JIKO Policy Paper 2/2012

May 2012

Wuppertal Institute
for Climate, Environment
and Energy

Current Proposals and Positions on New Market Mechanisms

Wolfgang Sterk

Summary

Countries have been discussing "various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions" in the Ad-hoc Working Group on Long-Term Cooperative Action (AWG-LCA) for several years. In Durban, Parties decided both the establishment of a new top-down mechanism as well as to consider establishing of a framework for bottom-up initiatives. Parties and accredited observer organisations were invited to submit their view on both issues and the AWG-LCA held workshops on these issues on 19 May 2012. This paper provides an overview of the positions and proposals as contained in the submissions and expressed at the workshops.

The submissions and the discussions at the workshops revealed that there continue to be fundamental differences between the Parties. On the new centralised mechanism, while many Parties subscribe to scaling up market mechanisms to the sectoral level, China continues to maintain that the new mechanism should be project-based and similar to the CDM. Bolivia continues to be fundamentally opposed to market-based mechanisms. In addition, developing countries maintain that market mechanisms should only be available to Annex I Parties that adopt an internationally legally binding emission target, which will hardly be acceptable to the USA and the countries that have opted out of the second Kyoto commitment period.

On the framework, there is a clear split between countries that argue for a centralised system and countries that are in favour of a decentralised system. While the former demand that only units generated within the UNFCCC should be allowed to count towards targets, the latter would essentially leave the recognition of units up to individual countries and envisage only a transparency function for the UNFCCC.

There are also some fundamental questions on the more technical level. One is how to handle a situation where individual installations reduce their emissions but the sector as a whole does not. In addition, there is substantial parallelism between the framework and the centralised new market mechanism. Both the new market mechanism and the framework are supposed to have common core elements as well as elements that may differ based on local circumstances. Further substantive questions relate to the relationship between the new mechanism, the Kyoto mechanisms and nationally appropriate mitigation actions (NAMAs).

Given these strong political differences and open technical questions, one may wonder whether it will in fact be possible to make the new mechanism operational by the end of this year. If not, possible ways forward may lie in the various proposals for pilot phases. In particular the proposal by the Center for Clean Air Policy to use NAMAs as testing ground for developing methodologies and capacities for measuring, reporting and verification has the advantage that it needs no further decisions by the Conference of Parties to be implemented.

Zusammenfassung

Die Staaten haben bereits seit mehreren Jahren in der in der Ad-hoc Working Group on Long-Term Cooperative Action (AWG-LCA) über "various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions" diskutiert. In Durban einigten sich die Staaten darauf, einen neuen zentralisierten Marktmechanismus zu etablieren und die Einrichtung eines Rahmenwerks für dezentrale Initiativen einzelner Länder zu prüfen. Die Staaten und akkreditierte Beobachter waren eingeladen, ihre Ansichten zu beiden Fragen bis Anfang März einzureichen und die AWG-LCA richtete am 19. Mai 2012 Workshops zu beiden Fragen aus. Dieses Papier bietet einen Überblick über die Positionen und Vorschläge, die in den Einreichungen und auf den Workshops vorgebracht wurden.

Die Einreichungen und die Diskussionen auf den Workshops zeigten, dass weiterhin fundamentale Meinungsverschiedenheiten zwischen den Staaten bestehen. In Bezug auf den neuen zentralisierten Mechanismus unterstützen zwar viele Staaten den Vorschlag, Marktmechanismen auf die sektorale Ebene auszuweiten, China hält jedoch an der Position fest, dass der neue Mechanismus projektbasiert und ähnlich zum CDM sein sollte. Bolivien lehnt marktbasierte Mechanismen weiterhin prinzipiell ab. Darüber hinaus fordern die Entwicklungsländer, dass Marktmechanismen nur für Annex I-Staaten zur Verfügung stehen sollten, die sich auf ein international verbindliches Emissionsziel verpflichtet haben. Dies dürfte jedoch für die USA und die Länder, die nicht der zweiten Verpflichtungsperiode des Kyoto-Protokolls beitreten, kaum akzeptabel sein.

Zu dem Rahmenwerk für „various approaches" besteht ein klarer Konflikt zwischen Ländern, die für ein zentralisiertes System eintreten, und Ländern, die sich für ein dezentralisiertes System aussprechen. Während erstere fordern, dass nur Zertifikate, die innerhalb der UNFCCC generiert werden, auf Ziele anrechenbar sein sollen, würden letztere die Anerkennung von Zertifikaten den einzelnen Ländern überlassen und der UNFCCC nur eine Transparenzfunktion zuweisen.

Es bestehen auch grundsätzliche Fragen auf der technischen Ebene. Eine ist die Frage, wie mit einer Situation umgegangen werden soll, in der individuelle Anlagen ihre Emissionen reduzieren, der Sektor insgesamt jedoch nicht. Zudem besteht eine erhebliche Parallelität zwischen dem Rahmenwerk und dem neuen zentralisierten Marktmechanismus. Sowohl der neue Mechanismus als auch das Rahmenwerk sollen sowohl gemeinsame Kernelemente beinhalten als auch Elemente, die sich auf Grund lokaler Umstände unterscheiden können. Weitere Fragen beziehen sich auf das Verhältnis zwischen neuem Mechanismus, den Kyoto-Mechanismen und nationally appropriate mitigation actions.

In Anbetracht dieser starken politischen Meinungsverschiedenheiten und offenen technischen Fragen erscheint fraglich, ob es tatsächlich möglich sein wird, den neuen Mechanismus wie vorgesehen bis Ende diesen Jahres operationsfähig zu machen. Falls nicht, zeigen die verschiedenen Vorschläge für Pilotphasen potenziell einen Weg nach vorne auf. Insbesondere der Vorschlag des Center for Clean Air Policy, NAMAs als Testlabor für die Entwicklung von Messmethoden und technischen Kapazitäten zu nutzen, hat den Vorteil, das er keiner weiteren Beschlüsse der Vertragsstaaten bedarf, um umgesetzt zu werden.

Table of Contents

1 Introduction

Countries have been discussing "various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions" in the Ad-hoc Working Group on Long-Term Cooperative Action (AWG-LCA) for several years. These discussions have in particular been promoted by industrialised countries, who have taken the position that most of the financial support needed by developing countries could and should be delivered through the carbon market. In addition, many industrialised countries are dissatisfied with the existing Clean Development Mechanism (CDM) and have therefore proposed to develop new market mechanisms (NMM). On the other side, many developing countries have been rather sceptical towards new mechanisms. While some see scaling up market mechanisms as a slippery slope towards adopting legally binding targets, others, in particular some of the left-wing ALBA countries (the Bolivarian Alliance for the Peoples of our America), even reject market-based approaches in general.

There are further divisions among the proponents of new market mechanisms. On one side, in particular Japan, New Zealand and the USA have advocated for a rather open framework for NMM without specific definitions. The aim is to allow countries who develop bilateral mechanisms, as Japan is already doing, to count the emission reductions from these mechanisms towards their UNFCCC commitments. On the other side, European and developing countries have advocated for a top-down definition of the NMM at UNFCCC level in order to maintain common standards, comparability and environmental integrity.

In Durban, Parties agreed on decision text that accommodates both avenues. The decision on the one hand defines a new market mechanism that is to operate under the guidance and authority of the Conference of the Parties (COP). The AWG-LCA is to develop modalities and procedures for this mechanism, to be considered at this year's COP in Doha. On the other hand, the decision notes that Parties could individually or jointly develop and implement market mechanisms in accordance with their national circumstances and requests the AWG-LCA to conduct a work program to consider the establishment of a framework for treatment of various approaches to enhance the cost effectiveness of mitigation actions. That is, the Durban conference decided both the establishment of a new top-down NMM as well as to consider the establishment of a framework for bottom-up initiatives.

The AWG-LCA had workshops on the NMM and the framework on 19 May 2012 and Parties and accredited observer organisations were invited to submit their views on both issues. This paper aims to provide an overview of the positions and proposals as contained in the submissions and expressed at the workshops.

It first discusses the submissions on the centralised new-market mechanism. In this respect, the paper first summarises the general positions and basic designs that have been submitted by Parties and observers and subsequently discusses the more technical details as they are addressed in the submissions. Issues that are raised in the submissions include participation requirements; determination of sector coverage; setting baselines and crediting thresholds; length of crediting/trading periods; provisions for measuring, reporting and verification (MRV); the overall accounting framework; the relationship between the NMM, the CDM and NAMAs; the timetable for implementation; financing of the system; supplementarity; sustainable development criteria; capacity building and the work programme that is to be conducted by the AWG-LCA.

Second, the paper discusses the submissions on the framework for various approaches. These mostly do not go into much technical detail, this section therefore only comprises an overview of the general positions and the suggestions for the work programme.

Unless stated otherwise, all the material used in this paper is sourced from Parties' submissions (UNFCCC 2012a-f) and the author's observations at the workshops on 19 May.

2 New Market Mechanism

2.1 General Positions and Proposed Basic Designs

2.1.1 Submissions from Parties

Many of the submissions by Parties take up the proposals for sectoral crediting and sectoral trading that were initially proposed by the EU. Sectoral crediting would be based on an agreed emissions threshold or "no-lose target" at sectoral level. That is, countries would agree on a target level of emissions for a sector. This threshold could either be set in terms of absolute emissions or be intensity-based, for example in terms of emissions per unit of GDP, emissions per unit of electricity generated, etc. The developing country could then undertake actions to reduce its emissions to the agreed level, either unilaterally or with some international support. If emissions are reduced below the target, the developing country receives credits. If the target is not achieved, there are no penalties. By contrast, under "sectoral trading", the developing country would receive tradable units ex ante. If the country managed to reduce its emissions below its target, it would thereby achieve a surplus of trading units which it could sell. If the country did not achieve the sectoral target, it would need to buy trading units to cover the shortfall.

The **EU** considers that as the project-based design of the existing mechanisms has a limited capacity to trigger large-scale, structural and infrastructural changes, the NMM should target broad segments of the economy and achieve significant net global emission reductions. The EU suggests that the governance system should enable the host country to play a strong role, while ensuring that internationally agreed rules are followed in order to safeguard the environmental integrity of the emissions reductions. The EU envisages the following steps for the implementation cycle of the new mechanism:

- The host country would submit an "initial report" to demonstrate that it meets the mechanism's participation requirements and to describe the national implementation of the NMM. This would include appointment of a competent authority, MRV arrangements, the coverage of sectors and gases, the baseline and crediting threshold, the measures to be undertaken to reduce emissions, and the contribution to sustainable development.
- This report would be reviewed by an Independent Review Team (IRT). The IRT would submit its assessment to an Implementation Committee (IC), which would have to resolve any question of implementation raised by the IRT.
- After the start of implementation, the host country would have to submit annual reports on the actual verified emissions and demonstrating that it continues to meet the participation requirements.

- Annual reports would also be reviewed by the IRT. If the IRT raised questions of implementation, these would be referred to the IC.
- In the case of sectoral crediting, if the review had a positive result, there were no outstanding questions of implementation, and sectoral emissions in the reporting year were below the crediting threshold, credits would be issued accordingly.
- In the case of sectoral trading, trading units would have been issued ex ante and the host country would need to submit trading units corresponding to its emissions in the reporting year.

