COP27

Generating ITMOs in Accordance with Article 6.2 under the Bilateral Cooperation Agreement with Switzerland

Speakers:

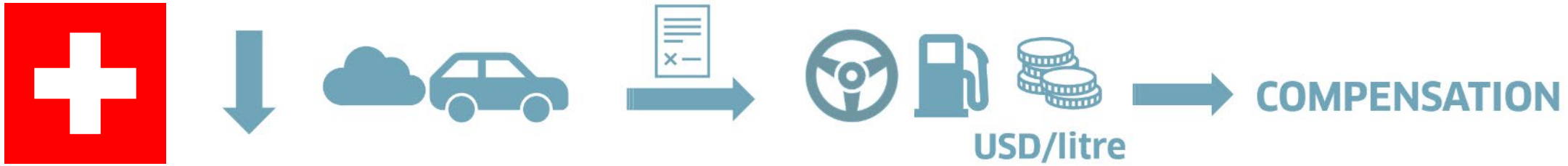
- **Jacqueline Jakob**, KliK Foundation
- **Janina Schnick**, MyClimate
- **Ingo Puhl**, South Pole
- **Sergi Cuadrat**, ALLCOT
- **Ken Newcombe**, C-Quest Capital
- **Raphael Eberle**, ACT Commodities

Sharm El-Sheikh, IETA BusinessHub, 18:00-19:30

Agenda

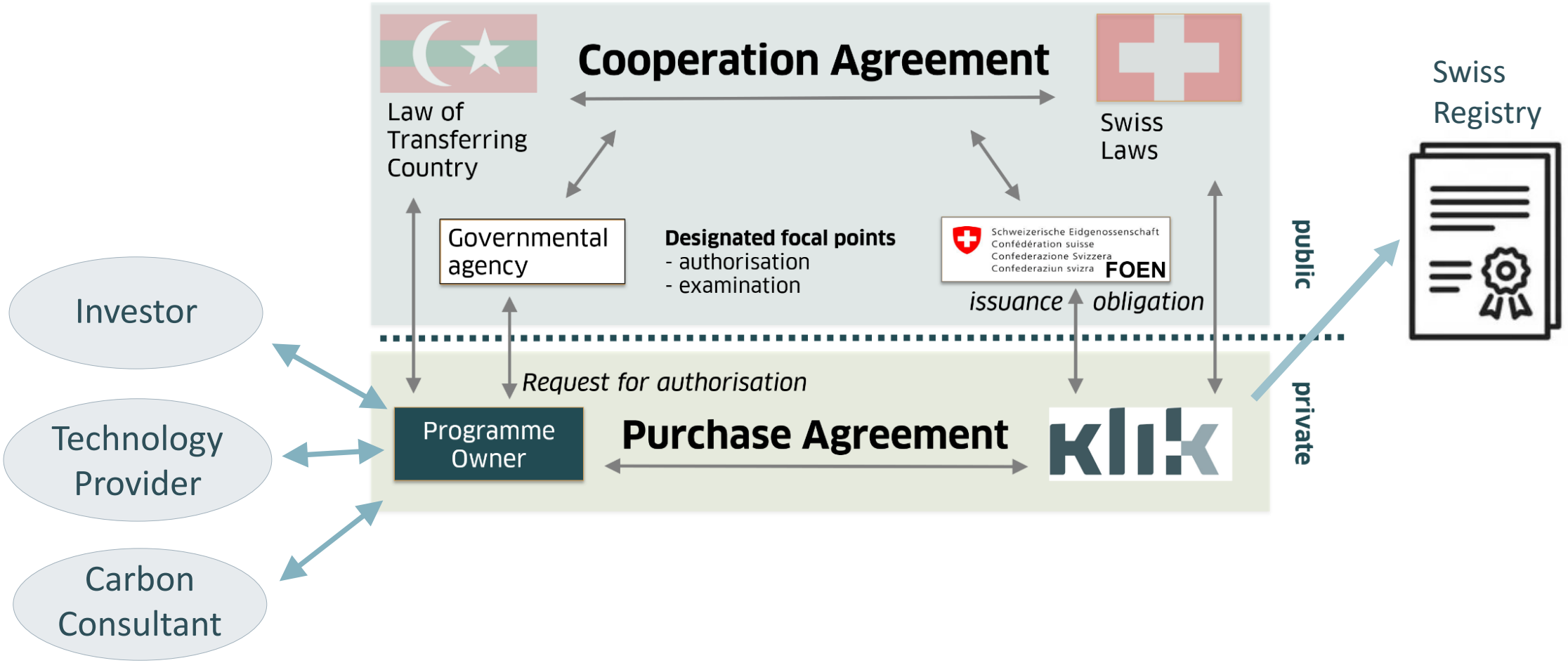
1. KliK Foundation Mandate
2. Your Role
3. Requirements
4. Procurement Process

