Climate Finance Innovators: Linking market mechanisms and climate finance in Africa

Stephan Hoch, Hanna Jenne, Sandra Greiner

COP24
December 06, 2018
Agenda

- Introduction and current status
- Project Overview
- COP 24 Policy Brief
- Country experiences
Project Overview

- **Support to African CDM pipeline (especially PoAs), sustaining and scaling up mitigation impacts through results-based climate finance (GCF)**

- **Measures**: funding proposals, capacity building, conceptual work, technical assistance and outreach related to the operationalization of the PA, in particular Art.6, but also results-based climate finance (GCF)

- **Partners**
  - Ethiopia, Uganda, Senegal
  - Regional organizations in East and West Africa (UNFCCC, EADB, BOAD)
  - UNFCCC Negotiations
Results framework

Impact

Improved access to climate finance for mitigation technologies in sub-Saharan Africa will help to achieve and enhance the ambition of African NDC objectives and climate resilience

Outcome

Strengthening mitigation capacities by elaborating innovative climate finance models
Strengthening national and regional capacities for the mobilisation of investments
Strengthening the capacities of negotiators in the international climate negotiations

Output I
Climate finance proposals and national capacity building

Output II
Regional capacity building

Output III
Conceptual work (Publications and methodologies)

Output IV
Negotiation support, outreach and public relations
New policy brief addressing COP 24

Article 6 rulebook has to encourage participation from all countries and private sector

Such initiatives should build on successful CDM reforms, pipeline and tools such as programmatic crediting with high sustainable development impacts

Article 6 offers new finance streams, but new requirements should reflect African circumstances

African countries are preparing for Article 6, but this should be more actively supported from the very start, including dedicated funding

https://www.climatefinanceinnovators.com/publication/africa-is-getting-ready-for-article-6/
Thank you and visit us on our website!
Stephan Hoch, hoch@perspectives.cc
www.climatefinanceinnovators.com
## African registered PoAs (5+CPAs, public/private CME)

<table>
<thead>
<tr>
<th>Title</th>
<th>Host country</th>
<th>Coordinating Entity</th>
<th>PoA-Type</th>
<th>CPAs</th>
<th>2012 ktCO2</th>
<th>2020 ktCO2</th>
<th>Issuance kCERs</th>
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</thead>
<tbody>
<tr>
<td>PoA for the Reduction of emission from non-renewable fuel from cooking</td>
<td>Madagascar, (many)</td>
<td>Green Development AS</td>
<td>EE households</td>
<td>59</td>
<td>0,000</td>
<td>29.854,592</td>
<td>0,000</td>
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<tr>
<td>Uganda Municipal Waste Compost Programme</td>
<td>Uganda</td>
<td>National Environmental Management Authority</td>
<td>Landfill gas</td>
<td>12</td>
<td>136,847</td>
<td>1.018,526</td>
<td>16,549</td>
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<tr>
<td>Green Power for South Africa</td>
<td>South Africa</td>
<td>The Standard Bank of South Africa</td>
<td>Hybrid renewables</td>
<td>11</td>
<td>0,000</td>
<td>12.333,620</td>
<td>0,000</td>
</tr>
<tr>
<td>Solar Water Heater Programme in Tunisia</td>
<td>Tunisia</td>
<td>Agence Nationale pour la Maîtrise de l’Energie</td>
<td>Solar</td>
<td>8</td>
<td>15,719</td>
<td>417,630</td>
<td>0,000</td>
</tr>
<tr>
<td>SASSA Low Pressure Solar Water Heater Programme</td>
<td>South Africa</td>
<td>Solar Academy of Sub Saharan Africa</td>
<td>Solar</td>
<td>7</td>
<td>166,262</td>
<td>3.258,350</td>
<td>99,170</td>
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<tr>
<td>CDM Africa Wind and Solar Programme of Activities for South Africa</td>
<td>South Africa</td>
<td>CDM Africa Wind/ Solar</td>
<td>Hybrid renewables</td>
<td>7</td>
<td>0,000</td>
<td>20.337,200</td>
<td>0,000</td>
</tr>
<tr>
<td>DelAgua Public Health Program in Eastern Africa</td>
<td>Burundi, Rwanda, Tanzania, Uganda</td>
<td>DelAgua Health and Development Programs</td>
<td>EE households</td>
<td>7</td>
<td>0,000</td>
<td>1.593,909</td>
<td>66,217</td>
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<tr>
<td>African Improved Cooking Stoves Programme of Activities</td>
<td>Ghana</td>
<td>Envirofit International</td>
<td>EE households</td>
<td>6</td>
<td>0,645</td>
<td>2.370,399</td>
<td>12,472</td>
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<tr>
<td>Improved Cook Stoves programme for Rwanda</td>
<td>Rwanda</td>
<td>atmosfair gGmbH</td>
<td>EE households</td>
<td>6</td>
<td>9,948</td>
<td>2.221,250</td>
<td>6,517</td>
</tr>
<tr>
<td>Renewable Energy CDM Programme of Rwanda (RECPP)</td>
<td>Rwanda</td>
<td>Ngali Energy</td>
<td>Hybrid renewables</td>
<td>6</td>
<td>0,000</td>
<td>256,389</td>
<td>0,000</td>
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<tr>
<td>Improved Cooking Stoves for Nigeria Programme of Activities</td>
<td>Nigeria</td>
<td>Developmental Association for Renewable Energies</td>
<td>EE households</td>
<td>5</td>
<td>11,181</td>
<td>990,740</td>
<td>12,494</td>
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<tr>
<td>Tanzania Renewable Energy Programme</td>
<td>Tanzania</td>
<td>Rural Energy Agency</td>
<td>Mixed renewables</td>
<td>5</td>
<td>0,000</td>
<td>504,859</td>
<td>0,000</td>
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</tbody>
</table>
Ethiopia Off-Grid Renewable Energy CDM Programme

