

CARBON MECHANISMS REVIEW

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CARBON EXPO SPECIAL

Focus on the Essentials

Market mechanisms in the new
climate change regime

Report:

Tunisia's Pilot Market Mechanism
in the Cement Sector

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Carbon Expo Special



Photo: Siemens Press Image

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Dear Reader!

It's CarbonExpo time again, with the carbon market community meeting in Barcelona to discuss the latest developments.

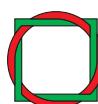
With an opinion piece on how market mechanisms might be integrated in the new climate agreement, the Carbon Mechanisms Review contributes to the debate, offering two interesting options on the way forward (see adjacent page). It also looks at activities conducted by the Partnership for Market Readiness, explains why Africa is essential to the carbon market and outlines an initiative that combines climate action with empowerment of women.

The vast scope covered in all of this shows the momentum to be gained with market-based mitigation mechanisms. This is something reflected in the CarbonExpo conference programme, which is as comprehensive as ever despite the market crisis.

On a different note, I would like to draw your attention to the relaunched JIKO website, www.carbon-mechanisms.de (see back page). Along with all the latest news on relevant climate policies, it features a comprehensive publications library and reports on German government initiatives.

On behalf of the editorial team, I should like to wish you an interesting read and an inspiring visit to the CarbonExpo 2015.

Christof Arens



Wuppertal Institute
for Climate, Environment
and Energy

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Focus on the Essentials

Market mechanisms in the new climate change regime

by Thomas Forth

+ Despite the numerous options available, the current negotiating text drafted at the international climate change negotiations gives nowhere near a clear idea of how the carbon market might look beyond 2020. + The role of the carbon markets was only sketched out in the Kyoto Protocol. + Kyoto effectively only introduced mechanisms for flexible achievement of emission reduction targets in industrialised states. + But at least these were successful and cost-effective. + Looked at from a distance, it is thus surprising that, from a financial standpoint, only a few industrialised countries are sticking to this route.

The waiting game

The idea that market mechanisms and carbon markets only serve to provide flexibility in achieving emission reduction targets is as understandable as it is one-sided. When all is said and done, it acts as a mental barrier to advancing comprehensive climate policy while shaping the Paris Agreement. Is it thus wise to postpone assessing the need for market mechanisms until the international community has agreed to ambitious climate change targets? And is it wise to wait until potential buyer countries generate sufficient demand for international certificates? Is it also wise to wait until market mechanism reforms have reached a new level? And is it, therefore, also wise to wait until the link between national targets, national climate policies and the need for international support (carbon markets and climate financing) has been clarified? There are many reasons why waiting might seem the best option – at least for those who want to wait.

But then, why wouldn't it be wise to wait? The usual argument against waiting is the one that points to the two degree goal – to the closing window of opportunity to keep global warming within a manageable range. And then there is the simple point that mitigating climate damage and shifting to a low-carbon economy would cost even more. This was all said well before Copenhagen. Even policymakers argued the point. But mere exhortations are clearly not enough. There is something missing. What is missing is not rational, fact-based argument. What has been missing so far is political will, reliability and trust. But by focusing purely on the negotiating text there is a chance that Paris might reach a consensus on an adoptable text that covers all the essentials.

Having said that, it would be of great benefit if expectations regarding negotiation proceedings and results could be better managed. There are two particular phenomena that have accompanied the climate change conferences from the start. The story of how the Kyoto Protocol was eventually adopted back in 1997 gives hope that conferences can be saved in the final hours if key decision-makers can find a way to agree. This leads to too little engagement, both in the run up to and in the early days of a conference. Rather than all hopes being hung on a last-minute, backroom deal, there is a real chance this year that the draft decision text could quickly become a final decision text.

Another phenomenon that occurred back then and which was evident again in Lima sees the interim status achieved in the early weeks of the negotiations being praised to the hilt, with substantial



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Focus on what is important and necessary: integrating market mechanisms in the new climate agreement.

progress seeming to be just within reach. All the greater the disappointment, therefore, when, at the end of the negotiation process, the interests of all have found their way into the final decision text. For expectations to evolve in this way would deal a fatal blow to the new agreement if it meant public perceptions of a positive negotiation outcome might be marred by ritualistic disparagement of international climate policy. This year brings yet another phenomenon – that of growing belief that effective climate change mitigation can be achieved on a global scale without the UN.

Staying focused

Given the status of the mechanism negotiations led by the SBI and SBSTA, no real progress can realistically be expected regarding individual mechanisms in Paris. There is stalemate on the New Market Mechanisms (NMM), the Framework of Various Approaches (FVA), Non Market-based Approaches (NMA) and the CDM review of modalities and procedures. The order of the day is a combination of a lack of willingness to

implement reforms right now, the risk of mechanisms being altered under the new agreement, a lack of pressure due to insufficient demand for international certificates and a clearly articulated interest in continuing to negotiate in other contexts with a clear new mandate. Also, issues that belong together have not been brought together. Is it not the case that, at the end of the day, only one market mechanism is actually needed under the new climate change regime? Don't many reform objectives go in the same direction, and so do they all need to be implemented and enforced? Is it necessary, in addition to the Accounting Rules, to provide an additional framework that regulates and controls international exchange of CERs?

Why, therefore, must emission reductions achieved from non-market approaches be made internationally tradable? Of all the ideas put forward in the negotiations, there could well be one or two whose loss turns out to be a gain. Neither the lack of clarity that has dominated proceedings since the climate change conference in Bali in 2007 nor the complexity



Photo: Tlennahos Efthimiadis / Flickr.com

Reviewing the options: use as is or repurpose as climate financing component? The future for Market mechanisms is unclear.

of the negotiations on market mechanisms can be remedied in a short space of time and in such a way as to satisfy all. The first step is to reach safe ground in the climate policy framework. This applies most of all with regard to the level of ambition in the agreement as a whole, the own contributions to be made by developing countries and the Accounting Rules. Only then can decisions be reached in the negotiations as to which of the points under discussion can be developed further or done away with.

