



CLIMATEFINANCEINNOVATORS

LINKING CARBON MARKETS WITH CLIMATE FINANCE IN AFRICA

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Regional Workshop:

Managing the transition from Kyoto to Paris – the potential of carbon market and climate finance for East Africa

2nd October 2019, Addis Ababa, Ethiopia

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

based on a decision of the German Bundestag

INTERNATIONAL CLIMATE INITIATIVE (IKI)



perspectives
climate group

CarbonAfrica
limited

08:30 – 09:00	Registration
09:00 – 09:15	Welcome remarks
09:15 – 09:30	Introduction to the CFI project and objectives for the workshop
09:30 – 10:00	Setting the scene: Key international climate policy developments
10:00 – 11:00	Case study: carbon markets and climate finance in Uganda
11:00 – 11:30	Coffee Break
11:30 – 12:30	Case study: carbon markets and climate finance in Ethiopia
12:30 – 14:00	Lunch
14:00 – 15:30	Key issues for climate finance mobilization <ul style="list-style-type: none"> – How to integrate supported activities into NDC accounting? – Designing financing mechanisms and blending climate finance
15:30 – 16:00	Coffee Break
16:00 – 16:45	Discussion: Potential for synergies bw carbon markets and climate finance
16:45 – 17:00	Wrap-up of workshop, outlook on day 2,3 and closing remarks

Introduction to the Climate Finance Innovators Project

CFI project objectives and approach

- **Support to African CDM pipeline (especially PoAs)**
- **Sustaining and scaling up mitigation impacts through GCF**
- **Activities: funding proposals, capacity building, conceptual work, technical assistance and outreach related to the operationalization of the PA (Art.6) and results-based climate finance (GCF)**
- **Partners**
 - Ethiopia, Uganda, Senegal
 - Regional organizations (UNFCCC, EADB, BOAD)
 - UNFCCC Negotiations
 - Accredited Entities

Introduction to the CFI project ...

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

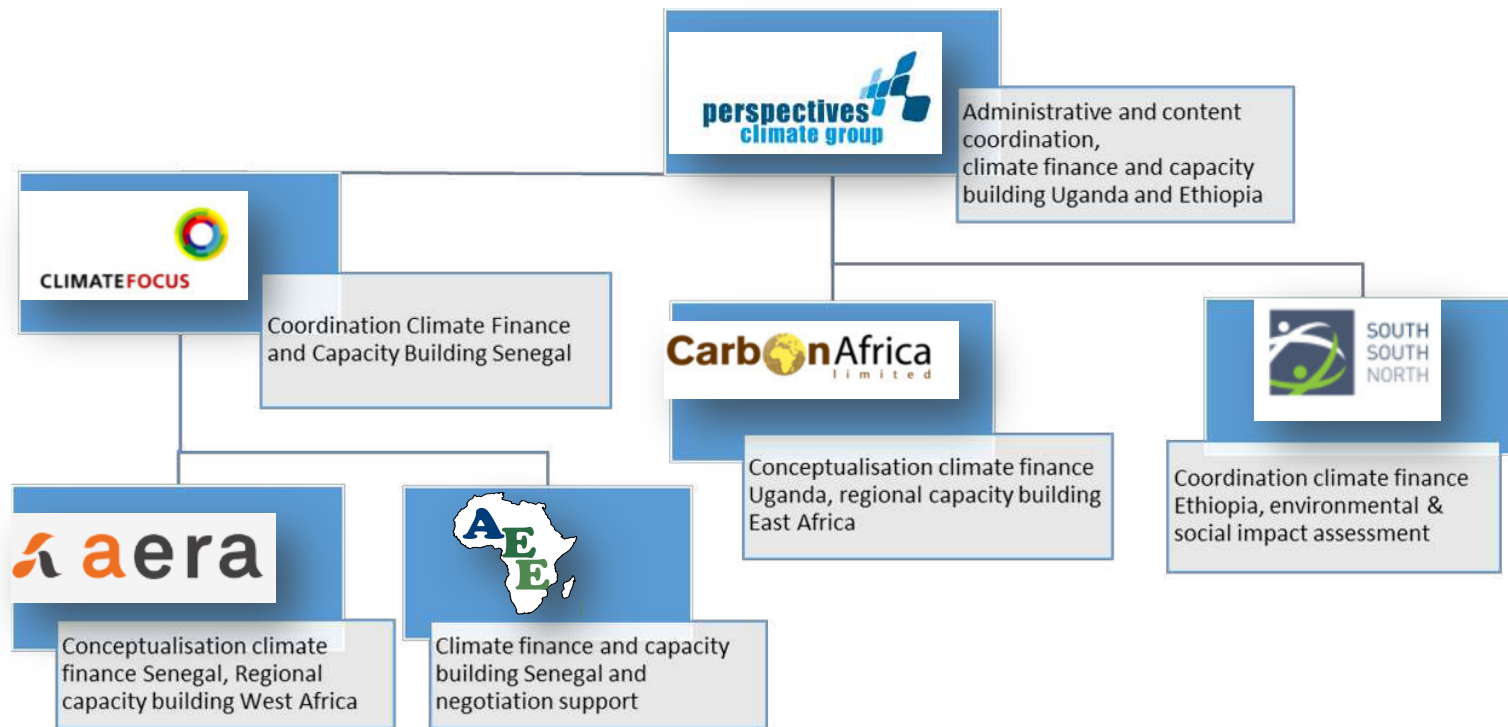
Output III

Conceptual work
(Publications and
methodologies)

Output IV

Negotiation support,
outreach and public
relations

Project Team

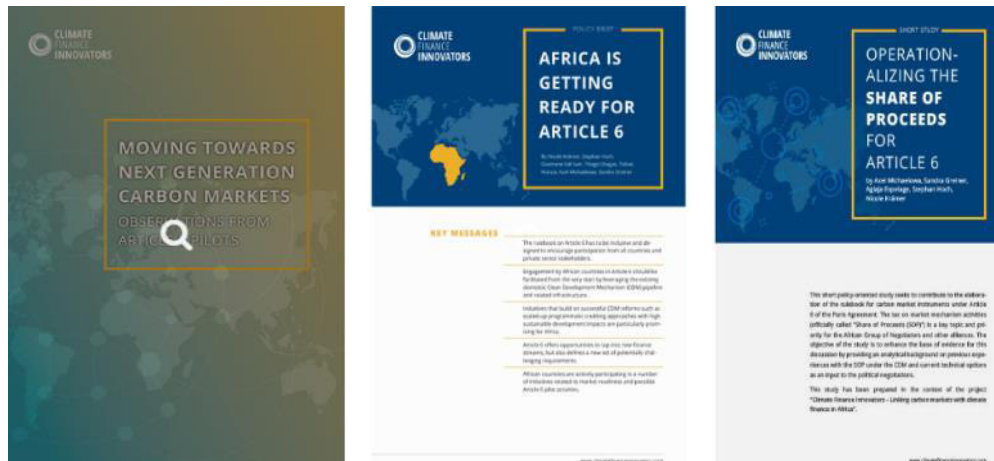


CFI achievements, current status

GCF Proposals

- **Senegal: rural electrification with minigrids**
- **Uganda: rural electrification with minigrids**
- **Ethiopia: sustainable irrigation with renewable offgrid energy**

▪ Knowledge products



▪ Outreach and technical assistance

- UNFCCC negotiations (AGN)
- Side Events
- Capacity development

International climate policy developments

The future of global climate policy and finance

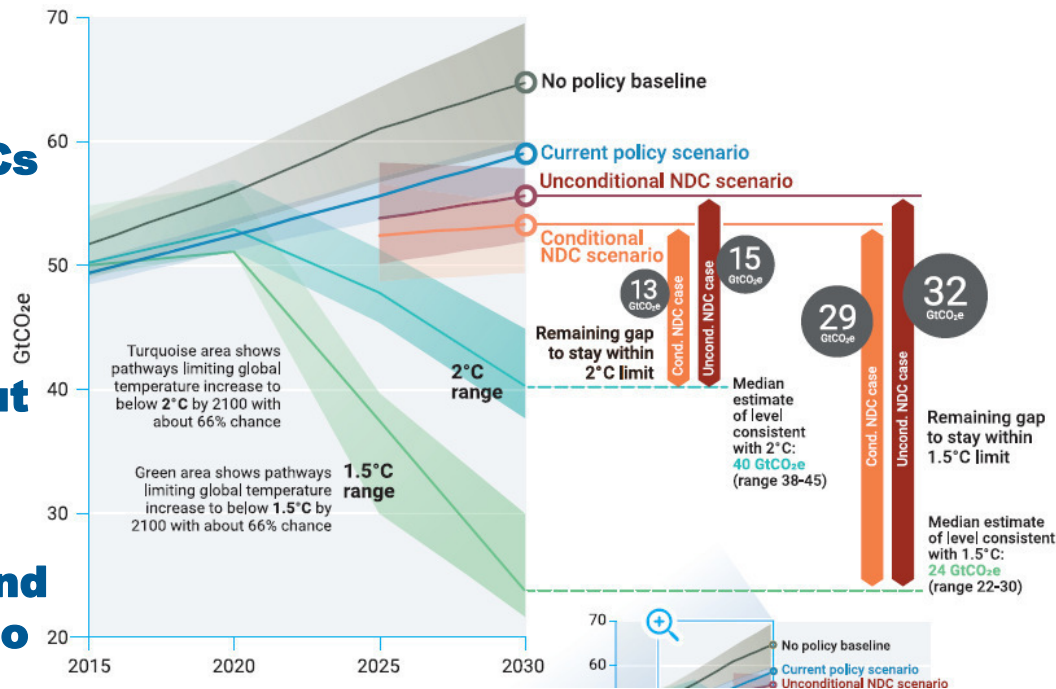
The **Paris Agreement** defines the future of carbon markets and climate finance → but what does that mean for East Africa?



