Prospects for German cooperation on the development of carbon markets in line with Article 6

Workshop on options for enhancing international cooperation to implement Article 6 of the Paris Agreement

Berlin, 25th January 2017
WP1: Analysis of current discussions on the development of market mechanisms

Input paper: Market Mechanism Positions on the way to Paris

WP2: Analysis of negotiation results of COP21 and development of targets and positions for the negotiation process in 2016

Discussion paper: International Market Mechanisms after Paris

WP3: Exemplary design for the use of market mechanisms, including ETS, based on a new climate regime for selected partner countries

Case studies: Ukraine, Vietnam, Ethiopia
Content

» Background

» Approach & Results
  • German carbon market cooperation
  • Country selection
  • Case studies

» Introduction to selected case countries
  • Ukraine
  • Vietnam
  • Ethiopia
Article 6 of Paris Agreement provides framework for international cooperation through markets

- Art. 6.2 “cooperative approaches” (CA)
- Art. 6.4 “mitigation and sustainable development mechanism” (MSDM)

Parties have different positions on use of market mechanisms and are at different stages of carbon market development

Different options for use of Article 6
Central question: How can international cooperation in general and German cooperation in particular contribute to a rule-consistent and well-integrated use of market instruments in a post-Paris world?

Further development of existing cooperation action in order to support…

1. **At partner country level**
   - …integration of existing mechanisms into post-Paris world
   - …conceptualisation of new mechanisms in line with Article 6

2. **At German government level**
   - …definition of rules and regulations for Article 6
   - …definition of German negotiation position
Approach

» Staged approach structured around three pillars:

1. German carbon market cooperation
   Objective: Provide an overview on German carbon market cooperation in the form of a comprehensive carbon market inventory

2. Country selection process
   Objective: Select three candidates for case studies that represent a spectrum in terms of carbon market readiness and, accordingly, options to make use of Article 6

3. Case studies
   Objective: Analyse case study candidates to deliver case-based recommendations and inputs for the further development of cooperation activity and to inform negotiations around Article 6
German carbon market cooperation

**Objective:** Provide an overview on German carbon market cooperation in the form of a comprehensive carbon market inventory

**Criteria:**
- Direct or indirect involvement of Germany in cooperation activity
- Focus of cooperation activity on markets or related issues
- Cooperation activity has taken place within past five years
- Information on cooperation activity is publicly accessible

**Data collected on country-by-country basis in comprehensive excel sheet**
- 34 countries, 81 projects and initiatives
- Information on scope, type, focus, status, funding source, volume, time frame etc.
### Example of Brazil

<table>
<thead>
<tr>
<th>Scope</th>
<th>Project Name</th>
<th>Focus</th>
<th>Type of cooperation</th>
<th>Status</th>
<th>Funding Source</th>
<th>Volume</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilateral</td>
<td>Programme Support for Implementation of the National Policy on Climate Change (PNMC)</td>
<td>MRV</td>
<td>Capacity Building</td>
<td>Implementation</td>
<td>IKI (BMUB budget title 896 05)</td>
<td>9,000,000 EUR (total for the project)</td>
<td>08/2016 - 11/2021</td>
</tr>
<tr>
<td>Bilateral</td>
<td>Masterplan to Harness Biogas Potential in Rio Grande do Sul</td>
<td>CDM/PoA</td>
<td>Capacity building; Pilot preparation</td>
<td>Completed</td>
<td>IKI (BMUB budget title 896 05)</td>
<td>157,387 EUR</td>
<td>08/2008 - 02/2010</td>
</tr>
<tr>
<td>Bilateral</td>
<td>PoA for Energy Efficiency Improvement in Buildings</td>
<td>CDM/PoA</td>
<td>Capacity building; Pilot preparation</td>
<td>Completed</td>
<td>IKI (BMUB budget title 896 05)</td>
<td>132,000 EUR</td>
<td>10/2008 - 02/2009</td>
</tr>
<tr>
<td>Multilateral</td>
<td>Country Manager Project - Brazil</td>
<td>CDM/PoA</td>
<td>Capacity building; Pilot preparation</td>
<td>Completed</td>
<td>CDM/JI Initiative (BMUB budget title 532 05)</td>
<td>2,100,000 EUR (total 2nd phase)</td>
<td>07/2010 - 06/2012 (2nd phase)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,700,000 EUR (total 3rd phase)</td>
<td>07/2012 - 06/2015 (3rd phase)</td>
</tr>
<tr>
<td>Multilateral</td>
<td>Partnership for Market Readiness (PMR)</td>
<td>Carbon markets</td>
<td>Capacity building</td>
<td>Implementation</td>
<td>IKI (BMUB budget title 896 05)</td>
<td>3,350,000 USD (total allocated to Brazil through PMR)</td>
<td>12/2011 - 06/2021</td>
</tr>
</tbody>
</table>
### Scope of cooperation