Against this backdrop, the only real chance is that the negotiation time left in the lead up to the Paris conference will be used to focus on what is important and necessary. This means whether and to what extent the market mechanisms and the carbon market will be embedded in the new agreement and under what conditions, and how, at minimum, double issuance of certificates for one and the same reduction effort can be avoided. It also means that, to the greatest extent possible, Paris must produce decisions on how negotiations on the market mechanisms are to be organised in the future and

set out a mandate for the climate change conference – including the issue of legal transformation and the way in which existing mechanisms should continue to be used. The draft text to be used in the negotiations in Bonn in June offers ample scope for debate.

Know the reasons why

It is often said that the project-based market mechanisms, meaning the CDM and JI, have contributed some 1.5 Gt to the global climate change effort, lessened the emission reductions burden on industrialised countries to the tune of billions of dollars and triggered hundreds of billions worth of investment in developing countries. By 2020, the existing project pipeline is expected to provide emission reduction potential in excess of seven gigatonnes. This could serve as a key contributor in closing the ambition gap in limiting global warming to 2 degrees.

The market mechanism reforms aimed for by several negotiation groups could enable the market mechanisms to contribute significantly greater quantities to the international climate change effort. Up-scaling of measures, own contributions by the host countries and demand from buyer states all go hand in hand. Under the new climate change agreement, this can only be achieved by increasing ambition across the board. This is completely in line with the Climate Change Convention, which does not provide for reductions through the use of market mechanisms but through cooperation between the country groups.

As the CDM and JI have shown, markets can generate emission reductions at low prices and provide cost-effective carbon credits. The Kyoto Protocol laid the policy foundation, followed by the subsequent public purchasing programmes and, most of all, the EU ETS and the setting of clear financial incentives for business.

The situation today is similar to that prior to the adoption of the Kyoto Protocol. Back then, the issue of ambition was also highly contentious. But raising ambition to the level required to achieve the two degree goal is an immediate priority if the window of opportunity for timely action is to be used and not allowed to close before anything is done.

Looking at the current demand situation, it can be said that:

- For some countries, the national targets under the new climate change regime must be set so high that international certificates play a renewed role. This applies both to states that purchase certificates and those who want to sell.
- As long as the national targets are not set high enough, the targets in emissions trading will not increase, with no new demand generated for international certificates as a result.
- The repair of the EU ETS, which is currently underway, will not generate scope to allow the use of international certificates until well into the next decade.
- The rules for the mechanisms themselves could make a stand-alone contribution to climate change mitigation. However, even the existing debate on net emission reduc-

tions shows that there are strong reservations and broad rejection of this idea.

- Also, net emission reductions have so far been seen as a fringe benefit in the use of market mechanisms to allow financial flexibility in achieving reduction targets. In other words, no purchase of offsets will likely mean no net increase in ambition.
- The CDM was and still is an instrument for use in achieving emission reduction targets and does not function of its own accord. Any change in its purpose as an instrument for cost-effective target achievement calls for a different model and a different frame of reference.

Subsequently, only two basic options should be discussed: one for continued use of the market mechanisms to achieve reduction targets and one on repurposing the market mechanisms as a climate financing component.

Option 1 - Separate Targets

Use of the market mechanisms and domestic reduction targets are broken out into two target systems. This can be likened to the EU INDC, taking into account the differences between the national and international shares in the Swiss INDC. Switzerland explicitly defines a national and an international share. And in setting an exclusively domestic reduction target, the EU has also paved the way for countries to decide explicitly and autonomously how ambitious they want to be at international level.

One solution to increasing ambition involves separate target areas, but a common overall goal. The international component could focus on the two degree reductions gap.

Option 2 - Focus on Climate Finance

Another option would see use of the market mechanisms being rated as a purely climate financing activity and not being counted toward the donor countries' targets. This would do away with international trade in certificates, with all the certificates generated going to the host country. Rather than being made available for trading, the certificates would

instead be counted towards the host country's target. The host country would not be allowed to trade said certificates in any way.

Option for increased ambition: no trade, but de facto prescription of financing quotas or emission quantities. In either case, a clear instrument for private-industry participation in climate financing would be created. Incentives for private sector participation could be provided via public programmes, tax incentives and commitments.

+ In Paris it will not be a case of transferring the options contained in the Kyoto Protocol to the new regime. + It will be a case of laying the foundations for something new. + The mechanisms of the new climate change agreement should be seen as integral to a global carbon market. + They should thus make their own contribution to global climate change effort.

Fostering Domestic Action

Partnership for Market Readiness (PMR) takes stock

by Maja Murisic, The World Bank

Pricing carbon through instruments such as emissions trading and carbon taxes is one of the cost-effective means to achieving greenhouse gas (GHG) emissions reduction. While there is a growing box of policy options and instruments that countries can draw from to shift toward a low-carbon pathway, tailoring these to each country's unique circumstances and development priorities is a challenge. The PMR is one of the key platforms designed to specifically help countries prepare for such policy choices and future implementation, by focusing on improving technical and institutional "readiness" for carbon pricing.

The PMR includes 13 Contributing Participants, which provide financial support to the PMR trust fund, and 17 Implementing Country Participants, which receive funding to finance the assessment, technical ground work, design, and piloting of market-based

approaches to GHG mitigation. In addition, the PMR includes technical partners, which are countries and sub-national jurisdictions that have already made significant progress with the preparation or the implementation of a carbon pricing instrument, and that can either benefit from specific technical support or share relevant experience with other PMR Participants. The World Bank serves as the PMR Secretariat, trust fund manager, and principal delivery partner to the Implementing Country Participants.

Momentum for Domestic Action

The PMR provides grant funding to support climate change mitigation policies and piloting of carbon pricing and other innovative instruments, such as

The PMR at a glance

Contributing Participants: Australia, Denmark, the European Commission, Finland, Germany, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom, and the United States. PMR funding at the end of 2014 stood at \$127 million.

