

CPMA International

The Adaptation Benefit Mechanism

FINAL DRAFT

Johan Nylander, Fatima-Zahra Taibi, Sean Weaver and Noim Uddin
2017-05-04

Content

Bringing Private Sector Finance to Adaptation Approaches3

The Challenges of Adapting to Global Warming3

 The Need for Private Sector Finance in Adaptation3

 The Kyoto Protocol: Mitigation Incentives for the Private Sector4

 Clean Development Mechanism.....4

The Paris Agreement5

 Objectives.....5

 Adaptation: Article 75

 Cooperative Approaches: Article 6.....6

Non Market Approaches:7

 Provisions of the Paris Agreement7

 Status of the Negotiations to Date8

A New Approach.....10

Defining the Adaptation Benefit Mechanism.....11

 Purpose11

 Scope 11

 Governance12

 Adaptation Benefit Units.....13

 Project cycle14

Relationship to other tools16

 Market-based mechanisms created under 6.416

 Links to the SDGs16

 Relationship to NDCs16

Project Developers, Public and Private Funding17

 Buyers and Demand.....17

 Project Developers and the Supply.....18

Are there any examples to date?18

Conclusion and Way Forward19

Bringing Private Sector Finance to Adaptation Approaches

The Challenges of Adapting to Global Warming

The Need for Private Sector Finance in Adaptation

While the focus of the Paris Agreement has been towards successfully securing a global commitment to reduce emissions, there is already significant climate change impacts locked into the earth system. The global community is facing a situation where efforts to limit global warming will not lead to the elimination of the adverse impact of climate change, including extreme weather conditions such as intense storms, longer droughts and sea-level rise. With limiting global warming to under 2°C by the end of this century compared to pre-industrial levels, the international community can only hope to reduce climate change impacts; this is the case even if the lower 1.5° C target is reached.

According to the UNEP Gap Report, the predicted 2030 emissions will, even if the Paris Agreement pledges are fully implemented, place the world on track for a temperature rise of 2.9 to 3.4 degrees by the end of this century. Scaled-up adaptation efforts can make an important contribution in addressing some of these negative impacts, particularly in developing countries, but current spending does not even come close to meeting the finance funding needs. The World Bank's Economics of Adaptation to Climate Change (EACC) study estimates that the cost of adapting to a 2°C warmer world by 2050 comes with a price tag of 70-100 billion US dollars per year¹. This implies massive financial resources directed towards developing countries, while facing the risk of diminishing public sector financial resources available to meet this financing need.

Governments, municipalities and cities must take their responsibility in scaling-up adaptation finance. However, the private sector will be a critical partner in closing this finance gap. There is an urgent need for the international community to engage all stakeholders in supporting climate change adaptation. The scale of the finance challenge, and the dominance of the private sector in the delivery of goods and services where adaptation will be most needed, means that the private sector has a crucial role to play in addressing adaptation needs.

Todate, participation of the private sector in financing adaptation has been very limited. This is probably due to the fact that adaptation projects often do not have direct financial benefits to the developers but rather to the local communities and the environment.

Consequently, in the challenging and complex field of private sector's engagement in adaptation, there is a need for a mechanism that could provide incentives and certainty for the private sector to invest in adaptation and overcome barriers to action.

¹ C.f. Narain et al. 2011

The Kyoto Protocol: Mitigation Incentives for the Private Sector

With the Kyoto Protocol, the UNFCCC was successful in incentivizing private sector funding to mitigation activities. The Kyoto Protocol was created in 1997, ratified in 2005 and started counting emissions in 2008. The Kyoto Protocol was based on top down targets negotiated between Annex I (OECD) countries.

Implicit in the Kyoto Protocol was an acceptance that a tonne of GHG emission had the same value in different economies. The economic focus was placed on the creation of Marginal Abatement Cost Curves, which showed which industries had the cheapest reduction opportunities and what volume was available at that price. The Kyoto Protocol was then characterized by commoditization of units and a technology driven approach to achieving targets at the lowest cost. It was in this setting that the Clean Development Mechanism could thrive.

Clean Development Mechanism

The Clean Development Mechanism or CDM was designed with two purposes in mind: 1) to give developing countries a role in the Kyoto Protocol and 2) to provide a source of real, additional and permanent emission reductions to help Annex 1 Parties achieve their targets (Kyoto Protocol Article 12). The key to the CDM is the criterion of additionality which means that emission reductions could only be granted to projects which would not have happened without the incentive of the CDM.

The CDM is governed by rules designed to ensure the emission reductions are fungible. These rules involve complex methodologies coupled with external validation, verification and a process for issuance of Certified Emission Reductions (CERs) in an electronic registry, which were then traded and submitted for compliance. The Private Sector got heavily involved and created a pipeline valued at over USD500 Bn. Over 12,000 projects have been initiated and 7770 projects have been registered to date. Though not all projects have been implemented, the scale and impact of the CDM is an impressive demonstration of what a well-targeted policy can do to mobilize private sector investment.