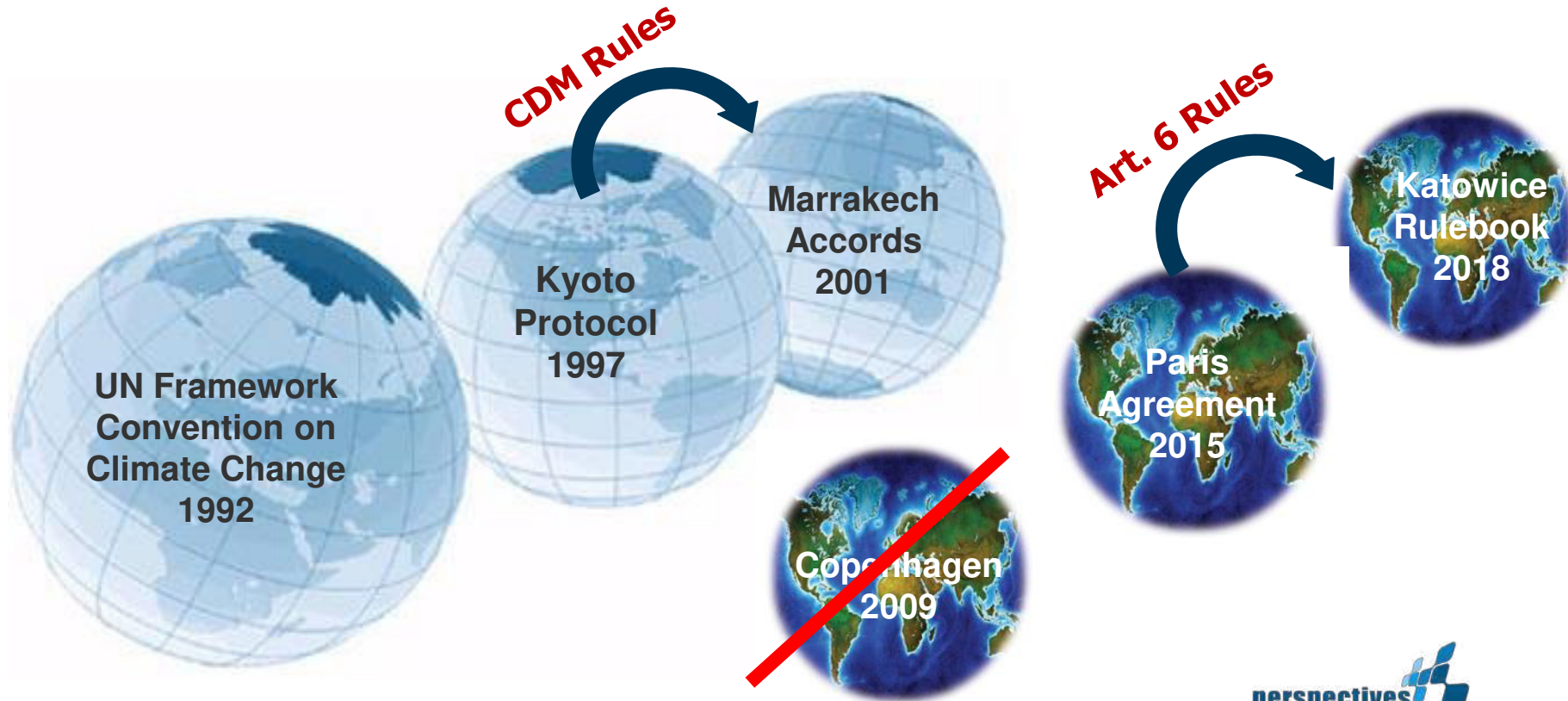
NDCs and the Ambition Gap

- **PA longterm goal to stay below 1.5-2°C**
- **All countries commit to NDCs**
- **Climate finance supports conditional elements of developing country NDCs**
- **Goal \$100bn/y until 2025, but NDCs demand \$345bn/y**

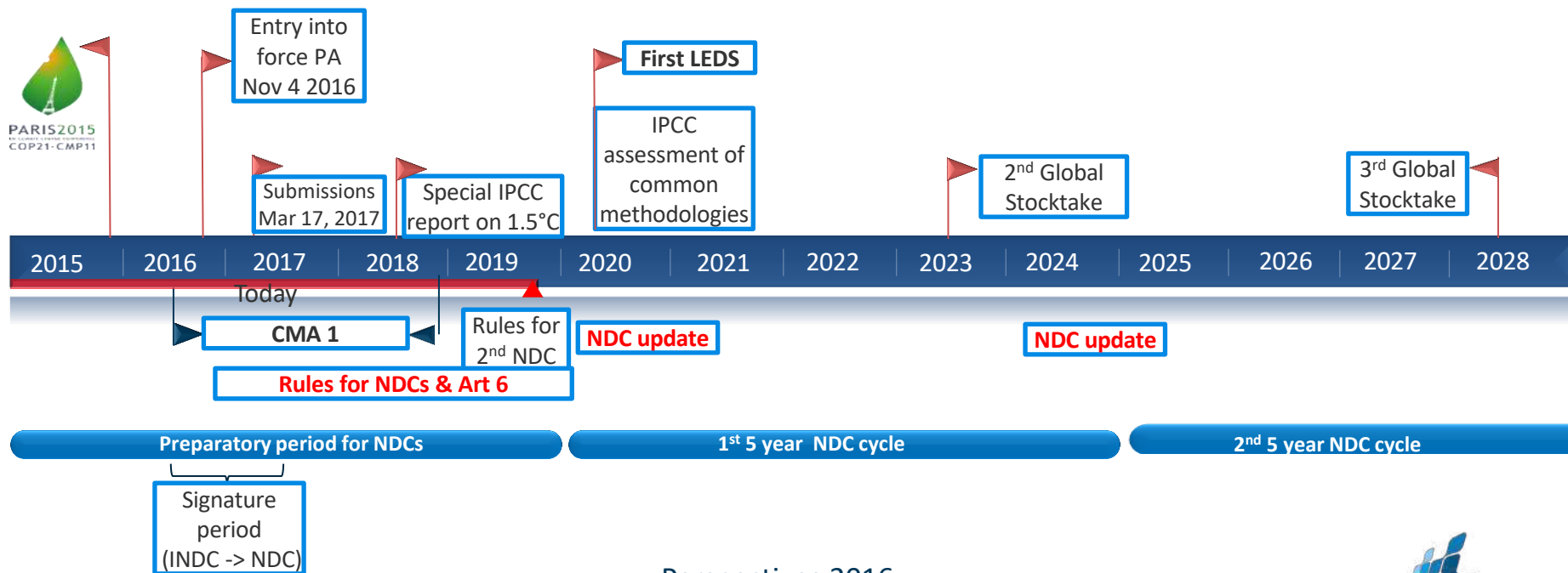
→ **How can carbon markets and climate finance contribute to closing the ambition gap?**



Milestones of multilateral rule development



Timelines under the Paris Agreement and Decision



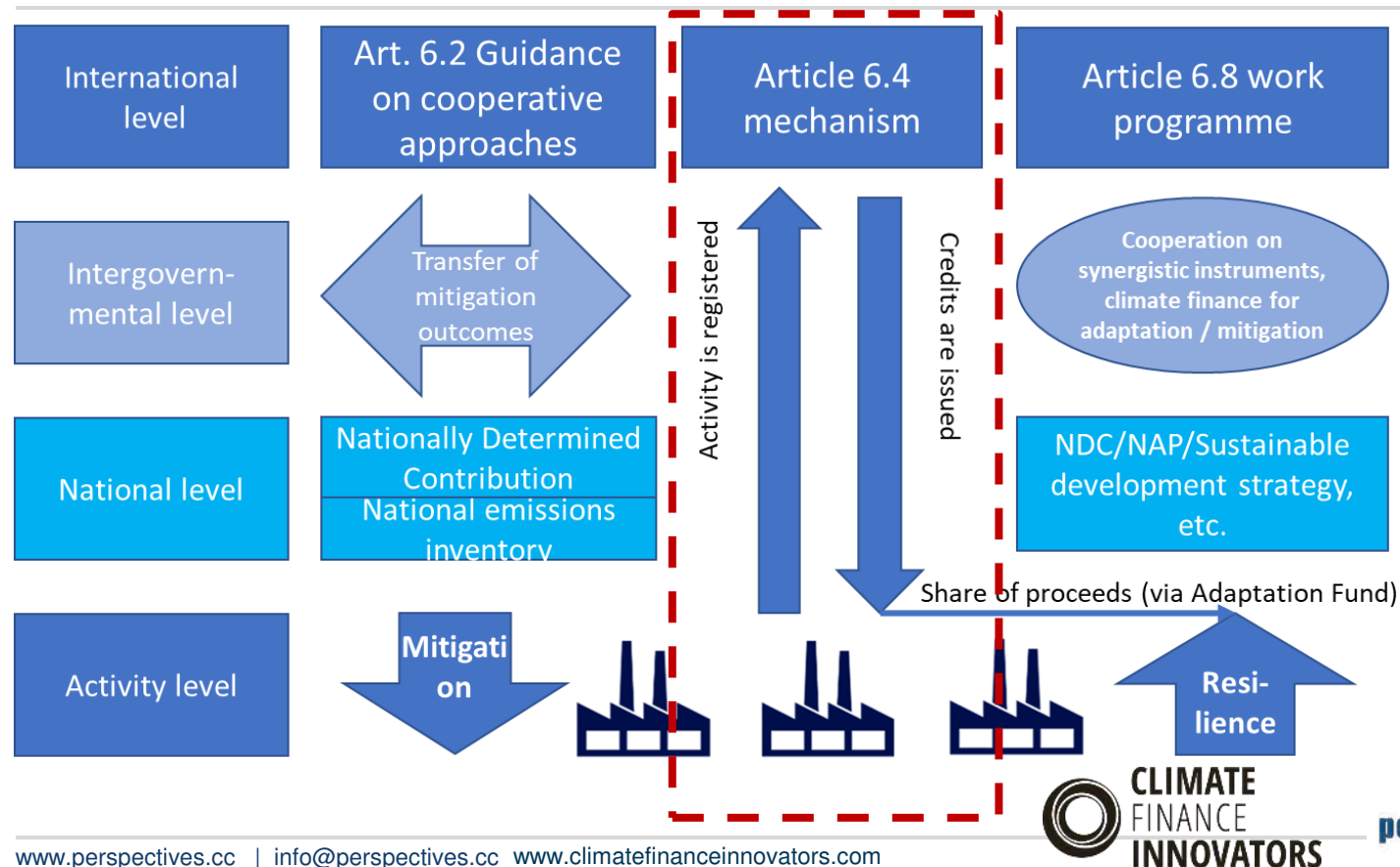
Perspectives 2016

Climate policy and finance as pillars of NDC implementation

- **All countries** make Nationally Determined Contributions, which increase in ambition every 5 years
- Industrialized countries **should** have absolute targets, developing countries **should** “**move over time**” towards “**economywide reduction**” targets
 - More flexibility for LDC/SIDS
- NDC implementation supported by climate finance and carbon markets
- Key question: How to finance conditional NDC elements?



