



**Consultation on the 2030 framework for climate and energy policies
(COM(2013) 169 final)**

PD Forum, July 2013

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Consultation on the 2030 framework for climate and energy policies (COM(2013) 169 final)

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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 reductions¹, mostly from the private sector. Registered CDM projects are estimated to achieve **850 million tCO2e reductions annually**, which is equivalent to more than 5% of non-Annex I CO2 emissions.²
- 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 has brought investment to a standstill;
- 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;
- 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;
- 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);

¹ 'Benefits of the CDM up to 2012', UNFCCC (2012), see 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.

² Annual reductions from registered CDM projects from UNEP Risoe CDM Pipeline (March 2013). The whole pipeline would result in 1.6 bn tCO2e reductions annually. 2010 non-Annex I CO2 emissions from IEA CO2 Emissions from Fuel Combustion (2012).

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

Introduction

The Project Developer Forum (PD Forum) welcomes the opportunity to submit our views on climate and energy policies for the period to 2030. This submission builds on our views on the future global carbon market architecture, including the Framework for Various Approaches (FVA) and both the New Market-based Mechanism (NMM) and Non-market mechanisms, and our experience with real renewable energy and emission reduction project implementation globally. In our view the EU’s 2030 framework for climate and energy policies cannot be seen in isolation from the global climate regime.

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

The PD Forum supports 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 Climate Convention and effectively and efficiently incentivising appropriate mitigation actions, which must be central in the EU 2030 framework for climate and energy policy. We believe in a “carbon-constrained world” where global emissions need to be reduced

³ Report of the High-Level Panel on the CDM Policy Dialogue.

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 market mechanisms within the EU to achieve the various objectives of the framework, such as emission reductions, renewable energy and energy efficiency. We also support the development of a Framework for Various Approaches (FVA) including a non-market mechanism, 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, 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 very small 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 far 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 demand is essential to the already existing carbon market, but is similarly required for new mechanisms and traded markets. The lessons from the last decade-and-a-bit of global carbon markets is that ambitious targets should be set, and that the market can deliver more than expected at a lower cost than anticipated, if there is sufficient incentive.

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.

In the current conditions of over-supply, there is a tendency to focus on methods which reduce the over-supply whilst at the same time disregarding the importance of sources of additional supply. In anticipation of tougher caps and mechanisms which will ensure that such surpluses as we currently see in the EU ETS do not re-occur in the future, sources of additional supply will become increasingly important. If during times of economic expansion, the economy reaches the cap, Europe's competitive position will be severely hampered. Whilst currently over-supply is the problem, we must not ignore the fact that *when* caps start to bite (not *if*), additional supply will be critically important.

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.

In addition, new mechanisms are likely to be deployed across some countries and some sectors. It is not unlikely that many developing countries and least developed countries which are still struggling to take advantage of the CDM will once again be left behind as advanced developing countries surge ahead with new market-based mechanisms. In this respect, the CDM as a project based mechanism, still offers the best opportunity for real engagement in emission reducing activities in a significant proportion of the global economy.

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 reductions⁴, mostly from the private sector – a size beyond the possibilities for the public sector to achieve.

⁴ 'Benefits of the CDM up to 2012', UNFCCC (2012), see 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.

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, and a proposal for a net mitigation share within all the various approaches for developing countries being part of the solution on climate change in annex 2. We propose that the net mitigation share is a key component of a future CDM which recognizes that the CDM is not a one size fits all mechanism and that Advanced Developing Countries should be moving away from the use of the CDM, integrating existing projects into E- policies, whilst less and least developed countries are left to make better use of the CDM over longer time periods. The net mitigation share is further described in the PD Forums submission to SBI and is available at this link:

Specific questions in the consultation document:

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| 1. Which lessons from the 2020 framework and the present state of the EU energy system are most important when designing policies for 2030? |
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The elements of the 2020 framework were mostly developed as stand-alone measures, with too little appreciation of their interaction. While the economic downturn of the last few years has had an impact, the collapse of the EU ETS is primarily due over-allocation to incumbent industry and weak targets that do not reflect the other policy measures taken.

While ETS targets did take into consideration the impacts of the targets of the Renewable Directive, the Energy Efficiency Directive which was introduced later wiped out all net demand from the system, leaving the market with a significant surplus. Therefore, within the 2030 framework policies should be designed together, and be sufficiently flexible to account for any newly developed policies.

Critically, it has to be noted here that it was not the use of offsets that caused the surplus, as the volume of offsets had been accounted for ex-ante in the target setting, and had been limited to a fixed volume. However, we do believe that the means of implementing an artificial limit on imports into the EU ETS of

genuine emission reductions achieved elsewhere, approved through the UN process and verified by independent third party verifiers, has caused immeasurable damage to the development of the global carbon market. We do not support the unilateral adoption of qualitative restrictions as this leads to a fragmented market with un-wanted CERs being dumped on remaining markets. We do support a multilateral process aimed at enhancing the quality of CERs such that ALL buying parties are willing and able to purchase from the same market. In this respect, our proposal for a Net Mitigation Share raises the quality of CERs by turning the CDM into a mitigation instrument where Host Parties determine the mitigation share dependent on their own policies such that Advanced Developing Countries significantly reduce the number of CERs they release to the market and re-direct the balance to their own pledges.