The CDM worked for a number of reasons, including the following:

- It provided investors with a bankable instrument in the form of an Emission Reduction Purchase Agreement (ERPA) which was a contract between the developer and an emission reduction buyer, usually an entity with emissions in the European Union. These were recognized contracts against which finance could be raised.
- This new cash flow compensated investors for additional risks, which after a few projects had been registered and project developers, consultants had learnt the ropes, boiled down to fairly manageable technology and counterparty risk. The payment for CERs in hard currency went a long way to address local currency risks.

The Host Country Letter of Approval (LoA) granted project developers the right to export these Certified Emission Reductions from the host country into a registry account in an

Annex 1 country. Obtaining the Host Country LoA was one of the key steps to registering and monetizing a CDM project.

Today there are only few CDM projects selling CERs to selected Governments and Corporate Social Responsibility (CSR) buyers (e.g. Nordic Environment Finance Corporation (NEFCO), the World Bank's Pilot Auction Facility) however, instead of treating units as the compliance grade commodity they are, buyers buy them through geography and technology-specific tenders and negotiate project specific prices.

Whatever the future development of the carbon market will look like, the lessons learned include the experience that given the proper incentives, the private sector acts in the areas of climate change mitigation.

The question then becomes how the private sector can be incentivized to act in the area of adaptation and what opportunities do the Paris Agreement offer in this regard.

The Paris Agreement

Objectives

The Paris Agreement builds upon the Convention and - for the first time - brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort. The Agreement was adopted in December 2015 and entered into force in November 2016. To date 141 out of 197 Parties to the Convention have ratified it.

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise by the end of this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries to climate change, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

All parties required to contribute to the achievement of the objective of the Agreement reflecting equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

Adaptation: Article 7

For the first time in the history of international climate negotiations, adaptation has its own article in a legal text. For many years, negotiations concerning adaptation have been contentious between developed countries, which have prioritized mitigation over adaptation and loss and damage, and developing countries that are uniquely vulnerable to the impacts of climate change. The Paris Agreement includes action on adaptation among the three goals that serve the Agreement's purpose of "strengthen[ing] the global response to the threat of climate

change, in the context of sustainable development and efforts to eradicate poverty. Later in the Agreement, Article 7 operationalizes this goal with fourteen paragraphs. The adaptation article is the third-largest provision in the Paris Agreement—behind only mitigation, and transparency.

The Paris Agreement establishes a global goal on adaptation - of enhancing adaptive capacity, strengthening resilience and reduction of vulnerability to climate change. Article 7 operationalizes this goal by specifically addressing the adaptive efforts Parties should make. It aims to significantly strengthen national adaptation efforts, including through support and international cooperation. It also recognizes that adaptation is a global challenge faced by all and that it is a key component of the long-term global response to climate change. All Parties should engage in adaptation planning and are expected to submit and periodically update an adaptation communication on their priorities, implementation and support needs, plans and actions. Developing country Parties will receive enhanced support for adaptation actions.

Parties recognize that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions, and that it is a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change.

The Agreement also recognizes the importance of support for and international cooperation on adaptation efforts and stipulates that the current need for adaptation is significant and that greater adaptation needs can involve greater adaptation costs.

Cooperative Approaches: Article 6

The Paris Agreement provides a framework for countries that want to pursue voluntary cooperation for “higher ambition in their mitigation and adaptation actions”. It thus provides a platform for cooperation both in the area of mitigation and adaptation. Furthermore, it establishes market based as well as non-market based approaches.

Countries are already encouraged to work together in the Convention. However, the Paris Agreement makes it more explicit. This cooperation can probably take many forms, and the open character of the language in paragraphs 6.1 and 6.2 indicates that Parties may pursue different approaches as long as the key objective – higher ambition – is addressed and some basic requirements are fulfilled. The concept of internationally transferred mitigation outcomes (ITMOs) are introduced to reflect efforts that are accounted for in one Nationally Determined Contribution (NDC) but implemented elsewhere.

A mechanism for mitigation and sustainable development is also introduced (Article 6.4). This could be similar in its design to the CDM, but Parties are yet to determine its scope and modalities of work.

Both Articles 6.2 and 6.4 are market based mechanisms focused on mitigation and aiming to enhance the ambition of the NDC. Resulting emission reductions may be reflected in either the buying or the selling countries’ NDC reporting.

An alternative approach to market based mechanisms is found in Article 6.8 and 6.9, which sets the framework for an integrated, holistic and balanced non-market approaches to assist in the implementation of NDCs.

Non Market Approaches:

Provisions of the Paris Agreement

Non market approaches were historically advocated for by some Parties particularly opposed to markets and in the view that Mother Nature should not be commoditized and traded. Over the years and in the lead-up to Paris, not much progress has been made.