Article 6 of the Paris Agreement



CDM achievements and mitigation potential

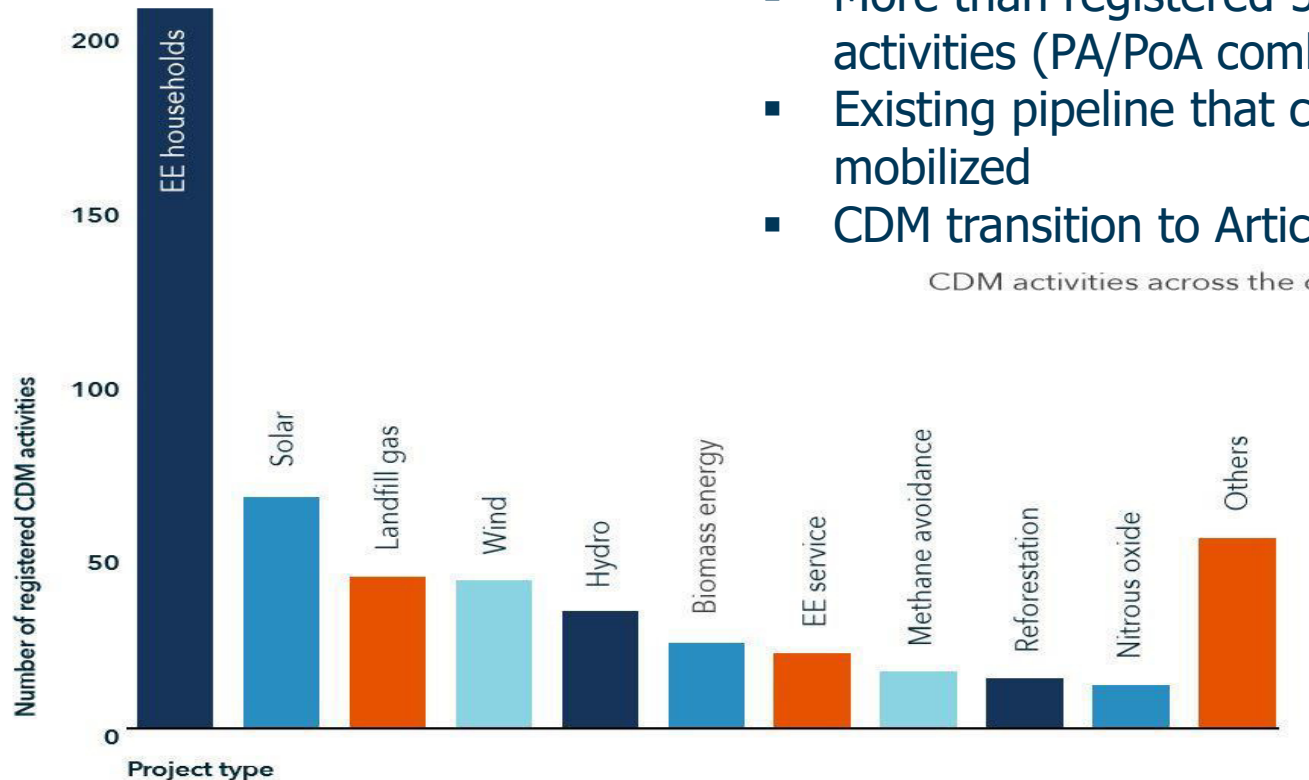
▪ CDM pipeline holds substantial mitigation potential

- More than **7.700** registered single projects
- **300** registered Programmes of Activities (PoA) with **>2000** component projects
- Significant untapped mitigation potential at risk of being stranded
 - 2020 CERs: 10,9bn CERs (incl PoA); 2030 CERs: 18,7bn CERs

▪ CDM reforms and diversification of use

- **Programme of Activities** and **simplified methodologies** for important activity types (sustainable energy access)
- **CDM is used for results-based climate financing** → canceling CERs
- All (sub)national **carbon pricing systems** use the CDM directly as a flexibility mechanism or build on its experience (domestic standards)

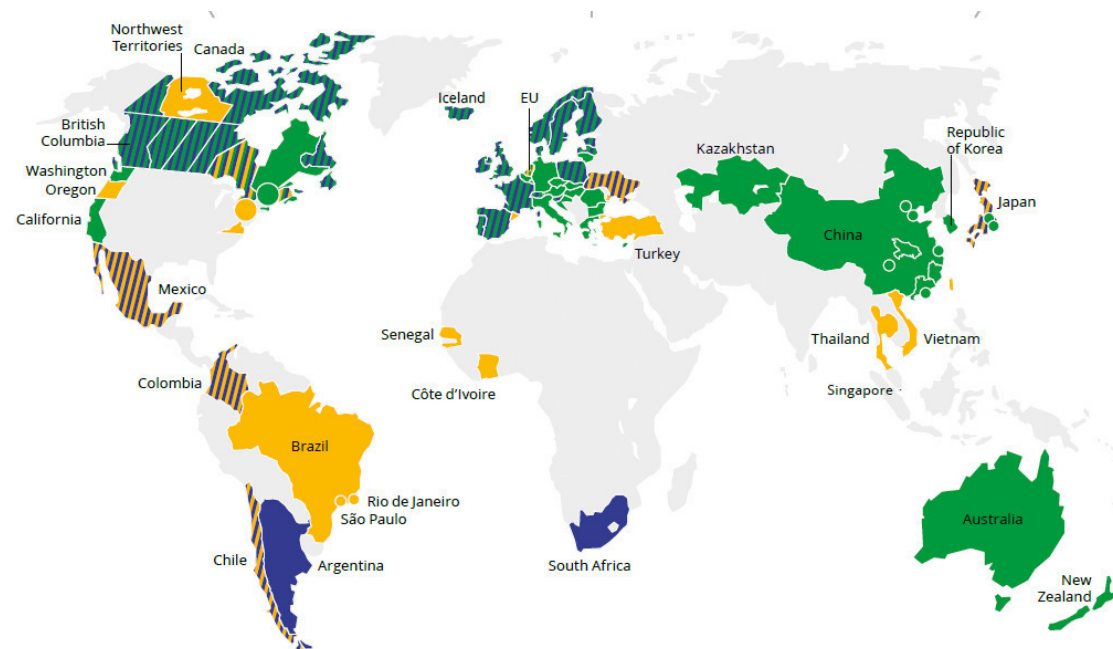
The CDM pipeline in Africa



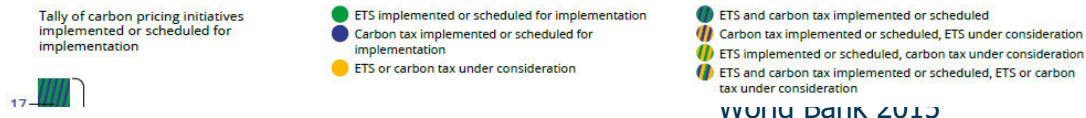
- More than registered 500 CDM activities (PA/PoA combined)
- Existing pipeline that can be rapidly mobilized
- CDM transition to Article 6?

CDM activities across the c

Global spread of carbon pricing with flexible mechanisms

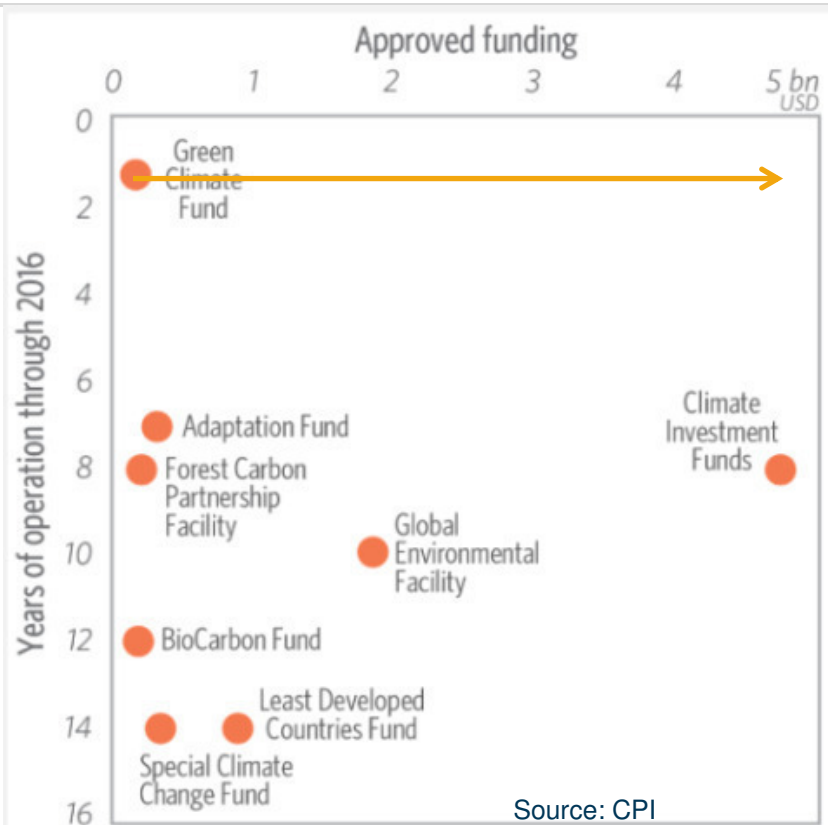


Source: World Bank 2019 – State and Trends of Carbon Pricing 2019, p. 13.