So we wish to see demanding targets set for 2030, which are in line or ahead of the 2050 target and which make use of market based mechanisms to ensure that targets are achieved cost effectively; and we wish to see better integration of energy sector policies to ensure that the carbon price is the superior policy instrument to achieve those targets.

2. Which targets for 2030 would be most effective in driving the objectives of climate and energy policy? At what level should they apply (EU, Member States, or sectoral), and to what extent should they be legally binding?

Experience has shown that policies with legally binding targets on individuals and a strong compliance regime deliver results. The best examples are the EU ETS and the UK Renewable Obligation. The EU ETS targets have always been met. The UK RO targets were not necessarily designed to be met – as that would reduce the value of the underlying certificates – but they have resulted in a dramatic increase in renewables generation. The actual cost to the end consumer of both these markets has been minimal.

Generous subsidies have also been successful, but have proven to be difficult to afford, both politically and for the final consumers. The subsidies for renewable energy in Germany are the best example: they have raised the share dramatically, but the costs are high.

Predictability of the support regime is critical. If subsidies are successful, the cost of the support becomes too high, leading to reducing the subsidies. Tradable certificate systems do not suffer from this inherent problem, but are more self-regulating as the price is the result of supply and demand.

Targets should be applied at the highest level possible to promote flexibility however, there should be careful consideration of which sectors are suited to emission caps and which should have other kinds of targets. We have seen that legally binding caps on the energy sector are effective whilst caps on trade exposed industries have been more problematic – although as other exporting nations adopt climate change policies these problems will disappear. ETS and caps may not be appropriate for all sectors of the economy such as the built environment and transport. These sectors may be better addressed through non-market mechanisms, being mechanisms which do not involve the issuance and trade of permits.

Examples include taxes on fossil fuel, regulations on efficiency standards, performance standards, subsidies and awareness raising. Legally binding targets are most appropriate as these provide the certainty that the private sector requires to justify investment.

3. Have there been inconsistencies in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?

As stated above, the Energy Efficiency Directive, which was introduced after the EU ETS, wiped out all net demand from the system, rendering it worthless in Europe and causing significant negative impacts on the developing global carbon market. Therefore, within the 2030 framework policies should be designed together, and be sufficiently flexible to account for any newly developed policies. It should be very clear which economic sectors are going to take part in ETS style policies and which are not. Targets and policies in those sectors which are included in the ETS must be sub-ordinate to the over-arching ETS policy and the establishment and maintenance of a carbon price.

4. Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewables target necessary for transport, given the targets for CO2 reductions for passenger cars and light commercial vehicles?

Where possible, economic sectors that can be combined within one multi-sectoral cap should be combined so as to promote flexibility and liquidity in the market however, sectors such as ground transport by private individuals (where there are too many point sources to effectively regulate through an ETS); agriculture (where the MRV of emissions is too uncertain), land fill gas emissions (which are the product of biological factors beyond human control) emissions from coal mines and oil and gas production (driven by geological factors) cannot be included without introducing the risk of inaccuracy, non-compliance, windfall profits etc. These sectors should be addressed through non-market mechanisms such as regulation, standards, subsidies etc. Fleets of transport vehicles (planes, ships, road freight transport, trains) can be included in an ETS but care needs to be taken to ensure that perverse incentives are not introduced.

Individual targets may be introduced for any sector or sub-sector. However, markets deliver the greatest efficiency if sectors are combined within the same traded market. The market will determine the price, and thus the allocation of effort between the different sectors. Policy makers do not have sufficient information available to pick the winners.

While renewables, efficiency and emissions are deeply linked, the objectives behind them are not necessarily the same (and in the case of non-CO2 greenhouse gases, are probably only very weakly linked). Therefore, individual targets can – and should – be set, but they may also be used to meet the other targets. For example, if refineries would be made responsible for their own emissions as well as

the embedded emissions of the fuel they produce, they could choose to reduce their own emissions, or produce lower-CO₂ fuel which probably has greater process emissions, they could also blend a greater share of renewable fuel or buy emission reductions from elsewhere. The compliance regimes ensure that each target is met, the markets – and fungibility between them – ensure they are met at lowest cost.

Additionally, sub-sectors should be encouraged to carry out similar projects globally and receive credit for additional projects. This would encourage sector-specific technology transfer and level playing fields.

5. How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?

Markets need predictability, they do not require certainty. Long-term overall targets need to be set for steeply reducing GHG emissions (2030 and beyond), increasing the share of renewables and increasing energy efficiency. These long-term targets set out a clear direction for any investment decision made. The markets provide flexibility to reward over-achieving and allow for optimising the timing of any investment, by providing the flexibility to deal with changing targets over time. Therefore, the 2030 framework should have a in-built facility to adjust targets to new developments, such as new technologies, while the overall targets continue to provide the investment predictability.