1. Mandate: Who is the KliK Foundation?



- Private entity
- Compensating emissions from the Swiss transport sector nationally and globally (purchase of ITMOs)
- Acting on behalf of Swiss motor fuel importers
- Obliged by Swiss law to buy 20-40 million ITMOs (t CO_2e until 2030, 3-5 m in host country)
- ITMOs are bought from Thailand and used by Swiss government to fulfil NDC target

2. Your Role within Public-Private Architecture



3. Requirements: General Eligibility Criteria

- **Aligned** with **the host country's NDC**
- **Programmes** not yet implemented
- Programmes **must** be **additional** (no business-as-usual)
- Hydro-power **smaller than** 20MW
- **No forestry**
- No nuclear power and no fossil fuel lock-in (no O&G projects)
- Larger programmes (**250'000 t CO_2** reduced until 2030)

Cooperation Under Bilateral Implementing Agreement With Switzerland


Dominica


Georgia


Ghana


Peru


Senegal


Thailand


Ukraine


Vanuatu

Bilateral Implementing Agreement Expected Soon


Malawi


Morocco


Uruguay

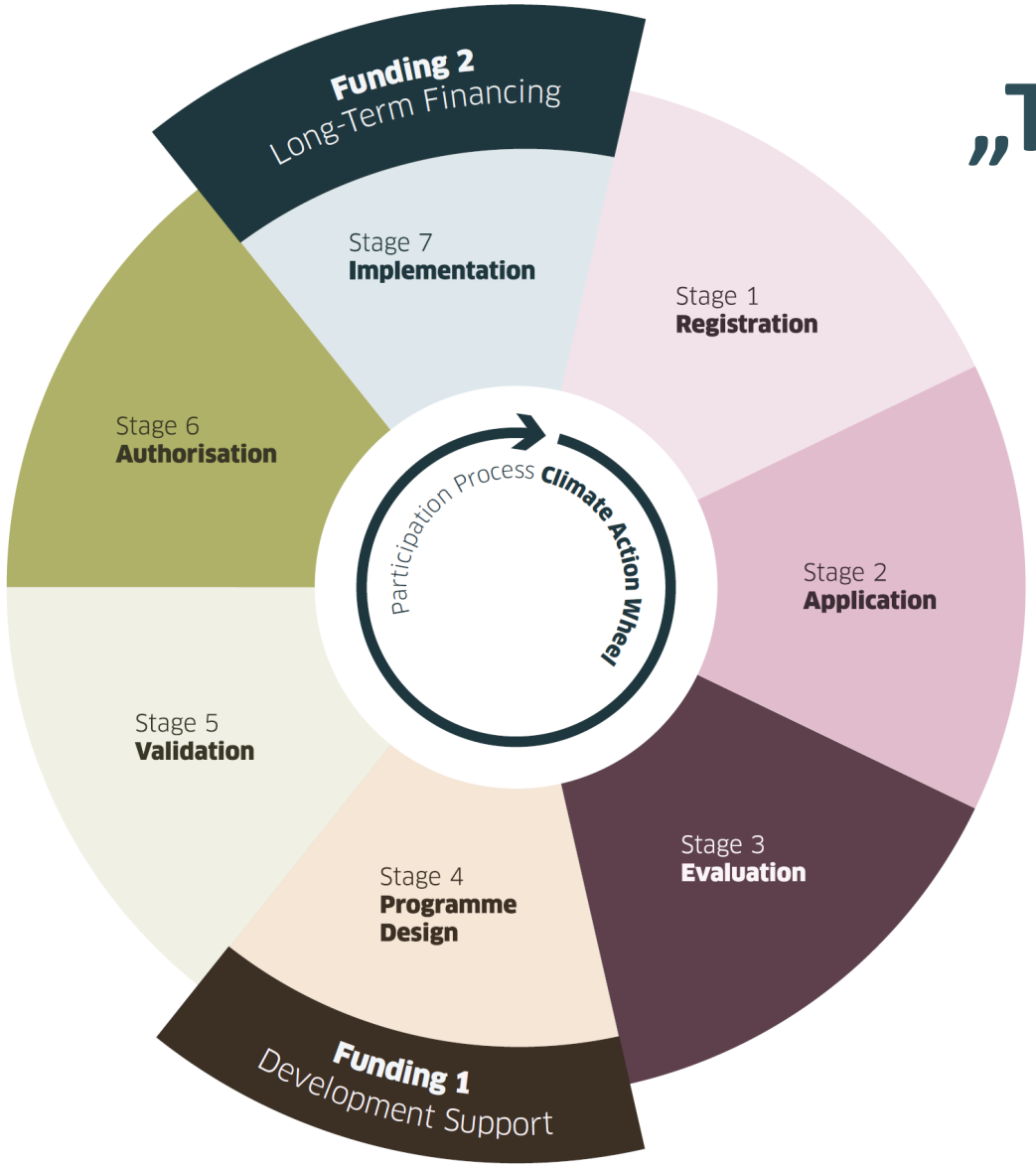
Check out the Enforcement Notice of FOEN:
https://www.bafu.admin.ch/bafu/en/home/topics/climate/publications-studies/publications/communications-enforcement-co2-ordinance.html

Programme Distribution

KliK Foundation: Our Portfolio

- ✓ Solar PV programs: Ghana, Dominica, Thailand