The EU considers that not all countries may have the capacity to perform all functions needed for the NMM, especially not in the beginning. The EU suggests that therefore some functions could be provided by the UNFCCC, for example the registry. A separate national registry would then not be required.

Finally, the EU posits that the modalities and procedures for the NMM would need to be regularly reviewed and that the first review should be undertaken no later than 2018.

The submission from **AOSIS** is the most detailed one after the submission from EU and also proposes sectoral crediting and sectoral trading. Similar to the EU, AOSIS argues that there is need for a NMM to incentivise substantially more emission reductions than is possible under the CDM, but without requiring developing countries to become Annex I Parties under the Kyoto Protocol. AOSIS suggests that the NMM should "bridge the gap" between the project-by-project approach available to developing countries through the CDM, and the economy-wide emissions trading available to developed countries under the Kyoto Protocol. The new mechanism should therefore address sectoral emissions of developing countries and deliver substantial net global emission reductions. It should maintain and extend the existing system for the international accounting of emissions and emission reductions developed under the Kyoto Protocol.

AOSIS proposes that if a Non-Annex I country were to voluntarily propose a national or sectoral target, the COP would determine whether the proposal would contribute to the achievement of Article 2 of the Convention and the shared vision for a long-term goal. In the case of a positive determination, the COP would inscribe this target in an Annex Z of a new Protocol to the Convention (which AOSIS has proposed as one pillar for the future climate regime, which would work in parallel to a continued Kyoto Protocol). "Inscribed amounts", akin to assigned amounts, would be calculated on the basis of the same methodologies, rules and procedures as are used for the assigned amounts of Annex I countries under the Kyoto Protocol.

Similar to the EU, AOSIS suggests that use of the international transaction log (ITL) could facilitate the establishment, maintenance, transfer and tracking of units, which would relieve developing countries of the need for establishing their own national registries and would help avoid the double counting of emission reductions.

While less detailed, a joint submission by **Costa Rica, the Dominican Republic, Mexico, Panama and Peru** also goes in a similar direction. It proposes that all countries should account for all emissions from all sectors based on principles and criteria set by the UNFCCC. A country could decide to make a share of its emissions available for market instruments. They emphasise that this could include one or multiple sectors, rather than having an instrument that could only operate in one sector. Limiting the mechanism to single sectors would in their view limit the flexibility of countries and would not allow to create markets across sectors.

Ecuador's submission goes into a different direction. It proposes a "net avoided emissions" mechanism for countries whose economies are so far based on extractive industries and who want to transform their econo-

mies. This proposal follows Ecuador's Yasuni initiative, by which it would commit to not exploit the fossil fuel reserves below the Yasuni national park if it is compensated for the revenue which it would thus forego. According to the submission, such compensation could be either in the form of direct compensation outside from the market, or through market mechanisms.

Ecuador's proposal for a "net avoided emissions" mechanism contains substantial details on institutional arrangements, though the division of roles is not always clear. There would be an executive board or governing body under the authority and guidance of the COP. This body would work very similar to the CDM Executive Board, developing the detailed modalities and procedures for the mechanism, approving new baseline and monitoring methodologies, accrediting operational entities, maintaining a registry, and approving activities. In addition, Ecuador proposes a steering committee to ensure transparency and high technical standards, which is apparently envisaged as a more technical implementation body. Its tasks would include the development of accreditation requirements and an accreditation system for operational entities and criteria for verification of activities.

Countries would need to designate national authorities for the assessment and approval of proposals in terms of their contribution to sustainable development, the baseline scenario and the quantification of emission reductions. They would also have the task to monitor, report and verify the functioning of the activities. In addition, operational entities that are accredited by the governing body would also be responsible for validation of proposals and verification/certification of avoided emissions. The division of work between the national authorities and the operational entities is not clear.

Norway and Japan suggest flexibility for the design of the new mechanism. **Norway** proposes that it should be possible to have different "'windows' or sub-mechanisms". While in Norway's view sectoral crediting and/or sectoral trading should be given priority, there should be flexibility to also include other types of market-based approaches. Norway supports having a centralised governance framework where the UNFCCC is responsible for verification and with a single registry issuing units and tracking transactions.

Japan does not provide much detail. It posits that new mechanisms should include both project-based and sector-based approaches and that these should not be mutually exclusive. Japan highlights that if credits are issued based on the overall sectoral performance, as proposed by the EU, an entity that has reduced its emissions would not be rewarded by emission reduction credits if the sector as a whole did not reduce emissions below the threshold level. Japan considers that it should therefore be required from host countries to ensure "proper incentives" for each entity to undertake emission reduction activities.

China continues to resist the introduction of scaled-up mechanisms. It's very short submission posits that the new mechanism should not introduce emission reduction commitments for developing countries and that it "should be project-based and its modalities and procedures should be comparable to those established under the Kyoto Protocol." It also posits that market-based mechanism established under the Convention should not introduce emission reduction commitments for developing countries.

The latter point is also emphasised by **Saudi Arabia**, which otherwise does not go into much detail.

The position of the **Coalition of Rainforest Nations** and some aligned countries (Bangladesh, Cameroon, Central African Republic, Congo (Republic), Costa Rica, Cote d'Ivoire, Democratic Republic of Congo, Dominica, Dominican Republic, Fiji, Gabon, Ghana, Guyana, Honduras, Kenya, Pakistan, Panama, Papua New Guinea, Sierra Leone, Solomon Islands, Suriname and Uganda) is not clear. On the one hand, they stipulate that standards "should be compatible with the existing market-based mechanisms under the Kyoto Pro-

tocol and should address issues such as project-by-project scale". On the other hand, they suggest a "trading approach" based on a "national reference level". If emissions are above the reference level, there should be safeguards such as offsetting such excess emissions in future years. To be eligible, Parties would need to be in compliance with requirements on reporting national greenhouse gas inventories. The submission also suggests to establish a "Carbon Reserve Bank" to ensure functioning of the carbon market.

Bolivia maintains its fundamental opposition to carbon markets, highlighting that they create a false equivalence of different GHGs while they have in fact different retention times in the atmosphere and different biochemical impacts, faulty baselines, lack of additionality, incompatibility with sustainable development and human rights violations. Sectoral approaches and NAMA crediting are in their view not acceptable as setting adequate baselines would be impossible, there would be a risk of sectoral leakage, the new mechanism would harvest the low-hanging fruit, and responsibility for reducing emissions would be shifted from industrialised to developing countries, further cementing the disparity in per capita emissions. Bolivia calls for a moratorium on all carbon credits unless there is a "renewed commitment of drastic reductions of GHG emissions in industrialized countries under the Kyoto Protocol".

The submissions by **New Zealand** and the **USA** mostly consist of questions to be addressed in the work programme (see below). The USA generally agrees that market-based mechanisms can play an "important role" in reducing the cost of emission reductions but does not put forward or endorse any concrete proposal. New Zealand suggests that consideration should be given to how the new mechanism would interact with the framework for various approaches. While there would probably be overlaps, New Zealand would not agree to using the NMM as a substitute for the framework as this would "ignore the realities of schemes that already exist or are being planned by countries".

2.1.2 Submissions from Intergovernmental Organisations

The joint submission by the Organisation for Economic Cooperation and Development (OECD) and the International Energy Agency (IEA) is based on the assumption that the new mechanism will be a crediting mechanism. Similar to Japan, they highlight that if credits are issued on the basis of the overall sectoral performance, individual investors would not necessarily have any guarantee of receiving credits and hence little incentive to invest. The mechanism would therefore require the host country government to introduce policy instruments to provide such incentives.

The UN's Food and Agriculture Organisation (FAO) notes the importance of agriculture for mitigation and that new mechanisms should take into account the specific characteristics of agriculture. This includes the fact that agricultural mitigation actions are often spread over a large and highly varied group of farmers, fishers, herders, forest managers and others. Sectoral approaches should therefore include new regional or landscape-level methodologies for agricultural activities and simplified MRV systems that allow aggregation of many small-holder based activities

2.1.3 Submissions from Business Organisations

The submissions by the Carbon Capture and Storage Association (CCSA) and by the Global CCS Institute (GCCSI) focus on what role the new mechanism could play for the CCS technology. Both highlight that CCS projects need support for their high up-front capital costs as well as for operating costs. They consider that, due to its high costs, CCS will require capital financing well beyond what the NMM could provide. The

NMM should therefore in their view be flexible to combine different sources of finance from market-based and non market-based mechanisms. The GCCSI specifically suggests that the Green Climate Fund may be better for assisting the planning stages and upfront capital requirements, while the operating costs would be best managed through market-based arrangements. In addition, CCSA stresses that the new mechanism should avoid project-by-project approvals as in the CDM, generally have less bureaucracy and be eligible for all technologies.

The Climate Markets & Investment Association (CMIA) proposes a system of progressive graduation through five levels of increasingly stringent mechanisms, depending on the host countries capacity. The five proposed levels are:

- Reformed CDM/JI with standardised baselines;
- A benchmark mechanisms, where performance targets would be defined for a defined population of entities in a country; this mechanism could either be incorporated in the reformed CDM, or developed as a new mechanism;
- A "crediting baseline mechanism", where an emissions intensity target would be set for a sector, this proposal is essentially the same as the sectoral crediting proposal of the EU;
- A cap-and-trade system for specific sectors, this proposal is essentially the same as the sectoral trading proposal of the EU;
- Economy-wide targets as under the Kyoto Protocol.

The International Emissions Trading Association (IETA) proposes a "NAMA crediting mechanism" as the NMM under the COP. Sectoral crediting and sectoral trading as proposed by the EU would fall under the NAMA crediting mechanism. Similar to CMIA, IETA proposes three levels of increasing complexity for the NAMA crediting mechanism:

- "Benchmark Crediting" would generate credits at the project level based on performance targets for a given activity, expressed in tonnes of emissions per unit output;
- "Policy Crediting" would generate credits at the national or regional level for the implementation of "common policy structures" such as feed-in tariffs that incentivise large-scale diffusion of low-emission technologies;
- "Aggregate Crediting" would generate credits at a pre-defined sectoral or sub-sectoral level.

The World Business Council for Sustainable Development (WBCSD) proposes to create a flexible framework building on the current bottom-up process of developing NAMAs. They propose a system for "Credited NAMAs" and "Traded NAMAs"; these proposals are essentially the same as the EU's proposals for sectoral crediting and trading. To keep MRV costs at a manageable level, the NMM rules should in their view focus on assessing the GHG performance at an aggregate level, "without requiring tracing or attributing each ton of GHG reduced and/or avoided to individual actions within the sector/sub-sector/geographic area."

KfW highlights that as NMMs would be proposed and implemented by governments, the private sector would participate mainly indirectly through engagement within host countries and their NMMs. KfW envisages two ways of prompting mitigation actions from the private sector: either directly carbon-related incentives, such as crediting the specific plant operators, or indirectly-carbon related incentives in the form of pol-

icies implemented by the government, such as standards and regulations, taxes and charges, subsidies, and other market and non-market based instruments.