Climate Financing Institutions Overview

- **UNFCCC Financial Mechanism**
 - GEF, Adaptation Fund, GCF
- **Bi- and Multilateral initiatives**
 - REDD+
- **Technical complexity of application procedures tends to increase with scale**
- **Increasingly diverse landscape of funds**

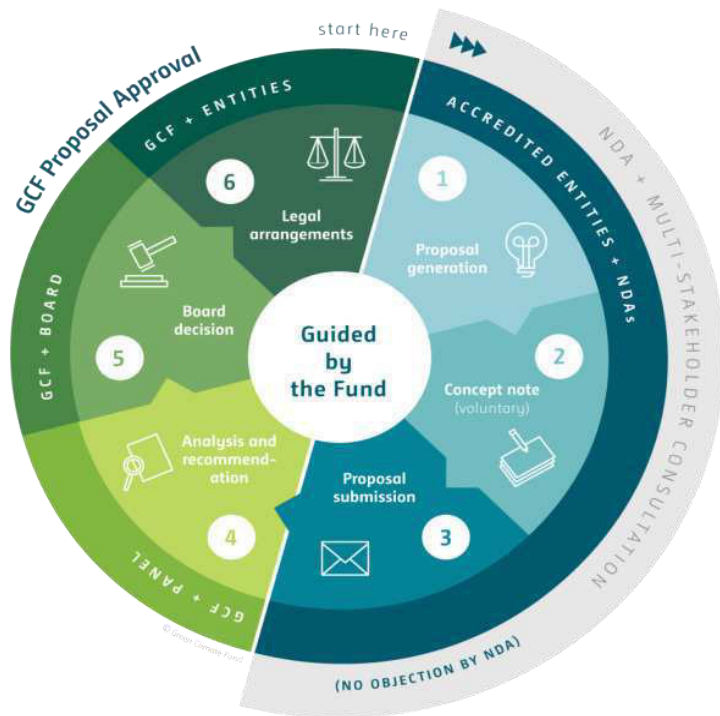


Green Climate Fund objectives

TARGET GCF PORTFOLIO



The Green Climate Fund



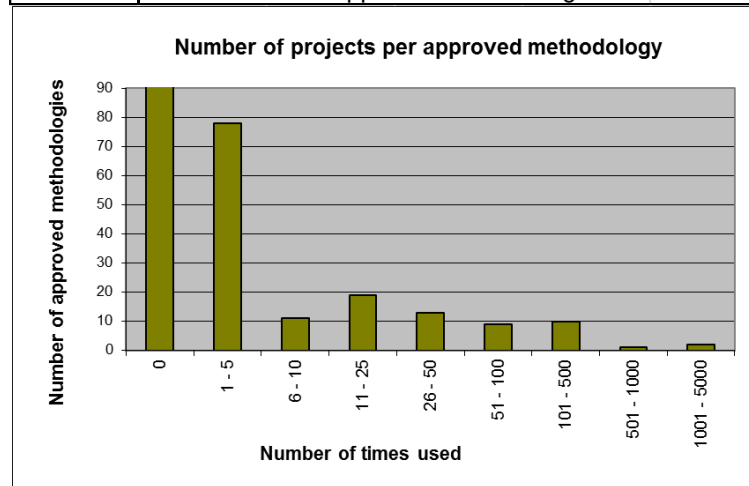
- **Key long term climate finance vehicle**
- **Initial capitalization of \$10 billion, replenishment ongoing**
- **GCF Portfolio expanding**
 - 111 projects approved
 - Total GCF investment of ~5.3 bn USD mobilizes ~18.7 bn USD co-finance
- **GCF complex procedures have been challenging**

Linking carbon markets and climate finance

- **In 2011, at COP17 the CMP requested for GCF to collaborate with other UNFCCC bodies**
- **In 2013, GCF mentioned the CDM as a potential financing instrument for the Private Sector Facility. The CDM has since been omitted from formal discussions in Board meetings.**
- **In 2015, at COP21 the CMP encouraged the CDM Executive Board to explore new opportunities for financing the CDM through climate finance**
- **In 2016 UNFCCC Secretariat reported that the CDM could contribute to:**
 - Supporting the **implementation of NDCs**
 - Serving as an effective MRV tool for transparent **results-based** disbursement of climate finance
- **An increasing number of GCF projects use CDM methodologies, but there is still no formal guidance on CDM-GCF interplay**

CDM as MRV toolkit

Present number of approved CDM Methodologies				
93	Large scale Methodologies (AM)			
25	Large scale Consolidated Methodologies (ACM)			
93	Small scale Methodologies (AMS)			
1	Large scale Afforestation/Reforestation Methodologies (AR-AM)			
1	Large scale Consolidated Afforestation/Reforestation Methodologies (AR-AM)			
2	Small scale Afforestation/Reforestation Methodologies (AR-AMS)			
34	Approved Standardized Baselines			
249	Total number of Approved Methodologies			



- NDCs require harmonized and transparent MRV standards for Art. 6 Mechanisms, NAMAs, Climate Finance (GCF)
- CDM has generated MRV knowledge and tools

GCF investment criteria and the CDM

	GCF criteria	CDM approach
Impact potential	Potential to contribute to low-emission sustainable development pathways or increased climate-resilience	UNFCCC-MRV framework, but no mandatory guidance on SD impacts.
Paradigm shift	Degree to which the activity can catalyse a wider impact and low-carbon development in line with 2° C	PoA scale up of mitigation efforts across regions
Sustainable development	Degree of environmental, social, economic, and gender-related benefits resulting from the activity	SD inherent to many CDM activities, CDM SD tool
Needs of recipient	Technical, institutional, and financing needs of the beneficiary country or project implementer	Additionality tools demonstrate financial, technology or institutional barriers
Country ownership	Country ownership of the activity, as well as alignment with national development or climate policies (NAMA)	Host country approval through DNA
Efficiency and effectiveness	Economic and financial soundness of the activity, including the cost of tCO ₂ e reduced	Financial additionality shows the efficiency of the intervention

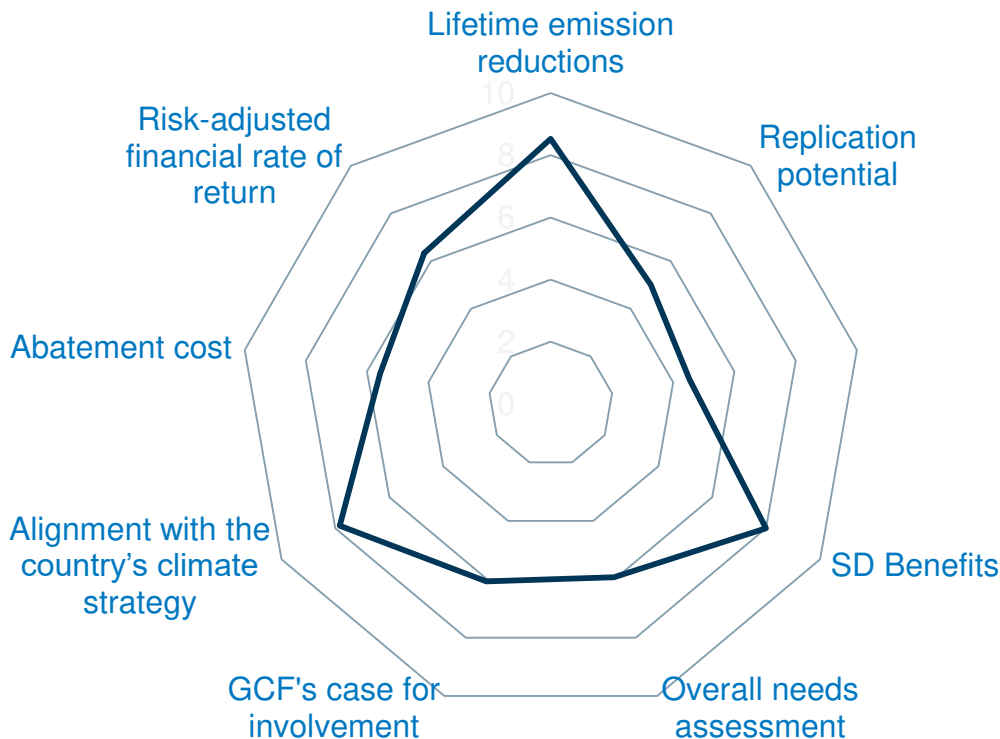
CDM GCF Portfolio Analysis

Many CDM activities align well with the indicated GCF benchmarks.