- ✓ Clean cooking: Malawi, Peru, Ghana
- ✓ Biogas: Senegal, Morocco, Peru
- ✓ Energy Efficiency for SMEs: Morocco, Peru
- ✓ Energy Efficiency in buildings: Georgia
- ✓ Electric Mobility: Thailand, Senegal, Dominica
- ✓ Waste management: Ghana, Senegal, Morocco
- ✓ AWD: Thailand
- ✓ Green cooling: Ghana, Thailand
- ✓ Sustainable cement: Thailand

4. Procurement Process

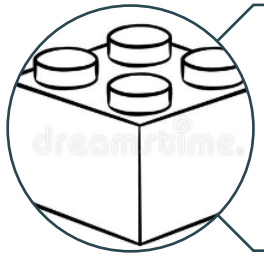


„The Climate Action Wheel“

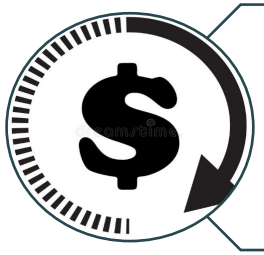
Funding opportunities:

- 1. Conceptual development
- 2. Purchase of the resulting emission reduction

Eligibility Checklist

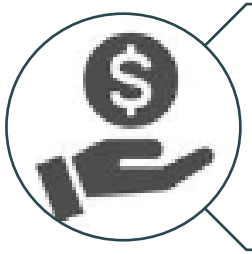


Structure and Scale



Financing Requirements and Viability

Plausibility of Business Modell



Financial Additionality & Role of Carbon

Self-Sustainability

Early Consideration of Support

Foundation for Climate Protection and Carbon Offset KliK

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Fax +41 (0)44 224 60 09

international@klik.ch

Current Activities

Newsletter KliK Foundation

www.international.klik.ch/en

Guiding Questions

- Experience with respective programmes in development?
- Scope of interventions?
- Challenges ensuring due process (registration, transaction)?
- Host country institutional set-up and experiences?
- How can developers ensure demands in terms of environmental integrity?