In the Paris agreement, it is no different. The text providing the basis for market approaches is very detailed: a mechanism has been clearly defined and Parties would only need to work out the details for its implementation. In contradiction, the text for non market based approaches is still very open and it seems that Parties have not yet agreed what could or not constitute a non market approach.

The provisions for non market approaches are stipulated in the Paris Agreement in article 6.8 - 6.9. Those articles state that:

6.8. Parties recognize the importance of integrated, holistic and balanced non-market approaches being available to Parties to assist in the implementation of their nationally determined contributions, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, as appropriate. These approaches shall aim to:

- (a) Promote mitigation and adaptation ambition;
- (b) Enhance public and private participation in the implementation of nationally determined contributions; and
- (c) Enable opportunities for coordination across instruments and relevant institutional arrangements.

6.9. A framework for non-market approaches to sustainable development is hereby defined to promote the non-market approaches referred to in paragraph 8 of this Article.

The operationalization of Article 6.8 is described in para. 39 and 40 of decision 1/CP.21. These paras state:

39. Also requests the Subsidiary Body for Scientific and Technological Advice to undertake a work programme under the framework for non-market approaches to sustainable development referred to in Article 6, paragraph 8, of the Agreement, with the objective of considering how to enhance linkages and create synergy between, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, and how to facilitate the implementation and coordination of non-market approaches;

40. Further requests the Subsidiary Body for Scientific and Technological Advice to recommend a draft decision on the work programme referred to in paragraph 39 above, taking into account the views of

Parties, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session.

As can be seen from the Agreement and the related decision text, though not very detailed, a framework for non-market approaches that promote both adaptation and mitigation has been defined aiming at enhancing both ambition as well as public and private sector participation. Furthermore, it encourages opportunities for coordination across instruments and institutional arrangements.

Though it is not yet clear what these non-market approaches would be, these provisions allow for new approaches to be developed, also encouraging participation of the private sector with the potential of adding several tools to the toolbox for Parties to achieve their NDCs and the ultimate objective of the Convention.

Status of the Negotiations to Date

SBSTA 44 pursuant to decision 1/CP.21, paragraphs 39 and 40, initiated the process related to the work programme under the framework for non-market approaches to sustainable development. After an initial exchange of views, SBSTA 44 agreed to focus on establishing common understanding at SBSTA 45 (November 2016) of the matters related to the work programme. SBSTA 44 invited Parties and observer organizations to submit by 30 September 2016 their views on the work program.

The Like-Minded Developing Countries²³ (LMDC), outlined in their submission to SBSTA 45 some of the main purposes of the framework as assisting countries in implementing their NDCs in a holistic manner by facilitating access to finance, technology transfer, and capacity building for mitigation and adaptation, and contributing to map and register needs of countries and assisting them in matching them with means of implementation, as well as monitoring the support provided.

Other countries cautioned to avoid duplication of work with other processes under the UNFCCC. They recommended focusing discussions on possible synergies and coordination in non-market cooperation.

Various countries also suggest specific issues that could usefully be tackled under the new framework, including:

- Fossil fuel subsidy reform, this is mentioned by several countries;
- Phase-out of inefficient and polluting technology;

² Carbon Mechanisms Review, issue 4-2016

³The group of like-minded developing countries includes China, India, and other Asian countries such as Malaysia, countries in the Organization of Petroleum Exporting Countries such as Saudi Arabia, and some Latin American countries such as Bolivia and Venezuela

- Policy reform to create the enabling environment for increased deployment of renewable energy;
- Development of NAMAs;
- Reduction of black carbon;
- Joint initiatives for the conservation of oceans and other ecosystems;
- The role of state-owned enterprises in fossil energy provision.

Based on those submissions and the discussions in Marrakesh, SBSTA 45 invited Parties to submit, by 17 March 2017, their views on, inter alia, the elements to be addressed, including their operationalization, in the decision on the work programme on the framework for non-market approaches to sustainable development defined in Article 6, paragraph 9, of the Paris Agreement, overarching issues, and relationships between Article 6, paragraphs 8 and 9, and other provisions of the Paris Agreement, the Convention and its related legal instruments, as relevant. Seven submissions have been received, mainly focusing on Articles 6.2 and 6.4. A few Parties have nevertheless submitted proposals relating to the non market approaches, most notably Uganda. In its submission, Uganda proposes the creation of an Adaptation Benefit Mechanism (ABM) and requests parties to adopt it at its upcoming session.

A submission from the environmental integrity group submissions states that Non Market Approaches (NMA) shall not generate internationally transferable units or such outcomes. Other submissions mainly call for identifying what NMA means, listing some of the existing approaches and calling for exploring synergies between them. The SBSTA also requested the UNFCCC Secretariat to organize a roundtable discussion among Parties based on the submissions, in conjunction with SBSTA 46 (May 2017) while ensuring broad participation of developing and developed countries. Except for earlier proposals for a joint mitigation and adaptation mechanism, no concrete proposal for a tool under 6.8 has been presented yet.