<table>
<thead>
<tr>
<th>Scope</th>
<th>Number of activities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bilateral</strong></td>
<td>23</td>
<td>Mexico: Preparation of an Emissions Trading System in Mexico</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turkey: Capacity Development for a MRV System for GHG Emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tunisia: Capacity Development for GHG Inventories and MRV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>China: Supporting the Establishment of a National ETS in China - Phase I</td>
</tr>
<tr>
<td><strong>Multilateral</strong></td>
<td>38 (14 initiatives)</td>
<td>Country manager project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information Matters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accounting Rules for the Achievement of the Mitigation Goals of Non-Annex I Countries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measurement and Performance Tracking of Mitigation Actions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capacity Building for Emissions Trading to Support Bilateral Cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Future of the Carbon Market Foundation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthening the African CDM Pipeline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joint Implementation Coordination Project (JIKO)</td>
</tr>
<tr>
<td><strong>Multilateral (indirect)</strong></td>
<td>20 (3 initiatives)</td>
<td>Partnership for Market Readiness (PMR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initiative for Climate Action Transparency (ICAT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nitric Acid Climate Action Group (NACAG)</td>
</tr>
</tbody>
</table>
## Focus and type of cooperation

<table>
<thead>
<tr>
<th>Focus</th>
<th>Number of activities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRV</td>
<td>25</td>
<td>Information Matters, Measurement and Performance Tracking, …</td>
</tr>
<tr>
<td>CDM/JI</td>
<td>24</td>
<td>Future of the Carbon Market Foundation/ Sustainable biomass in Senegal, …</td>
</tr>
<tr>
<td>ETS</td>
<td>16</td>
<td>Capacity Building for Low Carbon Growth in Ukraine, …</td>
</tr>
<tr>
<td>Carbon markets</td>
<td>10</td>
<td>PMR, JIKO</td>
</tr>
<tr>
<td>Sectoral crediting</td>
<td>6</td>
<td>PMR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of activities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity building</td>
<td>79</td>
<td>Capacity Building for Emissions Trading to Support Bilateral Cooperation, Information Matters, Measurement and Performance Tracking, …</td>
</tr>
<tr>
<td>Pilot preparation</td>
<td>8</td>
<td>Capacity Development for GHG Inventories and MRV in Tunisia, CDM Rural Electrification Project in Burkina Faso, …</td>
</tr>
<tr>
<td>Financial support</td>
<td>5</td>
<td>Future of the Carbon Market Foundation/ Efficient cook stoves in Zambia, Nitric Acid Climate Action Group (NACAG), …</td>
</tr>
<tr>
<td>Scientific guidance</td>
<td>5</td>
<td>Joint Implementation Coordination Unit (JIKO), PoA Working Group, …</td>
</tr>
</tbody>
</table>
Funding sources

- BMUB budget title 896 05: International Climate Initiative (63)
- BMUB budget title 532 05: carbon markets
  - 532 05 – 1 → CDM/JI Initiative (8)
  - 532 05 – 2 → Capacity Building ETS and ICAP (8)
- UFOPLAN (2)

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of activities</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>In implementation</td>
<td>47</td>
<td>Information Matters, Measurement and Performance Tracking, …</td>
</tr>
<tr>
<td>Completed</td>
<td>28</td>
<td>PoA for Energy Efficiency Improvement in Buildings in Brazil, Strategies for Carbon Market Development through Standardised Baselines in African LDCs, …</td>
</tr>
<tr>
<td>Planned</td>
<td>6</td>
<td>Preparation of an Emissions Trading System in Mexico, Capacity Building for Emissions Trading to Support Bilateral Cooperation in Thailand, …</td>
</tr>
</tbody>
</table>
German carbon market cooperation – World map

- Bilateral cooperation
- Multilateral cooperation
- Multilateral (indirect) cooperation
Staged approach structured around three pillars:

1. **German carbon market cooperation**
   Objective: Provide an overview on German carbon market cooperation in the form of a comprehensive carbon market inventory.