Developing projects with KliK Foundation:

Generating ITMOs under bilateral agreements

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Consulting & Services

myclimate offers customised solutions for sustainability and climate protection to companies of all sizes through carbon footprint analyses, IT tools, labels and resource management support.

Education

Through our interactive and action-oriented educational programmes, we encourage everyone to make a contribution towards our future.

Climate protection projects

Our high-quality projects promote quantifiable emission reductions and sustainable development worldwide

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myclimate carbon offset projects at a glance

myclimate has developed and supported over 174 carbon offset projects in 45 countries around the world since its foundation in 2002.

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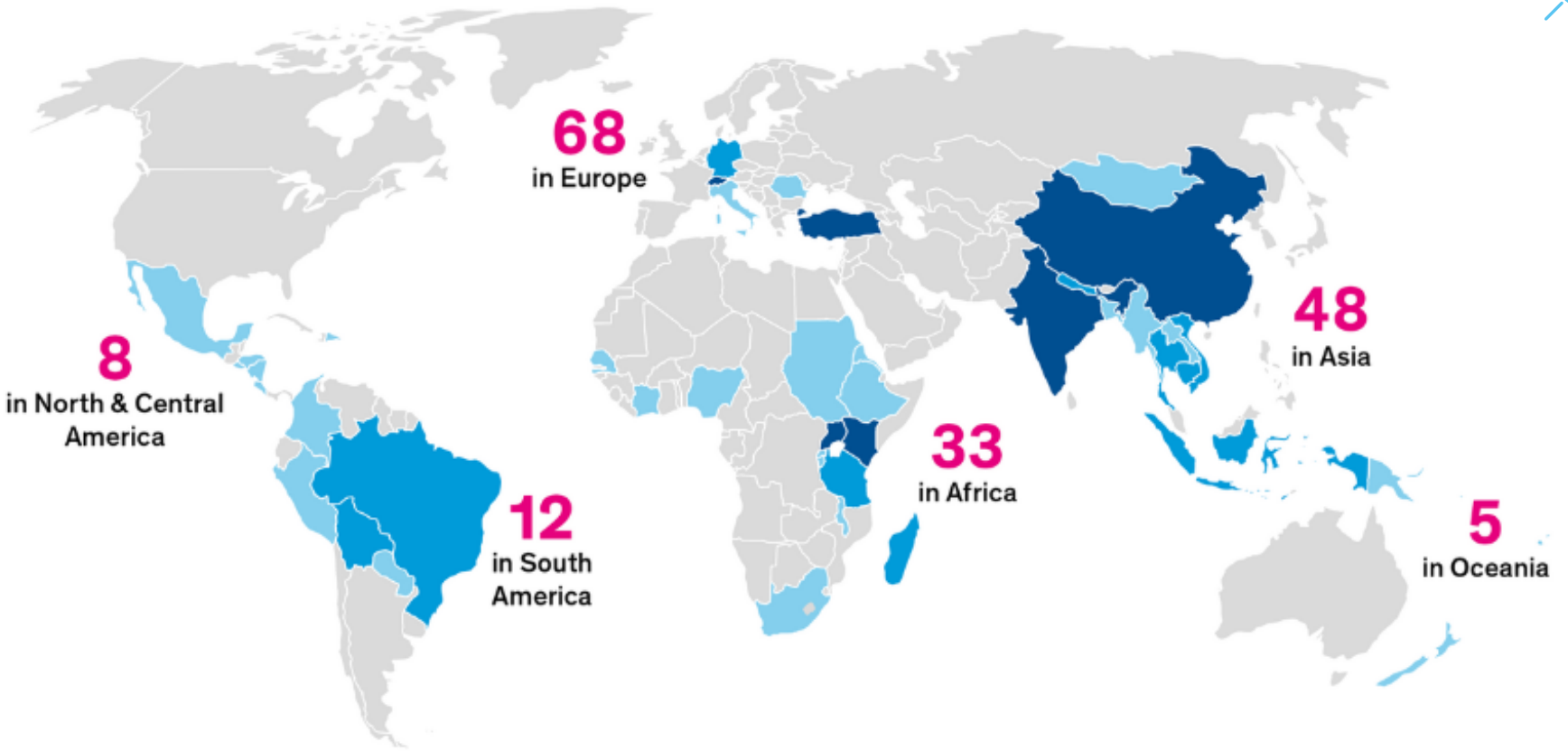
# of carbon offset projects
- 6+
- 3–5
- 1–2
- 0