Combining technology targets such as renewable portfolio standards with ETS can provide a strong incentive to industry to meet their targets ahead of the deadline. In the same way as we propose that developing countries gradually reduce the number of CERs awarded to CDM projects implemented in an E- policy environment, artificially weighting the adoption of renewable energy technologies ahead of a deadline can accelerate investment, advancing the development and adoption of technology and bringing price reductions leading to higher uptake. As technologies, they would lose any favoured status in recognition of reduced costs and lower risks associated with investment in mature technology.

Additionally, ambitious targets with fungibility between the targets would give a more robust system able to deal with maturing technologies. For example, if a renewable energy technology cost would reduce significantly, and it over-achieves the renewables target, it would help reduce emissions, and may be counted towards the efficiency target if that proves to be elusive, acting as an internal 'offset'.

6. How should progress be assessed for other aspects of EU energy policy, such as security of supply, which may not be captured by the headline targets?

It may be possible to capture security of supply in a separate traded market, which would provide a direct price signal to the market for long-term security of supply. Liberalised energy markets will normally respond to security of supply issues, in particular if data and long-term projections are

available. With regards to the infrastructure of the markets, such as the energy grids, long-term planning is indispensable.

Security of supply should not be considered as a reason to support nuclear energy. Likewise it should not be based on imported supplies of biomass: the greatest impact on energy security is efficiency, the second is local renewable energy (not imported biomass), the third is connecting to and opening other markets (eg connecting the grid to North Africa and encouraging liberalised markets there). While nuclear energy may play a role in some jurisdictions, it still relies on imported fuel, and therefore is no different from any other diversification.

7. Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?

Yes; we would support the introduction of a floor price for carbon emission allowances throughout the EU as implemented in the UK.

8. How should specific measures at the EU and national level best be defined to optimise cost-efficiency of meeting climate and energy objectives?

As stated above, long-term targets are needed, providing predictability. Some medium-term flexibility may be needed to adjust for realities. The various targets need to be (at least partially) fungible, providing a safety valve at both high and low prices.

Access to additional emission reduction units is critical to ensure that targets can be achieved cost efficiently. In the current conditions of severe over-supply, it is easy to forget how important it is to have access to least cost abatement options; if these are restricted to the geographic and technical scope of the ETS then they can very quickly run out. Additional emission reductions are a vital part of a balanced ETS and to help broaden the reach of emission reducing policies they should be allowed to come from domestic activities (and therefore not challenging the concept of complementarity) as well as from international sources. The PD Forum's proposals for a net mitigation share ensure that CDM projects not only create emission reductions for the purpose of offsetting emissions in capped economies but also create transparent and quantified host country mitigation or own-effort.

Individual targets may be introduced for any sector, sub-sector or country. However, markets deliver the greatest efficiency if sectors are combined within the same traded market. The market will determine the price, and thus the allocation of effort between the different sectors. Policy makers do not have sufficient information available to pick the winners.

9. How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilise investment?

No comment.

10. Which measures could be envisaged to make further energy savings most cost-effectively?

Given the success of traded markets in certificates, we believe a tradeable 'white certificate' market should be developed. This market should be made fungible with renewables and vice versa. The market should allow energy efficiencies achieved in sectors outside the core included sectors to be counted. Project mechanisms, such as those under the Kyoto Protocol, have proven to be an efficient tool for delivery.

Energy savings need to be accurately monitored, reported and verified, and ambitious baselines will need to be agreed. Such approaches could be developed under the new market-based mechanism or depending on the definition of markets the non-market mechanism.

11. How can EU research and innovation policies best support the achievement of the 2030 framework?

No comment.

12. Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?

Overall targets need to be agreed for 2030 and beyond to provide absolute clarity for investment decisions. Traded markets around the individual (but fungible) targets will allow for the flexibility which is needed to account for the investment cycle.

'Offset projects' from non-included sectors should be accepted, if there is sufficient robust monitoring, reporting, verification and ambitious baselines. Investments outside the EU which achieve similar verified energy savings/emission reductions/renewable energy production should be able to obtain credit; this will achieve both technology transfer and assist industry with their global operations.

Emission reduction targets that drive technology development and uptake create jobs and make European industry more competitive; by developing technology in Europe, we will create growth opportunities both within Europe and in other economies seeking to reduce their own emissions.

13. What evidence is there for carbon leakage under the current framework and can this be quantified? How could this problem be addressed in the 2030 framework?

There is no evidence for carbon leakage from current policies. With increased action on climate change globally, including by non-Annex I countries, any carbon leakage should become even less of a problem. However, it may be necessary to agree action against 'rogue' states not taking on sufficient effort.

14. What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?

The price of carbon is NOT a driver of energy costs in Europe at present; trends are driven by the costs of fossil fuels and the risks associated with securing supplies of imported fossil fuels. Greater energy security will reduce the impact of fluctuations in fossil fuel prices. Ultimately, or netter still in the mdium term, carbon prices must become a significant factor in energy price otherwise investors will not respond to the ETS in a manner which reduces GHG emissions.