2.1.4 Submissions from Environmental Non-Governmental Organisations

The Climate Action Network (CAN), The German NGO Forum for Environment and Development (Forum U&E) and CDM Watch highlight that there is a substantial gap between the emission reductions that have so far been pledged and what science suggests would be necessary. They emphasise that a NMM must therefore go beyond pure offsetting and achieve net atmospheric benefits. To this end, they propose setting crediting baselines at levels below business-as-usual, discounting of emission reductions, excluding types of projects/action where net benefits are unlikely or difficult to establish and excluding types of projects/action that perpetuate high carbon fuel uses and high GHG emitting practices.

South-South-North (SSN) suggests that a new mechanism could consider including all existing mechanisms – JI, emissions trading, CDM, REDD, Afforestation and Reforestation and other Land-Use Mechanism as well as NAMAs into a single mechanism, but does not provide further details.

2.1.5 Submissions from Research Organisations

The submission by the Centre for European Policy Studies (CEPS) is based on the concepts of sectoral crediting and trading. CEPS highlights that under a crediting approach, financing comes only at the end of the implementation cycle and therefore instruments to finance investments ex-ante, such as a multilateral guarantee, would need to be established. CEPS also emphasises that there should be clear accountability and responsibility for the reductions, the benefits that accrue from them, and for failure to deliver. Otherwise, the NMM would in their view become a "government-to-government tool".

The Center for Clean Air Policy (CCAP) highlights the risks of double counting that may occur due to the interaction of NAMAs and new mechanisms. CCAP also cautions that NMM will focus on low-cost emission reduction potential, which developing countries may rather want to use themselves for meeting their own pledges. CCAP therefore proposes that developing countries should first begin with NAMAs and crediting thresholds should be set to go beyond the reductions that are expected from all unilateral and supported NAMAs.

CivicExchange, proposes a market-based mechanism that would be based on the Green Climate Fund (GCF). They propose that the GCF should use reverse auctions to allocate funding to mitigation projects. With such an approach, the GCF would tender specific investments, e.g. installation of a given amount of renewable energy capacity or a new rail line in a country, and bidders would compete against each other. CivicExchange notes that reverse auctions are widely used by private businesses and currently transfer hundreds of billions of dollars from developed to developing countries annually, for example for textile procurement. CivicExchange proposes that the tenders should be differentiated by sectors and technologies, noting that a high price will be needed for some actions while having a single carbon price would lead to paying substantially more than necessary for low-cost projects. The system would include the following steps:

- Developing countries' proposals for NAMAs would include an estimate of funding required for each type of action. Once the NAMAs are agreed, the GCF, with the developing countries' assistance, would publish a schedule of funding rounds indicating the money allocated to each type of project.

- The developing country authority would then act as agent of the GCF to put a contract out for bidding, and potential project managers would submit bids competing to offer the lowest price that meets all of the specifications of the bid.
- Bids would have to meet biodiversity and indigenous people standards and would have to be submitted together with a "Review Report" from an auditor accredited by the GCF.
- The developing country authority would rank the bids in order of "carbon benefit" per dollar cost and, as agent for the GCF, would commit to fund the highest ranked projects. Project managers whose projects are approved could use the GCF's commitment to support their creditworthiness and thus their ability to raise the funds for implementation.
- Payments would be made on the basis of progress reports, which would also need to be accompanied by a "Review Report" from an Auditor accredited by the GCF.

CivicExchange suggests that the reverse auctioning mechanism could also be used to get competitive prices for adaptation projects.

The Institute for Agriculture and Trade Policy (IATP) proposes to finance mitigation projects under the NMM through "green sectoral bonds" (GSB). Unlike conventional bonds, the collateral for GSB would be developing country emission credits, which the bond holders could trade until the bond's principal and compounded interest are paid in full.

The Institute for Policy Studies (IPS) bases its position on strong criticism of the CDM in terms of lack of additionality and environmental integrity, inadequate stakeholder consultations, inequitable geographical distribution and other issues. They posit that it is impossible to accurately predict future sectoral emissions. The additionality problems of the CDM would hence in their view not be resolved by sectoral crediting, they would instead risk being worsened by the impossibility of knowing future output and the possible creation of perverse incentives to increase (or delay decreasing) production output in order to increase credit generation. They also highlight the risk that carbon prices could further collapse if the new mechanism was to deliver significant quantities of credits to a market with unambitious Annex I targets.

They therefore advocate for the use of feed-in tariffs, which they hold to be a market-based instrument that is simple, meaningful, transformational, and not prone to corruption. In addition, they posit that in order to achieve the desired impact, finance for renewables needs to be front-loaded, as is the case with feed-in tariffs, rather than ex-post as is the case with carbon crediting approaches.

2.2 Proposals and Positions on Technical Details

The following summarises the submissions' contents on technical details of the new market mechanism. To enhance readability the bulk of the content is contained in the annex to this paper whereas this section only summarises the main points.

2.2.1 Participation Requirements

Various submissions address the question of which requirements countries would need to fulfil to participate in the new mechanism. While most submissions stay at a rather general level, the submission by AOSIS is

very detailed. It proposes that both Annex I and non-Annex I countries would need to fulfil eligibility criteria that are closely modelled on the eligibility criteria of the Kyoto Protocol's flexible mechanisms. The EU submission also goes into some detail but only addresses requirements for non-Annex I countries. Notably, all developing country submissions posit that the new mechanism should only be available for Annex I countries that have adopted internationally legally binding emission targets.

2.2.2 Determination of Sector Coverage

Only few submissions address sectoral coverage. While some discuss methodological requirements for sectoral coverage, others express preferences for which sectors should be covered. AOSIS and KfW suggest to initially focus on the least complex sectors, such as power production and some industrial sectors. The EU and Japan suggest to apply de minimis thresholds to keep MRV requirements manageable.

The EU goes into most methodological detail, suggesting that common definitions for defining sectors should be used to allow comparing of efforts and performance between countries, as well as to prevent carbon leakage or competitive distortions. When common definitions cannot be applied, the host countries could use their own definitions, but the proposal would be subject to analysis and review at international level. By contrast, the World Bank suggests that coverage could vary substantially depending on local circumstances.

2.2.3 Setting Baselines and Crediting Thresholds

While some submissions discuss setting baselines and crediting thresholds separately, most of them discuss these two issues in conjunction or only one of the two. Also, different terms are used. While some use the term "baseline" to refer to BAU projections, others use this term or the term "crediting baseline" to denote the emission level below which credits would be generated. To provide consistency, this paper uses the term "baseline" to denote projected BAU emission levels and "crediting threshold" to denote the emission level below which credits would be generated.

All submissions that address this issue agree that crediting thresholds should be set below BAU in order to achieve a net environmental benefit. AOSIS also suggests discounting of credits. The World Bank cautions in this respect that finding the right balance between overly stringent and overly lax crediting thresholds is a key challenge. Another key challenge is the risk of perverse incentives, e.g., postponing policies and/or action in order to benefit from crediting later on.

2.2.4 Length of Crediting/Trading Periods

Only two submissions address the length of crediting or trading periods in detail. Both agree that reporting and crediting should be on an annual basis. The EU suggests that crediting/trading periods should be consistent with the period covered by the developing country pledges for the period before 2020 and the developing country mitigation commitments under a new protocol for the time after 2020.

CCAP suggests that if emissions exceed the crediting threshold in one year, the host country would first need to make good these excess emissions in subsequent years before further credits would be issued.

2.2.5 Provisions for Monitoring, Reporting and Verification

Most submissions do not go into much detail on MRV. The EU suggests some institutional arrangements that would need to be fulfilled in host countries to provide for robust MRV. Both KfW and the World Bank suggest to allow accounting for emissions at an aggregate level rather than plant-by-plant or project-by-project in order to facilitate implementation and upscaling of reductions. The World Bank specifically suggests to establish a close link to the procedures for national inventories and national communications.

2.2.6 Overall Accounting Framework

AOSIS, the LDCs, Norway and environmental NGOs stress the importance of having a common accounting system as under the Kyoto Protocol in order to ensure environmental integrity and comparability of efforts. They propose stringent common rules for the development and international review of emission inventories, clearly defined units and a system of registries and an international transaction log to track them.

2.2.7 The Relationship between the NMM, the CDM and NAMAs

Most of the submissions address the relationship between the CDM, the NMM and NAMAs, though not all cover all aspects. There is broad agreement that the NMM should complement rather than replace the CDM and that there should be no double counting of emission reductions.

In addition, developing countries as well environmental NGOs and some research institutes posit that there should be no double counting of offsetting and financial support that is provided by industrialised countries. As the purpose of purchasing offsets by industrialised countries is to meet their GHG reduction targets, the financial flows associated with those purchases can in their view not count towards the promised fast start finance or the long-term goal of mobilising $100 billion annually by 2020.

Environmental NGOs and some research institutes also caution that market-based mechanisms must not compete with domestic action in developing counties, that is, developing countries must be able to utilise low-cost mitigation potential towards meeting their own mitigation targets rather than having it tapped by the carbon market and count towards Annex I targets. CCAP therefore proposes that NAMAs should come first and that crediting threshold should be set to go beyond the reductions expected from NAMAs.

2.2.8 Timetable for Implementation

Only a few submissions discuss timing aspects. The EU posits that modalities and procedures should be finalised this year to allow a "prompt start" of the NMM at COP 18. AOSIS, CCAP, KfW and OECD/IEA suggest to launch a pilot phase. AOSIS suggests to invite developing countries to identify possible sectors and propose possible sectoral targets. This could in their view serve to gauge countries' interest in NMM and accelerate the development of emission inventories.

As noted above, CCAP considers that NAMAs should come first and the "learning by doing" phase would consist of developing appropriate methods to construct baselines and estimate emissions reductions on the basis of unilateral and supported NAMAs. KfW and OECD/IEA note that a pilot phase that is to involve the private sector would need to involve the issuance of credits or other fungible instruments.

2.2.9 Financing of the System

The submission by the EU is the only one that addresses financing of the system. It suggests to introduce a share of proceeds as in the CDM. AOSIS and the LDCs propose that there should be a share of proceeds for the Adaptation Fund, as in the CDM.

2.2.10 Supplementarity

While this issue is generally not addressed by the submissions from industrialised countries, several developing country submissions stress that developed countries should achieve their emission reduction commitments mainly through domestic efforts and market-based mechanism should only play a complementary role. China urges the establishment of further guidelines in this regard whereas the LDCs and environmental NGOs even call for a quantified limit.

2.2.11 Sustainable Development

Several submissions suggest that there should be requirements for demonstrating the contribution of NMM initiatives to sustainable development. The EU suggests that a country's initial reports would need to show that the implementation of the NMM contributes to the sustainable development of the host country. CAN, Forum U&E and CDM Watch consider that there should be explicit human rights safeguards, international standards and guidance to define sustainable development indicators and social and environmental safeguards, as well as associated reporting and verification standards. CEPS suggests that, in order to avoid controversy over the eligibility of units, it may be useful to assess if common guidelines can be agreed for units that are to be used in international carbon markets. The submission by Ecuador goes into most detail, suggesting a list of environmental, social and economic criteria that should be achieved.