174 projects

45 countries

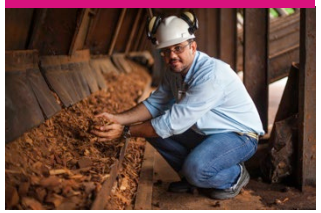
10 technologies



Dominican Republic
Solar Power Plant

China
Efficient cookstoves

Brazil
Biomass Power Plant



Uganda
Water filters

EcoCarSolaire

Mobilité et transport durable à Dakar

Technology: Solar / E-Mobility

Approach:

- Transforming diesel-fuelled “Cars Rapides” into electric “Cars Solaires” powered with electricity from photovoltaic systems
- Setting up a network of solar stations for vehicles to charge or change their batteries

Emission reductions: up to 300,000 tCO2 by 2030

Project developer: myclimate & MANDU I consulting

Project implementer: MANDU | consulting / EcoCar Solaire Consortium

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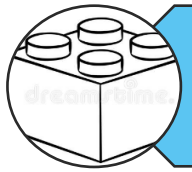
EcoCar Solaire Eligibility



Structure and Scale

- Aligned with Senegal‘s **NDC** & additional (**one of a kind**)
- Up to **300,000 ITMOs** by 2030

Financing Requirements and Viability

- **Results-based financing** contingent on delivery of emission reductions
- Increased capital needed at the inception

Plausibility of Business Model

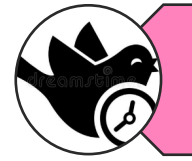
- Project builds on **existing informal transport system** with known demand
- **Breakeven** expected in 3-4 years

Financial Additionality & Role of Carbon

- **Carbon finance** needed to scale project model
- **Subsidies** for solar components and bus transformation kit

Self-Sustainability

- **Low-tech, cost-efficient, scalable** approach
- Supports local economy by securing up to **30,000 jobs**



Early Consideration of Support

- Starting in **2023** – not yet implemented
- Based on internationally recognised **standards**

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Collaboration with KliK Foundation

Developing projects with KliK Foundation

- Productive, uncomplicated working relationship
- Regular guidance and clear expectations throughout the project development process
- Helpful points of contact and clear communication
- Flexibility and openness towards new, unusual or difficult project set-ups (high-hanging fruit!)

Project development process

1. Discussion of project idea with KliK
2. MAIN development & submission to KliK
3. Feedback / approval from KliK (CARs, FARs, MARs)
4. MADD development & submission to KliK
5. Feedback / approval from KliK & FOEN
6. Independent MADD validation
7. Formal government authorisation
8. Implementation & issue of ITMOs to KliK

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Planned projects with KliK in Georgia

Energy-efficient heating in rural Georgia

Technologies: Fuel-efficient stoves – Solar water heaters – thermal insulation
Local implementer: Women Engage for a Common Future (WECF)
Emission reductions: Up to 640,000 tCO2 by 2030

