
The Networked Carbon Markets Initiative's Partners & Strategy Workshop

Saturday May 28, 2016, Cologne

Summary Note

Based on discussions at the Networked Carbon Markets (NCM) initiative's Partners & Strategy Workshop, this note summarizes the NCM initiative's team of experts' feedback and input on the work carried out to-date under the NCM initiative's three work-streams: country focus, modelling, and concept development; and the suggested next steps to progress and consolidate various strands of the NCM initiative's work to support 'networking' in the future.

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SESSION 1 – COUNTRY FOCUS

a) The “Mitigation Action Assessment Protocol” (MAAP) and its country pilots

The MAAP is a quantitative tool developed by the NCM initiative to assess the Mitigation Value (MV)¹ of different carbon programs that have, or may have in the future, a crediting component. The NCM initiative’s main focus this year is to pilot the MAAP tool in a wide range of countries in order to strengthen the design and implementation of mitigation actions, assist countries in the prioritization and comparison of mitigation actions and, in time, support the fungibility of assessed actions into international carbon markets. Based on pilot experiences in Peru and Thailand, the NCM initiative’s partners discussed and agreed upon three key follow-up tasks:

- **Country pilots (June, 2016).** The NCM initiative will continue to explore piloting opportunities in countries, such as Mexico, Chile, Jordan, Sri Lanka, India and countries in Japan’s Joint Crediting Mechanism.
- **The MAAP online tool and database (July, 2016)** will be developed to enhance the accessibility and usability of the tool so that non-specialists can easily evaluate and compare a wide range of mitigation programs. The end-goal is to position the MAAP as a point of reference to guide capacity building, track low-carbon development, and compare and ultimately trade units from different crediting programs.
- **The MAAP-Design (June, 2016)** will be developed to only assess programs based on how well they are designed. By targeting less advanced programs at the early design stage, the MAAP-Design aims to respond to countries’ short term needs to develop robust mitigation actions by enabling more targeted capacity building, facilitating climate finance, and enhancing the participation in low-carbon programs.

b) The NCM initiative’s Scoping Study in China

In 2016, the NCM Initiative formally commenced a collaboration with Tsinghua University, China Beijing Environmental Exchange (CBEE) and the University of Edinburgh on a Scoping Study in China titled “Exploring international linkage opportunities for China’s carbon markets and potential support from the NCM initiative”. The main purpose of the Scoping Study is to understand key policy makers, influential stakeholders in China, as well as international carbon market experts’ perceptions of domestic and international carbon market linkage in China, and to explore the possibility of using the NCM initiative’s MV Assessment Framework as a mechanism to facilitate domestic/international linkages in the future. The study involves three key components: **stakeholder consultations**² which will be conducted in June and July; **a qualitative research paper** building on previous work on carbon market linkage and the stakeholder consultations; and **a workshop on “International Carbon Market Linkage in China”** that will be held on September 1 or 2, 2016. A separate roundtable discussion with a smaller group of stakeholders

¹ The MV assessment framework is a key component of the NCM initiative, it aims to facilitate heterogeneous carbon market linkage based on a shared understanding of the relative climate change mitigation impact (i.e. MV) of different climate actions.

² Stakeholders that are being consulted include representatives of China’s national government and provincial governments involved in the development of China’s national and provincial ETES; major trading participants such as state-owned enterprises; as well as international carbon market experts.

(including National and Local Development and Reform Commissions), will be organized alongside the workshop in order to have a more in-depth discussion about findings from the Scoping Study in China.