15. How should uncertainty about efforts and the level of commitments that other developed countries and economically important developing nations will make in the on-going international negotiations be taken into account?

Many developing countries are already taking action and making commitments, including contributions to CDM projects through E- policies and NAMAs for example feed in tariffs. Our net mitigation share proposal demonstrates how these E- policies can leverage off CDM investment and over a period of time, transition from individual CDM projects to sectoral initiatives or NAMAs which are embedded in the host country's targets. However, where countries, whether developing or developed, refuse to take on sufficient commitments, it may be necessary to agree action against such countries. Given the urgency of action needed this may override other agreements.

The EU and other developed nations must recognise that building a global carbon market is a slow process – even getting the EU's own ETS to function as intended is taking 10 to 20 years; it will take time for other countries to join and during that period of time, those that can, must take up ambitious targets and do all they can to encourage others to join. The rewards to early movers will come in the form of technology innovation, green jobs, competitive gain in a world where GHG emissions are capped, and green growth opportunities. Furthermore, evidence suggests that, for example, demand for CERs has driven carbon mitigation investment in many developing countries resulting in material reductions in GHG emissions alongside a wide range of other sustainable development benefits and co-benefits. Much of this money has been extremely well spent and there are numerous opportunities to continue this success story if Governments or multilateral funds would create more demand.

16. How to increase regulatory certainty for business while building in flexibility to adapt to changing circumstances (e.g. progress in international climate negotiations and changes in energy markets)?

Overall targets need to be agreed for 2030 and beyond to provide absolute clarity for investment decisions, even if individual targets may only be agreed in the medium term. Traded markets around the individual (but fungible) targets will allow for the flexibility which is needed to account for the investment cycle.

Revising the EU ETS to make the allocation process responsive to economic conditions and changing conditions. For example, adjusting the allocation based on ex post production would stop the build up of allowances in the event of economic declines.

17. How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?

Revenues can be channelled to research and development and new technologies can be afforded more favourable status for a period of time. For example, if a new technology is developed which is considered to be more energy efficient, and it is decided that the technology shall become mandatory with a ten year period, then rewarding early adopters with a greater share of allocation on a declining scale towards zero when the technology is to be adopted will encourage industry to innovate and adopt new technologies.

18. How can the EU best exploit the development of indigenous conventional and unconventional energy sources within the EU to contribute to reduced energy prices and import dependency?

A traded market will deliver a set target most cost effectively, in particular if an EU-wide linked and fungible market is developed. A traded market allows policy makers to choose a target, which is a political decision, and the market will determine the price on the basis of supply and demand. A feed-in tariff or subsidy would require policy makers to second guess costs, and the development of cost over time, for which they do not have sufficient information to make such a choice.

The relevant sectors are energy efficiency and indigenous renewables (i.e. not including imported biomass). In the liberalised energy markets, these sectors are disadvantaged compared to conventional sources due to the short-termism of the market. However, on the basis of lifecycle costs, some renewables, and certainly efficiency measures, are already cost effective compared to conventional fossil fuel – and even more so compared to nuclear. Also given the urgency of climate change mitigation, fossil fuel based energy should not be encouraged, indigenous or not.

Renewable energy is capital intensive but cheap to run. Renewable energy could be encouraged through access to cheaper capital.

19. How can the EU best improve security of energy supply internally by ensuring the full and effective functioning of the internal energy market (e.g. through the development of necessary interconnections), and externally by diversifying energy supply routes?

It may be possible to capture security of supply in a separate traded market, which would provide a direct price signal to the market for long-term security of supply. Liberalised energy markets will normally respond to security of supply issues, in particular if data and long-term projections are available. With regards to the infrastructure of the markets, such as the energy grids, long-term planning is indispensable.

As stated above, the greatest benefit to energy security is increased efficiency, the second is indigenous renewable energy (not imported biomass), the third is connecting to and opening other markets (eg connecting the grid to North Africa and encouraging liberalised markets there). While nuclear energy may play a role in some jurisdictions, it still relies on imported fuel, and therefore is no different from any other diversification.

20. How should the new framework ensure an equitable distribution of effort among Member States? What concrete steps can be taken to reflect their different abilities to implement climate and energy measures?

A single target and traded market for the whole of the EU would ensure the greatest cost efficiency and spread the costs equally. However, the interpretation of equitable distribution is a political choice.

21. What mechanisms can be envisaged to promote cooperation and a fair effort sharing between Member States whilst seeking the most cost-effective delivery of new climate and energy objectives?

A single target and traded market for the whole of the EU would ensure the greatest cost efficiency and spread the costs equally. However, the interpretation of fair effort sharing is a political choice.

22. Are new financing instruments or arrangements required to support the new 2030 framework?

There is scope for new instruments to deliver the 2030 framework, as described in our overarching carbon market infrastructure paper. While such instruments should be an evolution of the existing mechanisms, the regrettable collapse of the nascent global carbon market may require new instruments to partly or completely replace those already successfully operating.