**PoA Technologies**

- Solar Lamps
- Mini-Hydroelectric Plants
- Solar Home Systems (SHS)
- Institutional Solar PV Plants
- Solar Pumps for Irrigation

- CDM PoA registered in July 2016
- Development Bank of Ethiopia is Coordinating/Managing Entity (CME)
- World Bank Carbon Initiative for Development supports PoA development, purchases 800,000 certified emission reductions (CER) until 2024.
- 3 Component Project Activities (CPA) circa 150-200k solar lamps, circa 20kCERs/year
Ethiopia Clean Cooking CDM Programme of Activities

- CDM PoA registered March 2016
- Development Bank of Ethiopia is PoA Coordinating/Managing Entity
- World Bank Carbon Initiative for Development supports PoA development, purchases 1.1 million certified emission reductions (CERs) until 2024.
- 2 Component Project Activities (CPA) registered for this PoA: circa 4000 biogas digesters, 20-25k CER/year
Achieving GTP II targets enables scaling up CDM PoAs

<table>
<thead>
<tr>
<th>Item</th>
<th>Targets GTP I additional during 09/2010-08/2015</th>
<th>Achievement in GTP I period</th>
<th>Targets GTP II additional during 09/2015-08/2020</th>
<th>Total achieved by beginning 2015</th>
<th>Total targeted until 08/2020</th>
<th>Potential by 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-grid-electricity service coverage</td>
<td>75% 10,000 rural towns and rural centres</td>
<td>7,000 rural towns and rural centres</td>
<td>10,000 rural towns and rural centres</td>
<td>17,000 rural towns and rural centres</td>
<td>16,328 Kebeles, unknown number of rural towns and rural centres</td>
<td>estimated 15,000,000- 16,000,000</td>
</tr>
<tr>
<td>On-grid-number of EEU customers</td>
<td>2,000,000</td>
<td>700,000</td>
<td>4,000,000</td>
<td>2,300,000</td>
<td>6,300,000</td>
<td>approx 13,400,000 to 15,000,000</td>
</tr>
<tr>
<td>On-grid households incl. shared meter households</td>
<td></td>
<td></td>
<td></td>
<td>total connected</td>
<td>approx 5,500,000</td>
<td></td>
</tr>
<tr>
<td>Solar systems</td>
<td>165,500</td>
<td>40,000 by REF not known number by private traders</td>
<td>400,000</td>
<td>360,000 + unknown</td>
<td>440,000</td>
<td>5,000,000 to 6,000,000 long term off-grid and 2,000,000 to 7,000,000 medium term off-grid electrification</td>
</tr>
<tr>
<td>• Solar home systems</td>
<td></td>
<td></td>
<td></td>
<td>not known, only distributed by private traders</td>
<td>3,600 + unknown</td>
<td>majority grid connected</td>
</tr>
<tr>
<td>• Solar lanterns</td>
<td>3,160,000</td>
<td>2,032,000</td>
<td>3,600,000</td>
<td>not known, only distributed by private traders</td>
<td>3,600 + unknown</td>
<td>majority grid connected</td>
</tr>
<tr>
<td>Hydro-power mini-grids</td>
<td>0</td>
<td>0</td>
<td>105</td>
<td>0</td>
<td>105</td>
<td>0</td>
</tr>
<tr>
<td>Fuelwood efficient cookstoves</td>
<td>9,400,000</td>
<td>8,875,000</td>
<td>11,450,000</td>
<td>9,000,000</td>
<td>20,450,000</td>
<td>31,000,000</td>
</tr>
<tr>
<td>RE-Pumping</td>
<td>300 wind 300 solar</td>
<td>112</td>
<td>30,000</td>
<td>112</td>
<td>30,000</td>
<td>no estimate</td>
</tr>
<tr>
<td>Biogas digesters</td>
<td>25,000</td>
<td>11,518</td>
<td>41,400</td>
<td>10,500</td>
<td>51,900</td>
<td>up to 1,000,000</td>
</tr>
</tbody>
</table>

CDM PoAs can support all energy access technologies targeted by GTP II

Clean Cooking CDM PoAs

Offgrid Electrification CDM PoAs

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Where is the money? International climate finance trends

- Clean Cooking
- PoAs
- Offgrid Electrification
- PoAs

CRGE / GTP2,3,4,... / NDC

Carbon Credits

Climate Finance

Upscaling up with GCF finance?

NDCs
Article 6 mechanisms

Green Climate Fund

CORSIA
Green Schools NAMA Uganda

PURPOSE: countrywide application of clean energy technologies in schools that solve energy needs and bring economic, health, social, and environmental benefits

OBJECTIVE 1: Use of clean energy technology (electrification, biogas, stoves)

OBJECTIVE 2: Increase involvement of private sector in financing and implementation
Green Schools NAMA use of CDM elements

INTERVENTION 1: Improved institutional cookstoves (IICS)

CDM SB provides MRV for NAMA and CDM

CER

- CDM activities contribute to NAMA implementation
- Two financing approaches
  - Revolving Fund
  - CER cancelation
- Ongoing analysis as part of NAMA preparation

CDM PoA 2

MRV

Standardized baseline
Institutional Cook Stoves in Uganda