policies, accounting for the reductions using the same rules applied under the mechanisms. Where policies are bilateral, for example, where host countries provide a feed-in tariff, or other support, as well as using external carbon finance, the DNA may claim its own-effort share. By allowing the sharing of the reductions achieved any perverse incentives that are currently perceived to exist are resolved.<sup>20</sup> The exact same accounting could be applied to Nationally Appropriate Mitigation Actions (NAMAs) (the example below shows 50% credited NAMA).

In a component NMM (a specific sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the Net Mitigation Share, the host country's own-effort. The NMS can be quantified in this manner and be credited to the host country's account. Therefore, the NMS allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions.

It would be expected that Advanced Developed Countries would set higher NMS rates, as they would contribute more towards emission reductions, and LDCs lower rates, as they are expected to contribute less. NMS rates may also vary over time, for example where carbon finance provides the incentives for the early reductions in the first few years, but the host country's own-effort continuing the incentive after several years of crediting.

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<sup>18</sup> Note, the PD Forum has also proposed a Host Country Mitigation Share of Proceeds (MSOP) which is similar to the NMS but specifically designed for the CDM. See the PD Forum submission on the review of the CDM M&P or [www.pd-forum.net](http://www.pd-forum.net) for more details.

<sup>19</sup> While host country own-effort must be rewarded and counted towards meeting their mitigation, until it has an assigned amount (or equivalent under the Durban Platform) this can not be tradable.

<sup>20</sup> It may also simplify accounting of E+/E- policies, in particular if a database is established with E+/E- policies by each DNA.

The NMS would guarantee that activities deliver net mitigation. The quantification and verification would use existing (and new) baseline methodologies, nearly 200 of which are already available under the CDM, covering almost all sectors.

#### *Implementation of the NMS*

- Accurate quantification of the emission reductions (to be) achieved through reliable baseline methodologies.
- Agreement on the Net Mitigation Share through the lifetime of the policy, project, or programme. This should probably be fixed by the host DNA.
- Monitoring, reporting and verification, using DOEs.
- Allocation of the reductions between host country own-effort and carbon finance source in the common registry.
- Retirement of the NMS towards the host's (pledged or non-pledged) commitments in its registry account.
- The NMS may be implemented as a "share of proceeds", similar to the adaptation levy, or as a specific target or reference level.

#### *Common building blocks*

The guiding principles of the new approaches (NMM and FVA) are similar to those of the existing mechanisms, in particular CDM. While the existing mechanisms have proven to be efficient, there is a desire to move beyond their boundaries. The building blocks needed to operate the new approaches therefore are based on those already existing where possible, thus allowing the existing infrastructure, including institutional capacity, to continue and serve the new approaches without delay.

We propose that these guiding principles and building blocks of the carbon market are seen as the framework for the approaches and mechanisms, the Framework for Various Approaches providing the umbrella for the approaches and mechanisms. The overarching architecture provides the common currency which gives the fungibility between the approaches and the global demand.

Building blocks that may be part of the framework, and applied by all mechanisms, should include at least<sup>21</sup>:

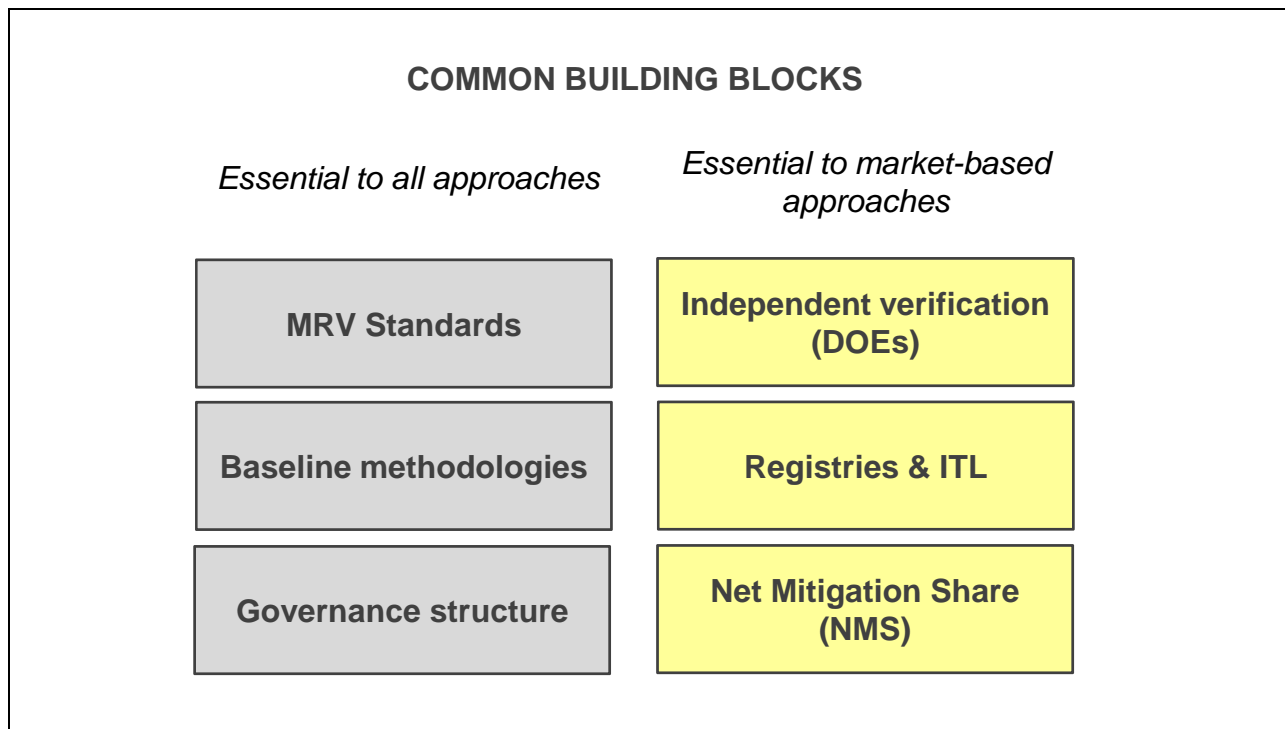
- **MRV system**  
The monitoring, reporting and verification system of the CDM is proven and has delivered over 1.2 bn tonnes of greenhouse gas emission reductions.
- **Baseline methodologies and (emission reduction) accounting**  
Nearly 200 credible baseline methodologies, covering almost every sector, have already been developed under the CDM, providing the best resource for accurate carbon accounting for projects and approaches in almost every sector.
- **Governance**  
We propose a single supervisory board for the mechanisms, with the executive functions