As climate change is the key element in the 2030 framework, and climate change is a global issue, the EU framework cannot be effective without global involvement and links to global market, global mitigation action etc. Our overarching carbon market paper describes our view of the required evolving global market.

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.

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 tCO₂e reductions annually**, which is equivalent to more than 5% of non-Annex I CO₂ emissions.
- Building on our previous proposal and the existing high-successful structure, **an overarching 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 reductions⁵, mostly from the private sector.
- Registered CDM projects are estimated to achieve 850 million tonnes of CO₂e annually, which is equivalent to more than 5% of non-Annex I CO₂ emissions.⁶
- 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'.⁷
- 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 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.

⁵ 'Benefits of the CDM up to 2012', UNFCCC (2012), see 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.

⁶ Annual reductions from registered CDM projects from UNEP Risoe CDM Pipeline (March 2013). The whole pipeline would result in 1.6 bn tCO₂e reductions annually. 2010 non-Annex I CO₂ emissions from IEA CO₂ Emissions from Fuel Combustion (2012).

⁷ "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>.

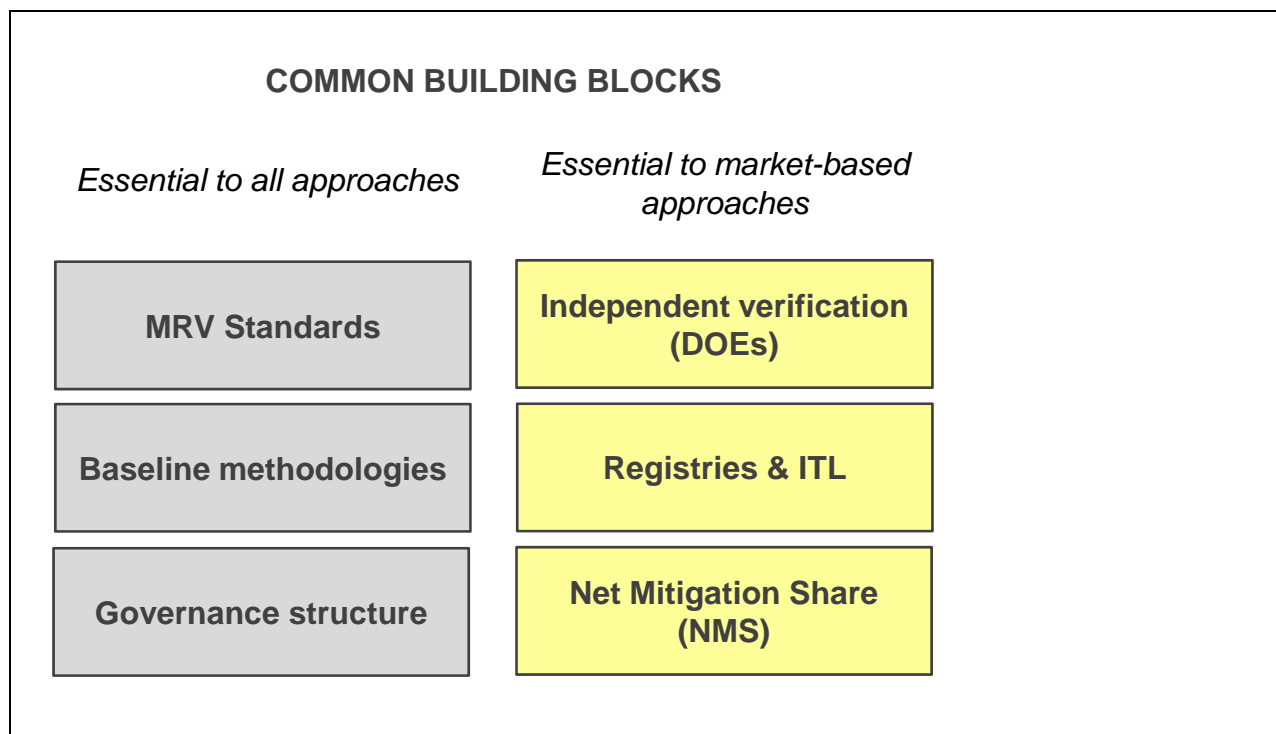
- The programmatic approach is very different from the main CDM. It is proposed that programmatic approaches are separated out from the CDM as soon as practicable, and merged with and grandfathered into a (credited) NAMA mechanism.
- ‘A strong CDM is necessary to support the political consensus essential 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.’⁸

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.

⁸ 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 sector⁹, 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

⁹ As well as a number of A/R methodologies.