After two negotiating sessions, there is still no agreement between Parties as to what would constitute a non market approach nor on how countries could cooperate for such approaches.

A New Approach

Given the current state and developments in the climate landscape elaborated above, namely:

- The need for upscaling efforts to combat global warming
- The need to upscale adaptation efforts against the adverse effect of climate change,
- The need to enhance and incentivize private sector participation in adaptation efforts,
- The lessons learnt from the CDM demonstrating that a well targeted policy can mobilize the private sector and deliver environmental results,
- The provision in the Paris Agreement of a framework of non-market approaches that includes adaptation in addition to mitigation.

It is suggested that Parties consider the creation of an Adaptation Benefit Mechanism (ABM) within the framework for Non-Market Approaches as defined in the Paris Agreement.

This Adaptation Benefit Mechanism would be designed to meet the requirements of the framework for non-market approaches, but would still involve a buyer and a seller, but along the lines of results-based purchase agreements for verified outcome delivery, and where buyers include the public and private sector.

The definition of market could vary, but in general it is a medium allowing buyers and sellers of a specific good or service to interact in order to facilitate an exchange. While the ABM provides, wholly or partly, this exchange, it does not provide typical elements of emissions trading or the carbon market in general: i.e. the existence of a price signal, the economic efficiency objective, the compliance regime, or the commodification of the atmosphere. This implies that the most appropriate framework for the ABM is the non-market approach.

It is to be noted that some Parties have suggested to consider REDD+ as one of the non market approaches under article 6.8⁴. It is therefore worth reminding that REDD+ is a mechanism via which developing countries receive results-based payments for results-based actions.

This is exactly the same approach that is suggested for the ABM, though ABM projects could be developed both in developing and in developed countries.

The ABM would promote both adaptation and mitigation, aim at enhancing ambition as well as public and private sector participation. Furthermore, it would seek ways of cooperating and drawing lessons from other instruments and institutional arrangements under the Convention.

If this proposal is accepted, it would be significant as it would mean the creation of a mechanism that breaks new ground in the climate negotiations and offers Parties a new and alternative way of distributing climate finance and supporting one another in the critical area of adaptation to climate change.

⁴ Co-facilitators reflection note SBSTA 44 Item 11 c - Work programme under the framework for non-market approaches referred to in Article 6, paragraph 8, of the Paris Agreement, Version of 21 May 2016 (http://unfccc.int/files/meetings/bonn_may_2016/in-session/application/pdf/sbsta44_i11c_reflections_note.pdf)

Defining the Adaptation Benefit Mechanism

Purpose

The Adaptation Benefit Mechanism (ABM) would be one of the tools in the toolbox for the implementation of the Paris Agreement. The main purpose of the ABM would be to create a baseline-and-credit business model that encourages private sector investment in adaptation in order to help scale up climate finance and simultaneously deliver contributions to the Sustainable Development Goals and the goals of the Paris Agreement.

In addition to scaling up climate finance, ABM would contribute to achieving the global goal of adaptation in the Paris Agreement, as well as to implementing relevant targets and priorities of the host countries. ABM activities may also have multiple co-benefits, including in relation to mitigation, technology development and transfer, and the Sustainable Development Goals. Through assisting Parties with achieving their existing commitments, ABM will indirectly contribute to enabling enhanced ambition. This is also the objective of Article 6 of the Paris Agreement.

ABM would be a results-based payment non-market-based mechanism that will generate verified adaptation benefits expressed in non-fungible adaptation benefit units (ABUs). The purchase of these units by the public or private sector will create incentives for private sector investments in adaptation.

ABM would provide incentives to project developers to go beyond business-as-usual and invest in technologies and services that deliver adaptation benefits to households, communities and economic sectors in developing countries, making them economically stronger and better able to withstand climate shocks.

The adaptation benefits would be quantified, verified and issued as Adaptation Benefit Units (ABUs). The contract between project owners and buyers (Adaptation Benefit Offtake Agreements) would be bankable and, subject to due diligence. They could be used by the project owners to raise equity and conclude loans to finance the project start-up cash flows. Potential investors and lenders could be institutions, such as impact investors, commercial, regional and multilateral development banks. The ABM could also assist through co-financing the enhancement of enabling structures.

ABUs are likely to be purchased, in addition to their use as a channel of public climate finance through payments for result delivery, either under Corporate Social Responsibility schemes or as contribution to the achievement of the goals of the Paris Agreement and SDGs. Some ABUs may also be funded by philanthropists and foundations.