2.2.12 Capacity Building

Many submissions acknowledge that substantial capacity building will be needed to implement the NMM but do not go into further detail. The submission by CEPS is the most pronounced, highlighting that experience from the EU ETS as well as private initiatives such as the Cement Sustainability Initiative have shown how complex it will be to collect large quantities of data in a systematic, transparent and trustworthy way. CEPS posits that capacity building can therefore not be an "afterthought", but has to be an integral part of implementation. Responsibility for capacity building should not be left disperse, without clear accountability and responsibility.

AOSIS suggests that support for establishing NMM could be facilitated by the Consultative Group of Experts on Non-Annex I Communications.

2.2.13 Work Programme

Even though specifically called for in the COP decision, not all submissions specifically provide input for the work programme that the AWG-LCA is to adopt. AOSIS, the EU, the LDCs, and the USA suggest to have a series of workshops as well as technical papers and inputs from the Secretariat and further calls for submissions by Parties and observer organisations. Some Parties also suggest lists of questions that should be tack-

led by the work programme. Synthesising these questions leads to the following list of issues and questions for the work programme:

- Presentations from Parties or organisations that have conducted pilot studies or similar activities to share their experiences;
- What kind of approaches would be covered by the new mechanism, for example project-based, sectoral crediting and/or sectoral trading;
- The relationship between a new market mechanism and the existing Kyoto Protocol mechanisms;
- The relationship between a new market mechanism and NAMAs;
- The relationship between a new market mechanism and mechanisms being developed outside of the UNFCCC;
- Which entities (private, public, national, sub-national) would be eligible to generate emission reduction credits from the new mechanism;
- The governance structure for the new mechanism, including whether it would build on the institutions of the Kyoto Protocol;
- Eligibility/participation requirements;
- Rules to define sectors or sub-sectors, policies and measures, technologies or other mitigation actions, as well as gases that can be part of the mechanism;
- Timeframe of the crediting and trading mechanisms;
- Methods for calculating baselines, crediting thresholds (for the crediting mechanism) and targets (for the trading mechanism);
- Developing country mitigation potential in key sectors;
- Options for achieving substantial net emission reductions (e.g., discounting, set aside of units, conservative baselines set X% below BAU, etc.) and what impacts they would have;
- The status of the development of sectoral baselines under the CDM;
- Rules for reviewing and approving baselines, crediting thresholds and targets at the international level;
- Rules for measurement, reporting and verification;
- Options for avoiding the double counting of emission reductions;
- Rules for the issuance of ex ante units (trading mechanism) and ex post credits (crediting mechanism);
- Possible approaches to the allocation of emission reductions between host country and investor participants;
- Rules for tracking units;
- Capacity-building to facilitate the use of the mechanism by Parties.

3 Framework

3.1 General Positions and Proposed Basic Designs

3.1.1 Submissions from Parties

The submissions by China, Norway and Switzerland are the same as those submitted on the new centralised mechanism and are therefore not repeated in this section.

AOSIS posits that, "The climate regime already has an internationally-agreed framework for standards and approaches to deliver real, permanent, additional and verified mitigation outcomes for mitigation, established under the Kyoto Protocol." Therefore, in the view of AOSIS any framework for various approaches should build on the Kyoto framework. There should be a system of regular GHG inventories from all Parties according to common accounting rules. The inventories should be reviewed by technical experts; be subjected to adjustments where common methodologies have not been applied, and be reviewed for compliance with emission targets.

AOSIS maintains that the commitments of Annex I countries should not be "watered down" through use of units that have not been scrutinised internationally and do not comply with multilaterally-agreed accounting rules. Any criticisms of the existing flexible mechanisms would in their view best be addressed by making the international rules more uniform, more stringent, and more centralised, rather than less uniform, less stringent and decentralised.

In addition, AOSIS criticises that some bilateral offset programmes promote investment in technologies that are not eligible under the Kyoto mechanisms, such as nuclear power or enhanced oil recovery. AOSIS notes that the fact that some project types are not included under the CDM does not prevent Annex I countries that are interested in them from providing funding to these initiatives, consistent with their obligations under Article 4.3 of the Convention.

AOSIS considers that non-market-based mechanisms may be an efficient way to achieve substantial net global emission reductions in many contexts, in particular where low-cost or negative-cost mitigation potential exists, or there are concerns on non-permanence. AOSIS specifically suggests the use of non-market mechanisms for HFCs, N_2O and other gases with high global warming potential.

While less detailed, the **EU** takes a similar position to AOSIS. It considers that if the framework for various approaches is to result in tradable emission reduction units, these units should meet the same standards as those being developed under the NMM and be fully accounted for as part of a rigorous, robust and transparent common accounting framework. In addition, the EU suggests that a non-market based approach should be pursued to address the increasing emissions of HFCs, which should be implemented under the Montreal Protocol.

The submission by the **Gambia on behalf of the LDCs** mainly focuses on LDC's low level of participation in the CDM. In relation to new mechanisms they posit they should only be allowed to be used by countries that are part of the second commitment period of the Kyoto Protocol. Similar to AOSIS, the LDCs consider that any credits generated from mechanisms which are outside the UNFCCC could not be included in the new market-based mechanism.

Malaysia posits that enhancing cost effectiveness through various approaches should not be used as a substitute for significant domestic action. Use of market mechanisms should therefore be limited and result in a real transfer of low-emissions technology.

Bolivia also stresses that all mechanisms must operate under the COP and that bilateral or regional agreements may not be eligible for compliance with emission targets under the UNFCCC. In addition, Bolivia highlights that the framework is to address not only market-based but also non-market approaches and proposes the establishment of three "Climate Justice Mechanisms". Bolivia considers that industrialised countries' historical emissions constitute an ecological debt that requires a mechanism for compensatory payment. The three mechanisms would be:

- A "Joint Mitigation and Adaptation Mechanism for Integral and Sustainable Management of Forests";
- A "Mitigation Mechanism" for assessing and addressing mitigation needs and impacts;
- An "Adaptation Mechanism" for assessing and addressing adaptation needs and impacts as well as loss and damage from the impacts of climate change.

The mechanisms would receive resources from the Green Climate Fund and there would be counterpart national institutions in developing countries. These national institutions would develop national schemes to support national actors in reducing emissions and adapting to climate change.

In contrast to the positions of the EU and developing countries, **Japan** posits that a "one size fits all" approach will not be suitable for addressing the "complexity of issues" that Parties have to address in mitigating climate change. Japan therefore considers it crucial for Parties to establish a wide variety of approaches which best reflect their national circumstances while ensuring environmental integrity. Japan points to difficulties with the CDM (such as high transaction costs, inequitable geographical distribution, and disproportionate CER issuance from certain types of projects) as rationale for calling for new mechanisms with decentralized governance.

Japan suggests that the COP could establish basic principles, supply best practices as a reference, and provide a reporting system and reporting formats for ensuring transparency. In Japan's view, a standard could not be exactly the same for each country, due to different national circumstances and priorities. Therefore, the standard would in their view best be developed by the implementing Parties. Japan suggests the following elements to be developed by the implementing Parties:

- Overview of the mechanism (process flow, institutions involved and their roles, etc.);
- Eligibility criteria for the projects and the project selection process;
- Underlying principles of methodologies and their approval process;
- Roles of the third-party certification entities and their accreditation process;
- Approaches to managing projects and credits issued (including measures to avoid double counting).

Once developed, the standard would need to be disclosed to the public through a reporting process established by the COP. Information to be disclosed should also include the record of implementation of the standard and lessons learned from the implementation.

New Zealand considers that the complexity of carbon trading is only likely to increase as more and more countries, including developing countries, take on mitigation goals and pledges and develop domestic carbon markets generating their own units. Similar to Japan, New Zealand proposes a declaration model as one possible framework. Parties wishing to generate units eligible to meet an emissions reduction target would need to publically declare what units they are using, the methodology for their generation, and show how these units represent genuine, verifiable emissions reductions.

New Zealand suggests that Parties could provide this information to the UNFCCC Secretariat through a declaration template. The declaration and supporting evidence could then be held by the UNFCCC Secretariat and made available for inspection by interested countries. However, New Zealand stresses that it envisages only a facilitative role for the UNFCCC that would not involve coercive or punitive measures.

New Zealand suggests that the declaration model could be supported by common standards. Parties would then be able to use some or all of these standards in designing their carbon markets. Parties could deviate from the common standards to account for national circumstances. Such deviations could be recorded in a country's declaration together with evidence to demonstrate their environmental integrity. New Zealand notes that flexibility to reflect national circumstances is already part of the standard approach all countries use for their greenhouse gas inventories.

New Zealand suggests that if the declaration model approach was then integrated into the biennial reports and the International Assessment and Review (IAR) and International Consultation and Analysis (ICA) processes for developed and developing countries, this would give confidence that countries were using market mechanisms consistently with the details of their declarations.

Similar to Japan and New Zealand, the **United States** suggests that the framework should be voluntary and non-exclusive, preserving the ability of countries to develop other market-based mechanisms according to their national circumstances, promote transparency of information, and be consistent with UNFCCC MRV guidelines, including biennial and national communication reporting guidelines.

The USA suggests that countries should develop and implement their own standards in accordance with their domestic circumstances. It would be left to governments considering the use of credits toward meeting UNFCCC commitments to determine whether or not the credits are generated according to the principles agreed under the UNFCCC. The UNFCCC role would be to provide transparency. The USA discusses the following elements for the international system:

- Developing common approaches to tracking of units to prevent double counting;
- Registries would need to be established by any country wishing to transfer credits or allowances internationally, in order to ensure accurate tracking of units. Registries and the international tracking and transparency systems could also include credit retirement records;
- Parties should provide detailed information about their systems through the existing MRV channels in the UNFCCC; including through biennial reporting and consideration under IAR and ICA.

3.1.2 Submissions from Intergovernmental Organisations

OECD/IEA highlight the need to clarify the purpose of the framework. The purpose could in their view be either to promote consistency and transparency of market-based mechanisms and to facilitate links, or to allow recognition of units from country-led market mechanisms under the UNFCCC. In the latter case, countries would in their view ideally agree a common basis for their targets or goals in order to avoid double counting, taking into account GHG unit flows into and out of countries. The simplest common basis would in their view be if pledges were expressed as total emissions to be emitted over a fixed timeframe, with sources and sectors clearly stated according to common terms. Without clear quantitative definitions of emissions goals and targets, adding or subtracting GHG units would be less meaningful.

The framework could be built on more or less international coordination. They propose three areas for criteria for unit recognition in a system with high coordination: (i) project/activity eligibility criteria, (ii) methodology principles, and (iii) monitoring standards.

Project/activity eligibility criteria could include:

- A requirement to demonstrate the environmental integrity of units issued. While developing a common standard may in their view be difficult and details would be designed by the countries, general criteria could include: that emissions reductions are real and measurable; that credited activities are new; and that clarity is given on overlaps between credited activities and host country regulation;
- Evidence that relevant emissions-related data is of sufficient quality;
- Demonstrated voluntary consent from all Parties involved in the mechanism;
- Ensuring that emission reduction projects or activities are based on clear, publicly-available methodologies.