Implementing Country Participants: Brazil, Chile, China, Colombia, Costa Rica, India, Indonesia, Jordan, Mexico, Morocco, Peru, South Africa, Thailand, Tunisia, Turkey, Ukraine, and Vietnam.

Technical Partners: California, Kazakhstan and Québec.

Observers: New Zealand, South Korea, Italy, Singapore and France regularly participate in the PMR as Observer.

ETS, carbon taxes and new, scaled-up crediting mechanisms. Implementing Country Participants follow a two-phased process: a Preparation Phase in which they formulate a Market Readiness Proposal (MRP), which is reviewed and endorsed by the Partnership Assembly (PA), and an Implementation Phase in which they agree on implementation arrangements and carry out the activities identified in the MRP. As of May 2015, all 17 Implementing Countries were allocated funding for the Preparation Phase, in the amount of \$350,000 each, and 13 were allocated funding for the Implementation Phase, in the amount of \$3, 5, or 8 million. The following provides some examples of the PMR-supported country programs:

China announced its plan to develop seven official ETS pilot programmes (Beijing, Shanghai, Tianjin, Chongqing, Guangdong, Hubei and Shenzhen) in 2011. By June 2014, all seven pilots were operational. With that, China now houses the second largest carbon market in the world, covering 1,115 million tonnes of CO₂-equivalent. The pilots, which differ in terms of economic structure and development, sectors covered, as well as thresholds to determine covered enterprises, are based on each jurisdiction's respective economy and emission profile. That said, the experience with China's seven ETS pilots demonstrates that all face somewhat similar challenges. The experience also illustrates that building "fundamentals" (e.g., a reliable and transparent emissions monitor-

ing, reporting and verification framework) is a critical albeit time-consuming process. Despite impressive progress by China over the past two years, more needs to be done. All will be valuable lessons to feed into developing a national ETS, expected to be launched possibly as soon as in 2016.

South Africa plans to introduce a carbon tax in 2016 at R120 (\$11.20) per tonne of CO₂-equivalent, with annual increases of 10% until 2019/20. The tax is envisioned to be a fuel input tax, based on the carbon content of the fuel used, and will cover all stationary direct greenhouse gas (GHG) emissions from both fuel combustion and non-energy industrial process emissions, amounting to approximately 80% of the total GHG emissions. The carbon tax and accompanying tax incentives, (e.g., energy efficiency) are expected to provide appropriate price signals

to help shift the economy towards a low-carbon and sustainable growth path. A complementary offset scheme is also proposed, with its parameters yet to be finalized. The development of the offset scheme, which is being supported by the PMR, aims to provide flexibility for tax payers and allow them to lower their tax liability, as well as incentivize mitigation in sectors not directly covered by the tax.

The PMR is currently supporting eight countries in the development of crediting instruments: Colombia, Costa Rica, Mexico, Morocco, Peru, Thailand, Tunisia and Vietnam. Existing mechanisms, such as the Clean Development Mechanism (CDM), have built extensive capacity, knowledge, and experience related to crediting. As a result, a number of countries are now considering scaling up and using crediting instruments in their own domestic contexts, as well as in the context of international markets. The PMR is taking a flexible approach when supporting these countries by focusing on improving readiness while minimizing regrets and maximizing co-benefits. Examples of minimizing regrets include data analysis and management, quantification of emissions, and baseline determination, all with a broad applicability for various market and non-market mechanisms, policies and funding approaches. Advancing specific regulatory frameworks, developing domestic sources of demand, and setting up finance vehicles are examples of maximizing benefits, considering that these activities can help build a political momentum and involve a broad stakeholders' engagement.



Photo: Sasol / mediachubsouthafrica.com

Low-carbon or carbon-intensive development? South Africa's carbon tax aims at a paradigm shift. Mining operations in the Free State province.

Supporting Post-2020 Emissions Scenarios

Complementary to the country programs, the PMR also supports efforts to determine post-2020 mitigation scenarios and identify a package of effective and cost-efficient policies – including carbon pricing instruments – to achieve climate change mitigation. Much of this work will contribute to the Implementing Countries' work to prepare and, later, possibly update the mitigation component for their “intended nationally determined contributions” (INDCs) under the UNFCCC process. The PMR support consists of the cross-country activities, among which is the development of the “Checklist for Establishing Post-2020 Mitigation Pathways” – a document which includes key components for setting mitigation scenarios and is intended to facilitate transparency and understand-

ing of the key indicators and assumptions used when constructing INDCs. In addition, the PMR is supporting a number of countries – Brazil, China, Colombia, Costa Rica and Peru – by providing technical input to the formulation and presentation of the emissions pathways for reaching their mitigation targets.

Promoting Good Practices and Sharing Lessons

The PMR's Technical Work Program complements the work countries are undertaking under various programs. As such, the PMR promotes best practices and facilitates efforts to establish common standards and approaches for GHG mitigation. Drawing upon country experience, global industry experts, and in-house resources, the PMR Secretariat gener-

ates a host of knowledge products on various economic policy instruments and technical elements related to carbon pricing. Examples of the activities carried out under the Technical Work Program include: Technical Notes (e.g. “Lessons Learned from Linking Emissions Trading Systems: General Principles and Applications” or “Preparing for Carbon Pricing: Case Studies from Company Experience: Royal Dutch Shell, Rio Tinto, and Pacific Gas and Electric Company”), Guidance documents (e.g. the “ETS Handbook” currently being jointly developed jointly by the PMR and ICAP), facilitated and tailored training events and technical workshops, etc.

ment. With this regard, the PMR has broadened its membership and created a new category of participants – Technical partners – as well as scaled-up and expanded some areas of focus, such as work on upstream policy analysis and private sector readiness. The PMR is currently also undertaking a review of the status and scope of crediting-related readiness activities in order to assess how these crediting-related activities can stimulate scaled-up mitigation. In order to ensure that the PMR’s impacts are maximized and sustained over time, discussions on the strategic direction for the future of the PMR are ongoing.