2. **Country selection process**
   Objective: Select three candidates for case studies that represent a spectrum in terms of carbon market readiness and, accordingly, options to make use of Article 6.

3. **Case studies**
   Objective: Analyse case study candidates to deliver case-based recommendations and inputs for the further development of cooperation activity and to inform negotiations around Article 6.
Objective: Select three candidates for case studies that represent a spectrum in terms of carbon market readiness and, accordingly, options to make use of Article 6.
Definition of criteria and categories that reflect spectrum of carbon market related expertise across countries

Criteria are **qualitative** in nature and serve as an **orientation** for categorisation taken up in expert discussions

<table>
<thead>
<tr>
<th>Exemplary criteria</th>
<th>Advanced</th>
<th>Medium</th>
<th>Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position on carbon markets</td>
<td>positive</td>
<td>open</td>
<td>open</td>
</tr>
<tr>
<td>Participation in international initiatives</td>
<td>yes</td>
<td>yes</td>
<td>possibly</td>
</tr>
<tr>
<td>Experience with international market mechanisms</td>
<td>yes</td>
<td>yes</td>
<td>possibly</td>
</tr>
<tr>
<td>Experience with national market instruments</td>
<td>one or more instruments at national or sectoral level exist</td>
<td>instruments at national or sectoral level exist/ are planned</td>
<td>do not exist/ are planned</td>
</tr>
<tr>
<td>Legal and institutional framework for market mechanisms</td>
<td>exists/ is being established</td>
<td>is being established</td>
<td>does not exist/ is planned</td>
</tr>
<tr>
<td>MRV system</td>
<td>exists/ is being established</td>
<td>is being established</td>
<td>does not exist/ is planned</td>
</tr>
<tr>
<td>GHG inventory</td>
<td>recent and high quality</td>
<td>exists</td>
<td>exists</td>
</tr>
<tr>
<td>Options for linking market instruments</td>
<td>explored (short-term)</td>
<td>considered (medium-term)</td>
<td>not ruled out (long-term)</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Creation of **long-** and **short-list** of countries per category:

<table>
<thead>
<tr>
<th>Advanced</th>
<th>Medium</th>
<th>Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Chile</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>Mexico</td>
<td>Tunisia</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Turkey</td>
<td>Senegal</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Vietnam</td>
<td>Azerbaijan</td>
</tr>
<tr>
<td>South Korea</td>
<td>Brazil</td>
<td>Burkina Faso</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>Egypt</td>
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<tr>
<td></td>
<td>South Africa</td>
<td>Georgia</td>
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<tr>
<td></td>
<td>Thailand</td>
<td>Ghana</td>
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<tr>
<td></td>
<td></td>
<td>Indonesia</td>
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<tr>
<td></td>
<td></td>
<td>Jordan</td>
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<td></td>
<td></td>
<td>Morocco</td>
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<td></td>
<td></td>
<td>Peru</td>
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<td></td>
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<td>Philippines</td>
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<td></td>
<td>Rwanda</td>
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<tr>
<td></td>
<td></td>
<td>Saint Vincent and the Grenadines</td>
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<td></td>
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<td>Sri Lanka</td>
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<tr>
<td></td>
<td></td>
<td>Uganda</td>
</tr>
</tbody>
</table>
Final case selection:

- **Advanced group: Ukraine**
  - Active in PMR, developing MRV system and EU ETS-compatible scheme at national level
  - Considerable JI experience
  - German cooperation with Ukraine focuses on capacity building for ETS; bilateral IKI project planned for 2017

- **Medium group: Vietnam**
  - Active in PMR, exploring sectoral approaches in steel and waste sector and ETS for steel sector after 2020
  - Considerable CDM experience; bilateral document for the introduction of the JCM signed in 2013
  - German cooperation with Vietnam focuses on support of MRV system

- **Early group: Ethiopia**
  - Least Developed Country with aspiration to achieve middle income status by 2025
  - Not active in PMR, but increasing interest in carbon markets reflected in strong commitment to international climate negotiations
  - Some CDM experience; bilateral document for the introduction of the JCM signed in 2013
  - German cooperation with Ethiopia focuses on support of MRV system
Staged approach structured around three pillars:

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Case studies

» **Objective:** Analyse case study candidates to deliver case-based recommendations and inputs for the further development of cooperation activity and to inform negotiations around Article 6.