Scope

Adaptation projects or programs of activities aiming to deliver measurable and verifiable adaptation benefits that contribute to enhanced action on adaptation in accordance with the relevant targets and priorities of the host country, and has been developed in accordance with any other future UNFCCC guidance, criteria or requirements, should be eligible to generate ABUs under this mechanism. For example, any activity which makes households and communities more resilient to climate-induced shocks constitutes an adaptation benefit.

Clean cooking-stoves, flood prevention, disaster risk reduction, and access to electricity all help to make households economically stronger by (among other things) improving health, reducing women's workloads and drudgery (freeing up their time to be more economically active), improving access to information, facilitating income generating opportunities, protecting crops and assets from flood damage etc.

The indicators and units of measurement backing up any ABU could include any low-cost-to-measure proxy that represents the scale and impact of the adaptation benefit. For example, this could include a) the number of households using clean cooking stoves per year; b) the number of villages protected from flooding per decade; c) the number of households permanently connected to a supply of (renewable) electricity; d) the amount of water collected from rooftops; and (e) the reduced amount of water used for irrigation. As examples a) and c) show, project activities currently addressed by carbon finance could be supported by ABM instead. However, a strength of the ABM is that it also opens up for other types of projects, not least activities where the benefits would be multi-dimensional, (e.g. covering the food, energy and water nexus).

Governance

The ABM can be established as a non-market-based mechanism under the framework for non-market-based approaches, as referred to in Article 6.8. of the Paris Agreement⁵.

The ABM would be placed under the guidance and authority of the CMA and be governed by an Executive Board (or another body appointed by the CMA) with the support of the UNFCCC Secretariat. It would have its own modalities and procedures, methodologies, project description template, monitoring reports and tools to determine that it contributes to enhanced action, permanence and safeguards building upon best practices from existing mechanisms.

The ABM body would report to the CMA through the SBs. Rules and procedures for preparing decisions and for decision-making could be designed building upon on experience and best practice from other bodies, including the CDM Executive Board and the Adaptation Committee. However, it would be important to avoid or address differently the issues that sometimes exposed the CDM Executive Board to overly politicized engagement.

The ABM Executive Board could ensure participation of both the private sector and Non-Governmental Organizations (NGOs). This kind of participation was a long-lasting request from the private sector and NGOs under the CDM, and have been accommodated in many new similar bodies (such as the GCF Board).

Existing CDM Designated Operational Entities (DOEs) or those accredited to serve under Article 6.4 could serve also the ABM. The ABM EB could also approve independent verifiers that are accredited under other schemes. These independent verifiers would verify the benefits of the adaptation project or programme and adherence to any relevant requirements that might be agreed by the ABM Executive Board and/or the CMA.

⁵ Alternative routes could be explored: e.g. following the mandate referred to in Decision 1/CP.21, paragraph 42 and/or in response to Decision 5/CP.22, paragraph 44 on Review of the Adaptation Committee.

As for the CDM and the new MSDM (Mechanism for Sustainable Development, Article 6.4-7 of the Paris Agreement), participation in the ABM would be voluntary and could require some type of recognition or approval by a Designated National Authority (DNA). Countries may consider that the DNA could be the same as their entity responsible for authorizing MSDM project activities or for Adaptation in order not to complicate the climate change governance landscape at the country level.

There could be a single registry for projects and programmes and for issued and retired (or cancelled) ABUs but there would be no need for transfers out of the registry and no speculator-driven secondary market in ABUs since there would be no compliance instrument specifying quantitative targets for ABUs.

A key issue for ABM design would be to include a means to accommodate community-based ABM initiatives, and thereby maintain accessibility to the ABM to a wide range of operational scales on both the demand and supply side. This includes the need for a low-cost administrative (including accreditation of independent verifiers) pathway to project development and implementation. This is particularly relevant to the most-vulnerable to climate shocks, namely LDCs, SIDS, African countries and community-led initiatives, where projects are also likely to be small-scale and/or complex procedures may impose an administrative burden. Furthermore, a large project in a small country can still be "small" in CDM-equivalent terms, and can be well treated within the CSR budgets of relatively large private sector entities. It is, therefore, important that the administrative burden associated with project registration, verification, and unit issuance do not lead to exclusion of LDCs, SIDS, African countries and community-led initiatives from ABM, as they are primary target groups for this mechanism.

Adaptation Benefit Units

The key element, which sets the Adaptation Benefit Mechanism apart from the CDM and other market mechanisms, for which a benchmark unit for GHG emissions reductions can be created straightforwardly, is that ABUs are non-fungible and non-commoditized units, which represent the verified delivery of measurable adaptation outcomes. They would be unique for each project and therefore incomparable with ABUs from other ABM projects. Since ABUs cannot be transferred to third parties, speculation with their prices and "dumping", as it happened with CERs, would be impossible. The intention is that ABUs do not commoditize Mother Earth.