Renewable Energy Cooperatives

Technologies: Small-scale solar, wind & hydro
Local implementer: Caucasus Environmental NGO Network (CENN)
Emission reductions: ~300,000 tCO2 by 2030

Sustainable biomass production & utilisation

Technology: Energy-efficient stoves using biomass briquettes/pellets
Local implementer: Caucasus Environmental NGO Network (CENN)
Emission reductions: Up to 700,000 tCO2 by 2030

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Future plans, challenges & opportunities

Project pipeline

Mozambique
Solar mini-grids

Senegal
- Biogas for wastewater treatment
- Solar-powered water towers
- Geothermal energy & solar

Kenya
- Energy-efficient school kitchens

Challenges

- Unchartered territory:
  - Coordination with governments
  - Implementation of Corresponding Adjustments
- High-hanging fruit:
  - More complex approaches & technologies = higher costs

Opportunities

- Government commitments for long-term climate protection
- Higher carbon prices → more funding for climate action
- New, efficient and scalable technologies

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Thank you!

https://www.myclimate.org/

Janina.Schnick@myclimate.org

On E-Mobility, Green Cooling, Biogas

Ingo Puhl
Founding Partner of South Pole Group

allcot

Climate Change & Sustainability solutions

November 2022

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About the Session

Side Event at COP 27

KliK Foundation Programme Developer Event

Generating ITMOs in accordance with Article 6.2 under the bilateral cooperation agreement with Switzerland

Sustainable Waste Management Programme for the generation of ITMOs in Senegal

When

Thursday,
10. Nov. 2022,
18.00 - 19.30 (20.30)

Where

IETA Business Hub Zone: B;
Building: Delegations Pavilion;
Room/Stand: IETA Pavilion

Baseline Scenario

- Senegal's NDC includes waste management as a priority sector with high potential for **reducing GHGs**.
- The recovery of organic waste through composting and mechanization are options identified by Senegal to increase its **GHG reduction ambitions**.
- The country intends to **reduce emissions** from its sector by 13% by 2030 and by 31% over the same period if external assistance is provided (Conditional).

Mitigation Activity

The programme is composed of the construction of **eight new composting facilities** for the treatment of the organic fraction of municipal solid waste that will be diverted from a solid waste disposal site that otherwise would produce methane emissions by anaerobic decay.

GHG emissions reductions estimated **35,000 tCO2e/year** during the period of this cooperative approach 2024-2030.

Compost production will be 50,000 tonnes/year.

Recycling of 100,000 tonnes/year of plastic materials (HDPE, LDPE, PET, and PP).

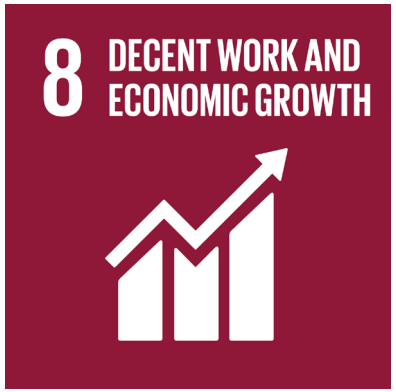
Implementation Plan

STRUCTURATION	MONTHS																	
ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Design of the programme	✓	✓	✓	✓	✓	✓												
Feasibility study of the eight sites	✓	✓	✓	✓	✓	✓												
Elaboration of the technical documentation							✓	✓	✓	✓	✓	✓						
Construction starting of all the composting plant							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

SDGs Framework

SDG 4

The mitigation activity will implement professional training between the workers in the composting Facilities.



SDG 8

Creation of new technical jobs by the project as well as labour employment.

Source of foreign exchange earnings through the creation of markets for composting by-products.

SDG 11

This Mitigation Activity will reduce per capita environmental impact of cities, in this case through the improvement of waste management.

The Implementation Use of Article 6

Article. 6 should be used to finance the **mitigation actions** of higher abatement costs within the NDCs.