**Potential implication of categorisation** for the use of Article 6:

» **Advanced stage**

- Possibly interest in options provided through Art. 6.2, e.g. with a view to linking ETS
- Countries interested in reflecting transfers of mitigation outcomes under Art. 6.2 must dispose of necessary legal and institutional arrangements at domestic level that safeguard environmental integrity
- Art. 6.2 potentially more attractive than Art. 6.4 for countries at a more advanced stage of carbon market development
Case studies

» **Medium stage**

- Possibly interest in using Art. 6.2, e.g. to reflect bilateral mechanism
- Countries must dispose of necessary legal and institutional arrangements at domestic level that safeguard environmental integrity
- Bilateral mechanism potentially more attractive than linking of ETS for countries at a medium stage of carbon market development that have not (yet) established domestic ETS

» **Early stage**

- Possibly interest in using Art. 6.4
- Countries with limited domestic capacity can benefit from centralised governance approach and CDM experience
- Will early-stage countries be able and willing to fulfil more stringent requirements under Art. 6.4?

Note: Countries may as well look into options to use both Art. 6.2 and 6.4, or use either of the mechanisms in a different way than expected. As long as no rules for Article 6 have been established, the potential use of markets leaves much room for interpretation.
Content

» Background

» Approach & Output
  • German carbon market cooperation
  • Country selection
  • Case studies

» Introduction to selected case countries
  • Ukraine
  • Vietnam
  • Ethiopia
Country context and carbon market activity

- Overall greenhouse gas emissions (2014): 353.04 MtCO2e (excl. LULUCF); 340.13 MtCO2e (incl. LULUCF)

Participation in carbon pricing instruments

- Plans to establish a national ETS in line with obligations under UA - EU Association Agreement of 2014 (concept of ETS development adopted in 2015)
- Joint Implementation (JI): 321 JI projects - largest number of Track 1 projects; second largest in Track 2 (after Russia); largest number of issued ERUs; participation in the Green Investment Scheme (GIS)

Current capacities

- Reporting: 6 National Communications (latest 2013), Biennial Reports not available; last year of inventory - 2014 (National Inventory Report (NIR) 2016)
- Major institutional changes in 2014 (liquidation of State Environmental Investment Agency (SEIA), centralisation under Ministry of Ecology and Natural Resources)
- Potential concerns from experts regarding NDC ambition level and quality of reporting under UNFCCC

### Sectors

<table>
<thead>
<tr>
<th>Sectors</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>67%</td>
</tr>
<tr>
<td>(Transport share in energy)</td>
<td>(15%)</td>
</tr>
<tr>
<td>Industrial Processes and Product Use</td>
<td>17%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>13%</td>
</tr>
<tr>
<td>Waste</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: National Inventory Report Ukraine 2016
German-Ukrainian cooperation

- 4 recent/ongoing cooperation projects with Germany (main focus on MRV and ETS development; 1 project with JI focus):
  - Capacity Building for Low Carbon Growth in Ukraine (focus on ETS)
  - Capacity Building for Emissions Trading to Support Bilateral Cooperation
  - Preparation of an Emissions Trading Scheme in the Ukraine
  - Utilising Alcoholic Fermentation Residues (focus on JI)

- Type of cooperation: capacity building and technical support (establishment of a robust MRV system, administrative structures, cap setting, allocation rules)

Multilateral cooperation

- PMR focal point is Ministry of Ecology and Natural Resources of Ukraine; Market Readiness Proposal finalised in 2014

- PMR major focus: Design of a road map on ETS implementation; development of MRV as a first step towards ETS; MRV system with focus on electricity and industry

- Joint International Carbon Action Partnership (ICAP)-PMR capacity building ETS training for a wide range of stakeholders planned for 2017
Country position on Article 6 and markets as stated in NDC:

“Ukraine will participate actively in the development of existing international market mechanisms and implementation of new ones. The declared GHG emissions level does not account for the participation of Ukraine in international market mechanisms”

SBSTA Submissions (on guidance on cooperative approaches referred to in Art. 6, para. 2; on rules, modalities and procedures for the mechanism established by Art. 6, para. 4):

- Do not specify which mechanism Ukraine intends to use
- Mention one of lessons learned from Kyoto Protocol - lack of simple and clear determination of measuring and legal meaning of mitigation outcomes from KP flexible mechanisms
- “… any and all outcomes from activities under cooperative approaches … and mechanism to contribute to the mitigation of GHG emissions and support sustainable development … shall be quantifiable and measurable in Metric Tons of CO2e of already achieved or future mitigation of GHG”

