







5th Africa Mini Grids Summit Accra, Ghana 24 June 2019





















GMG Facility Kenya

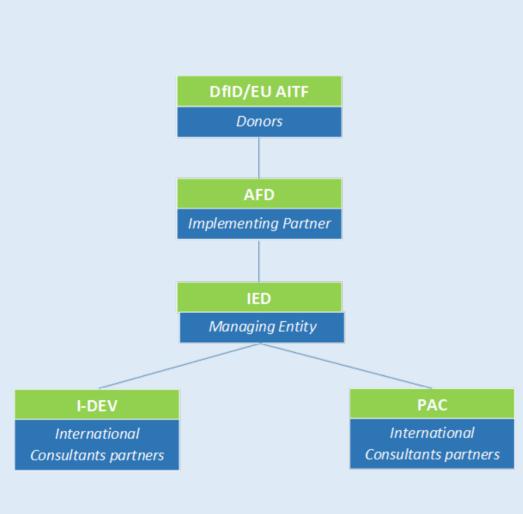
The Facility avails funds, and supports green and sustainable mini-grid electrification in off grid areas in Kenya.

The Facility provides:

- Technical assistance
- Milestone investment grants
- Output-based grants

Who we are





Funded by UK DFID

(and EU AITF since mid 2018)

AFD Implementing partner

 AFD has experience in renewable energy RE&EE (SUNREF Programme).

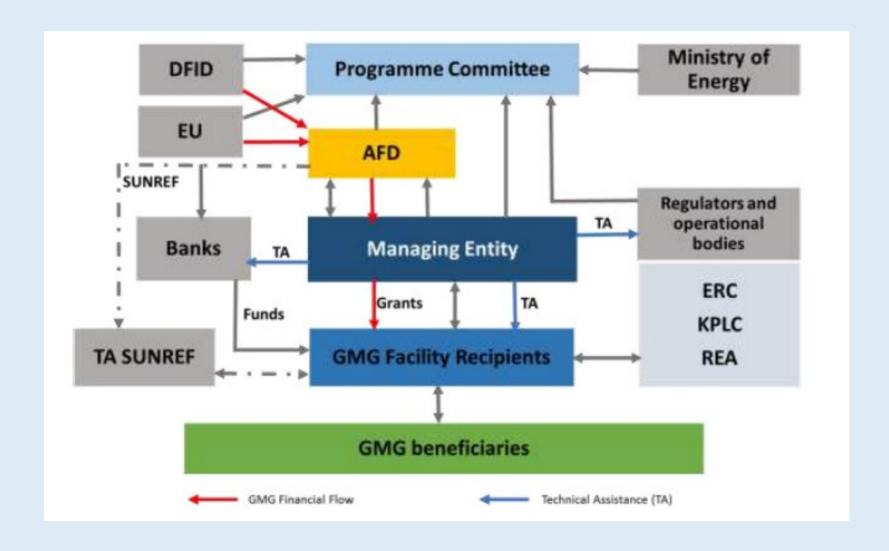
Innovation Energie Development,

Managing Entity

- IED has extensive expertise in mini grids and access to energy
- I DEV provides investment advice
- PAC focuses on social and gender inclusion and community engagement.

Programme Structure





GMG Programme time line







Funding / Targets of GMG Facility



Funding available

- DfID committed GBP 9,16M for Project and Sector TA and Investment / Output based Grants .
- EU-AITF committed €5.65M for Project TA and Investment /output based Grants.



Type of Grants



pre-feasibility

development

execution

- Technical Assistance max
- € 50,000
- Max per potential connection € 100
- Technical Assistance max € 250,000
- Max per potential connection € 125
- Max grant € 450 / connection
- Max grant 50% of eligible costs

~ € 12 million for Grants + TA

Projects selected on:



Category	Example
Technical design of project	Quality of design Choice of technology Sustainability of generation resource Cost effectiveness
Business model	Financial benefits Scalability Risk and risk mitigation
Past experience	In technical design In raising financing In project management
Management team	Composition and skills Completeness of skills required Local experience Level of qualifications
Potential impact	Number of connections Installed capacity from renewables Employment creation (economic benefits) Gender considerations Additional capital leveraged