Workshop participants focused their discussion on developing a possible strategy for the stakeholder consultations, and identified three key considerations that should be taken into account when framing the NCM initiative's key concepts to stakeholders: i) risks and opportunities of linking for China; ii) key benefits of carbon market linkage for China, including cost efficiency gains and potential large revenue streams as a result of China's competitive advantage in an international carbon market; iii) the importance of building a robust legal and regulatory framework to support carbon market linkage; and iv) how MV could be operationalized to support heterogeneous linkages in China.

c) The NCM initiative's Scoping Study in India

In 2016, the NCM initiative formally commenced a collaboration with The Energy & Resources Institute (TERI) on a Scoping Study titled "Enhancing the transparency, comparability and linkage of climate actions in India through the NCM initiative". The primary objective of the study is to develop the methodology to measure and compare the MV of the "Performance Achievement Trade" (PAT) and "Renewable Energy Certificate" (REC) scheme. One way to achieve this is to "unbundle the environmental attributes" of the two schemes, by quantifying and differentiating the global benefits of emission reduction (i.e. MV) and domestic co-benefits. "Unbundling the environmental attributes" through the NCM Scoping Study could have important synergies with the second component of India's Market Readiness Proposal under the Partnership for Market Readiness (PMR), which is exploring how "green credits", accounting for both co-benefits and emission reduction benefits, could be developed in India. The draft research paper will be shared by September 30, 2016.

SESSION 2 – DATA AND MODELLING

In 2016, the NCM initiative has commenced a series of modelling exercises to quantify the impact of various linking scenarios (i.e. no linking, direct linking and 'networking') on the costs, emissions, and trade flows of China, Korea and Mexico's ETS. The findings would be used to guide the design of trading rules that would be tested in a simulation exercise supported by the NCM initiative.

Moving forward, ENERDATA will first test the proposed linking scenarios on 2 jurisdictions, China and South Korea, and if successful, ENERDATA would evaluate the impact of linking with Mexico's ETS as well. The preliminary findings will be presented at a **multi-stakeholder workshop in DC** on June 21 from 3 pm to 5 pm. A separate **teleconference with the NCM initiative's 'team of experts'** will be arranged on the same day from 10 am to 11:30 am to receive further feedback and input on the findings of the modelling exercises. Finally, the NCM initiative is exploring opportunities to collaborate with the Asian Development Bank to support an **extension of the Scoping Study in China** to include a section on modelling. The main purpose of doing so is to highlight the pros and cons for China to link its ETS internationally, without necessarily giving concrete case studies. ENERDATA may also present the findings from the existing modelling exercises at the workshop on "International Carbon Market Linkage in China" on September 1 or 2 2016 in Beijing.

SESSION 3 – INTERNATIONAL CARBON ASSET RESERVE (ICAR)

The NCM initiative is developing the blueprints for the ICAR, which aims to facilitate the trade of heterogeneous carbon assets between jurisdictions, and act as an intermediary for mitigating carbon market risks while still preserving countries' political sovereignty. Three ICAR prototypes proposed in the Grantham Research Institute and INFRAS Consulting Group's recent paper on "ICAR - Prototype for instruments reducing risks and linking carbon markets" were presented.

The first prototype, "Platform", takes a decentralized approach whereby ICAR would simply be a marketplace where local allowances would be traded. On the other hand, the second prototype, "Central Hub", is a platform for centralized trading of international units (IU) among member jurisdictions. Using a *universal* MV among member jurisdictions of the ICAR, "Central Hub" would create a pool of IU and offer buy/sell services which could be used to mitigate carbon and price risks. Lastly, the third prototype, "Gateway", is a facilitator for one-way transfer of IU and offers insurance services for key mitigation action risks. It is envisioned that ICAR would be developed in a phased manner, where "Central Hub" would only be introduced at a later stage once a universal MV has been established.

As a next step, it was discussed that there is an opportunity to bring together the ICAR work and Enerdata's modelling work. For instance, Enerdata's POLES model could be used to test the impact of the ICAR prototypes on costs, trade flows and emissions in real jurisdictions.

SESSION 4 - REGULATORY FRAMEWORK TO SUPPORT LINKING

a) Regulatory framework to support carbon market linkage

The session provided an opportunity to discuss three key findings of Reed Smith's paper for the NCM initiative on "Regulatory framework to support carbon market linkage". First, given the sense of urgency to reduce the required emissions to meet the global 2 C target, there is a need to significantly increase the efficiency of linking carbon markets. Second, regulatory frameworks for carbon market linkages should be developed separately from existing trading agreements, given the specificity of carbon market linkage requirements. Lastly, a key next step for developing the regulatory framework for networking would be to determine *who* will run the MV model and *how* the MV would be operationalized.