Methodology principles and monitoring standards could build on the experience from the CDM.

A framework with less international co-ordination would contain only general principles and minimum transparency requirements.

They propose three options for how tracking transactions could be done outside of the Kyoto Protocol. The first option would retain a central ITL with the ability to conduct both technical and policy-related checks on transactions before executing them, as under the Kyoto system. The second option would also retain a central ITL, but without the ability to conduct policy-related checks of transactions. The third option would have no central ITL or other hub, only direct communication between registries hosted by participating countries.

3.1.3 Submissions from Business Organisations

The Climate Markets & Investment Association (CMIA) highlights that it has taken nearly a decade to develop the CDM to its current scale and that new approaches cannot be expected to become operational within a short timeframe unless they substantially build on the existing knowledge and systems. Continuity of the current market and infrastructure should therefore be maintained. CMIA emphasises that private sector involvement will depend on there being sufficient demand for emission reductions, fungibility between the reductions achieved through all the different approaches, and confidence in the longevity of the market-based approaches and that value can be derived from them.

The Federation of Electric Power Companies of Japan (FEPC) posits that state-of-the-art technology has not been swiftly deployed in developing countries due to cost reasons but also because the CDM process takes a long time and some technologies are not eligible in the CDM. They argue that the bi-lateral offset mechanism that is currently developed by Japan would be effective in promoting technology transfer and should therefore be considered as one of the "various approaches" under the framework.

IETA proposes a "Credit Conversion Mechanism (CCM)" as the international framework for bottom-up approaches. IETA notes that apart from CO_2e emission trading systems, countries may also choose another environmental commodity trading system, such as trading in credits for energy efficiency or renewable energy. The Credit Conversion Mechanism would provide a means to harmonize these various forms of crediting into a single international currency.

3.1.4 Submissions from Environmental Non-Governmental Organisations

Similar to AOSIS, CAN, Forum U&E and CDM Watch advocate for a common accounting system. They consider that having little or no international oversight would be dangerous, as it is in the interest of the host country to maximise credit generation. In their view, the experience with Joint Implementation Track 1 clearly illustrates that voluntary guidelines will not be sufficient. The framework should therefore have a strong binding governance structure where:

- An appointed UN body functions as a standards-setting organization.
- All units/credits are approved by this international body.
- Credits are fully accounted through a rigorous, robust and transparent common accounting framework.
- A common international transaction tracking mechanism with unique serial numbers should be used for all offsets counted towards pledge attainment.
- To prevent all possible kinds of double counting, including double-counting of financial support, there should in addition be a system to track all types of emission reduction activities, not limited to CDM and mechanisms covered under the Framework but also including non-market based activities and NAMAs.

In addition, they maintain that the framework must ensure that all internationally traded credits come from activities that uphold human rights and that there should be international standards and guidance to define sustainable development indicators and social and environmental safeguards, as well as associated reporting and verification standards.

Similar to AOSIS and the EU, they suggest that a non-market based approach under the Montreal Protocol would be best suited to address HFC emissions.

The Environmental Defence Fund (EDF) considers that the COP should recognise that each Party retains its sovereign prerogative to design its own approaches. The role of the COP is in their view to assure transparency of results. The COP should therefore establish and promote common standards for MRV. EDF suggests the following criteria for the framework:

- Only countries that adopt internationally or domestically binding caps for sectoral or national emissions should be eligible to participate in market-based approaches.

- The cap should be set in terms of absolute emissions rather than intensity targets. Countries with low emissions would be afforded a transition period. Caps should not be based on BAU emissions as this could trigger inflated projections.
- All tradable units should be fungible and there should be transparent tracking and reporting of tradable emissions units and transactions.
- Emitters should be accountable for meeting clearly established targets, with known-in-advance consequences for failure to do so that could be applied either internationally or domestically.

Finally, EDF raises the question whether some of the principles and tools of market approaches could be combined with public finance mechanisms. EDF suggests that the Green Climate Fund (GCF) as well as other plurilateral and bilateral public climate funds could purchase emissions reductions, possibly focused on certain countries and types of reductions. This could take the form of directly purchasing reductions, providing a minimum price guarantee to qualifying projects, or auctioning options to sell a certain amount of reductions at a pre-agreed price and future date.

Sustainable Population Australia argues that systemic flaws in the architecture of the Kyoto Protocol inhibit effective price signals in developed countries. First, emissions reporting and responsibility is on a production basis, not a consumption basis, which is in their view inherently inequitable and disadvantaging to developing countries. Second, it divides countries into two "black and white boxes" (Annex I and non-Annex I), which in their view prevents any real implementation of "common but differentiated responsibilities". Third, international emissions trading in their view destroys price signals in developed countries, inequitably transfers effort from developed to developing countries, and corrupts emissions accounting in both. In their view the only efficient market-based mechanism is a carbon tax.

3.1.5 Submissions from Research Organisations

CEPS highlights that the relationship of the framework to the NMM and the already existing mechanisms is unclear. First, it should in their view be clarified whether the NMM and the Kyoto mechanisms would also need to conform to the framework. Second, CEPS points out that there is substantial parallelism in the framework and the NMM. The Durban decision posits that the NMM will on the one hand have a core set of rules and on the other hand some elements will be defined locally by the host country. At the same time the framework is also to include a common set of standards as well as rules defined locally. That is, both the NMM and the framework are supposed to have common core elements and local elements. CEPS considers that this parallelism needs to be resolved by ensuring that the NMM set of core standards become the core standards for all market mechanisms.

CEPS considers that the NMM and the framework will need a regulatory body to provide for coordination, transparency and avoid duplication between market mechanisms, ensure the integrity, good functioning, and evolution of the NMM and any new approaches, and in particular to define and recommend to the COP conversion factors to allow conversion from units resulting from different market mechanism.

IATP argues that the carbon market is not an effective tool to promote mitigation. In their view, carbon prices have been too low and volatile to induce adequate investments. They also consider their environmental integrity to be “fragile”, highlighting in particular HFCs and impermanence concerns on REDD. As alternative, they suggest that mitigation finance should be based on the social cost of carbon and reducing material

risk exposure to climate change. The social cost of carbon denotes the loss and damage that is caused by a tonne of CO_2-eq. and is calculated based on climate science and econometric models. Companies should disclose their total GHG emissions, perform a strategic analysis of climate risk and emissions management, assess the physical risks of climate change, and analyse the risks of regulation at the state, local, and national level that may affect their operations.

IPS pronounces itself to be highly concerned about the possibility that bilateral or unilateral mechanisms could be counted towards emissions reduction targets. In their view, this would be a "regressive step", downgrading the role of the UNFCCC. They are also concerned that this would open the door for project types that have been excluded from the CDM.

3.2 Work Programme

Only four submissions directly address the content and format of the work programme.

AOSIS suggests that the work programme could:

- Consider methodologies and options to ensure substantial net emission reductions from the new centralised market-based mechanism;
- Consider ways to use non-market based mechanisms to prevent double counting of emission reductions and incentivise low-cost or negative-cost reductions;
- Consider ways to avoid double counting between project-based mechanisms and emission reductions achieved through funded NAMAs.

New Zealand suggests that the work programme could focus on:

- Discussion of guidance for and examples of best practice in carbon market design and operation;
- Discussion of how its proposed declaration model or other proposed approaches might work in practice;
- Exploring the concept of minimum common standards for units, how standards other than these might be fungible and confirmed as having environmental integrity, and how the declaration model (or other proposed framework) could assist this; and international tracking of units from various markets, including how this would work in an increasingly complex trading environment.

Saudi Arabia suggests that developed countries should adequately demonstrate all pros and cons, both short and long term, for developing countries' participation in various approaches. In addition, it posits that using various approaches must not result in negative impacts on developing countries and that therefore a mechanism for the assessment of economic and social impacts on host countries and other developing countries should be established.

The USA suggests that the issues it has raised should be discussed in one or more workshops and that a wide range of views should be solicited, particularly from regulators, the private sector and other existing market actors and experts.

4 Conclusions

The submissions and the discussions at the workshops revealed that there continue to be fundamental differences between the Parties. On the New Market Mechanism, while many Parties subscribe to scaling up market mechanisms to the sectoral level, China continues to maintain that the new mechanism should be project-based and similar to the CDM. Japan considers that both project- and sector-based approaches should be possible. Bolivia continues to oppose market-based mechanisms as a matter of principle. How these divisions may be bridged is currently unclear. In addition, developing countries maintain that market mechanisms should only be available to Annex I Parties that adopt an internationally legally binding target, which will hardly be acceptable to the USA and the countries that have opted out of the second Kyoto commitment period.

On the framework, there continues to be a clear split between countries that argue for a centralised system and countries that are in favour of a decentralised system. The former include AOSIS, the EU and the LDCs, whereas the latter include Japan, New Zealand and the USA. While the former demand that only units generated within the UNFCCC should be allowed to count towards targets, the latter would essentially leave the recognition of units up to individual countries and envisage only a transparency function for the UNFCCC.

There are also some fundamental questions on the technical level. Japan, OECD/IEA and CEPS raise the question of how to handle a situation where individual installations reduce their emissions but the sector as a whole does not. As the EU has proposed that credits should be issued on the basis of the overall sectoral performance, this would mean that the rewards for good performers could be undermined by rising emissions at other installations. Under these circumstances, there would hardly be an incentive for installation operators to invest.

CEPS also highlights that there is substantial parallelism between the framework and the NMM. Both the NMM and the framework are supposed to have common core elements as well as elements that may differ based on local circumstances. This raises the question whether pursuing both tracks might in the end lead to substantial duplication of rules and institutions.

Further substantive questions relate to the relationship between the new mechanism, the Kyoto mechanisms and NAMAs.

Given these strong political differences and open questions, one may wonder whether it will in fact be possible to make the NMM operational by the end of this year. Possible ways forward may lie in the various proposals for pilot phases. AOSIS suggests inviting developing countries to identify possible sectors and propose possible sectoral targets, which could serve to gauge countries' interest in NMM and accelerate the development of emission inventories. CCAP considers that, in addition to their inherent benefits, NAMAs might also serve as a "learning by doing" phase, as developing appropriate methods to construct baselines and estimate emissions reductions could be done on the basis of unilateral and supported NAMAs. This may indeed be the most feasible way forward. As KfW and OECD/IEA note, a pilot phase that was to involve the private sector would need to involve the issuance of credits or other fungible instruments. However, it is doubtful whether Parties could agree to issue compliance-grade credits on the basis of a provisional framework.

References

UNFCCC (2012a): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on a framework for various approaches, Submissions from Parties, FCCC/AWGLCA/2012/MISC.4, Advance Version, 11 April 2012.

UNFCCC (2012b): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on a framework for various approaches, Submissions from Parties, Addendum, FCCC/AWGLCA/2012/MISC.4/Add.1, Advance Version, 7 May 2012.

UNFCCC (2012c): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on a framework for various approaches, Submissions from admitted observer organizations, FCCC/AWGLCA/2012/MISC.5, Advance Version, 11 April 2012.