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 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:

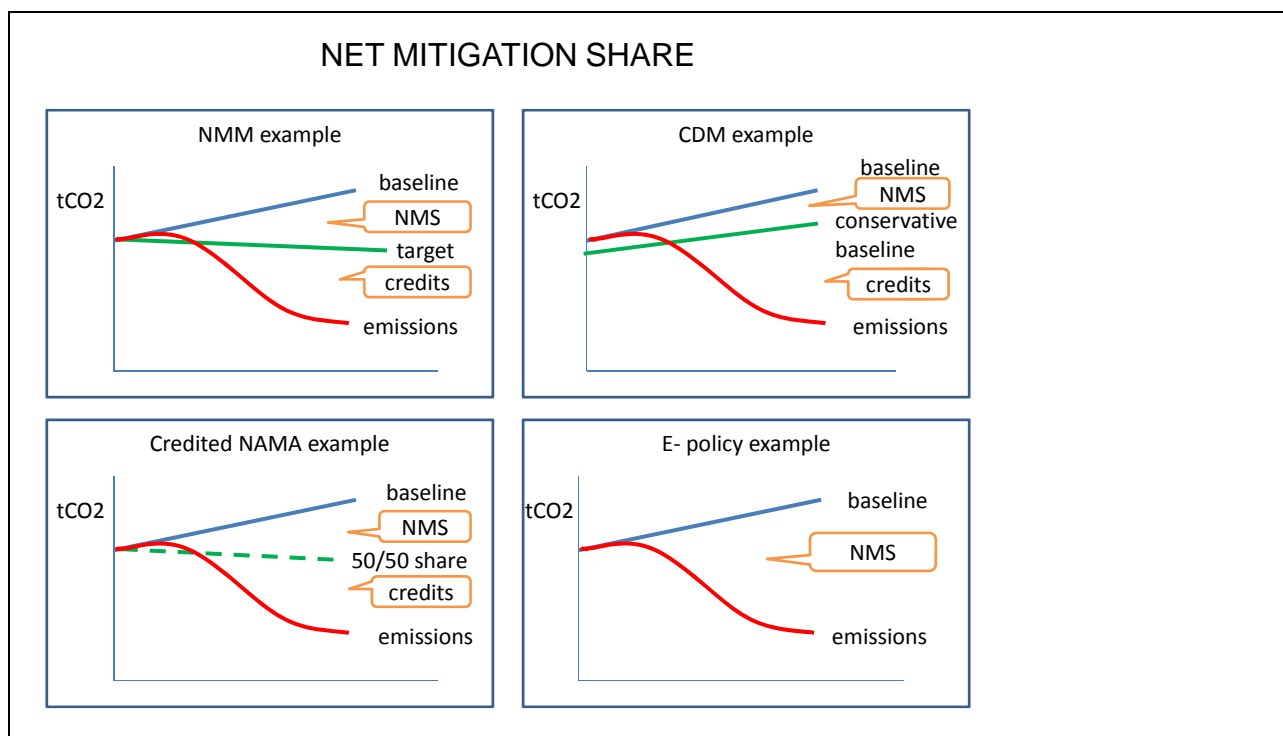
- **Net Mitigation Share (NMS)**

Enclosed is a separate paper with details, but the key points are summarized as follows and illustrated below¹⁰:

- 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 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

¹⁰ 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 for more details.

- the CDM, but as a default it would be expected that the host country's NMS would be 0%.
- o 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.¹¹ 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.



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

¹¹ 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.

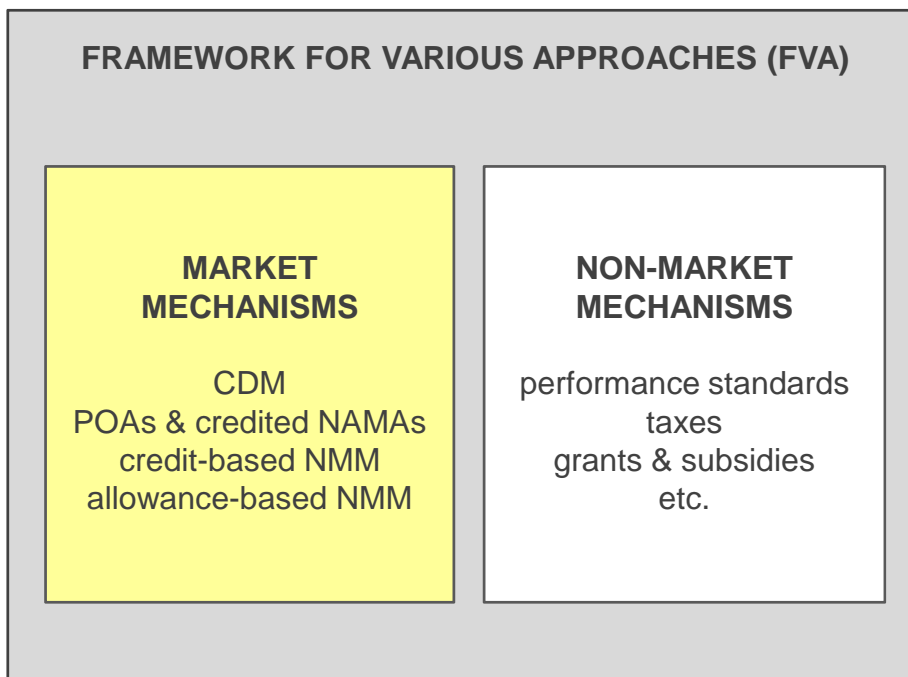
NMM and FVA specify that they must lead to net mitigation. The CDM also leads to net mitigation by the application of its conservative approaches. Additionally, the Durban Platform should lead to commitments from developed and developing countries alike from 2020 onwards and therefore there should be 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-NMM¹². 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

¹² 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.