For this purpose, it is proposed that the ABM would focus on pricing the human labor and technology cost of reducing human suffering and looking after nature and people, rather than putting a price on suffering itself. For example, any activity that makes households more resilient to climate-induced shocks constitutes an adaptation benefit and could conceivably be generated as Adaptation Benefit Units. For example, one house with climate resilient design in Nigeria could result in 1 ABU worth X USD, while 1 ABU generated through a similar ABM project in Peru, may cost Y USD, due to different design requirements and associated costs. This concept of having unique ABUs per project, would fit in the Paris Agreement regime characterized by a large variety of targets, tools and mechanisms to achieve these targets.

ABUs would be priced on the basis of the cost of generation plus a risk margin for the project developer. These data would be presented in the ABM Project Description and verified by an independent accredited verifier (third party, DOE in CDM terms). Guidelines as to what constitutes eligible costs would be required. ABUs from different projects may have different

prices reflecting the costs of technology, the scale of the benefits and geographical location. Over time verifiers will develop databases of the costs in order to assess the value for money from individual projects.

The ABM would likely require some methodological guidance on how project developers can define the activity type of their ABU delivery, in order to assist buyers in identifying activity types they seek to support.

Project cycle

Building upon good experiences from the CDM, it is proposed that the ABM follows a similar project cycle. It is however suggested that for certain type of projects (to be defined later), a simpler cycle involving only verification instead of both validation and verification could be adopted (or a programmatic approach where only the first activity, for instance requires validation).

There would be no need to define crediting periods. Crediting, or simply activity periods would be activity-specific and could be defined in methodologies and in the PD.

The Project Description could be very similar to the CDM PDD but in addition, project developers could present the costs of generating ABUs and their expected profit margins for transparency and financial integrity. Project developers would also need to present indicators and units of measurements, as well as define the duration period of the activity.

A template tool with a transparent cost-based pricing model could be developed and required to be used and disclosed by all project owners (project developers can be different than the owners. For instance, a climate resilient house could be developed by a contracted construction company, while the project owner is the owner of the residential site). Over time the costs of different activity types would trend towards the most cost-efficient pricing, as buyers would have the possibility to assess and compare cost data from different projects and developers through an evidenced-based project budgeting system.

Additionality and Baseline

The purpose of the ABM is to deliver climate change adaptation outcomes that the private sector could not deliver unassisted - hence the need for additional finance through the sale of ABUs. The ABM, therefore, targets gaps in the adaptation “market” - typically where the marginal cost of adaptation outcomes is prohibitively high in the baseline.

For example, where the marginal cost of adaptation is low (e.g. delivering reliable water supply to lower middle class residents in a suburb) the private sector can provide this service unassisted (or with minimal policy stimulus). However, delivering reliable water supply in a poor and remote rural community in the same country is far more costly and often beyond the reach of the private sector. Here the adaptation need is demonstrably high (e.g. high incidence of communicable disease - that will only get higher under drought conditions), and minimal policy stimulus is incapable of overcoming this barrier.

Accordingly, a new definition of additionality is proposed, based on a) the principal that good technologies eventually prevail over bad ones, and b) that the project is unable to succeed

financially without implementation finance from the sale of ABUs (financial additionality). The latter part would be similar to the incremental funding approach of the CDM, but the additionality tool could be designed in a less complicated way compared to the CDM additionality tool. The purpose of registering a project as an ABM activity would be to accelerate the adoption of a new technology or the provision of new services, which requires additional financial support while adaptive technologies and adaptive/resilient development are unable to compete on their own against maladaptive technologies and maladaptive development. This would also screen out projects that were to be financed using conventional development funding. Baselines would be based on current practice and policies and hence e+ or e- (like in CDM) would not be an issue since the speed of implementation would be the key aspect. In this manner, buyers can be confident that they are causing the project to become possible because of the funds made available to the project from their purchase of ABUs.

Safeguards

Negative externalities, injustices and poor project performance need to be avoided in the ABM. Accordingly, the ABM will need to develop a set of safeguard requirements to be incorporated into project methodologies. Such safeguard requirements need to be capable of preventing negative externalities and social injustices, but should not be so strenuous that meeting such safeguards makes projects prohibitively expensive to develop and implement. There is ideally an optimal middle path between these extremes which would be sufficient to ensure that the ABM remains robust, whilst maximizing outcome delivery per dollar invested.

Durability

From the point of view of methodological safeguards, it is also important that the ABM does not create a financing environment for non-durable projects to proliferate, but which fail after a short time (e.g. 2 years) due to poor implementation. This is particularly important in 'appropriate technology' projects. Experience across a range of technologies has shown that effort in appropriate technology provision without sufficient effort in creating the enabling conditions for that technology to continue working long-term creates significant non-delivery risk. As such, appropriate technology projects in the ABM would be required to demonstrate that project design and implementation sufficiently addresses this "durability requirement" through the provision of proven "enabling conditions" as an integral project design component. These enabling conditions comprise the social capital component of an ABM project and will include aspects such as transparent project governance and benefit sharing arrangements, financial discipline, transparent coordination among key stakeholders, technology maintenance regimes, and dispute resolution procedures.