UNFCCC (2012d): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on the new market-based mechanism, Submissions from Parties, FCCC/AWGLCA/2012/MISC.6, Advance Version, 11 April 2012.

UNFCCC (2012e): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on the new market-based mechanism, Submissions from Parties, Addendum, FCCC/AWGLCA/2012/MISC.6/Add.1, Advance Version, 7 May 2012.

UNFCCC (2012f): Ad Hoc Working Group on Long-term Cooperative Action under the Convention, Views on the new market-based mechanism, Submissions from Parties, Addendum, FCCC/AWGLCA/2012/MISC.6/Add.2, Advance Version, 18 May 2012.

The positions expressed in this policy paper are strictly those of the author and represent neither the opinion of the Wuppertal Institute nor of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

The author would like to thank Christof Arens, Joelle de Sépibus and Silke Karcher for their comments and suggestions, which have for the most part been incorporated in the text. Any remaining errors and emissions are the sole responsibility of the author.

Contact:
Wolfgang Sterk
Tel. +49-(0)202 2492-149 (-129 Secretariat)
Email
wolfgang.sterk@wupperinst.org

Wuppertal Institute for Climate, Environment and Energy GmbH
Döppersberg 19 - 42103 Wuppertal - Germany

The Wuppertal Institute is carrying out the "JIKO"-project on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Internet: www.jiko-bmu.de, www.wupperinst.org/jiko

Annex: Inputs on Technical Details

Table 1: Inputs on Participation Requirements

AOSIS	Non-Annex I countries would need to: • present a sectoral or economy-wide target that is significantly below BAU projections; • present an adequate time series of sectoral or economy-wide emissions, based on a consistent methodology, reported according to agreed IPCC methodologies; • allow a technical review of baselines, targets and inscribed amounts at the international level by sectoral experts, drawn from the UNFCCC roster of experts, which could be facilitated by the Consultative Group of Experts on Non-Annex I Communications; • have in place a national system or national arrangements for the estimation of anthropogenic emissions by sources and removals by sinks; • report regularly on sectoral emissions and national emissions; • maintain inscribed amount and/or units, once issued, in the international transaction log; • put procedures in place to avoid double counting of emission reductions; and • submit its inventories to review. For Annex I Parties, the same eligibility criteria as under the Kyoto Protocol must apply. Annex I Parties must, among other things: • have an internationally legally-binding, single number, economy-wide emission reduction commitment (Kyoto Parties) or target (non-Kyoto Parties); • have calculated and recorded its assigned amount for the commitment period (Kyoto Parties) or to have calculated and recorded a proxy assigned amount or inscribed amount for the commitment period (non-Kyoto Parties); • have in place a national system or national arrangements for the estimation of anthropogenic emissions by sources and removals by sinks; • have in place a national registry; • submit annual GHG inventories for an in-depth review at the international level; • submit supplementary information to demonstrate progress toward achieving economy-wide emission reduction commitments and targets; • submit information on annual holdings of Kyoto units and any new mechanism units; • put procedures in place to avoid the double counting of emission reductions; and • subject its annual inventories to a review at the international level consistent with the Article 8 review now in place for Kyoto Protocol Parties and to subject its inventories to a compliance procedure that determines whether holdings of units are sufficient to cover commitment period emissions.
China	New mechanism should only be available to developed countries that have undertaken internationally legally binding emission reduction targets which are measurable, reportable and verifiable.
Ecuador	Countries that could apply to the net avoided emissions mechanism would be those that: • have marginal levels of GHG; • look to transform their extractive economies to exporters of services and assets; • that can argue the richness of biodiversity and ancestral cultures; and that • can commit to invest the economic resources generated by the mechanism in mitigation and adaptation actions to climate change.
EU	The host country should meet at least the following requirements to participate in the NMM: • It is a developing country and Party to the Convention; • It has submitted an initial report for the sector or broad segment of the economy; • It has in place a system for monitoring, reporting and verification of emissions in the sector or broad segment of the economy;

	• It has in place a national registry or arrangements for use of an international registry administered by the UNFCCC secretariat; • It has appointed a competent authority responsible for implementation of NMM and for compliance with modalities and procedures for the NMM and other relevant guidelines and international rules. Parties may authorize legal entities to participate in the NMM subject to requirements to be defined in the modalities and procedures.
Gambia/LDCs	Common accounting rules need to define eligibility criteria in the same way that the eligibility rules apply to all the flexible mechanisms under the Kyoto Protocol. The design of the new mechanism needs to reflect experiences of the CDM in providing options that address the special situation of LDCs. This could for example include options to apply as a group of countries, in line with experiences on PoAs.
Switzerland	NMM should be open to all Parties under the Convention, does not see any conditions to be defined for the use of the market mechanism.
CMIA	Minimum eligibility criteria for a sector: 1) Access to accurate and transparent sectoral data; 2) Determination of a baseline; 3) Proof of additionality; 4) Implementation of accurate and transparent monitoring, reporting and verification for all sector participants; and 5) A national registry.
WBCSD	Criteria to include stringent MRV and defining "ambitious" baselines. Second, a process which determines which countries and sectors qualify to use which mechanisms. For example, a developed country cannot submit a credited NAMA and an emerging economy cannot host a CDM project. This qualification must be reviewed periodically to ensure that countries can transition from one category to the next.

Table 2: Inputs on Determination of Sector Coverage

AOSIS	The most promising sectors are those where substantial emission reductions need to be achieved; data is readily available; the degree of uncertainty in emission estimates is low; substantial potential to contribute to the host country's sustainable development is present; and it can be shown that real and additional reductions in emissions that would otherwise have occurred to the atmosphere can be achieved. These considerations support the initial creation of opportunities within the energy sector (power generation) and for industrial emissions (e.g., oil refineries, natural gas facilities, iron and steel production, cement production).
Ecuador	Each country will define the eligible sectors and activities. These will not be restricted to a specific economic activity or sector. Guidance for prioritising sectors and activities should be developed by the governing body.
EU	Coverage should be based on already agreed definitions, such as those of the IPCC inventory guidelines, in order to facilitate the compilation of data required. A common definition for the same broad segment of the economy in different host countries should be used to allow comparing of efforts and performance between countries, as well as to prevent carbon leakage or competitive distortions. When common definitions cannot be applied, the host countries could use their own definitions, but the proposal would be subject to a thorough analysis and review by the IRT based on the following criteria: • Deviations from the default definitions would need to be sufficiently justified; • Definitions should be product/service specific but not technology-specific to enable competition between technologies; • Definitions should include all covered installations/activities of the sector. For practical reasons, de minimis thresholds could be considered.
Japan	The monitoring of GHG emissions is not easy to implement in developing countries, particularly for small facilities. Therefore, it is realistic, for example, to cover not all the facilities, but to cover only those which emit GHGs above a certain amount in the identified sector under the SCM.
IPS	Include complete life-cycle emissions. For example, sectoral boundaries for the power sector would need to include emissions associated with extraction, processing and transport of fuel as well as emissions associated with the flooding and maintenance of the reservoirs of large hydro generation.

KfW	Start with segments of economies that are less complex. These could include segments and sectors which may be covered with robust MRV at reasonable cost and effort. This could for example include energy production, certain energy intensive industries, or (public) transport.
World Bank	The scope could vary depending on local circumstances. For example, it could cover an entire sector or sub-sector (e.g., the power sector, or a sub-sector of it), or a regional sub-set of installations/activities related to regional initiatives of states or even those of major cities. Variations could also be (i) all installations/activities over a certain size threshold; or (ii) all installations with particular features (e.g., using a certain feedstock or supplying a certain market); or (iii) a combination of emission removal and emission reduction activities; or (iv) something else. Key issues to address in the determination of the boundary are the need to limit and manage leakage risks and to avoid double-counting of decreased and/or avoided emissions. One important step to address double-counting risks is through the establishment of an emissions registry.

Table 3: Inputs on Setting Baselines and Crediting Thresholds

AOSIS	A range of modalities might be envisaged to ensure a net decrease in global emissions through participation in the new market-based mechanism. These include, among others: • Conservative crediting thresholds, set at a fixed percentage below verified BAU projections (e.g., 20% or 30% below BAU projections); • Crediting thresholds set below absolute emissions, averaged over a fixed time period preceding the trading/crediting period (e.g., average 2008-2010 emissions) for emission reductions to be delivered over a fixed timeframe (e.g., 2013-2017); • Discounting of units generated or traded, at a rate that will ensure that the units generated lead to, or the units traded reflect, a substantial net benefit to the environment; • Setting aside a portion of units generated for the benefit of the environment through the international transactions log (e.g., W% set aside for the environment; X% available for acquisition through the international transactions log; Y% credited to host Party emission reduction goals; Z% contributed to the Adaptation Fund).
Ecuador	A baseline will be established: • For each activity and/or using an emission factor for the emission for various activities according to the national priorities, economic capacity of the country, etc. • In a transparent manner in terms of the selection of the technical criteria, assumptions, methodologies, parameters, sources of data and essential factors. • Taking into account policies and national circumstances and/or respective sectors, such as the initiatives of sectoral reform, the availability of local fuels, plans of expansion of the energy sector, and the economic situation of the sector that the activity corresponds to. • Taking into account uncertainties and using a conservative approach.
EU	• All key parameters of the baseline should be presented and justified in a transparent manner. • Every covered sector/broad segment of the economy in the same host country needs a separate baseline. • Baselines should not be pure extrapolations of historical developments, but take into account any existing policies and measures and technological developments. For new installations/activities the average emissions of similar installations/activities undertaken under similar social, economic, environmental and technological circumstances, and whose performance is among the top 10 per cent of their category, should be used. In addition to technological factors, baselines depend on socio-economic factors, such as population or economic growth, demand in general or for certain products, price developments, etc. • Crediting thresholds and targets need to be set to ensure net decrease of GHG. They should include mitigation efforts in the host country which are not issued as credits to be used by other Parties. The thresholds/targets therefore need to be set substantially below the baseline. The respective stringency of crediting thresholds or targets should reflect respective capabilities in the sector and in the country. • In principle, crediting thresholds can be formulated on an absolute or an intensity basis.