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.¹³

Overall architecture

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

¹³ 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.

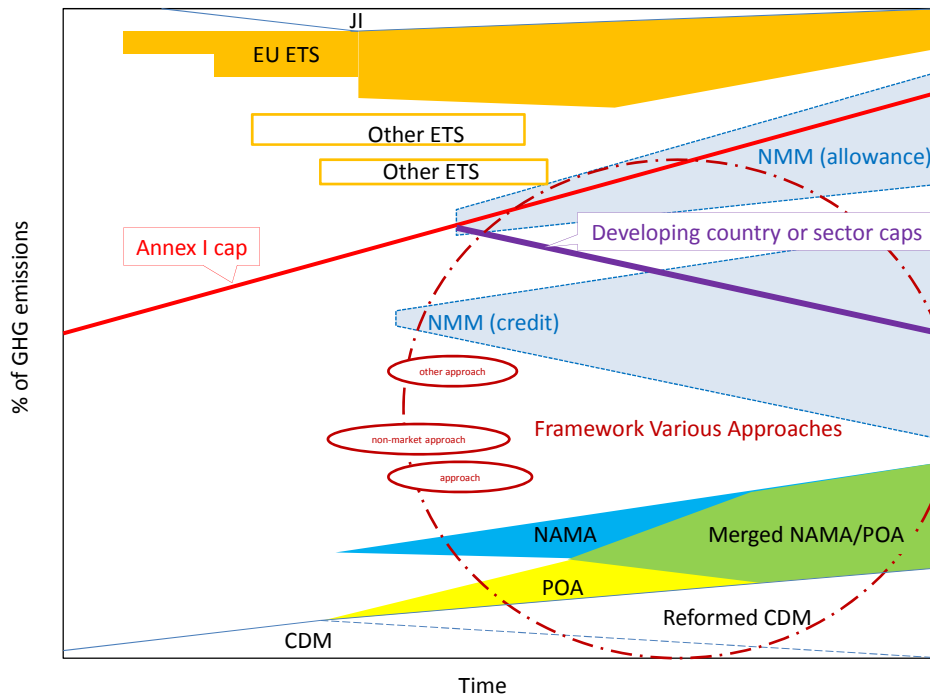
merged with NAMAs. POA is following a very different approach from the CDM, using different crediting periods etc. so we believe it would be more efficient to treat this as a different approach altogether. Under credited NAMAs part of the mitigation could be the host Party's own-effort, with the remainder credited, while non-credited NAMAs could be fully counted towards the host country's mitigation.

- 3) Land-use based approaches.¹⁴ 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.*
- 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

¹⁴ 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.

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.

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.

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 Share¹⁵

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).¹⁶

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

¹⁵ 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 for more details.

¹⁶ 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.

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.¹⁷ 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.

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.

¹⁷ It may also simplify accounting of E+/E- policies, in particular if a database is established with E+/E- policies by each DNA.

- Retirement or 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 least¹⁸:

- **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 delegated, probably to the UNFCCC secretariat, including an Executive Director, and

¹⁸ For more detail, please see our submission on the Carbon Market Architecture.