Looking ahead

The PMR is responding to new domestic and international developments and a rapidly changing environ-

Breaking Ground

Tunisian cement sector is writing a new chapter of its carbon market readiness story

by Seif Derouiche, GIZ Tunisia

The last few years have been challenging for Market-Based Mitigation Mechanisms. Since the price decline of carbon credits in the 2011 and the ineligibility for CERs issued from Clean Development Mechanism (CDM) projects under the European Market (EU-ETS) in 2012, Tunisian stakeholders have chosen to focus on sector-wide instruments through Nationally Appropriate Mitigation Actions (NAMAs) or the New Market Mechanism (NMM).

Despite the lack of internationally adopted guidance and rules on these mitigation mechanisms, Tunisia succeeded in designing innovative projects that are attractive for international donors. Today, all relevant sectors have developed mitigation strategies such as

a NAMA in the forestry and agriculture sector, a wastewater NAMA, the NAMAs under the Tunisian Solar Plan and recently an ongoing activity for developing a transport NAMA. The cement sector was one of these relevant sectors and, due to a great interest of the cement companies in clean technologies and emission reductions, it was chosen in 2012 for the development of a proposal for a hybrid NAMA/NMM mitigation mechanism.

This study was financed by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and conducted by GIZ and the National Agency for Energy Conversation (ANME). A dialogue and stakeholder consulta-

tions approach showed that the sector is well-structured, comprises a high mitigation potential and that emissions and mitigation measures could be measured, reported and verified.

Design

The first stage of the Tunisian initiative started in February 2012 with a concept note. Building on this, a study developed in 2013 by ANME and GIZ analyzed the current state of the cement sector and proposes a GHG mitigation mechanism.

The proposed mechanism aims to ease the various obstacles to the implementation of GHG mitigation measures in the Tunisian cement sector and boosting investment in less carbon-intensive technologies. Emissions reductions were estimated as being equal to over 8 million tons CO₂ equivalent (mtCO₂e) over the period 2014-2020, via a mobilization of 970 million Euros of investment. Various co-benefits were identified making the mechanism an important instrument for the sustainable development of the cement sector in Tunisia.

The new instrument was designed with a view to being integrated into one of the mechanisms of the United Nations Framework Convention on Climate Change, such as NAMAs or the NMM. It is aligned with Tunisia's National Strategy on Climate Change and the Tunisian Solar Plan, which promote measures on energy efficiency, renewable energies and the use of international policy instruments to combat climate change.

Key figures

In 2012, the Tunisian cement sector included eight cement plants producing 7.9 mt of cement. A ninth plant with an annual production capacity of 2.2 mt cement started production in October 2013. With 6.4 mtCO₂e emitted and a carbon intensity of 0.810 tCO₂e/1 t cement, the cement sector accounts for around 16% of Tunisia's GHG emissions.

The study of ANME and GIZ led to the establishment of a baseline scenario for the GHG emissions from fuel combustion, electricity consumption and chemical processes for the period 2013-2020.

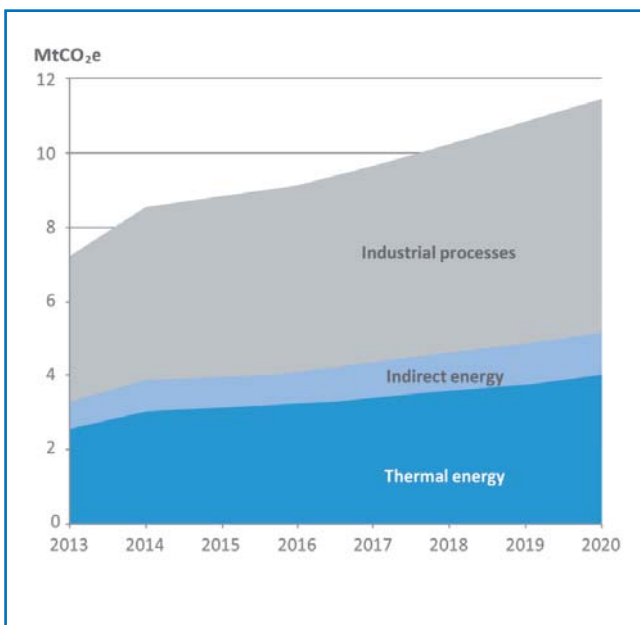


Figure 1: Baseline scenario of the cement sector (total emissions) over the period 2013 - 2020

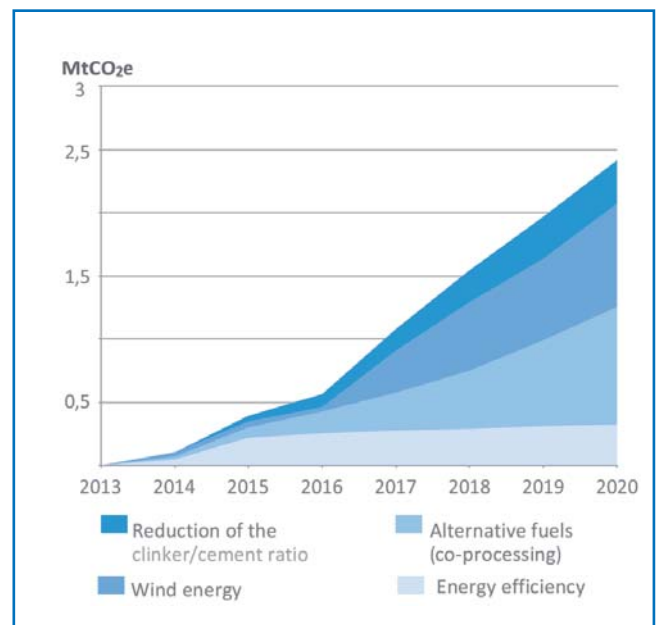


Figure 2: Respective contributions of the various types of mitigation measures

During 2013, a discussion process was initiated with the Tunisian cement producers which helped to identify most efficient GHG emission mitigation measures. The identified measures lead to a total reduction of GHG emissions of over 8 MtCO_{2e}, based on the implementation of four types of technologies:

- **Energy efficiency measures**, with a mitigation potential of around 1.7 mtCO_{2e} for the period 2014-2020;
- **Renewable energy**, notably wind energy, with a mitigation potential of around 2.5 mtCO_{2e} for the period 2014-2020;
- Finer segmenting of the cement market, allowing a **reduction of the clinker/cement ratio**, thus mobilising a GHG emissions mitigation potential of around 1.2 mtCO_{2e} for the period 2014-2020;
- **Co-processing** (use of waste as a fuel), which could mobilize additional reductions of around 2.6 mtCO_{2e} over the period 2014-2020.