As a next step, it was agreed that there is a real need to build on the findings of Reed Smith's paper, to further define the legal, regulatory and governance arrangements to support linking under the Cooperative Approaches mechanism of the Paris Agreement. The NCM initiative will consider future work in this regard.

b) Implementation of the Paris Agreement and update on negotiations in Bonn

It is currently unclear whether Internationally Transferred Mitigation Outcomes (ITMOs) will be transferred as units or some other means, and there is still significant uncertainty around how Certified Management Accountant (CMA) governance for ITMOs should be developed. Moving forward, the NCM initiative may therefore consider formally submitting paper(s) to the United Nations Framework Convention on Climate Change (UNFCCC) consultation process in order to “intellectually inform” the development of ITMOs.

SESSION 5 – MITIGATION VALUE ASSESSMENT FRAMEWORK

a) COP21, carbon pricing and ‘Climate Clubs’

The Paris Agreement suggests that the implementation of countries’ mitigation commitments will be a bottom-up process. Since linking is potentially disruptive for both jurisdictions and entails a loss of national control, exchange rates could be used to account for the differences in economic development and preserve the political sovereignty of linked jurisdictions. Exchange rates could be calculated in a number of ways. For example, it could be calculated based on market carbon price or institutional/‘shadow’ carbon price.

b) Mitigation Value to enable international linkage of domestic programs

The World Bank Group has been carrying out in-house work on how to translate a benchmark gap analysis into a carbon exchange rate. Anchoring the ‘global carbon budget’ (i.e. the level of emissions required to stay within the 1.5 or 2C global target), this work aims to calculate the MV based on countries’ climate ambition at the global level. Linking carbon assets to a global carbon budget, the framework seeks to account for the difference between countries’ planned emissions as set out in their Nationally Determined Contributions (NDCs) and countries’ carbon budget that would be compatible with the 1.5 or 2 C target. Criteria that could be considered when determining countries’ 2 degree-compatible carbon budget include emissions responsibility, economic capacity and development indicators, relative costs of action and mitigation potential.

Moving forward, the NCM initiative core team³ at the World Bank will continue to develop and refine these key concepts.

³ Members of the NCM initiative’s core team at the World Bank are Chandra Sinha, Bianca Sylvester, Johannes Heister, Alan Lee, Rubaina Anjum, Rachel Mok

APPENDIX

The Partners & Strategy Workshop Agenda

Date & Time: Saturday May 28, 2016, 9:00 am – 4:00 pm,

Location: Hyatt Regency Cologne, Kennedy-Ufer 2a, Cologne, NW, 50679, Germany (Meeting Room Franken, M-floor)