	Initially, intensity-based thresholds may be more appropriate but in the long term thresholds and targets should be determined in absolute terms.
Gambia/LDCs	A minimum share of emission reductions should be defined that is not to be used for emissions in buying countries. This share could either be part of the unilateral action of the host country or could be financed through the international finance framework under the UNFCCC. Exceptions should apply to LDCs and SIDS.
CEPS	Baselines should be more stringent than BAU.
KfW	Challenges around data quality can usually be largely mediated by conservative assumptions. Details on baseline and crediting thresholds are best attended if analysed and approved on a case-by-case basis.
OECD/IEA	Two alternative approaches to setting crediting thresholds are possible: • One approach would be for Parties to first agree on a rate of departure from a (BAU) scenario (e.g. x% below BAU). This would require a process to agree on BAU trends and a separate negotiation on the rate of departure from BAU. One way to achieve this would be a requirement for low-emission development strategies (LEDS) to contain projections of emissions by sector, possibly subject to an international review. • Alternatively, Parties could decide to negotiate crediting thresholds on a case-by-case basis without first specifying an exact BAU scenario and a precise deviation. This would require countries or other entities to propose a crediting threshold and justify why it would be at an appropriate level for the sector or group of emitters covered. This may imply a more political negotiation, as the magnitude of mitigation ambition on the part of the host country would be less clear. This discussion may also take place as Parties conduct international reviews of LEDS.
World Bank	Finding the right balance between overly stringent and overly lax crediting thresholds is a key challenge. The determination of BAU emission trends is inherently uncertain and will depend on each country's historic trends, development level and potential future changes and national circumstances. There are different approaches for the determination of crediting thresholds, including: • Projections, based on historical and expected trends in emissions; or • Determining emissions from a specific technology or based on modelling approaches; or • Determining emissions from top performers in the segment of the economy targeted by a NMM (e.g., the average of the top X percent of performance category), that is, benchmarking. The choice of technical parameters (e.g., vintage of data and percentage chosen to select the sample on which to determine the crediting baseline) can be more determinant of a crediting baseline's stringency than the approach selected. A key challenge in the setting of crediting thresholds is addressing the risk of perverse incentives (e.g., postponing policies and/or action in order to benefit from crediting later on). It makes sense to transparently take into account a host country's policy and legislative goals and its particular circumstances.

Table 4: Inputs on Length of Crediting/Trading Periods

EU	The crediting/trading period is a fixed period of time during which an established baseline, crediting threshold or target for broad segments of the economy is not changed. This can be different from the reporting and compliance cycle, which should be on an annual basis. The crediting/trading period should be consistent with the period covered by the developing country pledge for the period before 2020 and the developing country's mitigation commitment under a new protocol for the time after 2020. However, in order to allow learning from early experiences, crediting/trading periods should be shorter in the beginning. Once experience has been gained, crediting/trading periods could become longer.
CCAP	Use annual measurement periods to avoid delays that would occur with a multi-year emission measurement period. An annual measurement period would speed up crediting, improve incentives, and accelerate the testing of compliance procedures. Emissions are likely to vary between years and thus would credit earnings, even with indexed crediting thresholds. Credits might therefore be issued annually but be calculated using a cumu-

	lative crediting threshold. That is, if emissions were above the threshold in one year, the country would in the subsequent year first have to make up its excess emissions before earning credits.

Table 5: Inputs on Provisions for Monitoring, Reporting and Verification

EU	The host country is responsible for ensuring robust MRV of baselines and actual emissions. It needs to demonstrate that national arrangements meet common international standards through an initial report. The international standards should include requirements for national arrangements regarding: • Responsibility for monitoring, reporting, collection, verification, and storage of data; • Provisions for transparency of monitoring, reporting and verification; • Provisions on data, sources, quality, use of default factors and conservativeness, • Independent verification of actual emissions. The initial and annual reports would be assessed by the IRT. Verifiers should be accredited to meet an international accreditation standard approved by the COP, and may be accredited by the host country or a panel appointed by the COP for the purpose.
KfW	The most robust MRV system emerges where it is possible to monitor emissions down to the plant level. In many instances, however, it may only be possible to account for emission reductions in the aggregate on the sector level. MRV requirement will therefore depend on the design of incentive schemes using a range of instruments. It will be necessary to allow for aggregated and e.g. sector wide MRV approaches in order to achieve an overall upscaling in emission reductions.
World Bank	There should be a close link between procedures followed in national GHG inventories and national communications and the MRV of sequestration/mitigation of GHG emissions achieved in the same country under the NMM. In turn, this should lead to making the MRV requirements for a NMM simpler and less onerous than under the project-by-project CDM/JI experience, by focussing on a more aggregated approach. The NMM requires looking at MRV differently than under the CDM/JI, focussing on achieved GHG reductions/sequestrations and not being bogged down with the potentially or often onerous and complex exercise of providing evidence of the attribution of GHG reductions/sequestration to a given measure/policy. This would open the door for considering a broader array of interventions under a NMM.

Table 6: Inputs on Overall Accounting Framework

AOSIS	There must be a common accounting system as under the Kyoto Protocol to ensure environmental integrity, including • common accounting rules, agreed and applied at the international level; • technical reviews and adjustments of sectoral and economy-wide inventories; • inscription of assigned amounts for each commitment period, transparently established and reviewed at the international level; • clearly defined units, representing reductions or allocations over a fixed timeframe; • a centralized international transaction log, maintained by the secretariat; • compilation and accounting reports of international units held by Parties, prepared annually by the secretariat; • a transparent system for proposing and establishing baseline and monitoring methodologies at the international level; • international standards for accreditation of designated operational entities and international standards for validation and verification of emission reductions; • the opportunity for public comment on proposed methodologies and baseline methodologies; and • a compliance system that ensures that Parties satisfy eligibility criteria and that facilitates the accounting of emissions and holdings of units against assigned amounts.
Gambia/LDCs	There is a need to agree on common accounting rules to be applied to the identification of tradeable units and reporting of robust emission reductions.
Norway	A common unit accounting framework can help build trust in the implementation and the

	demonstration of mitigation commitments, establish a clear relationship between domestic units and international compliance units, to facilitate the tracking of units, avoid double counting and contribute to the comparability between different mitigation targets (reduction relative to reference year, reduction relative to business as usual (BAU) and intensity targets) and where Parties have different commitment periods or targets for a single year. Norway proposes to use the Kyoto system or a similar system, with the following elements: • Establishment of ex ante rules and regulations. In particular, it must be clear ex ante which and how GHG units can be used for achieving a Party's pledge. • Norway would prefer if the system of assigned amount units or a similar system could continue. If approaches to defining mitigation commitments are used, the accounting of units should be harmonized to allow fungibility. • All Kyoto units as well as all other types of GHG credits generated by any future mechanism within the framework of UNFCCC should be fully fungible. • Where units are traded between countries, Parties should agree on basic standards and requirements for domestic emissions trading systems, including, to the extent possible, on guidelines for the standardization of baselines and reference levels for future project-based mechanisms and sectoral mechanisms. • Clear international rules for verification, issuance of credits and registration of traded credits. • A system to track GHG units. Norway suggests establishing an international unit registry where all GHG units that can be internationally transferred, are included. Units should have unique serial numbers. The tracking system should build upon the Kyoto Protocol's International Transaction Log. • Registration in the international registry would be a prerequisite for acceptance of units towards a country's commitment. • The system for tracking GHG units should be compatible with other systems, like the registry of national appropriate mitigation actions in developing countries.
CAN, Forum U&E and CDM Watch	There needs to be a common international transaction tracking mechanism for all credits counted towards pledge attainment, with assignment of unique serial numbers to each tonne transacted or registered. Such a registry should not be limited to the CDM and mechanisms covered under the Framework but also include non-market based activities and NAMAs.

Table 7: Inputs on the Relationship between the NMM, the CDM and NAMAs

AOSIS	The new market-based mechanism must complement existing Kyoto mechanisms, not replace these mechanisms
China	The utilization of market-based mechanism established under the Convention should not lead to double counting by developed country Parties, i.e. both as fulfilling their financial and technology transfer commitments and as offsetting their emissions.
Costa Rica, the Dominican Republic, Mexico, Panama and Peru	The countries that are proposing this new mechanism understand that while any new market mechanism is developed, the existing market mechanisms, including the CDM, will continue in operation. If included within the new scheme underlying this mechanism, the reductions considered within the CDM would be discounted from other emission savings achieved by the country, and score to whoever buys them.
EU	Clear rules regarding the complementary relationship between CDM and the NMM will need to be agreed. These rules should give incentives for more emission reductions, avoid double counting of emission reductions, provide clarity to investors and ensure the continuing stability of the market.
Gambia/LDCs	Money spent on units from new mechanisms cannot be counted towards the financial commitment by developed countries and at the same time allowing for the generation of credits.
Japan	In the cases where entities which belong to the sectors under the SCM had their projects registered under the CDM, how to treat the issuance of certified emission reductions (CERs) from the projects needs to be addressed. Since the project participants had made the investment decision on the CDM project premised on the expected income from CER selling, CERs from the CDM projects within the identified sectors under the SCM should be admitted.
Norway	There could be a transition from the mechanisms under the Kyoto Protocol to the new market

	based mechanism. The CDM may be more suitable for countries and sectors with a lower degree of market readiness. Sectoral crediting or trading may be more suitable where emission reduction plans or Low Emission Development Strategies have been established and a suitable framework for measuring, reporting and verification (MRV) as well as a legal framework is in place.
CAN, Forum U&E, CDM Watch	Market-based mechanisms must not compete with domestic action in developing counties. Developing countries must be able to utilize lowest cost mitigation actions towards meeting their own mitigation targets. Rules are needed to ensure that offsets are only counted by the buyer and not by the seller and that financial flows are also counted only once. The financial flow related to the purchase of credits can not be counted as financial assistance to the host country. Double counting of financing financial flows would reduce the total amount of financial support from developed countries to developing countries and thus reduce the emissions reduction that could occur otherwise. The international registry should therefore not be limited to the CDM and mechanisms covered under the Framework but also include non-market based activities and NAMAs.
CEPS	While in the KP the CDM was used to create reductions to be used as compliance units for Annex 1 countries obligations, in this new regime, developing countries will also want to use reductions and will want to ensure that the low-cost reductions are available for their own use, and not exported, leaving higher cost abatement cost actions for domestic use.
CCAP	A clear "bright line" distinction between NAMAs and NMMs is needed to avoid double counting and ensure that both of these new mechanisms achieve a net decrease of GHGs towards the global abatement goal, ensure fairness in terms of developing country access to their own low cost mitigation opportunities, prevent GHG measurement and accounting problems, and to align private sector incentives with the broader mitigation and development interests of developing countries. Developing countries would begin by implementing NAMAs and only emissions reductions achieved in excess of a negotiated crediting threshold, that would be set to go beyond the ambition level expected from the supported NAMAs, could be sold to support compliance in developed countries. For existing CDM projects, they and the associated emissions reductions should be put into the business-as-usual baseline for the NAMA, so that they are not factored in to estimates of emissions reductions expected by the NAMA. Alternatively, it would also be possible to "wall off" existing CDM projects, so that they are not counted as part of the NAMA. Walling off a CDM project would mean that it does not appear in the NAMA baseline and is also not considered when assessing a country's success in achieving its NAMA goals or targets. New CDM projects or new market mechanisms that target the same actions covered by the NAMA should in their view be prohibited in the sector(s) covered by the NAMA. As the main goal of purchasing offsets by developed countries is to meet their GHG reduction obligations, the financial flow towards developing countries associated with the purchase of those offsets cannot be counted as financial support for developing country GHG mitigation. As such, developed countries can not count this money as being part of the financial support promised under Fast Start Finance or towards the $100 billion per year developed country contributions by 2020.
CMIA	The development of new mechanisms 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. 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. There should be compatibility and coherence between NAMAs and new mechanisms, while avoiding double counting. Participation in these mechanisms could be registered as NAMAs at the discretion of the host parties, for example an emission standard could be introduced for a sector and used as the benchmark in the new mechanism (and vice versa, where a NAMA may be registered as a particular action in one of the mechanisms in order to obtain carbon finance, to pay for the implementation of the NAMA). This should enable more countries to implement such a standard early and/or at more ambitious levels.
IETA	New market mechanisms should complement and not replace the CDM; there should be co-existence as well as co-evolution. The CDM and any new market mechanism must fit together under the umbrella of a single UN administrative organization. A reformed CDM or new market

	based mechanism could be more directly linked to the funding of NAMAs, e.g. by developing NAMA-crediting for NAMAs which are listed in the NAMA registry in order to receive public/private sector support. The areas covered by the NAMA would not be available for traditional CDM projects.