Implementing these measures would lower the carbon intensity of cement production, which would drop from 0.793 tCO_{2e}/t cement produced in the business as usual scenario to 0.626 tCO_{2e}/t cement produced in the mitigation scenario, hence a decrease by 21% by 2020.

Figure 2 shows the evolution of the emissions reductions resulting from each type of measures. One notes the rapid implementation of energy efficiency measures, which are least costly in terms of investment. Co-processing and wind energy are more costly and will start to yield their full potential from 2017 on. Ultimately, co-processing ranks first with a third of the sector's GHG mitigation potential, followed by wind energy (31%), energy efficiency (21%), and the reduction of the clinker/cement ratio (15%).

Obstacles

The Tunisian cement sector is willing to engage in mitigation efforts, but is currently faced with several obstacles and barriers:

- **Regulatory “bottlenecks”**: The current energy governance framework is not conducive to investments by cement firms, as the regulations lack clarity regarding selling back electricity to the grid and do not allow cement firms to involve specialized power investors.
- **Co-processing**: The emission limits for air pollutants are more stringent in Tunisia than in Europe. Constructing co-processing facilities compliant with such rigorous limits would require high investments for waste gas cleaning and thereby undermine the economic feasibility of this option. Besides this, co-processing is not yet part of Tunisia's waste management strategy, leading to a lack of waste collection and treatment units appropriate for co-processing.
- **Blended cements**: The regulations in force do not allow the sale of certain cements with low clinker content, which are, on the other hand, suitable for certain uses.
- **Common practice and awareness-raising**: Investments in actions involving waste and renewable energies are not part of the cement producers' core business, and represent risky investments for them.

From study to readiness

At the end of 2014, the European Commission (EC) and BMUB launched a new project aiming to support Tunisian stakeholders to set up this mechanism and create market readiness of the Tunisian cement sector. From 2015 to 2017, the project will consist of eliminating organizational, regulatory, technical and financial barriers for the implementation of the sectoral mechanism and thereby pave the way for investments in climate friendly technologies in the sector. The project will be divided into 4 components:

Organization

This component supports the Tunisian government in setting up a Management Unit for the mechanism



Photo: Asian Development Bank / Flickr

Tapping the Potential: the Tunisian cement sector accounts for around 16% of the country's GHG emissions.

and is going to assist the Management Unit in negotiating and developing a voluntary agreement between the Tunisian government and the cement industry.

The Management Unit will be set up as part of the ANME and supervised by a steering committee consisting of the stakeholders of the project. The integration of the Management Unit into the ANME ensures the ownership of the Tunisian government for the sectoral approach and the sustainability of the mechanism in the long-term.

Supported by the project, the Management Unit will be responsible for negotiating and developing a voluntary agreement between the Tunisian government and the cement industry.

The voluntary agreement comprises organizational elements, technical (e.g. baseline definition modalities and methodologies, setting the crediting thresholds) as well as financial elements (e.g. financial incentives and conditions for access to these incentives) will be identified and analysed and proposals for their potential characteristics in the Tunisian case will be illustrated.

Regulatory matters

To overcome the regulatory barriers, the existing legal texts will be revised in a three-step process:

- Revision of legal texts by international/national experts and lawyers and subsequent capacity building for the responsible units in the adminis-

tration on legal aspects and requirements of the new regulations.

- Awareness rising for the correct use of low clinker cement and conduction of audits.
- Project development support for renewable energy projects.

CO₂-audits

CO₂- and energy audits are the basis for the technical and organizational components of the mechanism:

- the results of the audits allow for a detailed evaluation of the mitigation potential of each cement factory and the related mitigation costs, forming the basis for the design of the voluntary agreement
- the audits include detailed technical analyses of the different cement factories, which will be used for the development of implementation action plans.

MRV:

The MRV system for the sectoral approach will consist of different components:

- a calculation methodology for detailed and accurate ex-post and ex-ante assessment of the GHG emissions and co-benefits
- instrument-based monitoring of emissions in the cement factories process lines.

The first aspect of MRV requires the definition of calculation methods, emission factors and activity data including their uncertainty as well as exhaustive training of the Management Unit staff and the data providers.

The second aspect requires the purchase and installation of measurement equipment in the cement factories as well as continuous data collection systems, analysis methods and training of the staff responsible for data collection and analysis.

Financial component

The financial component consists of conceiving a financial mechanism which will provide the necessary incentives for investments in climate friendly technologies. As long as sectoral market mechanisms are not operational at the international level, the mechanism can be designed as a NAMA, which may attract subsidies and loans for investments in mitigation technologies. If a market for offset credits becomes feasible in the future, the approach will be developed further as a sectoral market approach, in which the cement companies can finance their investments by the revenues from the selling of CO₂ certificates.

In all cases, the setting up of the financial mechanism requires first a detailed analysis of existing financing schemes and stakeholder consultations on possible future systems. For example, Tunisian financing schemes for measures concerning energy efficiency exist already, as do some basic subsidies for the installation of renewable energies.

Next steps

The main mission for the next months will be the operationalization of the Management Unit within ANME, given that this unit plays a key role in the whole process. In general, the setting up of the institutional structure and raising awareness of the stakeholders will be the first important step towards the successful implementation of the mechanism.

