

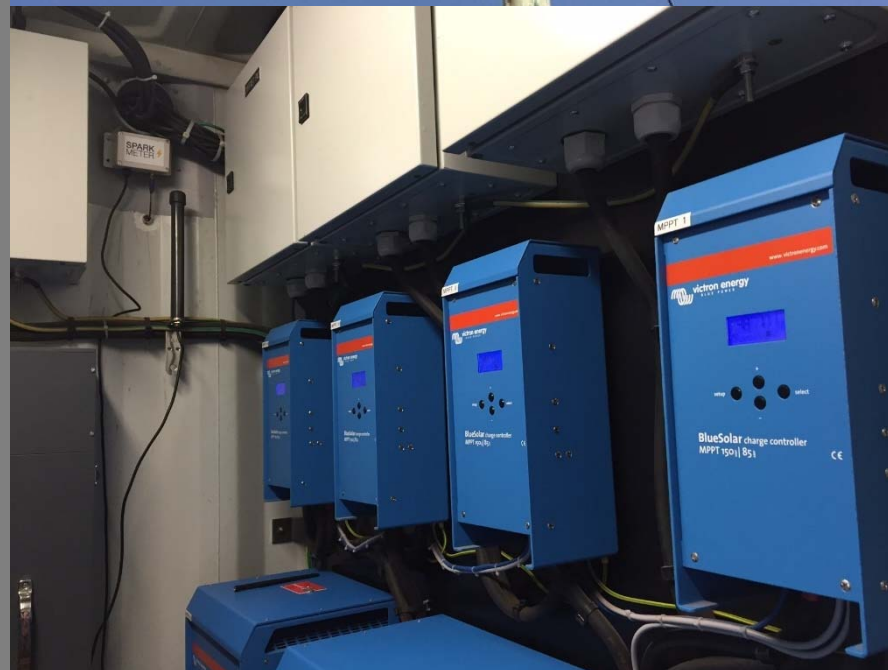
TANZANIA MINI-GRID PROGRAM



CLEAN ENERGY SOLUTIONS CENTER WEBINAR TRAINING: 18 JULY 2017

IFC'S PURPOSE

- To promote open and competitive markets in developing countries
- To help generate productive jobs and deliver essential services to the underserved
- To support companies and other private sector partners where there is a gap
- To catalyze and mobilize other sources of finance for private sector development



Capturing the mini-grid opportunity in Tanzania

- Like many other countries, Tanzania faces financial limitations to extending the grid
- Government and other players have worked over past 5+ years to establish strong enabling ecosystem to support mini-grid penetration
- As a result, country has a unique legal and regulatory environment that should help attract a range of companies to support off-grid sector

- Based on recent analysis (Electrification Prospectus) in Tanzania mini-grids are considered to be technically- and commercially viable for high-density populations (>125 people per km²)
- This segment includes 9.1m residents (1.86m households) or 20% of population



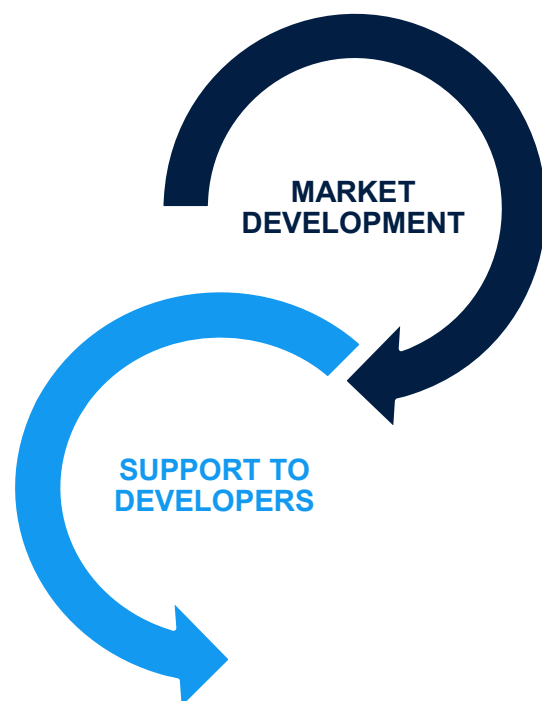
How can we help companies to effectively capture mini-grid opportunity in Tanzania?

Tanzania mini-grids program

Overall Objective: The Tanzania mini-grid program aims to develop a robust distributed power generation sector in the country. Implemented by IFC, in partnership with SREP.



Two interlinked components of the program:



- Development of **Technical Standards and Specifications**
- Development of an **Information Portal for permitting and licensing**
- **Support financial institutions** to help them identify, analyze and finance mini-grid projects

To address market barriers to mobilize resource and investments so as to commercialize and scale up mini-grids; Sub key areas include:

- **Technical** (assessment of design and advice regarding capacity building)
- **Financial and Legal** (commercial advice, financial analysis and legal requirements to different capital supports)
- **Compliance and access** (registration of permits, and licenses for community engagement)

Information for Mini-Grid Developers

Welcome! This Portal provides comprehensive information for investors interested in developing renewable mini grids in Tanzania. It was developed under SREP (Scaling-Up Renewable Energy Program). SREP was prepared under the leadership of the Government of Tanzania, through a National Task Force led by the **Ministry of Energy and Minerals (MEM)**. The broader objective of SREP is to catalyze large-scale deployment of renewable energy in Tanzania, including a specific component on mini-grids.