Waste Management in Africa requires a **high ITMO price** to overcome barriers.

Institutional arrangements are hard to be implemented by project developers.

Financing should be facilitated by **ITMO buyer country**. Getting the reward is a result of taking the risk.

Technology transfer needs to be adapted to local conditions.

Capacity-building at all levels for the long-term success of Article. 6 implementation and operations

CONTACT ALLCOT

CHANGING CLIMATE CHANGE

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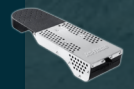
KliK Foundation Project Malawi: The Lilongwe Project

Project Objectives: Cut charcoal use in half in 5 years; eliminate open fire cooking within 50km radius

1. **Eliminate harmful three stone fire cooking**
   - 600,000 village households using open fires within a 50km radius of Lilongwe get Double CQC Rocket Stoves.

2. **Replace at least half of all current charcoal using households in five years**
   - ~ 170,000 fan-assisted and natural draft pellet and wood burning stoves replacing charcoal in urban areas.
   - ~ 2,000 Roadside food stalls converted to fan-assisted ('JetFlame') combustion systems.
   - ~1,000 Tea rooms/restaurants with high efficiency institutional stoves



3. **Build sustainable fuel sources**
   - CQC and its affiliate Ener-G-Africa (EGA) supply sustainable biomass fuel-stoves ecosystems on fully commercial basis. Stikwood and Pellets.

4. **Improve economic wellbeing of program recipients**
   - Women entrepreneur fuel production for urban market: 2 bamboo seedlings per household per year to women using project stoves within 50kms. CQC will buy back bamboo fuel for urban households and restaurants. ~10,000 ha over 7 years

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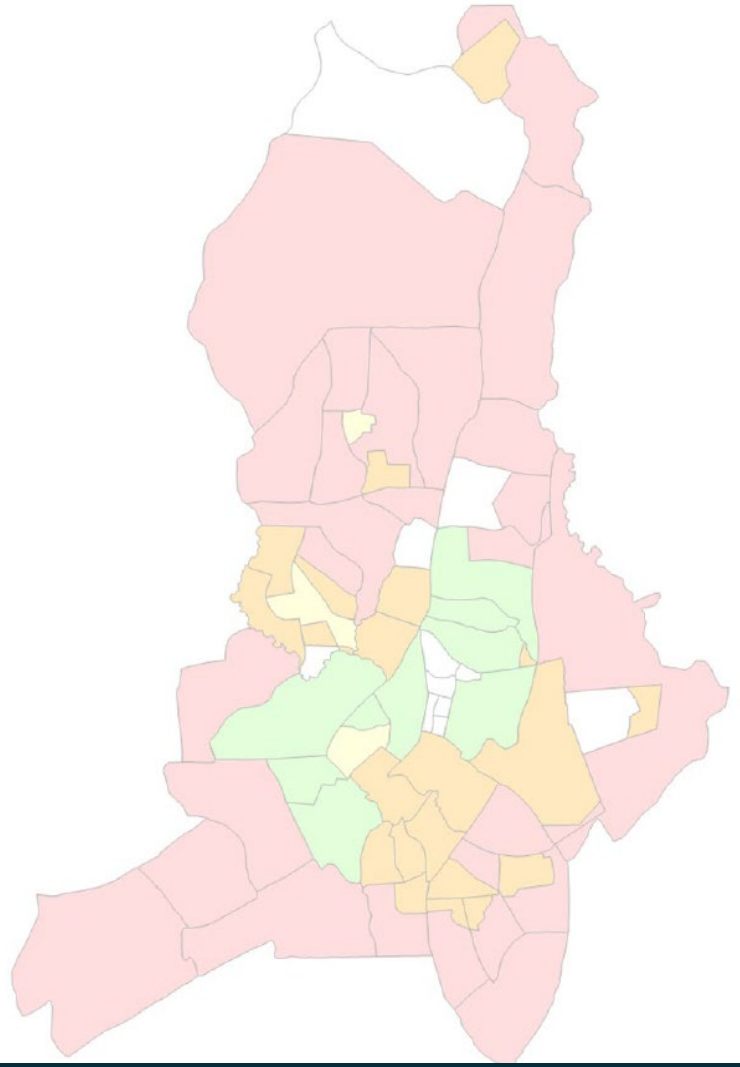
Lilongwe Market Mapping (Households)