Besides the institutional aspects, also work on nearly all technical and regulatory aspects has to be launched as early as possible, given the fact that most of the components and activities are linked with each other.

Market mechanisms – Whither to?

by Pedro Martins Barata

Carbon markets have had a rough ride over the last few years. Whether in Australia, the United States or even within the EU, many have come to question the wisdom of market-based mechanisms for climate protection. The most plainly obvious example of that trend has been the near demise of the Clean Development Mechanism. Thriving just a couple of years ago, interest in it has been dwindling as can be seen from the low present and expected prices for Certified Emission Reductions (CERs). Over the past two years, the de-construction and divestment by major stakeholders has been staggering. Although the CDM suffers of particular issues that have been identified over the years, it is but a victim of wider trends in carbon and climate finance.

The first most relevant one is the fragmentation of the international carbon market. Once established as a single international market backed by a common metric and unit of currency across all major demand centers, new markets have tended to shy away from international linking and instead focus on domestically driven institutions. Where offsets have been used, clear favour has been given to domestic offset providers, whether in the form of “salvaged” CDM or by the creation of an entire new system of offset generation *ex novo*. This trend may well be welcomed by many, especially in the environmental movement, who tend to view with suspicion, not without some reason, the quality of offset schemes to date. A word of caution is in order, though. It is neither clear that domestically driven offsets will achieve higher quality, and the retreat from international cooperation and international market-based solutions should in itself be seen not as a positive signal but as a retreat from international responses to climate change. Climate change, of all issues, is truly global. It remains to be seen whether this retreat from cooperation will manifest itself in the wider climate policy field.

Instead, global climate cooperation is now mostly presumed to take place under the general concept of climate finance, as viewed by the recent announcements of the early capitalisation of the Green Climate Fund. The stress on the mitigation side on securing an environmental outcome through the GCF (so-called “results-based finance”) is now seen to replace to an extent the achievements of international market-based cooperation.

Where does that then leave the prospects for new market-based mechanisms in the near and distant future? Do the arguments made for the development of new market mechanisms still stand?

Despite the stop-and-go nature of carbon market developments across the world, carbon markets will no doubt continue to play an increasing role internationally, as more and more emission trading systems come into play, alongside carbon taxes and new pricing instruments such as “tax and offset” schemes. What is clear however is that, at least in the immediate future, these individual domestic experiences will not be structured as in Kyoto with the backing of an international infrastructure and a single “carbon currency” unit. The New Market Mechanism, as originally envisaged by the EU and others in the negotiations, is meant to provide, alongside the discussions on the “Framework For Various Approaches” a structure for the hard work of providing an alternative standard for both emissions allowances and emission reductions. The rationale therefore for the development of a new mechanism (alongside the opportunity to improve on its forerunners, namely the Clean Development Mechanism) still stands. Moreover, the urgency of clarity on the need for these standards and their development is compounded by the process of Intended Nationally Determined Contributions (INDCs).



Photo: Schmolow/BASF/Presseportal.de

Quo vadis Carbon Markets? Market mechanisms must be well-designed and meet quality standards.

In the absence of guidelines on information to be submitted alongside the INDCs, and without a consensualised understanding of the impact that particular INDCs may take on the ability to trade internationally, it is likely that carbon market instruments such as offsets, included in the INDCs may come to be proposed without due regard for the potential for double counting or double claiming.

In light of these developments, both in terms of the actual demand-supply balance and the development of a new climate regime on top of a fragmented carbon market, in consultation with the European Commission, the team leading the New Market Mechanism project for the European Commission has sought to re-focus the project less towards the development of true pilots (as these are anyway proceeding under other initiatives such as the Partnership for Market Readiness), but rather focus on this issue of capacity building on the embedding of markets in a new regime. Building on some of the PMR work, the team will be conducting workshops in sev-

eral locations throughout this year (already one workshop in Tunis and another in Trinidad have taken place, and others will take place in Asia, Africa and South America) on the issue of bringing coherence between the INDC process and the market mechanisms envisaged by different Parties. In tandem, the guidance developed by the project team on the implementation of the principles set out in COP decisions on the NMM is being applied to five country case studies. These case studies will be supplemented with an analysis of the possibility for regional roadmaps for the development of these mechanisms, bringing together experts from each region and looking at the possibilities of regional cooperation under the UNFCCC on these new mechanisms.

New market mechanisms will almost certainly be required if the overall ambition of countries will meet the 2°C goal. We must collectively make sure that these mechanisms are well designed and meet quality standards.

Africa Essential to the Global Carbon Market

Impressions from the African Carbon Forum

by Lydia Ondraczek and Thomas Forth

This year's African Carbon Forum (ACF) sent out some clear messages for the upcoming climate change conference in Paris. The official organisers and the Moroccan hosts had managed to breathe new life into the event: rather than focusing on individual issues such as the future role of the CDM, the carbon markets and carbon pricing, the 600-plus participants discussed climate change policy as a whole.

In addressing the INDC process and the associated national needs and responsibilities, the African states showed they are an integral part of the solution to global climate change. This is something that the industrialised nations and emerging economies must understand and accept. It is also necessary for them to intensify cooperation activities with the African states – in policymaking and in practice. The argument, still cited all too frequently, that Africa's overall emissions are very low and that it suffices to focus purely on emitter states, completely misses the point. The African states are clearly developing and to allow their development to follow the emissions-intensive pattern seen elsewhere would be short-sighted in climate change policy terms.

Africa harbours huge potential for development towards a low carbon economy and the UNFCCC can play a pivotal role in guiding that development path. But it is important that the international community shows greater willingness now, which of course also includes other, less developed countries.

A notable example is the agriculture and forestry sector. African states in particular have been stressing its importance for years. Projects in these segments have found little resonance under the CDM so far. But perhaps the CDM and its link to tradable certificates is not the best solution if the 'a tonne means a tonne' principle is to be retained. The link to results-based finance and the funding options available through climate financing may well offer more.