Markets in national climate policy making: ETS to be developed in accordance with UA-EU Association Agreement; however, lacking understanding and support among stakeholders; difficult political and economic situation
Initial observations on post-Paris carbon market participation

- National ETS under development; accumulated experience with carbon markets (JI and GIS)
- Active preparation through participation in international initiatives, e.g. PMR, bilateral cooperation with Germany on ETS readiness
- Comprehensive MRV for major sectors under development, also with the help of international cooperation; capacities for accounting (e.g. NIRs); quality of previous UNFCCC reporting has been criticized

- NDC indicates willingness to use markets; concerns regarding ambition level expressed by some experts; hypothesis on best suited mechanism (Art. 6.2 or 6.4): Could potentially use both (if environmental integrity and transparent reporting guaranteed)
- Other country specific aspects: Political difficulties (no general solid commitment to ETS among stakeholders; not among first priorities due to political and economic crisis), recent institutional change

Sectoral emissions share –
- Energy (57%)
- Industrial processes (9%)
- Agriculture (36%)
- LULUCF (8%)
- Waste (6%)


Carbon market activity

- **255 registered CDM projects** generating 16,353 kCERs (as of 01/12/2016)

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Registered Projects</th>
<th>CER Issuance (kCERs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomass energy</td>
<td>16</td>
<td>61</td>
</tr>
<tr>
<td>EE households</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EE own generation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fugitive</td>
<td>1</td>
<td>8,857</td>
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<tr>
<td>Hydro</td>
<td>200</td>
<td>6,343</td>
</tr>
<tr>
<td>Landfill gas</td>
<td>7</td>
<td>248</td>
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<tr>
<td>Methane avoidance</td>
<td>22</td>
<td>597</td>
</tr>
<tr>
<td>Reforestation</td>
<td>1</td>
<td></td>
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<tr>
<td>Wind</td>
<td>5</td>
<td>247</td>
</tr>
</tbody>
</table>

Source: CDM Pipeline (2016)

- **2013: Signatory of Joint Crediting Mechanism**
  - Approved methodologies (6) / Registered projects (4)
- **NAMAs under development**
- **Member of Partnership for Market Readiness**
  - Vietnam is focusing on the steel and waste sectors (ETS pilot expected to be completed by 2020)
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

» GIZ has been working in Viet Nam for more than 20 years. An example of the cooperation in relation to carbon markets includes:

» **Title:** Creation of an overarching framework for nationally appropriate mitigation actions (NAMAs) and measurement, reporting and verification (MRV) in Viet Nam  
  **Commissioned by:** BMUB  
  **Country:** Viet Nam  
  **Lead executing agency:** Ministry of Natural Resources and Environment  
  **Overall term:** 2014 to 2018

International Climate Initiative (IKI)

» Germany contributes to the Partnership for Market Readiness (PMR), which is helping to finance the implementation of an ETS pilot scheme in Vietnam.

» IKI funded project to strengthen capacities for the preparation of high quality Biennial Update Reports (BURs) and/or National Communications in Vietnam and other selected countries
In 2012, the **National Green Growth Strategy** was approved, which includes mitigation targets and measures; and regulations on linking with international carbon markets.

**Conditional INDC target** GHGs emission reduction compared to BAU: 8% (unconditionally); 25% (conditionally)

Vietnam NDC states that the country intends to apply market instruments.

NAMAs previously developed may be used within the implementation of unconditional NDC.

NAMAs currently under development (7)

Source: Presentation by Nguyen Khac Hieu (2016)
Active engagement in Article 6 negotiations

Vietnam participates in the Like Minded Developing Countries (LMDC) negotiation group

**Article 6.2**
- Supports a ‘broad’ guidance for Article 6.2 on accounting and use of ITMOs
- ITMO use to achieve NDCs shall be voluntary & only authorised by Parties
- Ensure the avoidance of double counting & transparency of governance
- Facilitate sustainable development in a ‘bottom up’ manner

**Article 6.4**
- Deliver an overall mitigation in global emissions / Complement NDC efforts
- Define the scope of activities under the mechanism
- Facilitate access for the participation of small and medium projects
- Establish a regular review process of the outcomes from the mechanism

Source: Review of the Like Minded Developing Countries (LMDC) submission to SBSTA 45 on Article 6.2, 6.4 and 6.8 of the Paris Agreement
Vietnam appears to be in the medium stage of carbon market development with a range of experience in both

- International market mechanisms i.e. Vietnam ranked 4th internationally for the number of CDM registered projects / JCM participation and
- German cooperation on various aspects of MRV and development of market mechanisms i.e. pilot ETS scheme planned based on PMR funding

Vietnam’s NDC states that the countries has experienced difficulties with the establishment of a national GHG inventory system, and MRV system at all levels.