8:30	Coffee
9:00 – 9:20	<ul style="list-style-type: none"> Overview of the NCM initiative’s vision and work plan, in the context of the World Bank Group’s broader climate and carbon finance initiatives: <i>Venkata Ramana Putti, World Bank Group (10 min)</i> Objectives of the workshop and introduction to the agenda: <i>Chandra Shekhar Sinha, World Bank Group (10 min)</i>
Session 1 – Country Focus	
9:15 – 10:00	<p>Session 1a – ‘Overview of the “Mitigation Action Assessment Protocol” (MAAP) and its application in Thailand and Peru, and plans for its application in Chile’</p> <p>This session will introduce the MAAP tool and discuss the lessons learnt from applying it in Peru to compare and prioritize Nationally Appropriate Mitigation Actions (NAMAs); and in Thailand to compare and prioritize Low Carbon City (LCC) Programs. The session will then explore opportunities to apply the MAAP to support the quantitative assessments, benchmarking and possibly linkage of mitigation actions in Chile.</p> <ul style="list-style-type: none"> Expert presentation: <i>Miguel Rescalvo, World Bank Group (25 min)</i> Discussion and Q&A <i>(20 min)</i>
10:00 – 10:45	<p>Session 1b – ‘The NCM initiative’s activities in Asia’</p> <p>This session will provide an update on the NCM initiative’s Scoping Studies in China and India.</p> <ul style="list-style-type: none"> Update on Scoping Study and stakeholder consultations in China which aims to assess the perceptions on domestic and international carbon market linkages and explore opportunities for the NCM initiative to support linking interests. <i>Xi Liang, University of Edinburgh (15 min)</i> Expert presentation on Scoping Study in India which aims to enhance the transparency and comparability of India’s “Perform Achieve Trade” (PAT) and “Renewable Energy Certificate” (REC) schemes, by assessing the Mitigation Value of the climate change mitigation benefits of the two programs. <i>Karan Mangotra, The Energy & Resources Institute (TERI) (15 min)</i> Discussion and Q&A <i>(15 min)</i>
10:45	Break
Session 2 – Data and modelling	
11:00 – 11:45	<p>This session will present the findings from the NCM Initiative’s modelling work that is being carried out by ENERDATA. The models aim to assess and compare the impact of different linking scenarios (i.e. no linking, linking and ‘networking’) on trade flows, emissions, carbon prices and costs.</p> <ul style="list-style-type: none"> Expert presentation: <i>Cyril Cassisa, ENERDATA (25 min)</i> Discussion and Q&A <i>(20 min)</i>

Session 3 – International Carbon Asset Reserve (ICAR)	
11:45 – 12:10	<p>This session will examine possible mechanics for an ICAR, based on the findings of a recent paper completed by INFRAS and the Grantham Research Institute. In particular, the session will present three ICAR prototypes with distinct characteristics that may be used under different linking circumstances.</p> <ul style="list-style-type: none"> • Presentation: <i>Juerg Fussler, Infrass Consulting Group and Luca Taschini, Grantham Research Institute (15 min)</i> • Discussion and Q&A (10 min)
Session 4 – Regulatory framework to support linkage both within and outside the UNFCCC process	
12:10 – 1:00	<p>This session will explore what regulatory frameworks may be required to support linkage both within and outside the UNFCCC process.</p> <ul style="list-style-type: none"> • Presentation on regulatory framework which will identify key provisions to support carbon market linkage on a bilateral, regional and multilateral basis, based on the findings of a recent paper completed by Reed Smith. <i>Peter Zaman, Reed Smith (15 min)</i> • Presentation on Implementation of Article 6 and update of negotiations in Bonn: <i>Andrei Marcu, ICTSD (15 min)</i> • Discussion and Q&A (20 min)
1:00	Lunch
Session 5 –Mitigation Value Assessment Framework	
2:00 – 3:00	<p>Session 4a – ‘Mitigation Value to Enable Linkage of Domestic Programs</p> <p>This session will explore options for using MV to enable comparability and linkage of a wide range of mitigation programs within jurisdictions.</p> <ul style="list-style-type: none"> • Expert presentation on linking Emission Trading Schemes (ETS) within jurisdictions: <i>Bianca Sylvester, World Bank Group (15 min)</i> • Expert presentation on calculating exchange rates to support linking within jurisdictions: <i>Michael Grubb, University College London (15 min)</i> • Discussion and Q &A (30 min)
3:00 – 3:30	<p>Session 4b – ‘Mitigation Value to Enable International Linkage of Domestic Programs</p> <p>This session will explore how MV may be applied at the global level to assess a jurisdiction’s relative contribution to the global mitigation target, taking account of the differences in countries’ domestic circumstances and priorities.</p> <ul style="list-style-type: none"> • Expert presentation: <i>Johannes Heister, World Bank Group (20 min)</i> • Discussion and Q&A (10 min)
Wrap up	
3:30 – 4:00	<p>Summary and next steps</p> <p>The final session will discuss how key components of the NCM initiative may be refined and brought together to facilitate carbon market linkages in the future.</p> <ul style="list-style-type: none"> • Discussion, Moderator: <i>Chandra Shekhar Sinha, World Bank Group (30 min)</i>

Meeting participants

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