Innovative GIS Mapping of Roof Type correlated with fuel consumption and cook stoves to target consumers for specific "fuel-stove" ecosystems. Targeting 223,000 urban households and 600,000 peri-urban and rural households



Peri-Urban Red

- Transition areas between rural and urban communities and have a mix of rural and urban characteristics with some collection of fuel and some purchasing fuels, including both firewood and charcoal
- Ideal for low cost, time saving products

Urban Orange, Yellow and Green

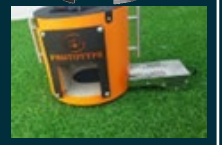
- Higher income earning
- Mainly cook with charcoal, electricity, and some LPG
- Candidates for more sophisticated products
- Offer a diversity of "fuel-stove" combination all offering faster, cleaner, and cheaper solutions

Market	Socio-economic	Average Income / Month (USD)	Wood	Charcoal	Electricity	Gas	Total Households
Urban Green	High	$1,000	3.0%	30.8%	44.3%	14.1%	6,856
Urban Yellow	Upper Middle	$150	4.7%	37.5%	47.2%	1.9%	2,919
Urban Orange	Middle	$50	16.9%	45.8%	26.4%	1.4%	40,754
Peri-Urban Red	Low	$35	20.9%	54.5%	14.4%	0.3%	173,017
							223,546

CQuestCapital

Fuel-Stove Ecosystem Selection by Income

Product trials /and focus groups used to select from 6 new or re-designed stoves and fuels for market entry in each income strata.

Stove Tested (Fuel Type)	Market Segment / Product Match			
	Peri-Urban Red	Urban Orange	Urban Yellow	Urban Green
Arc Natural (Stick) 	✓			
Baldwin (Stick) 	✓			
Flex (Stick) fan assisted 	✓	✓	✓	
Lello (Pellet) – fan assisted 	✓	✓	✓	✓
Natural Draft TLUD (Pellet) 				
Oorja / Ecochulla Elegant (Pellet) 		✓	✓	✓

CQuestCapital

Commercial Cooking Fuel-Stove Ecosystems

Combinations of large and small scale stoves, fuels and cooking pots with and without chimneys

Stove Combination to be Tested	Expected Market Segment / Product Match		
	Schools / Medical Centers	Closed Wall Restaurants / Tea/ Dining Rooms	Daytime Food / Tea / Chippie Stands
Modified Rocket Stove with Jet Flame Fan Assistance 			✓
Baldwin with Rocket Stove Combo and SuperPot 	✓	✓	
Double Baldwin with Chimney 	✓	✓	
Institutional Stove 	✓	✓	

CQuestCapital

Transformation Carbon

CQuestCapital

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Generating ITMOs in accordance with Article 6.2

Raphael Eberle

11/10/2022

Transformative Cookstove Activity in Rural Ghana

- Dissemination of 60,000 ICS.
- Beneficiaries in the rural regions of Ghana, with a focus on agricultural communities.
- Stove reduces biomass usage by 60% or more.
- Reduction in smoke and toxic fumes by up to 80%.
- Local assembly and distribution creates skilled labour.
- Design of a dedicated fund that provides micro-loans to farmers.

Malawi Dairy Biogas Program

- Installation of 10,000 biogas digesters.
- Beneficiaries are dairy farmers with 2-20 cows on average.
- Digesters turn manure into valuable biogas, providing farmers access to a clean energy source that can be used for cooking.
- By-product of the digesters is a slurry that can be used as an organic fertilizer.

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