Licensing

The Mini-Grids Information Portal's Licensing section provides an overview of procedures, prerequisites and required documentation for obtaining generation, distribution, and supply licenses for small powerplants.

[\[Licensing Section\]](#)

GIS

To help mini-grid investors get an overview of facts about specific areas in Tanzania, the GIS section presents geographically anchored information (rural electrification, MV&HV lines, powerstations, etc.).

[\[GIS Section\]](#)

Financing

Mini-Grid development in Tanzania may receive financing aid from REA. The required documentation and an overview of the procedure is presented in a dedicated relevant section of the Mini-Grids Information Portal.

[\[Financing Section\]](#)

Directory

The Portal allows the self-registration of state authorities, local authorities, financing institutions and other entities of relevance to mini-grid development. Their details are gathered in the Directory section.

[\[Directory Section\]](#)

Library

The Library section of the Mini-Grids Information Portal caters to the need of project developers to have all relevant legislature and relevant documents collected at one place, easily accessible, and up-to-date.

[\[Library Section\]](#)

TASF

The Transactional Advisory Services Facility (TASF) provides experts to support developers to strengthen mini-grids operating models, increase their commercial viability and, ultimately, bankability.

[\[TASF\]](#)

Please select the options below which apply to the profile of your intended activity:

<p>1 Capacity</p> <p>Up to 1 MW</p>	<p>4 Wholesale Selling to</p> <p>DNO (with SPPA)</p>
<p>2 Technology</p> <p>Solar</p>	<p>5 Retail Electricity Selling to</p> <p>Customers in own grid</p>
<p>3 Hybrid</p> <p>Yes</p>	<p>6 Own Mini-Grid</p> <p>Up to 1 MW</p>

▶ Generation Licence

The process for obtaining a generation license for the profile defined above entails the following steps. Further details are available by clicking on each step.

- 1 Establishment of a Business Entity (Project Company) +
- 2 Letter of Intent +
- 3 Issuance of SPPA +
- 4 Environmental Clearance +
- 5 Upgrading DNO's Distribution System +
- 6 Interconnection, Protection and Testing +

[Law & Policy](#)[Reports](#)[Forms & Fees](#)[Tariffs & Financing](#)[Guidelines & Standards](#)

Legislative Acts

[The Rural Energy Act, 2005](#)[The Electricity Act of 2008](#)[The Energy and Water Utilities Regulatory Authority Act, 2001](#)[The Environmental Management Act, 2004](#)

Regulations

[The Revised Draft Environmental Management \(Hazardous Waste Control and Management\) Regulations, 2008](#)[The Environmental Management \(Air Quality Standards\) Regulations, 2007](#)[The Environmental Impact Assessment and Audit Regulations, 2005](#)

Please select the options below to customise your view of geographically-anchored data:

1 Region

Lindi

2 Villages (per District)

Liwale

- Electrified
- To Be Electrified via Grid Extension (REA 2016-21 Plan)
- To be electrified via Off-Grid Technologies