Close to 20 CDM activities in African countries analyzed

Challenges

- replicability/scalability
- Paradigm Shift influence
- Efficiency/effectiveness





Coffee break (30 minutes)



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Case study Uganda

Climate Finance Innovators

2nd October 2019, Addis Ababa, Ethiopia

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OVERVIEW

1. Country context

2. CDM Portfolio

3. Climate Finance proposals

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OVERVIEW

1. Country context

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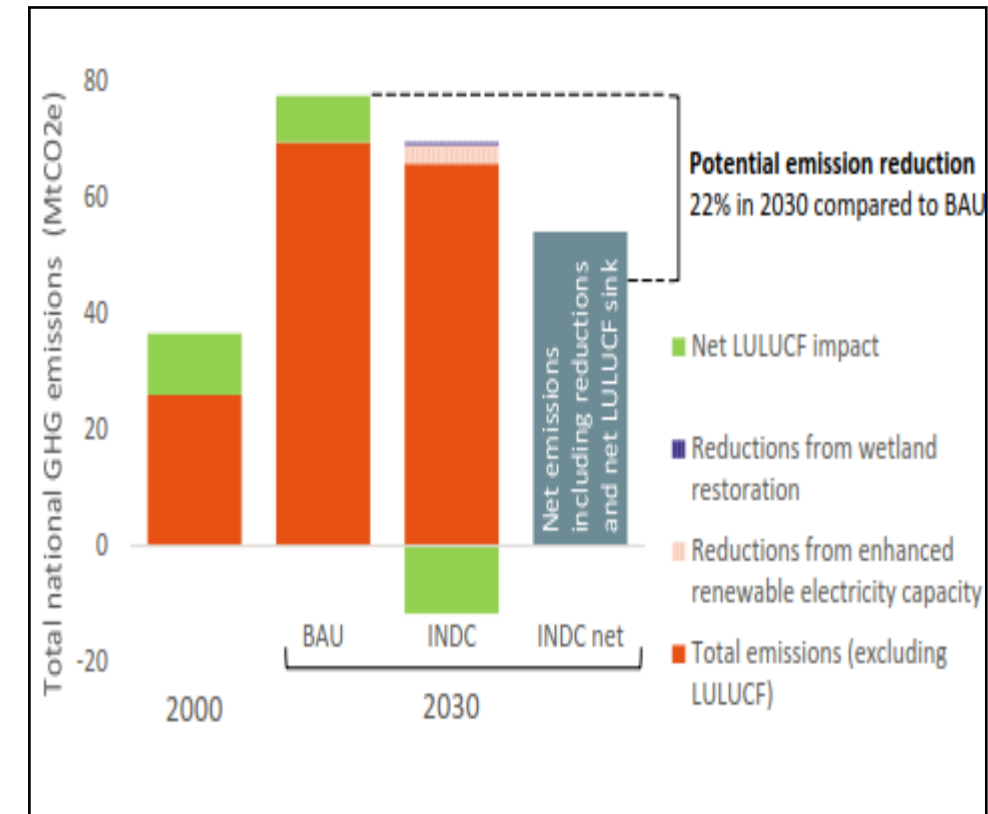


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- One of the **first African countries to ratify the Paris Agreement**
- Due to climate vulnerability, **Adaptation is the priority**
- Mitigation – committed to contribute a **conditional target** to reduce emissions by **22% until 2030** compared to “BAU”, **77.3 million tons CO₂e**
- Priority sectors - **energy supply, forestry** and wetlands
- Energy sector
 - **renewable electricity generation capacity - 3,200 MW / 2030 from 729 MW/2013**
 - **demand side energy efficiency, e.g. domestic biomass in energy efficient cookstoves**



- NDC implementation **main barriers - financing and capacity**
- intends to meet its commitments and/or increase the level of its contribution through the **use of international market mechanisms** where appropriate
- build on **existing extensive CDM projects/PoAs and NAMA pipeline**
- Supportive environment for climate finance and use of markets, **committed to pilot innovative climate finance approaches to support NDC goals**
- Uganda has been actively cooperating with international development partners - UNDP, RCC Kampala UNFCCC/EADB, NDC Partnership, GGGI and GIZ





OVERVIEW

2. CDM Portfolio

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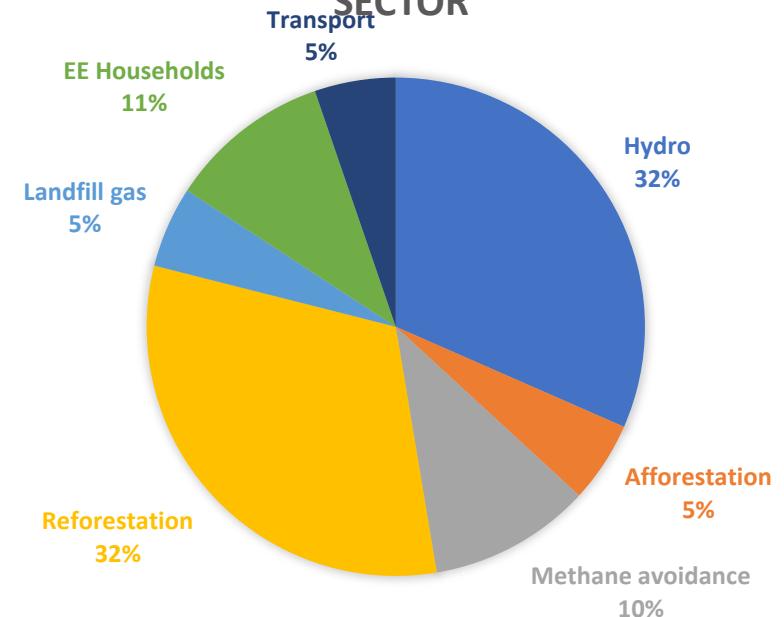


Project Activities	No.
Registered	19
Issued	10 (over 50%)
Issued CERs	6 Million + (over 50% approx. 12million 2020)

- Early mover – 1st PA reg 10 Feb 07, 11 Projects registered Jan 2011 – Jan 2013
- 87% of regional issuance (5,235,000 Bujagali)



UGANDA - REGISTERED CDM PROJECT ACTIVITIES PER SECTOR



CDM projects

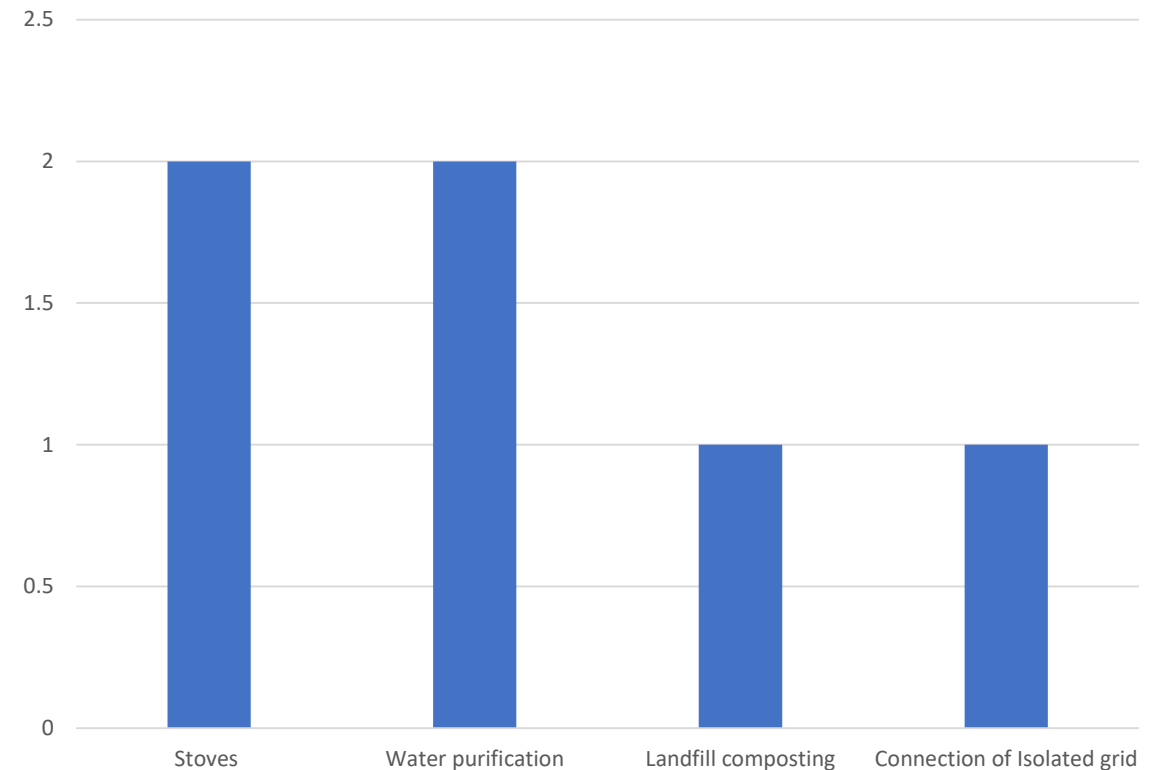
Title	Type	Sub-type	Expected accumulated 2020 ktCO2e	Total issuance (kCERs)
Bujagali Hydropower Project	Hydro	Run of river	7007	5235
Kachung Forest Project: Afforestation on Degraded Lands	Afforestation	Afforestation	352	345
Anaerobic digestion and heat generation at Sugar Corporation of Uganda Limited	Methane avoidance	Waste water	336	139
Bugoye 13.0 MW run-of-river Hydropower project	Hydro	Run of river	511	99
Mpanga 18 MW Run-of-River Hydropower Project	Hydro	Run of river	163	53
West Nile Electrification Project (WNEP)	Hydro	Run of river	388	49
Ishasha 6.6 MW Small Hydropower Project	Hydro	Run of river	167	45
Buseruka Mini Hydro Power Plant	Hydro	Run of river	271	28
Uganda Nile Basin Reforestation Project No 5	Reforestation	Reforestation	87	20
Uganda Nile Basin Reforestation Project No.3	Reforestation	Reforestation	77	5
Uganda Nile Basin Reforestation Project No 1	Reforestation	Reforestation	69	
Uganda Nile Basin Reforestation Project No 2	Reforestation	Reforestation	62	
Uganda Nile Basin Reforestation Project No 4	Reforestation	Reforestation	51	
Mpererwe Landfill Gas Project	Landfill gas	Landfill flaring	158	
Namwasa Central Forest Reserve Reforestation Initiative	Reforestation	Reforestation	174	
Nuru Lighting Project - Uganda	EE Households	Solar lamps	84	
Nakivubo Wastewater Treatment Plant Methane Capture and Utilisation Project	Methane avoidance	Waste water	110	
Production of biodiesel from non-food oil seeds	Transport	Biodiesel for transport	48	
Institutional Improved Cook Stoves for Schools and Institutions in Uganda	EE households	Stoves	120	

Programme of Activities	No.
Registered	6
Issued (Programmes)	4 (66%)
Issued CERs	300,000 +