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<sup>21</sup> For more detail, please see our submission on the Carbon Market Architecture.

delegated, probably to the UNFCCC secretariat, including an Executive Director, and expert panels responsible for policy development and standard setting. A satisfactory appeals process to guarantee due process for all participants should be available.

- **DOEs and the accreditation (standard)**  
The existing mechanisms already use DOEs, providing independent verification. All approaches under the FVA umbrella should similarly be subject to independent scrutiny.
- **Registries (and ITL)**  
Recording and tracking are necessary for all market-based approaches and is the most effective way to eliminate double counting.
- **Net Mitigation Share**  
We propose to include the additional common building block for the Net Mitigation Share (NMS), to enable the net mitigation achieved through any of the approaches undertaken by Parties under the UNFCCC to be quantified and allocated.



*Application to CDM*

There is currently no requirement for net mitigation in the CDM. However, in practice significant mitigation achieved by CDM projects, as well as positive leakage. It is impossible here to quantify the scale of positive leakage, but the implementation of CDM projects in some sectors in some countries has altered the baseline of those sectors. However, it is easier to show the mitigation achieved beyond pure offsetting, as significant conservativeness is built-in into the (CDM) baselines.

However, we believe that to improve accounting of emission reductions, a single (explicit) conservativeness factor should be introduced in methodologies, with this conservativeness

retired in a special account, allowing a better appreciation of the net mitigation achieved through projects.

For example, enclosed flares are normally more than 99.9% efficient in the destruction of methane, yet the methodology gives a default of only 90%; low enclosed flares are penalised with an additional 10% discount even if the efficiency is (accurately) measured. This may be conservative, but does not reflect reductions achieved by the underlying projects accurately. Similarly, conservative emission factors are applied throughout methodologies, under-estimating (baselines) reductions, and over-estimate emissions of projects.

We believe that the best estimated reductions should be accounted for, with an explicit quantification of the conservativeness applied to provide an estimate of the net mitigation achieved. This would have no impact on the actual volume of reductions available in the market, but it allows for a fairer estimate of (net) reductions achieved, and it provides for a standardized calculation among all approaches under the FVA umbrella. The NMS for conservativeness would be retired in the name of the host country. Therefore, the volume of credits available on the market would be unaltered.

With a NMS for conservativeness already included, in parallel with the other approaches above and to standardise accounting under the FVA umbrella, a host country could also introduce its own-effort NMS where relevant.