For example, installing water pumps in rural communities is a necessary but insufficient condition for the durable, on-going delivery of reliable water supply to those communities. What remains key is an effective preventive maintenance regime capable of ensuring that the pumps continue to operate under a minimum standard to qualify as "reliable" (e.g. minimum of two days down time for any one malfunction event, and no more than five malfunction events annually). Delivering a preventive maintenance regime, in turn, requires the establishment of an effective system of monitoring, communication, service delivery, and results-based maintenance payments.

Financial Sustainability

Another key safeguard element is the financial sustainability of the project activity beyond the supply of external funds from monetizing ABUs. Experience has repeatedly shown that projects reliant on external funding and without a means of becoming financially self-sustaining tend to fail once external financial flows cease. ABM projects need to demonstrate how ABU finance scales down to zero in project implementation budgets, coinciding with the end of the ABU issuance period.

It should be a requirement that the project cost declaration budget demonstrates ABU finance scaling to zero in year X coinciding with the end of the ABU issuance period, and whereby project internal finances are sufficient to sustain the project beyond the ABU issuance period.

Relationship to other tools

Market-based mechanisms created under 6.4

It is conceivable that Market-based mechanisms created under Article 6.4 of the Paris Agreement and the ABM could complement each other and partially use the same infrastructure.

The ABM could use, as elaborated above, some of the infrastructure created for the MSDM particularly the accredited designated operational entities (DOEs) and the authority that would be responsible for authorizing participation in the MSDM.

Similarly, the MSDM could use some of the methodologies developed under the ABM particularly for quantifying and verifying its sustainable development benefits.

Links to the SDGs

Linking climate change actions comprehensively with SDGs is necessary to monitor the achievement of the SDG13 on climate action. This is especially important for developing countries as it allows for a better integration of national efforts undertaken in linked and interconnected areas.

It is, therefore, proposed that ABM methodologies highlight the relevant SDGs and show how the project would contribute to progress towards the implementation of specific SDGs through measurable and verifiable outcomes, in accordance with the indicators provided for the specific SDGs.

Relationship to NDCs

The ABM can be used by all Parties. Under the Paris Agreement all Parties now have nationally determined contributions (NDCs⁶), that could include different types of targets (including adaptation targets and actions). Since buyers have the option of enabling a larger volume of adaptation outcomes per dollar invested, by investing where the marginal cost of adaptation is the lowest, this may favor the least developed countries and Africa to some extent, where

⁶ However, see Article 4.6. “The least developed countries and small island developing States may prepare and communicate strategies, plans and actions for low greenhouse gas emissions development reflecting their special circumstances.”

currency strength tends to be lower on global terms and adaptation needs per capita can be higher.

One of the reasons for creating non-market approaches was to assist Parties in the implementation of their nationally determined contributions. It could be therefore envisaged that the ABM could be used by Parties that have adaptation targets in their NDCs to meet those targets. It could also be envisaged that the ABM could be used as a result-based finance delivery mechanism that may help Parties to meet their finance commitment. How adaptation targets and related incentives can be designed for the private sector is something that could be further explored under the ABM.

The ABM could also be used to deliver net adaptation outcomes that go beyond the NDCs and the finance and technology transfer commitment of parties. The question then on how to determine whether an activity is beyond or within an NDC can be addressed at a later stage building upon the experiences obtained through pilots.

Project Developers, Public and Private Funding

Buyers and Demand

It is proposed that donors, trust funds like the GCF, Corporate Social Responsibility buyers and sustainability impact investors would purchase ABUs as a means of transparently and efficiently contributing additional funds towards climate finance (i.e. funds that are additional to existing Official Development Assistance or ODA). The efficiency and problem solving capacity of the private sector would be expected to deliver results more efficiently than, for example, MDB funded projects. When initiating the scheme, there should be a clear role for the public sector, where keystone buyers would stand for a significant share of financing.

Experience from the CDM and REDD+ shows that there could be a big problem of an oversupply of units against a demand side that is under-stimulated by government leadership. An important element of the ABM is that this type of leadership could come from redesigning how a significant proportion of public sector (including donor) financing is disbursed through a disciplined payment-on-results model that significantly reduces risk to the buyer/donor.

The transparency and governance structure of Modalities and Procedures, particularly the external validation, approved methodologies and monitoring, reporting and verification of units, would bring credibility to the process and the relatively simple status of ABUs in terms of compliance should reduce costs and transaction barriers.