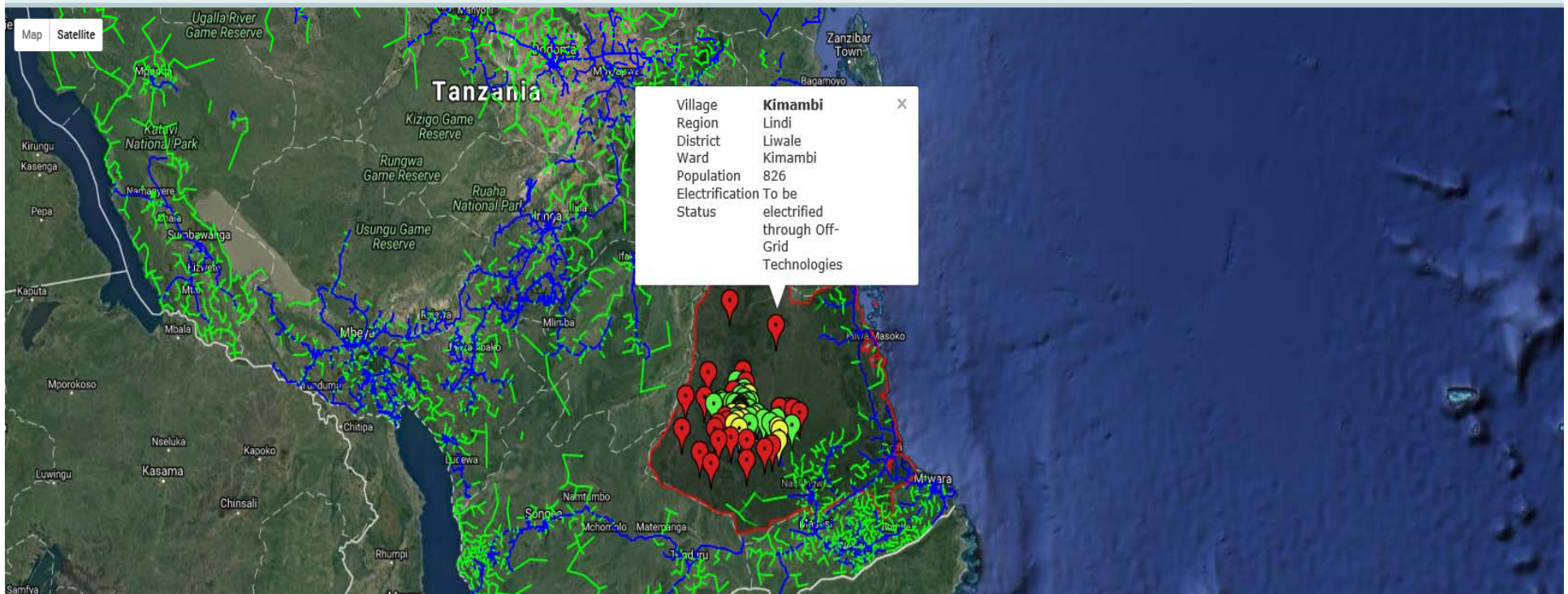
3 Mini Hydros (sourced from ESMAP website)

- Existing (Report)
- Potential (Report)

4 MV Lines

- 33/11kV Lines
- Proposed 33KV Lines (REA 2016-21 Plan)

See also: [Global Solar Atlas: Tanzania](#)



Transaction Advisory Services Facility (TASF)

The purpose of the TASF (Transaction Advisory Services Facility) is to support mini-grid project developers by providing advisory services to strengthen mini-grids operating models, increase their commercial viability and ultimately their bankability.

The aim of the TASF is to address select market barriers in order to mobilize resources and investments that will commercialize and scale-up mini-grids in Tanzania. These transaction advisory services will address the lack of proven commercially viable business models, sector level data and information on the markets and resources, the limited technical and business capacity that exists among developers and access to finance challenges. One of the primary parts of the component is the Transaction Advisory Services Facility (TASF).

TASF has the following objectives:

- Provide an integrated set of advisory services able to respond to the needs of developers
- Demonstrate the potential for scaling up business case for mini-grids in Tanzania by helping advanced projects reach financial close
- Support developers in accessing financial and non-financial support made available by development partners in Tanzania to support the mini-grid market
- Harness the lessons learnt by developers

The advisory services provided will comprise of the following:

- Technical & Engineering support
- Business Advisory support
- Financial & Capital raising support
- Legal & Compliance support

Apart from the aforementioned advisory services, 12 trainings and capacity building workshops will be organized by the team for the mini-grid developers suited to their needs through the project lifetime. (For more information, click [here](#).)

To benefit from [TASF services](#) content stakeholders will need to [Register](#). If you already have a TASF account and want to access the [TASF Knowledge Corner](#), you will need to [Log in](#).

[Register](#)

[Log in](#)

Technical & Engineering Support

TASF will provide various technical services to developers that will cover resource-related, environmental and social issues, among other areas. Market identification, site selection and determination of the willingness to pay are critical needs for developers. This could also include support for the permitting and licensing processes. The TASF will recommend minimum technical standards and specifications as well as offer support to developers who may need assistance with technical design works and construction.

Business Advisory

TASF will provide firm-level support through a menu of services that includes pre-feasibility and feasibility studies, regulatory compliance, technical design and evaluation, procurement, community engagement, preparation of business plans and models, financial and economic modelling, market and risk assessments, tariff estimation and setting, and financial closure. In line with the business planning, support will also be provided for pricing of energy services including tariff setting and billing methods.

Capital Raising

The TASF will provide advice on the types of financing available within the commercial, quasi-commercial and non-commercial options. Developers will benefit from in-depth support in financial modelling. As part of the feasibility assessment, economic and financial analysis support that determines key bankability indicators and the sensitivity of the business will be offered. This will also include investment readiness assessment, feedback on investor materials, selection of relevant financiers, introductions, and advice throughout the process.

Legal & Compliance Advice

Under this service, TASF will provide from basic support, such as business registration, to more complex services, such as environmental and social compliance to land access, the Consultant will provide developers with a spectrum of services that will enable them comply with the national and sub-national legal and policy requirements. Land rights, water permits, environmental impact assessments, generation licenses, distribution licenses, power purchase agreements (for grid-tied mini-grids), construction permits, and tax obligations, are just some of the requirements that need to be fulfilled in order to operate mini-grids.

Training and Workshops

Thanks



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