Table 8: Inputs on the Timetable for Implementation

AOSIS	Suggests an "early start" trial period. The COP or SBI could: • invite interested developing countries to identify, by COP 18, possible domestic sectors they may wish to propose for participation in voluntary sectoral trading or crediting schemes at the international level, and • invite interested developing countries to propose targets for emission reductions in sectors that are particularly suited to permanent, measurable and verifiable emission reductions (power generation, industrial emissions, transport), supported by historical inventory information that are capable of review by technical experts. Such an approach would help to gauge the interest of developing countries in access to the NMM and could also assist interested developing countries in improving their inventory systems, which would also contribute to the biennial update reporting process.
EU	NMM should become operational as soon as possible after Modalities and Procedures have been adopted. The work programme in 2012 should address the substantive elements to be covered by modalities and procedures for the NMM to allow countries a prompt start of NMM right after COP18. Any further guidance to be developed in 2013 with a view to making available detailed requirements and reporting formats to parties at COP 19.
CCAP	There are advantages to a "learning by doing" phase, including development of appropriate methods to construct baselines and estimate emissions reductions from unilateral and supported NAMAs. Such methodological issues should be settled before trying to develop a crediting baseline. The new framework for engaging developing countries in climate action should therefore focus on developing good policies first, with credits coming at a later stage.
KfW	Considers a prompt start is of essence in order to maintain the momentum of market mechanisms. A key challenge for such a pilot phase would be the lack of international demand for NMM credits. For a NMM-piloting phase funds could be provided by the public sector in Annex I countries via grant funding and cancellation of credits. To incentivize the private sector to participate in a NMM-piloting phase it would be necessary to furnish the private sector with a compliance instrument or another fungible. Parties to the Kyoto Protocol could be allowed to use a limited volume of NMM credits (e.g. from Parties with a no-lose target in defined sectors).
OECD/IEA	Pilot activities may be a useful first step, especially if a credit purchase guarantee is provided. This could follow the model of Activities Implemented Jointly (AIJ) launched at COP 1 and, for REDD demonstration activities promoted at COP 13. Pilot activities need not be initiated directly through the UNFCCC, but could be independent pilot activities which are reported back to the UNFCCC.

Table 9: Inputs on Financing of the System

EU	The NMM shall be self-financing through a variety of sources. In particular, administrative expenses of the international review of implementation of NMM should be paid out of a share of the proceeds (SoP) from the NMM. Financing to start up the system may be needed.
AOSIS	The automatic flow of CERs to the Adaptation Fund under the Kyoto Protocol, through a share of the proceeds, has generated essential adaptation funding. A share of the proceeds of any new market-based mechanism under the Convention must also be directed to the Adaptation Fund, to support the adaptation needs of countries particularly vulnerable to the adverse impacts of climate change.
Gambia/LDCs	A share of proceeds above 2% of the certificates emitted should be applied on all the new mechanisms and transferred to the adaptation fund.

Table 10: Inputs on Supplementarity

AOSIS	It is essential that these units be traded through UNFCCC institutions, to enable an ongoing assessment of holdings of units, progress toward global goals and supplementarity.
China	Emission reduction commitments of developed countries should be achieved mainly through domestic efforts, market-based mechanism could only play a complementary role. Further guidelines need to be established in this regard.
Gambia/LDCs	Emission reduction commitments of developed country Parties shall be achieved mainly through domestic efforts. Market-based mechanism can only play a complementary role. A clear quantified requirement should be established by the Conference of the Parties.
CAN, Forum U&E, CDM Watch	The definition of supplementarity remains vague. A quantified limit for the use of international emissions reduction units would be the most effective way to protect the principle of supplementarity.

Table 11: Inputs on Sustainable Development

Ecuador	Activities should demonstrate their contribution to sustainable development in the following areas: • Environmental criteria: Reduction of GHG emissions, protection of local resources, and improvement of local conditions; • Social criteria: Improve the quality of life, social equity, poverty reduction, employment creation, and linkages with the policies, national strategies and rulings on sustainable development of the activity, in such a way that it helps to strengthen national policies and rulings. • Economic criteria: Provision of financial returns, technology transfer, improving the economy of the areas of direct influence. In addition, the mechanism must assure additional benefits, such as: • Possibility of synergies to contribute to multiple environmental objectives of international conventions. • Creation of incentives to increase the possibilities to mitigate climate change in developing countries. • Contribute to the conservation and sustainable management of biodiversity by implementing the mechanisms in areas that are rich in biodiversity. • To provide global benefits and at the same time decrease the gap relative to the local benefit.
EU	Initial reports need to show that the implementation of the NMM contributes to the sustainable development of the host country.
CAN, Forum U&E, CDM Watch	There should be explicit human rights safeguards as well as international standards and guidance to define sustainable development indicators and social and environmental safeguards for national authorities. Associated reporting and verification standards to monitor and verify claims to ensure actual realization of the stated sustainability benefits need to be put in place.
CEPS	In order to avoid controversy over the eligibility of units, it may be useful to examine if a set of common guidelines can be arrived at for those units that are to be used in international carbon markets.

Table 12: Inputs on the Work Programme

AOSIS	The work programme should include technical papers and inputs from the secretariat, inputs from the CDM Executive Board, in-session workshops and submissions of views from Parties and admitted Observer organisations. Technical papers from the Secretariat could address: • developing country mitigation potential in key sectors; • options for achieving substantial net emission reductions and their quantitative implications for net global emission reductions (e.g., discounting, set aside of units, conservative baselines set X% below BAU, etc.) and the impacts on the gap in mitigation ambition that may result from each;

	• information on the status of the development of sectoral baselines under the CDM; • options for avoiding the double counting of emission reductions; • institutional options, given the institutions now in place under the Protocol, for facilitating the generation, transfer and acquisition of units, verifying emission reductions and reporting to the COP. In-session workshops could consider: • design issues related to the achievement of substantial net global emission reductions; • sectoral coverage, with an emphasis on environmental integrity; • oversight issues, building on the Marrakesh Accords; • processes for the technical review of proposed targets, baseline methodologies and emission reductions achieved; • institutional issues; • means to avoid double counting of emission reductions; • possible approaches to the allocation of emission reductions between host country and investor participants; • the possible contribution of the new market-based mechanism to closing the gap in mitigation ambition.
EU	Work programme in 2012 should address substantive elements to be covered by modalities and procedures to allow countries a prompt start of NMM right after COP18. In addition to formal negotiation sessions, the work programme would therefore need to be supported by informal workshops and technical papers that would allow in-depth discussions on specific elements of the modalities and procedures drawing from the broad pool of expertise among Parties and accredited observer organisations.
Gambia/LDCs	Parties made several proposals outlining wide ranges of market-based mechanisms to be considered. The experience leading to the development of some of these proposals has taken place outside of the context of the UNFCCC. Lessons learnt from these experiences might be helpful for the current process. This should be reflected in the work programme to be conducted in 2012, for example through in-session workshops with presentations from Parties or organizations that have conducted pilot studies or similar activities to share their experiences.
New Zealand	There are a number of other issues New Zealand considers need to be worked through by Parties as they discuss a new mechanism in more detail. These include: • the relationship between a new market mechanism and the existing Kyoto Protocol mechanisms; • the availability of any mechanism to all Parties; • the kind of approaches covered by a new market mechanism, for example project-based, sectoral crediting and/or sectoral trading; • the standards used to evaluate units generated through the mechanism; • the relationship between a new market mechanism and mechanisms being developed outside of the UNFCCC; • the international tracking of units generated through the mechanism; and • capacity-building to facilitate the use of the mechanism by Parties;
Norway	Areas for developing modalities and procedures should be: • Eligibility/participation requirements • Boundaries • Baselines and targets, including timelines • Monitoring, reporting and review • Technical requirements to facilitate issuance and safe transfer of units • Institutional requirements • Net decrease of emissions, double counting and additionality.
Switzerland	The standards we need to define for the market mechanism include: • Rules for the functioning of the trading and crediting mechanisms • Rules to define sectors or sub-sectors, policies and measures, technologies or other mitigation actions, as well as gases that can be part of the mechanism • Timeframe of the crediting and trading mechanisms • Rules for avoiding double-counting

	• Methods for calculating baselines, crediting thresholds (for the crediting mechanism) and area targets (for the trading mechanism) • Rules for reviewing and approving baselines, crediting thresholds and area targets at the international level • Rules for the measurement, reporting and verification (in coordination with the relevant processes under the UNFCCC) • Rules for ensuring permanency of the emission reductions and the net decrease of global GHG emissions (rules for crediting so that a part of the emission reductions is considered as a unilateral NAMA; and rules for trading so that the cap leads to a significant deviation from the BAU) • Rules for the issuance of ex ante units (trading mechanism) and ex post credits (crediting mechanism) • Rules for tracking units
USA	There are a number of issues that should be addressed through a work program before a final decision is taken on this matter. These include: • What approaches will be included in a new market mechanism under the UNFCCC (e.g. project-based mitigation, sectoral crediting, sectoral trading, etc)? • How would a new mechanism be different from existing offset programs under the Clean Development Mechanism (CDM) and Joint Implementation (JI)? Would it interact with the CDM or JI? If so, how? • What would the governance structure for this new mechanism be? • Would the detailed standards and methodologies used to quantify and generate credits be established by the COP or its subsidiary bodies, by an institution formed to manage the market-mechanism, or by Parties individually or jointly? • Which sectors or project types would be eligible to generate emission reduction credits? • Which entities (private, public, national, sub-national) would be eligible to generate emission reduction credits from this new mechanism? • How will this mechanism develop and implement standards that ìdeliver real, permanent, additional and verified mitigation outcomes, avoid double counting of effort and achieve a net decrease and/or avoidance of greenhouse gas emissionsî as per paragraph 73 of FCCC/AWGLCA/2011/L.4? • How will these new mechanisms interact with the development and implementation of Nationally Appropriate Mitigation Actions (NAMAs)? • How will a new mechanism provide appropriate incentives to countries to undertake mitigation action under the Convention? • What is the role of the private sector in developing and implementing a new market mechanism? • How will a new mechanism create incentives for investment at scale? How will double counting of effort be addressed and avoided in the design of any new market mechanism? In addition, addressing REDD+ market-based approaches in the broader new market mechanism discussions under the LCA should be considered. These questions, among others, should be discussed in detail at a workshop or series of workshops under the LCA. A wide range of views should be solicited and considered (particularly from regulators, the private sector and other existing market actors and experts).