The African states are hugely disappointed with the CDM. In its binding climate change policy decisions for the period up to 2020, the EU criticised the CDM but still agreed that the LDCs should be given privileged status. To be eligible for use in the EU Emissions Trading Scheme (ETS) and other industry sector schemes, international certificates generated from new CDM projects were to only stem from LDCs. At the time this decision was adopted, the EU's conditional target was still in place, envisioning a 30 percent reduction by 2020 linked to comparable ambition in other countries. Nothing came of this, neither at the climate talks in Copenhagen or thereafter. Demand for new certificates was thus limited and the exclusion of the contentious industrial gas certificates at the start of the third trading period did little to help.

For the African states, the CDM promises made by the EU were reduced to nothing more than a mirage as demand fell away. While remaining demand from public purchase programmes is vital to ensure that



Photo: Siemens Press Image

Cooperation needed – in policymaking and in practice. Fishermen on Lake Victoria using efficient LED lighting.

CDM activities do not collapse altogether, it will not be enough to salvage available potential. Policy perceptions in Africa are all the more critical because many African states have been able to create sufficient capacity using the support offered by the UNFCCC. Regional distribution of CDM projects needs to be improved.

Although some success has been achieved with the programmatic CDM, adequate demand for certificates is also needed. Without such demand, the CDM will fail. In recent years, trust and reliability have been tested to the extreme, yet trust and reliability are now needed more than ever to ensure that Paris produces a new agreement.

At the ACF, the issue of the CDM was not debated in the form of a historical review. Instead, the African negotiation groups had published a detailed submission to the UNFCCC prior to the Forum taking place. While it remains questionable whether the review of the CDM modalities and procedures will be completed at all given the status of the negotiations and available options for use under the Kyoto Protocol, the more urgent issue at hand is the extent to which the newly-proposed reform ideas might provide a basis for market mechanisms under the new agreement. The debate seems to focus more and more on how the CDM can be transferred to the new agreement. The deciding

factor is, of course, the underlying willingness to continue using the market mechanisms.

Given that all states are to assume responsibility for contributing to the global climate change effort, the question arises as to whether the certificates generated can be used in a way other than that set out in the Kyoto Protocol. The issue of the own contributions that developing countries are required to make should also be applied to use of the market mechanisms. Of course, this could be done on a lump sum, linear basis by earmarking a specific share as own contributions to the global climate change effort.

Most developing countries would likely view this as a rather unsatisfactory solution, however. It should thus be remembered that in sectors where these countries require support, transfer of technology is also needed where the necessary technologies are not in place. It thus makes sense that own contributions should vary from sector to sector and from segment to segment. The INDC thus needs to be broken out into policies, measures and programmes. There was isolated discussion of such issues at the AFC. The process is still in its infancy – it does not end with the registration of an INDC and the setting of an NDC. Determination of international contributions, via market mechanisms or direct climate financing, should be made a deciding factor in international cooperation over the next twenty years.

One highlight of the ACF was the adoption of a common document signed by 23 African states during the ministerial segment. Building on the Lima Call for Climate Action, they adopted the Marrakesh Call for Climate Action, which sent out clear messages regarding the need for a new climate change agreement to be reached in Paris. Moroccan Environment Minister Hakima El Haite emphasised that Africa is both a pro-active part of the solution and an integral part of the agreement. She welcomed the negotiation text, calling it a milestone that had been reached just in time for the conference in Paris.

With regard to the carbon market and the CDM, the Marrakesh Call leaves nothing to chance, and cer-

tainly not the issue of whether the CDM should or should not be used. The key points of the Call are as follows:

- There is an urgent need to accelerate actions to close the pre-2020 mitigation gap.
- Market mechanisms can play an important role in raising the ambition level. The same applies to climate finance.
- Putting a price on carbon could facilitate a reduction in emissions and drive investments into cleaner technologies in all sectors of the economy.
- African countries need access to carbon markets, including beyond 2020. For Africa, CDM reform is of immense importance.
- CDM projects should be made eligible for financing under the Green Climate Fund (GCF).
- The initiative of female representatives of the African CDM Designated National Authorities to establish a group entitled Women for the CDM is expressly welcomed.
- Binding international accounting rules and eligibility requirements are indispensable in the use of market mechanisms.

The Hidden Value

Monetizing co-benefits of climate actions to deliver Women Empowerment for a Sustainable Society

by Nadia Kähkönen & Ingo Puhl, The South Pole Group

There is an ever-increasing interest in the co-benefits of climate actions. Buyers in the voluntary market are willing to pay a premium for co-benefit rich carbon credits, p.ex. as certified by the Gold Standard. Public buyers of carbon credits are also increasingly interested in carbon credits that come along with Sustainable Development side effects (as well as carbon credits from least developed countries). In addition, there is now a recognition that “scaled-up” carbon markets (i.e. implemented, for example, within the context of Nationally Appropriate Mitigation Actions, NAMAs) – which are driven by developing country governments - also place a high priority on the co-benefits of mitigation actions.

The authors observe that the inherent value of these so-called “co-benefits” to those that benefit from them or value their production is much higher than the value given to them within the carbon market.

For example, recent studies by ICROA, the Gold Standard and the South Pole Group (with participation of UNESCAP and Waste Solutions) find direct financial values of co-benefits of mitigation actions of between 100 to 500 USD per ton of avoided CO₂, whereas the voluntary carbon market is able to monetize a value for co-benefits of between 2 and 5 USD / tCO₂ avoided.

This observation led to a partnership between the South Pole Group and the global women network WOCAN (Women Organizing for Change in Agriculture & Natural Resource Management), which had the objective to increase the monetizable value of co-benefits related to the empowerment of women,

which is another priority topic for global, sustainable development. WOCAN created and operates the W+ Standard, a social standard that allows the separation of women empowerment related “co-benefits” created by a climate action from carbon credits.