- Early mover – 1st PoA reg 12 April 2011, all registered by 2014



Uganda - Registered CDM PoAs per sub-sector



Programme of Activities	PoA-Type	CPA-Type	Sub-type	Total issuance (kCERs)
Up Energy Improved Cookstove Programme, Uganda	EE households	EE households	Stoves	273.032
International water purification programme	EE service	EE service	Water purification	34.665
Uganda Municipal Waste Compost Programme	Landfill gas	Landfill gas	Landfill composting	16.549
Secure Safe Water in Developing Countries	EE service	EE households	Water purification	0.000
Accelerating Electrification through Grid Extension and Off-Grid Electrification in Rural Areas of Uganda	Energy distribution	Energy distribution	Connection of Isolated grid	0.000
Improved Cook Stoves for East Africa (ICSEA)	EE households	EE households	Stoves	4.052



OVERVIEW

3. Climate Finance proposals

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3. Climate Finance proposals

- Water service provision - Pipeline
- Off-grid electricity – MRV / RBF
- Institutional cookstoves – MRV / RBF



1. Water service provision

Secure Safe Water in Developing Countries PoA, 1CPA

EE households

Water purification

0

Whave Solutions Limited

Registered - 19 Dec 14

Crediting Period - 18 Dec 21

- increase access of households, communities and SMEs to secure safe drinking water,
- Promote zero GHG emitting water purification technologies/measures, e.g. chemical disinfection methods (e.g. chlorination) and soil filtration technologies
- reduces the use of fossil fuels and non-renewable biomass to boil water
- Public/private partnership through delivery of water services with local governments
- Operational in 5 districts - communities pay a small annual fee, government regulation

Climate Finance Proposal - Adaptation Benefits Mechanism (AfDB)

- Potential pilot generate a income or secure loans through sale of certified adaptation
- reduce costs of CAPEX for infrastructure and potentially RBF (tariff/fee viability gap financing)

Climate Finance Proposal – *NAMA Facility*

- **Results-based CF** for **Improved Institutional Cook Stoves (IICS)** in the Green Schools NAMA (*other – Biogas from bio-latrines, Solar PV lighting/elec*)
- Improve the **energy conditions of the schools** via clean energy technology solutions
- **Increase involvement of the private sector** in financing and implementation of clean energy technologies

Scale

- 15,000+ Ugandan schools, which represents 75%

Mitigation potential: 760,000 t CO₂ per annum by year 5, 1,878,000 t CO₂ per annum by year 10

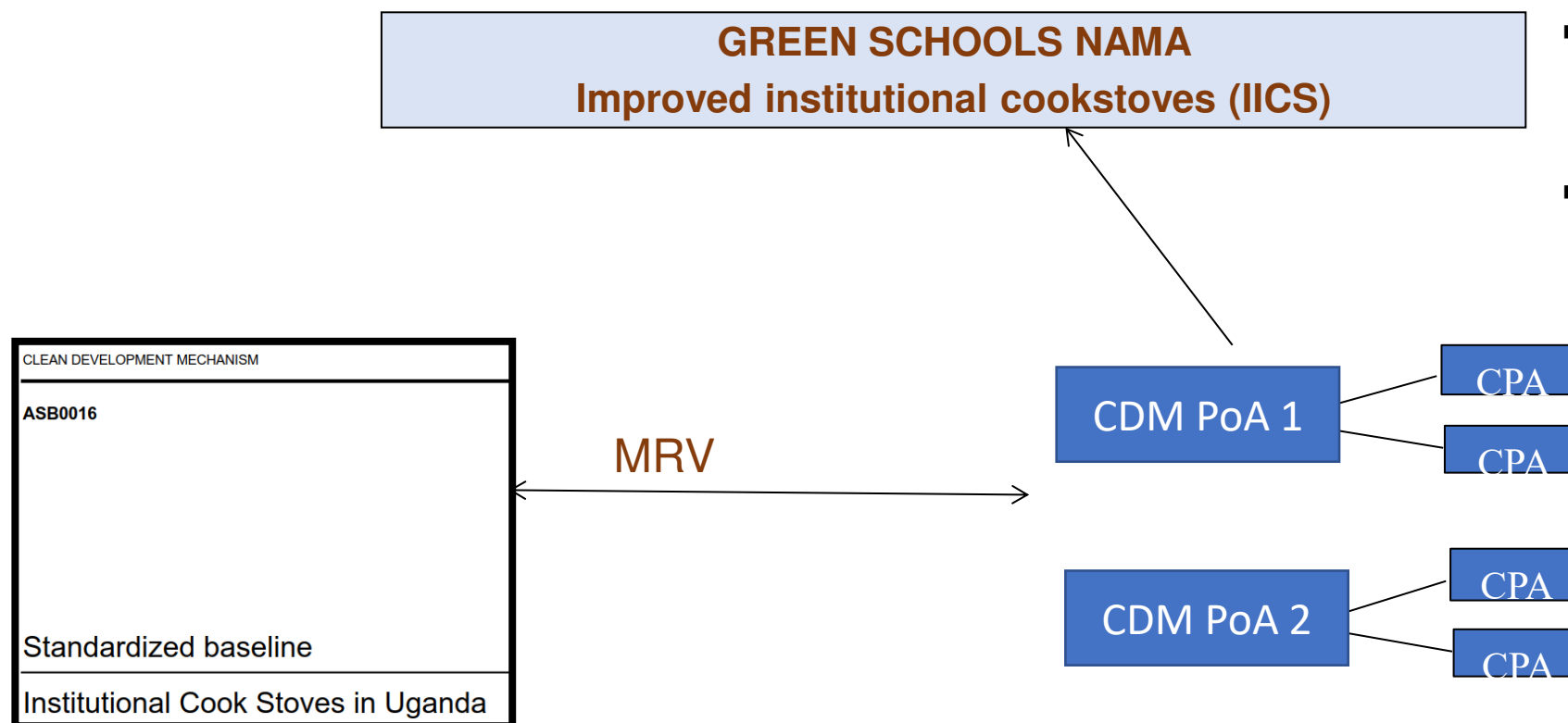
Barrier / Proposed solution

- main barrier for investments into EE technologies is **cost of capital (lending rate 25%)**
- ***Revolving Loan Fund*** to provide financing of investment into IICS.
 1. Capital through **NAMA Facility** to revolving loan fund, **loans at no/low interest rates to schools**
 2. Creation of **green funding lines with local/national banks**, where **NAMA Facility covers interest**

2. Institutional cookstoves

Climate Finance Proposal – NAMA Facility

- **Implement CDM activities** in **20% of the target schools** to strengthen participation of **private sector**
- **Results-based payments** will be paid by UNDP for **CERs** - accounted, registered, issued and cancelled
- 4 CMEs expressed interest



- *CDM projects and PoAs could contribute to NAMA implementation*
- *CERs can be traded or cancelled, depending on available financing*



Empowered lives.
Resilient nations.



MINISTRY OF
ENERGY & MINERAL DEVELOPMENT
UGANDA

2. Institutional cookstove

Institutional Improved Cook stoves for schools and universities in Uganda	EE Household	Stoves	0
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Simoshi Limited

Registered - 17 Feb 17

Crediting Period - 18 Mar 17 – 29 Feb 24

CPAs - [01 Mar 2017 - 31 May 2019](#) MR, issuance request submitted , 45,000+ CERs

- around **450 schools and institutions**, benefiting approximately 340,000 individuals, reducing 31,286 tonnes of annual CO₂
- Stoves different models and/or different sizes and will consume firewood that may be manufactured by local and/or international manufacturers, with briquettes potentially to be used in the future.



3. Off-grid electricity

Accelerating Electrification through Grid Extension and Off-Grid Electrification in Rural Areas of Uganda	Energy distribution	Connection of Isolated grid	0
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Rural Electrification Agency Uganda Registered - 28 Aug 15 Crediting period 28 Aug 15 - 27 Aug 22

- expand electricity access - extension of existing grid, **off-grid electrification** and SHS
- Rural Electrification Strategy and Plan II (2013-2022) increase access to electricity rural areas to **26% - 140,000 connections SHS & mini-grids** and 1.3 million new grid connections
- reduce GHG emissions by electrification through **renewable energy systems**, distribution of LED/CFL lighting systems, or connection to the national grid, thereby reducing the consumption of fossil fuels
- service providers will work to facilitate the connections by **reducing the connection fee**, providing connection materials, or supporting the connection in other ways using the **revenue from CER sales**.

GIZ Rapid solar PV power generation mini-grid expansion - up to 200 villages

- Support through TA, administrative, financial and regulatory systems
- Remove barriers for private sector
- 1st pilot 40 sites being tendered

Main Activities

- Site identification (incl. preparatory studies), Concession and Tender mechanism, Generation & Grid infrastructure, financing mechanisms for operators and businesses

Financing

- Total financing estimate: approx. 30 million USD
 - Grid infrastructure - 50% Grants?
 - Generation - CAPEX subsidy through grant
 - Productive Use (Credit Guarantee Fund to release funding for SMEs)
 - Enable microfinance access to small businesses in the villages

CDM – MRV / RBF - Focus on Mitigation with strong Co-Benefits (incl. Adaptation)

- Mitigation: AMS III BB - *Electrification of communities through grid extension or construction of new mini-grids Version 2.08*
BL: No or diesel based electricity generation; fossil fuel based lighting,
ER based on suppressed demand for power generation + replacement of kerosene for lighting
Total ER 200.000 – 250.000 tCO₂e / 25 years

SUMMARY

1. Country context

2. CDM Portfolio

3. Climate Finance proposals

- **Pipeline**
- **MRV**
- **RBF**

SCALE

1. PPP

2. Finance Mechanism

3. Carbon Markets?

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Case study: Ethiopia

Ethiopian climate policy context ...