- Data collection is challenging. Prime minister decision to set up a national inventory. Currently developing forms and templates for the process

In the medium to long term, the implementation of a proposed ETS could be reflected under Art. 6.2. However, in the shorter term, the crediting mechanism under Art. 6.4 may be more accessible whilst improvements to the domestic inventory system are ongoing.
Ethiopia

Emissions profile – **146.16 Mt CO$_{2}$e**

*0.4% of global emissions*

Sectoral emissions share –
- AFLOU (79%)
- Energy (including transport, power generation and buildings) (15%)
- Waste (4%)
- Industry (1%)

Source: own data compiled from various data sources

Carbon market activity

- **9 registered CDM projects**: 3 CDM, 6 POAs (2016)
  - Sectoral spread reflect national emission potentials - clean cook stoves, renewables, reforestation, methane avoidance, landfill gas
  - Highest emission reduction potential among African LDCs, esp. in agricultural residues
  - But… CER issuance meagre!
- Signatory of Joint Crediting Mechanism since 2013
  - 1 approved methodology: Electrification of communities using Micro hydropower generation; no projects
- Strong involvement of international players in project development
- Presence of some local private players as well
- Not a member of PMR
Support by UBA and BMUB

Focus on monitoring, reporting and verification (MRV) and CDM/POA

Capacity building (e.g. monitoring systems, GHG inventories and institutional capacities) and scientific guidance (on emission reduction accounting etc.)

Existing country and sector specific support is a connecting link for further work

- e.g. Ethiopian collaboration for development of a strategy paper on standardised baselining for rural electrification in African LDCs
Interest in markets

» **Executive level support** for carbon pricing on international platforms such as Carbon Pricing Leadership Coalition

» Also reflects in Ethiopia’s climate policy approach

**Conditional INDC target** of 255 MtCO₂e reduction from the projected BAU emissions in 2030 (400 MtCO₂e) or a 64% reduction from the BAU scenario in 2030

**INDC ‘sufficient’** on ambition and fairness (CAT analysis)

Expressly identify themselves as ‘sellers of emission reduction units’ in the INDC

Source: [http://climateactiontracker.org/countries/ethiopia.html](http://climateactiontracker.org/countries/ethiopia.html)
Active engagement in Article 6 negotiations

Openness to use both Article 6.2 and 6.4

**Article 6.2**
- ITMOs need to be GHG reduction units
- All NDCs need to be quantifiable in terms of their GHG impact
- ITMO transfers can be bilateral or multilateral or both
- Supports a ‘broad’ guidance on accounting and use of ITMOs to avoid any double counting
- Discusses potential situations that risk environmental integrity of ITMO transfers due to varied nature of NDCs, e.g. ‘encouraging ambition from lax contributions…and then wishing to participate as sellers of ITMOs’, ‘encouraging to enhance inadequate information from ITMOs’, ‘long term targets without short term balance sheets’

**Article 6.4**
- Draws on African CDM experience to discuss design aspects of a ‘fresh’ Article 6.4 M&P
  - Inclusiveness in accounting approaches and methodologies
  - Reflection on specific circumstances of Africa
- Suggests checking baselines at the plant level (with peers), national level (with NDC) and global level (no double accounting) for ensuring ‘overall mitigation and ‘long term benefits’

Source: Review of Ethiopia’s submission to SBSTA 45 on Article 6.2 and 6.4
There is openness in Ethiopia to explore carbon pricing instruments going forwards.

To this effect, the ongoing efforts on developing domestic institutional arrangements for MRV (e.g. GHG inventorization) could be useful foundation stones for facilitating instrument design in future.

On the other hand, relevant experiences with international market mechanisms exist which can be strengthened.

Good existing German cooperation on various aspects of MRV.

There is an opportunity for continuing, deepening and positioning cooperation on design and implementation of market-based mechanisms under the Paris Agreement, esp. for Art. 6.4 mechanism.
Thank you for your attention!

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