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)**

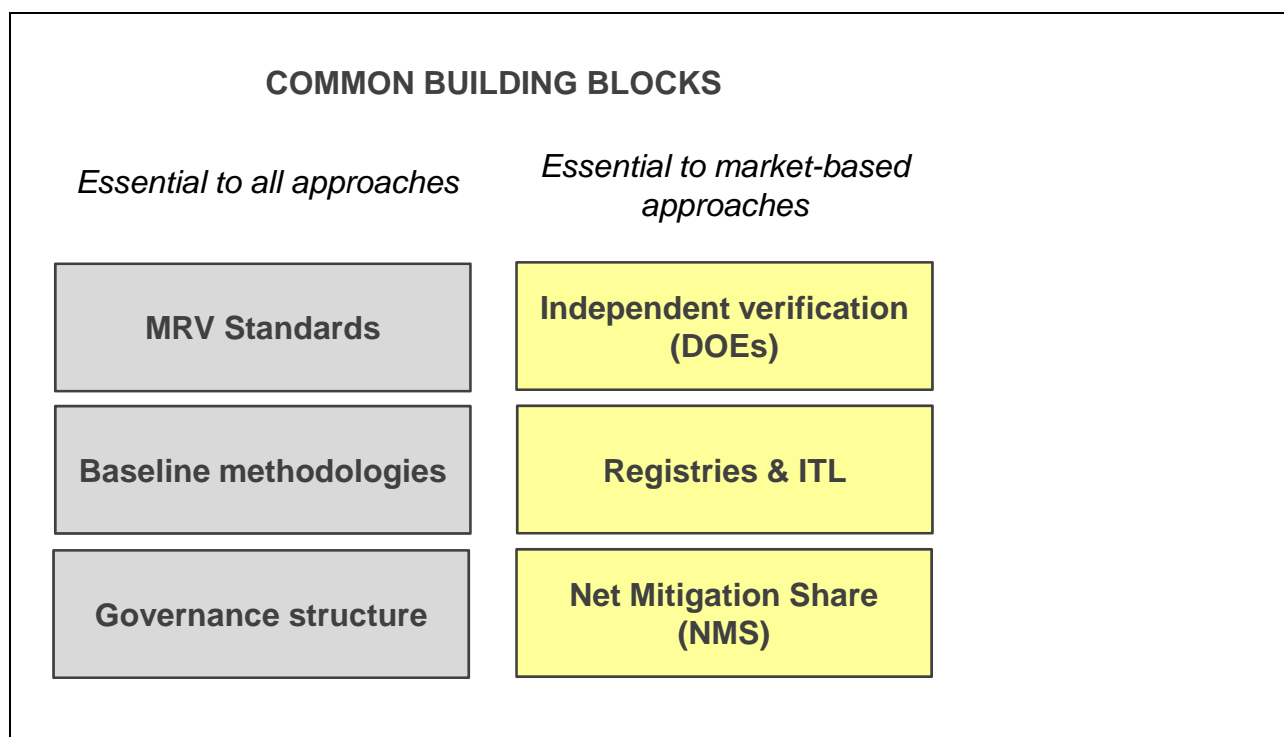
The existing mechanisms already use DOEs, providing independent verification. All approaches under the FVA umbrella should similarly be subject to independent scrutiny.

- **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.

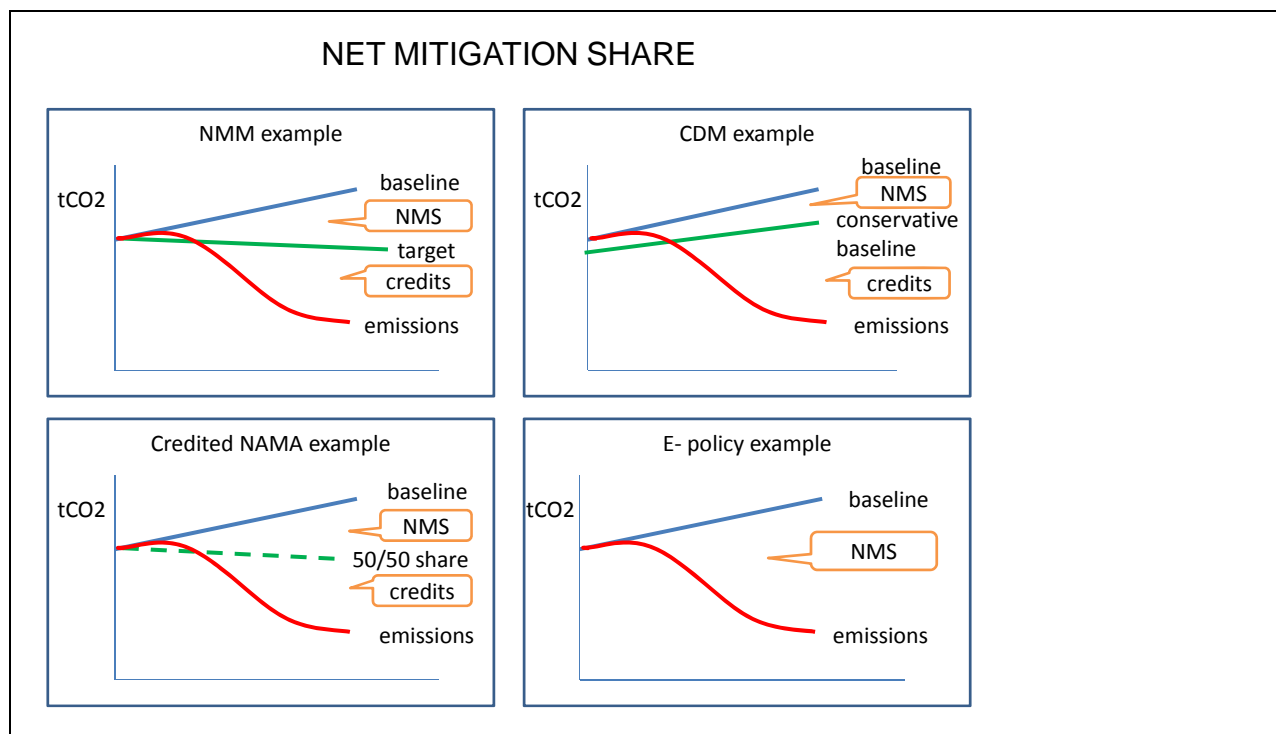
With a NMS for conservativeness already included, in parallel with the other approaches above and to standardise accounting under the FVA umbrella, a host country could also introduce its own-effort NMS where relevant.

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.¹⁹ We believe 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.

¹⁹ 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.



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

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.

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.