- **Second Growth and Transformation Plan (→2020)**

- Flagship 5y-plan for achieving low-carbon and climate-resilient development
- Key objective is to modernize agricultural practices, including by expanding modern irrigation and reducing dependence on rain-fed agriculture

- **Climate Resilient Green Economy Strategy (→ 2025)**

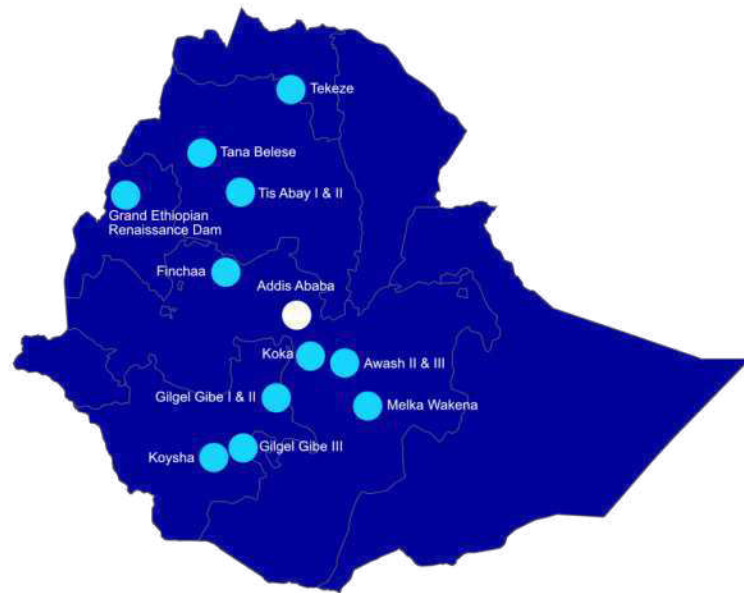
- Objective to become a “carbon-neutral middle-income country” by 2025
- Strategic priority: Strengthen resilience of agriculture w modern irrigation

- **Nationally Determined Contribution (→ 2030)**

- Conditional 64% mitigation goal vs BAU while strengthening climate resilience
- CC adaptation, water and agriculture are key priorities
- Ongoing elaboration, prioritization and finance mobilization processes

Ethiopia's experience with market mechanisms (CDM)

- Limited success in accessing CDM
- High share of renewable energy: 97% hydro, wind and geothermal emerging
 - Low grid emission factor, thus grid electricity unattractive for CDM
- 3 stand-alone CDM projects
- PoAs emerging: 7 PoAs with 13 CPAs for clean cooking and off-grid RE
- High degree of uncertainty on CER revenues



Dams in Ethiopia, Source: Embassy of Ethiopia in Brussels

Ethiopia CDM Pipeline: Single projects

Title	Type	Methodology	Project Duration/ Crediting period	2020 ktCO ₂ Title
Humbo Ethiopia Assisted Natural Regeneration Project	Reforestation	AR-AM0012	01 Dec 2006 - 30 Nov 2036 (Fixed)	413.535
Methane Capture and Flaring from Addis Ababa Repi open dump fill	Landfill flaring	ACM0001	01 Jun 2013 - 31 May 2023 (Fixed)	735.256
GHG Emissions Reduction through Modjo CETP	Waste water	AM0080	01 Jan 2019 - 31 Dec 2028 (Fixed)	285.204

Ethiopia CDM Pipeline: Programme of Activities

Title	CME	Type	Number of CPAs	Methodology	PoA Duration/ CPAs Crediting period	2020 ktCO ₂	2021-2025 kCER
PoA for the Reduction of emission from non-renewable fuel from cooking at household level	Green Development AS	Stoves	63 (4 in Ethiopia)	AMS-I.E.	01 Oct 2012 - 30 Sep 2040	1,106 (Ethiopian CPAs only)	n/a
Energy Efficient Stoves Program (EESP)	World Vision	Stoves	3	AMS-II.G.	05 Sep 12 - 04 Sep 40	1,314.66	372.24
Paradigm Sub Saharan Africa Cook Stove Programme	The Paradigm Project (TPP)	Stoves	1	AMS-II.G.	30 Oct 2012 - 29 Oct 2040	497.362 (potential for Ethiopian CPA is 246.092)	n/a
Fuel Efficient Stoves for Ethiopia Programme of Activity	World Food Programme	Stoves	1	AMS-II.G.	18 Sep 2013 - 17 Sep 2041	309.00	n/a
Ethiopia – Clean Cooking Energy Program	Development Bank of Ethiopia (DBE)	Gasification of biomass	1	AMS-I.I.+AMS-I.E.+AMS-II.G.	23 Dec 2014 - 22 Dec 2042	112.99	297.3
Ethiopia Renewable Off-Grid Energy Program	Development Bank of Ethiopia (DBE)	Off-grid RE technologies	1	AMS-III.AR.+AMS-I.F.+AMS-I.L.+AMS-I.B.	23 Dec 2014 - 22 Dec 2042	79.916	183.9
Project Gaia Cook Stove Programme of Activities (PoA)	Project Gaia Inc.	Stoves	2	AMS-I.I.+AMS.I.E.	12 Feb 15 - 11 Feb 43	862.9	434.8

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



Pictures: GIZ 2015

- 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 Activity (CPA) registered: 168,000 solar lamps, circa 17,750 CERs/year

Ethiopia Clean Cooking CDM Programme of Activities



PoA Technologies

Improved cook stoves

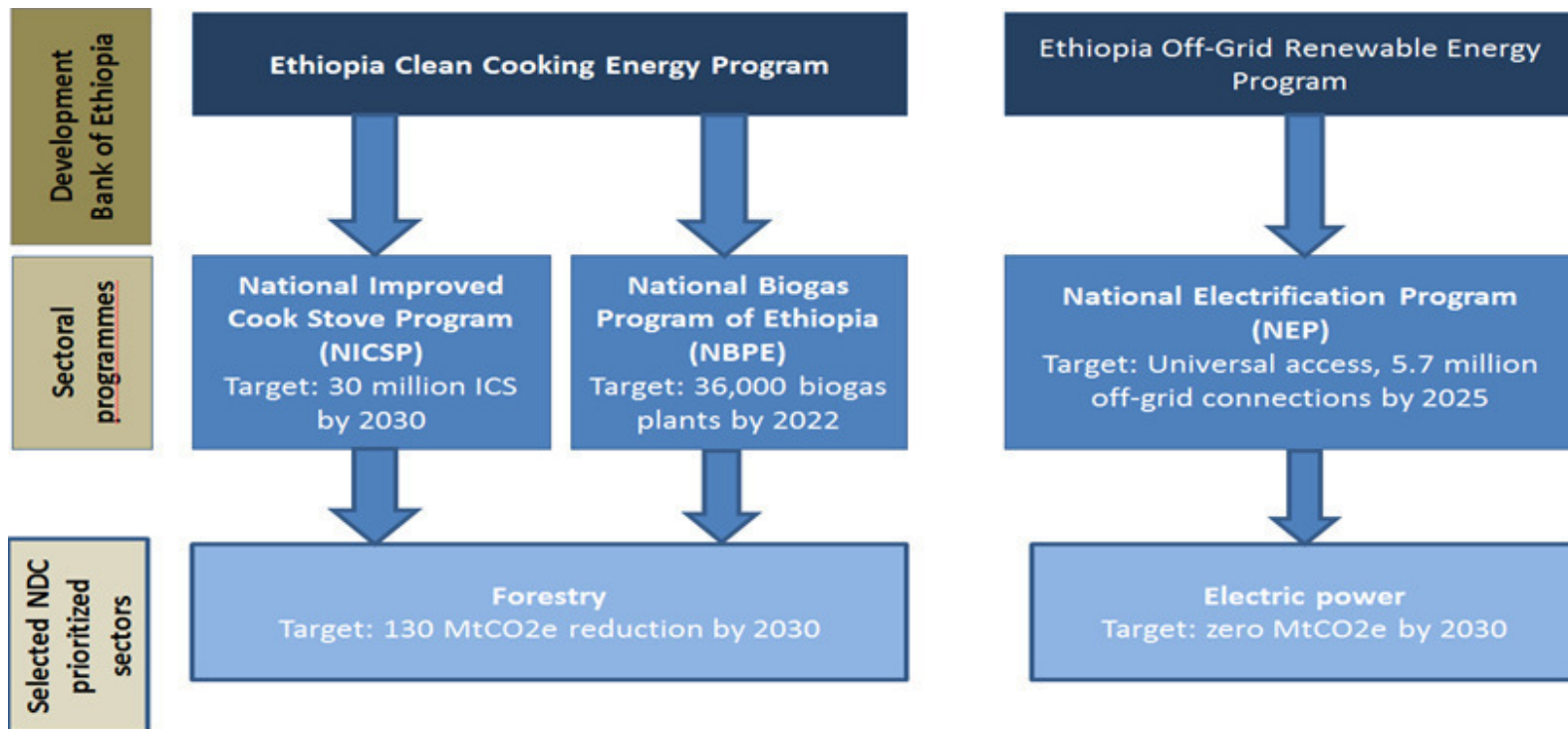
Institutional improved
cook stoves

Biogas digesters

Ethanol Stoves

- 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 Activity (CPA) registered for this PoA with 4000 biogas digesters, 23,580 CER/year

Contribution of CDM to Ethiopia's priority NDC sectors



Source: Authors based on Ethiopia's CRGE [n.d.](#); NDC [n.d.](#); NEP 2017; SNV 2017

GTP II sets ambitious targets: CDM PoAs need to be upscaled

Item	Targets GTP I additional during 09/2010-08/2015	Achievement in GTP I period	Targets GTP II additional during 09/2015-08/2020	Total achieved by beginning 2015	Total targeted until 08/2020	Potential by 2020
On-grid-electricity service coverage	75% 10,000 rural towns and rural centres	7,000 rural towns and rural centres	10,000 rural towns and rural centres	7,000 rural towns and rural centres	17,000 rural towns and rural centres	16,328 Kebeles, unknown number of rural towns and rural centres
On-grid-number of EEU customers	2,000,000	700,000	4,000,000	2,300,000	6,300,000	estimated 15,000,000-16,000,000
On-grid households incl. shared meter households ²				total connected approx. 5,500,000	approx 13,400,000 to 15,000,000	
Solar systems						
• Solar home systems	165,500	40,000 by REF not known number by private traders	400,000	40,000 by REF not known number by private traders	440,000	5,000,000 to 6,000,000 long term off-grid and 2,000,000 to 7,000,000 medium term off-grid households
• Solar lanterns	3,160,000	2,032,000	3,600,000	not known. only distributed by private traders	3,600,000 + unknown	
• Institutional solar systems	3,000	not known	3,600	not known	3,600 + unknown	majority grid connected
Hydro-power mini-grids	0	0	105	0	105	0
Fuelwood efficient cookstoves	9,400,000	8,875,000	11,450,000	9,000,000	20,450,000	31,000,000
RE-Pumping	300 wind 300 solar	112	30,000	112	30,000	no estimate
Biogas digesters	25,000	11,618	41,400	10,500	51,900	up to 1,000,000