#### *Worked examples*

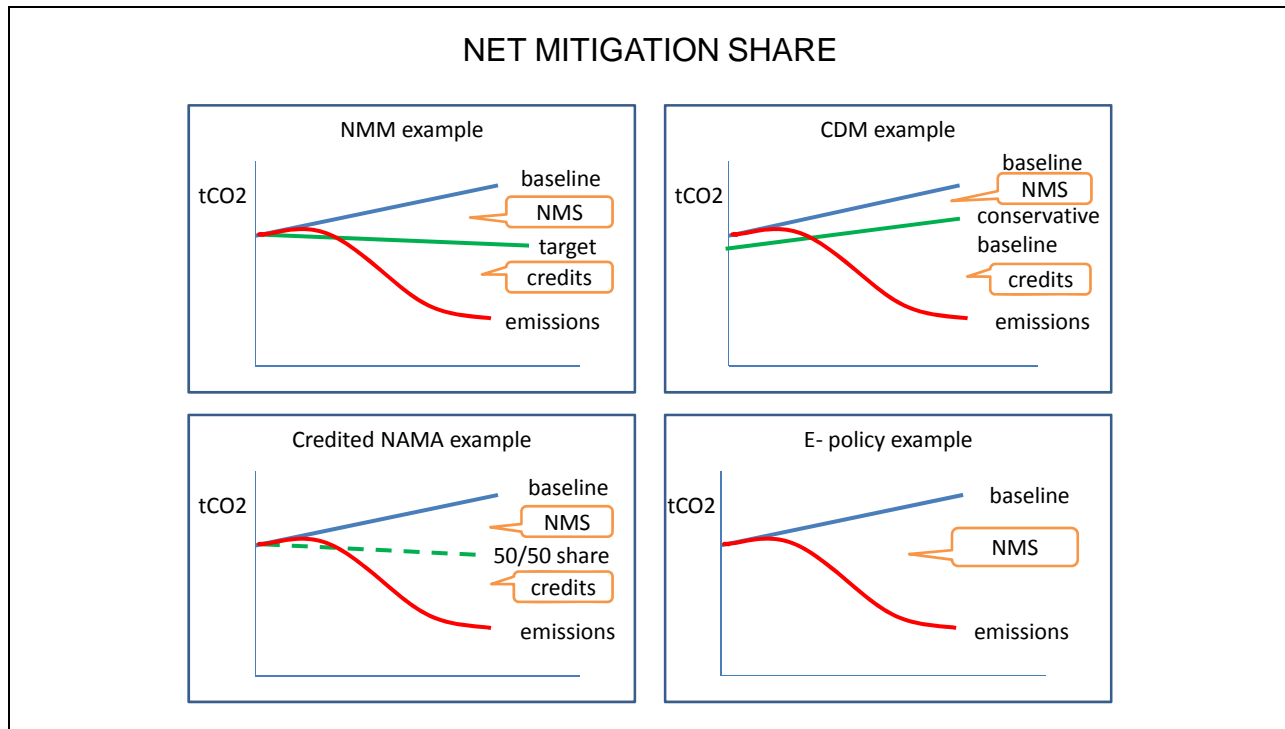
- In a component NMM (a sectoral scheme) it is expected that host countries would set a target for the sector below the baseline. Any reductions below the target would be credited and may be traded by the companies involved. The difference between the baseline and the target is the host country's net mitigation share. Therefore, the NMS allows the own-effort of host countries to be fairly attributed to those host countries, while allowing the mechanisms to provide carbon financing to enable the actions.
- It is accepted that the mitigation effort needs to be shared globally, taking into consideration different circumstances of developed and developing countries. It is expected that under the Durban Platform many countries will pledge some mitigation efforts. Developing countries need to be able to claim the emission reductions achieved through their E- emission reduction policies and count them towards their commitments, accounting for the reductions using the same rules applied under the mechanisms.
- Where policies are bilateral, for example, where host countries provide a feed-in tariff, or other support, as well as using external carbon finance, or their Nationally Appropriate Mitigation Actions (NAMAs) need carbon crediting to finance the action, the DNA may claim its own-effort net mitigation share.
- Within the CDM, to improve accounting a single conservativeness factor should be introduced in methodologies, with this conservativeness retired in a special account, allowing a better appreciation of the net mitigation achieved through projects.<sup>22</sup> We believe

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<sup>22</sup> For example, enclosed flares are normally more than 99.9% efficient in the destruction of methane, yet the methodology gives a default of only 90%; low enclosed flares are penalised with an additional 10% discount even if the efficiency is (accurately) measured. This may be conservative, but does not reflect reductions achieved by the underlying projects accurately.



that the best estimated reductions should be accounted for, and the net mitigation share for conservativeness retired. This would have no impact on the volume of credits that may be achieved by CDM projects, but calculates more fairly the best estimate of reductions achieved, and it provides for a standardized calculation among all approaches under the FVA umbrella. Where a host country also provides its own support, it could additionally claim its net mitigation share.



### Conclusions

NMM and FVA must lead to net mitigation. A quantified and verified net mitigation share by host countries would enable them to claim the reductions achieved towards their commitments under the Durban Platform. While the CDM has been successful in generating enormous financial flows and numerous projects, it is struggling to fulfil the expectations of some of the stakeholders. There is now an expectation amongst the buyers of credits that the CDM contributes to host country mitigation too.

Therefore, we propose that this Net Mitigation Share (NMS) is not limited to NMM and FVA, but a common building block for each of the approaches under the UNFCCC. With the NMS the net mitigation achieved through the mechanisms, or through a host country policy or implemented NAMA can be identified, quantified, monitored over time, reported by the Parties or entities involved, and verified using existing methodologies and independent entities.

By creating a transparent net mitigation rule, Parties would create effective net mitigation mechanisms, including NMM, FVA and CDM. The NMS would promote accurate and transparent accounting of all emission reductions achieved under the mechanisms, but may

also be applied to policies and NAMAs. Host countries could claim their own-effort in supporting CDM projects and count their share towards their targets. And NMS could function as a bridge between CDM and NMM/FVA, with more advanced developing countries taking greater own-effort.

*About CMIA*

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