The immediate benefits of adaptation projects, will provide buyers with compelling stories to report to stakeholders. In addition, buyers will be able to highlight contributions to the SDGs and the un-quantified (or quantified but not claimed) mitigation co-benefits, which would be helping the host country achieve their Paris commitment.

The story telling component would be built into the project outputs, through an informative project description, and the registry could contain marketing features where projects could upload specific data and materials designed to facilitate a project search by a prospective buyer.

Not least initially, there could be a need to look at ways of enhancing the demand for ABUs. While the storytelling and non-commodification elements of the ABM are compelling, additional incentives within the international finance regime for adaptation needs to be explored in order to achieve the necessary up-scaling. One way could be to use Quantity Performance Instruments⁷, where auctioning is one method for connecting buyers and sellers as a possible solution to the need for a purchasing instrument. In the absence of strong market demand, the Pilot Auction Facility for Methane and Climate Change Mitigation (PAF) has been a successful model for getting cost-effective mitigation. Similar approaches could be worth exploring for the ABM, in particular in its initial development.

Project Developers and the Supply

If the ABM creates a value chain sufficient for project developers to cover all of their costs, philanthropic project developer entities such as NGOs would see the ABM as an opportunity to realize their goals at scale through scalable financing, without the need to constantly win grant funding to survive. In addition, the cost recovery element combined with the ability to realize a profit from adaptation project development, would create enabling conditions for entrepreneurs to turn their attention to climate change adaptation activities. Some would already be involved in the voluntary carbon market and may expand their scope to include project development in adaptation. If carefully designed it could also provide a mechanism by which existing adaptation NGOs gain access to much needed capital as project development and implementation partners (e.g. as required local counterparts to international project development entities).

Are there any examples to date?

There are already a range of standards which seek to identify and quantify adaptation. However, these seem to lean heavily on the commoditization of the instrument. There are other examples of non-commoditized units such as Payment for Environmental Services, but so far there has been no concerted effort to place these within the context of the Paris Agreement and specifically as a non-market approach under Article 6.8 and 6.9.

It should be also noted that mitigation projects or joint mitigation and adaptation projects may qualify with their adaptation benefits for ABUs. For instance, some existing CDM projects and Programme of Activities (PoAs) have an adaptation component, for which the carbon market does not provide sufficient revenues to start up or maintain their operation. Such projects could develop their adaptation component as an Adaptation Benefit Mechanism project. In addition, renewable energy projects providing power to previously unconnected households could result in adaptation benefits.

⁷ Müller, Frankhauser and Forstater (2013) *Quantity Performance Payment by Results. Operationalizing enhanced direct access for mitigation at the Green Climate Fund*. Oxford Institute for Energy Studies

Conclusion and Way Forward

With the Paris Agreement, the purpose of collaborative approaches has changed from mere economic efficiency to raising ambition. It is also becoming clear that the current effort and the level of financing available for adaptation is far from being enough to shelter the most vulnerable people from the severe impacts of climate change. Therefore, climate adaptation finance needs to be up-scaled urgently and participation from the private sector is becoming critical. Drawing from the lessons learnt from the implementation of the CDM, that showed that the private sector can act and deliver results if provided by the appropriate incentives, it is then of utmost importance to incentivize the participation of the private sector in the adaptation efforts.

The proposed Adaptation Benefit Mechanism elaborated above, although designed as a non-market approach but drawing from the experience and the lessons learnt from the CDM, would constitute a driving force for up-scaling adaptation finance and enhancing private sector participation and involvement.

It would be a mechanism that would incentivize the private sector to target implementation of projects with strong adaptation benefits, would quantify and put a value on those benefits and sell them in the form of Adaptation Benefit Units (ABU) that could be bought by various types of buyers. It could be also used as a way of disbursing climate finance for adaptation through payment upon delivery of outcomes.

It is believed that the proposed Adaptation Benefit Mechanism would constitute an innovative and efficient way to operationalize the provisions sections 6.8 and 6.9 of the Paris Agreement and would provide parties with an additional tool in their tool box to help achieve the objective of the Convention.

SUBSTA 45 had invited Parties to submit, by 17 March 2017, their views on Article 6, paragraphs 8 and 9 and requested the secretariat to organize a roundtable discussion among Parties based on the submissions, in conjunction with SBSTA 46 (May 2017). Uganda had submitted a proposal for the creation of an adaptation Benefits Mechanism (ABM). It would, therefore, be critical that discussions among parties, are initiated, based on the Ugandan submission to SUBSTA 46, including during the round-table that will be organized by the secretariat.

It is also important that at least a decision, if not of creation of the mechanism, of a mandate for continued discussion and possibly a request for submissions by parties on the features of such a mechanism, is adopted.

in parallel, information to a wider range of stakeholders should be undertaken, through side events and promotion activities in conjunctions with the intergovernmental sessions as well as in regional fora related to both mechanisms and adaptation.