Clean Cooking
CDM PoA

Together, the 2
PoAs can
support all
offgrid
technologies
targeted by GTPII

Offgrid
Electrification
CDM PoA

Ethiopia's first approved GCF Proposal



- 1.3m beneficiaries
- \$50.0m Total project investment
 - GCF Grant USD 45.0M
 - Co-Financing GoE USD 5.0M
 - 8.3% GCF financing disbursed
- Executing Entities: MoANR, MoWIE
- Access to Water, Natural Resource Management, Enabling Environment

GCF funding proposal overview

- **Project concept: Sustainable irrigation with renewable energy**
 - Installing solar-powered irrigation pumps at existing, unutilized deep wells in four (semi)arid lowlands: drought prone/food insecure districts of Borena zone (Oromia) and the Kobo - Girana Valley (North East Amhara).
 - Increased water availability benefits MSMEs, cooperatives, smallholder farmers
 - Enhances crop resilience/food security, additional income, mitigation co-benefits
- **Technology: submersible water pumps (ca. 100m³/h) and irrigation systems powered by off-grid solar PV (ca. 50KW potentially + agroprocessing)**

Ethiopia country context and baseline

- **Agriculture accounts for >40% of GDP**
- **>80% of the population depend on agriculture, 95% of which is rain-fed**
- **High climate vulnerability:** recent droughts left over **10 million people food insecure**
- **Climate models predict increasing rainfall variability, frequency of extreme weather events until 2050**

→ **Strengthening resilience is an urgent, existential priority**



Source: WB Economics of Adaptation

Project overview ...

- **Accredited Entity: MOF**
- **NDA: EFCCC**
- **Executing Entities: MOWIE, FI (DBE/commercial banks)**
 - MOF coordinates all activities through CRGE Facility (together with NDA)
 - MOWIE: planning, coordinating deployment of water pumping infrastructure, licensing and tariffs
 - FIs: Developing and disbursing financial instruments (loans, risk insurance?) to MSME, cooperatives

Linkages with market mechanisms

- **CDM-based MRV to calculate emission reductions**
 - **Consider further integration with Ethiopia offgrid electrification PoA (subject to further study and feasibility)**
 - **Article 6 as a potential exit strategy**
-

Lunch break and group photo (12:30-14:00 hour)



Group Discussion: Key issues for climate finance mobilization

Linking the CDM & the Green Climate Fund

Report: Insights from practitioners and decision-makers in Africa



Is there support for linking CDM and GCF?

- **Yes, due to:**

- Existing pipeline of activities that can be rapidly mobilised and scaled up (PoAs)
- Proven engagement and mobilisation of the private sector
- Tested methodologies to streamline GHG accounting
- Default factors to simplify monitoring efforts
- Framework for reporting emission reductions
- Verifiable and transparent approach
- Progress towards achieving Sustainable Development Goals

- **But, there are reservations:**

- Long project development and issuance timeline
- Costly certification procedures
- CDM not applicable to all project types

Notable insights

- Project developers are interested in up-front financing. Equity and concessional loans to scale up revenue-generating activities and grants to cover outreach and capacity building.
- Accredited Entities see CDM methodologies as useful tools for appraising the mitigation impacts in a comparable manner in the absence of guidance from the GCF
- Government authorities (DNAs/NDAs) stressed that priority should be given to struggling CDM activities that can deliver strong sustainable development impacts, especially energy access and energy efficiency PoAs
- UNFCCC Secretariat felt that registered CDM activities should have simplified access modalities to GCF due to CDM project/programme cycle
- GCF acknowledged that the Board has no official position on engaging with the CDM due to lack of consensus on this issue

Key issues for climate finance mobilization

- **Relevance of carbon markets and climate finance for NDC ambition and accounting**
- **Designing financing mechanisms and blending climate finance sources**



Group Work

Group 1: Relevance of CM/CF for NDC ambition and accounting

- Country readiness for NDC implementation and accounting?
- How to ensure consistency in MRV / NDC Accounting (role of CDM/carbon markets)
- Relevance of sectoral climate policy for upscaling?

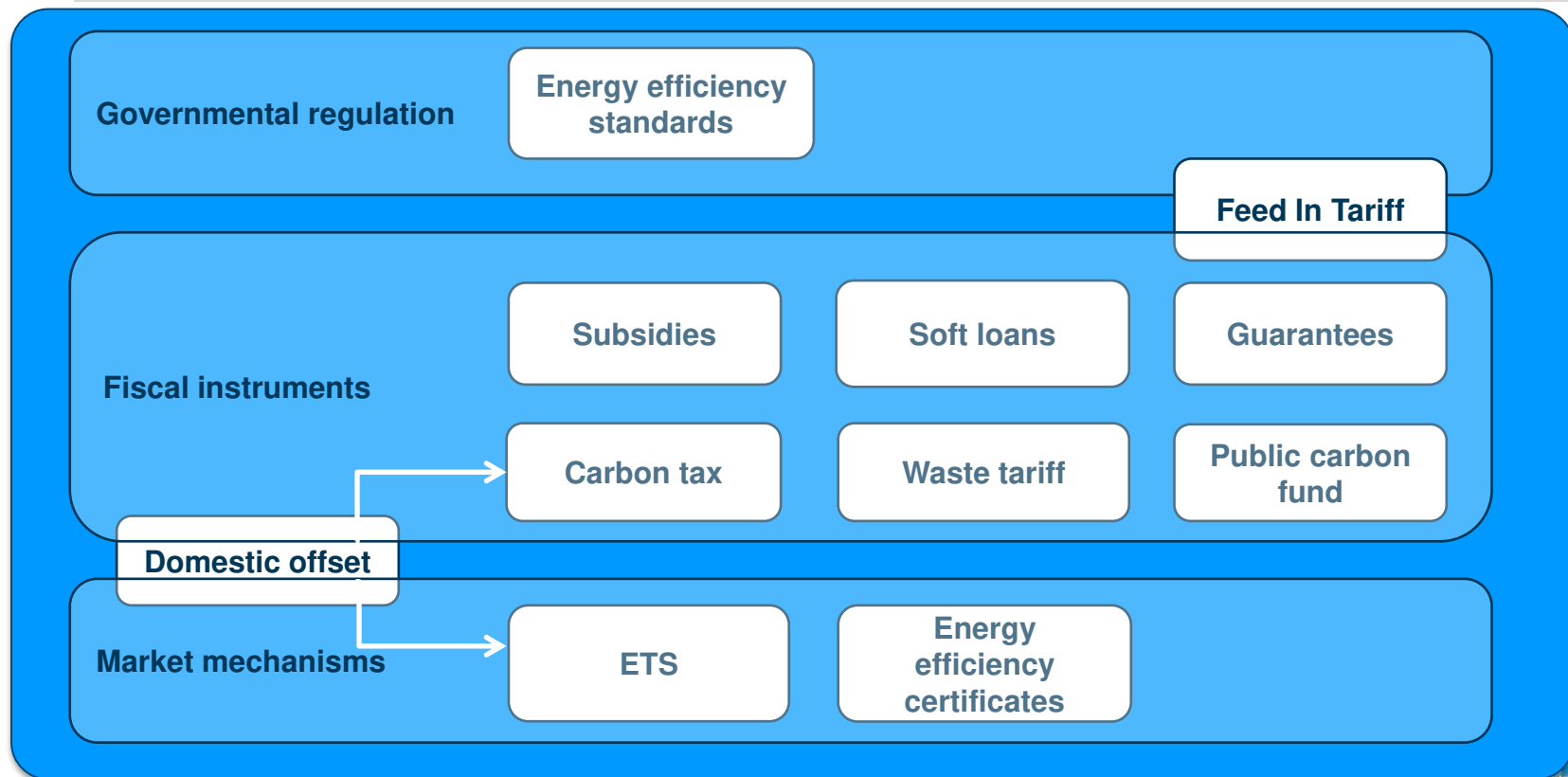
Group 2: Blending climate finance / mechanisms

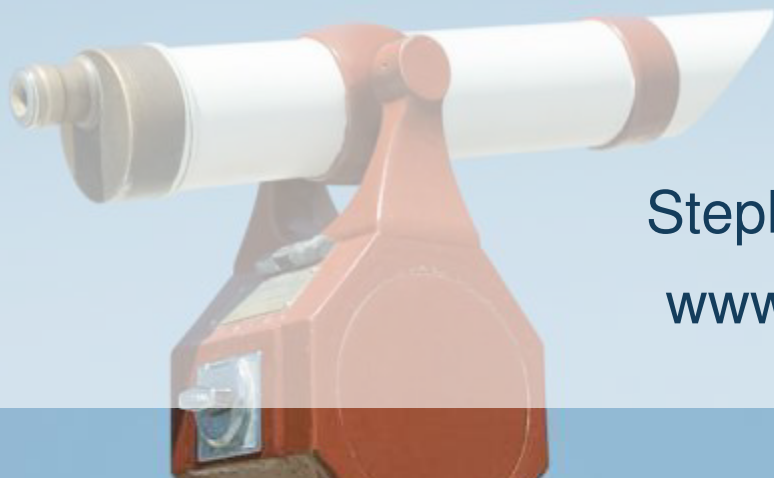
- Potential for carbon markets to support upscaled climate action in EA?
- Which climate financing instruments (GCF: grants, loans, guarantees, equity, other) are appropriate for which subsector/technology?
- Relevance of PPP in terms of expertise and (co)financing (domestic, private, international)



Coffee break (30 minutes)

Policy instruments that could underpin NDC implementation





Thank you!

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