This approach recognises that there are new audiences that are primarily driven by and advocate for women empowerment related objectives and are therefore willing to support projects that focus on such activities, irrespective of the contribution of such projects to climate mitigation – or in other words, for these audiences, climate mitigation impacts are the “co-benefit”.

Through the application of the carbon market's result-based approach, we can provide a new instrument to these audiences that supports and leverages actions they care about. By bringing these two audiences together, we leverage actions that benefit both the climate mitigation AND the women empowerment agenda, which – considering the low carbon price - creates a new lifeline for many such actions.

The following article introduces the relevance of women empowerment within the context of global development – a topic that might be unfamiliar to many operating in the carbon market - and describes how investment in women empowerment AND climate mitigation can be accelerated via a results-based approach.

In most parts of the world, the contribution of women to creating social and environmental capital is neither adequately recognised nor compensated.



Photo: South Pole
 Incentivizing investment in women's empowerment: A biogas project in Nepal.

Thankfully, an array of actors have taken this to heart, and initiatives to develop the economic potential of women are slowly becoming intertwined with corporate activity: from backing women entrepreneurs, to educating girls and enhancing digital literacy, companies such as Coca Cola, IKEA, Intel and Google have made commitments to empower women by engaging with women's NGOs, local governments and microfinance institutions.

Economic empowerment is a key step in making women full participants in their communities. Nonetheless there still remains the need to link such initiatives of economic empowerment to programmes that address the issue of women's empowerment in a more fundamental way: According to a report issued last year by the World Bank, tackling gender inequality "will not result from specific iso-

lated programs, but from a comprehensive approach that involves multiple sectors and stakeholders."

The next key question for corporate leaders to reflect upon should be the following: How to efficiently channel the millions of dollars currently being spent on increasing opportunities for women?

Presently, there are few solutions that offer full transparency in quantifying results and channeling funds in an accountable way to deserving projects. To address this gap, South Pole Group partnered with WOCAN to develop a results-based approach to evaluate the impact of a diverse set of project types on women empowerment.

The W+ Standard recently developed by WOCAN both measures results and puts money directly into the hands of women. The W+ consists of a set of project design and implementation requirements that can

also complement other certification systems and standards - including the likes of the Voluntary Carbon Standard, the Gold Standard and Fair Trade. The W+ tracks women's empowerment in six areas: time, income, health, leadership, education and food security. Each certified project measures progress in at least one of these areas. The measurement of results in these domains in turn produces quantified W+ units that contributors can purchase to demonstrate the outcomes achieved through their contributions in these areas, and to channel funds to women beneficiaries. For corporates, the W+ label can be used for the W+ certified activities along a supply chain, bringing higher premiums to women suppliers at the sourcing level.

The first W+ pilot project was carried out in 2014 in Nepal in partnership with South Pole Group. The project measured how much time was saved when women had biogas systems and did not have to rely on gathering fuel wood. Historically, the women in the Nepalese communities would toil for several hours each day in order to amass the necessary wood for cooking. Results from this W+ project showed savings of up to 2 hours a day for women who used the biogas technology - savings that can be used to pursue income generation, community leadership in natural resource management and education.

The methods used for the quantification of women empowerment related impacts (called "W+ units") were directly derived from the methodological approach common to carbon projects: defining eligibility criteria, system boundaries, "impact" baselines and a monitoring, reporting and verification plan. Following a stakeholder consultation within the context of a first pilot project, the team decided to first develop a method to quantify the time-savings for women as a result of household energy interventions. Key input and output parameters were carefully defined, along with the ways to measure them.

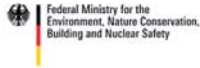
Future methods will be related to impacts related to income, health, leadership, education / knowledge, income / assets, and food security.

In the move towards results-based financing, the W+ Standard is creating a new market for gender capital that is steadily drawing the attention of corporations, impact investors, the CSR community and international development agencies alike. Solutions that integrate results-based financing offer potential to make certified investments in women's empowerment. These investments will in turn yield measurable outcomes for not only women, but also the investor and the supply chain as a whole. By having quantified results, companies such as can count towards internal targets for women's empowerment.

While the W+ Standard can be applied to projects that are unrelated to climate change mitigation (or adaptation), the list of existing pilot projects suggests that there are many positive synergies between women empowerment and climate mitigation, as all current pilot projects produce positive impacts in both domains.

The W+ unit serves to reinforce the importance of recognising and supporting the leadership and roles of women across sectors and socioeconomic classes in the management of natural and social resources. Empowering women offers transformative potential in areas such as climate change, poverty, gender inequality and food security.

Against this backdrop, South Pole Group would like to invite experts and practitioners to engage in and support the growth of this initiative beyond its current pilot phase.



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Latest News



Carbon Expo spotlights the carbon market challenges that lie ahead

April 2015 - The Carbon Expo – the leading international trade fair for emissions trading, carbon abatement solutions and clean technologies – takes place in Barcelona, Spain, from 26 – 28 May 2015. Over the three days, decision-makers, project developers and investors will explore current trends and future opportunities for market-based climate policy instruments. As in previous years, the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and the German Emissions Trading Authority (DEHST) will host a joint stand for exhibitors from Germany. [more](#)

World Bank announces selection criteria for CER auctions

April 2015 - The collapse in prices for CERs renders many promising carbon reduction projects unviable. This situation is especially critical for projects that rely exclusively on revenue from certificate sales. To ensure that the climate change activities conducted under such projects can continue, the World Bank has established the Pilot Auction Facility for Methane and Climate Change Mitigation (PAF). The eligibility criteria to be applied in selecting projects and programmes for the inaugural CER auction in June have just been announced. [more](#)

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German Federal Ministry for the Environment Carbon Mechanisms Portal

This website provides information on market-based climate policy instruments. It covers on the one hand the existing instruments, the Clean Development Mechanism (CDM) and on Joint Implementation (JI), two of the flexible mechanisms agreed under the Kyoto Protocol in efforts to reduce global greenhouse gas emissions. On the other hand, the website informs about carbon markets of the future currently under discussion.

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