Ongoing GMG Projects

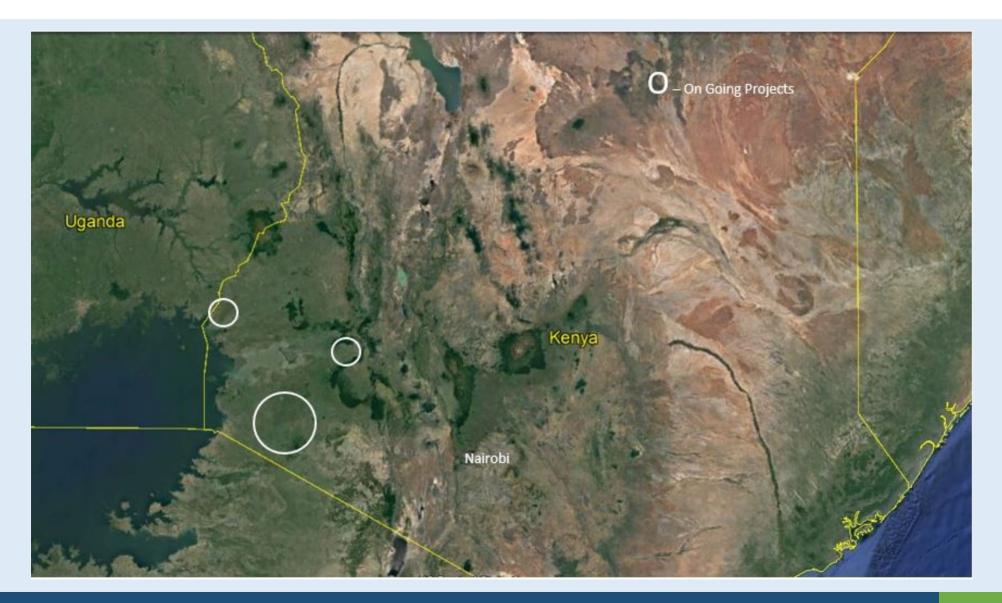


- Grant agreements signed early 2018 with three developers
- Implementation initially planned to be completed within 12 months
- Delays for operational and regulatory reasons
- Completion of construction end 2019



Developer's Geographic Areas





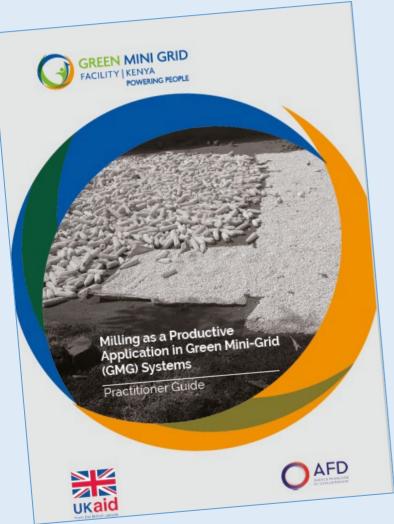
Technical Assistance to Sector



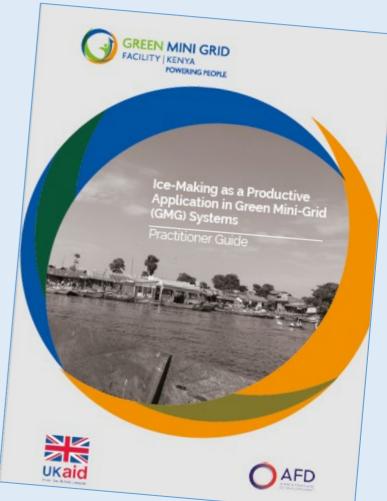
Subject	Results
Support to Ministry / regulator	 GMG supported Ministry and other projects in this area Draft regulations were developed in 2018. Need to be adapted to the new Energy Law March 2019
Access to Finance	 Demand and Supply side of Energy Finance and Market Assessment studies for HH appliances and PU applications for SMEs . Financial Models developed in consultation with local banking group Working towards Loan Guarantee Fund
Productive use of energy	 Two tool kits to improve economic development in mini-grid communities. Milling Ice making Further promotion planned through Ministerial workshop in July

Sector Technical Assistance





Practitioner's
Guides
for
Milling
and
Ice making



search for resources www.gmgfacilitykenya.org

Other areas of productive use....









Egg incubator





Regulatory framework MG

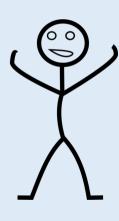


- Ministry of Energy Approval based on EoI, includes no objection of County authorities and REA
- **Tariff approval** by Regulator (detailed feasibility study, standard tariff calculation, ESIA etc). Reviewed annually;
 - Approved tariffs varying between \$0.50 0.85/kWh and connection fees \$65 95 but vary per developer.
 - Regulator open to different models.
- Construction Permit (tech specs, land registration, etc). Valid
 12 months
- Generation, Distribution and Supply License after commissioning of plant/ distribution network, up to 20 years
- Regular reporting to Regulator, monthly and annually
- Required for each site

Achievements



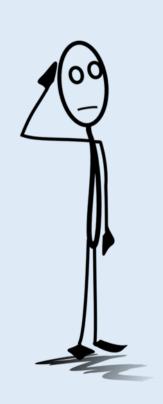
- Stimulation of conversation on Mini-Grids in Kenya;
- Increased number of connections and access to off-grid areas;
- Accelerating productive uses in communities served by Mini-Grids;
- Policy and Regulations The Ministry has drafted and plans to incorporate regulations to support Mini-grids development
- Leverage of international private investments
- Innovative systems and models used by various developers – which could be integrated into Electrification Strategies by Government and utilities.
- Kenya on forefront of mini grid solutions. Starting point for international developers.



Challenges



- Regulatory approval process. Time and resource consuming and requirements changed over time.
- Land registration issues.
- Delays in procurement/ delivery of materials/ contractual issues.
- Evaluation and approval process is time consuming but needed to manage risks especially in case of investment grants. Verification more demanding
- Overly optimistic time frame from both donors and developers.
- High kWh tariffs despite grant support









Thank you

Gerard Hendriksen

g.hendriksen@ied-sa.fr www.gmgfacilitykenya.org





Managing Entity:



In association with:



