REGIME TARIFÁRIO PARA AS ENERGIAS NOVAS E RENOVÁVEIS (REFIT)

GET FIT Mozambique

Introduction to the Programme

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### Challenges for leveraging private investment in renewable energy

<table>
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<th>Number</th>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Incomplete / incoherent reform</td>
<td>Weak design and faulty implementation of sector unbundling and renewable energy promotion programs (including standard documentation)</td>
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<td>2</td>
<td>Political and commercial risks</td>
<td>Detrimental country risk profiles and weak off-taker structures</td>
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<td>3</td>
<td>Inadequate incentives/ RE regimes</td>
<td>RE promotion programs (such as FiTs) offer inadequate commercial incentives especially for early-movers</td>
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<tr>
<td>4</td>
<td>Technical/ engineering issues</td>
<td>Grid integration of RE requires significant investment in transmission infrastructure</td>
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- **Long-term debt finance and equity are hard to come by, terms and conditions are generally punitive**
- **Few RE deals have come to close/ gone into implementation**
GET FiT Uganda
Results Achieved 2012 - 2016

→ Total of 21 projects approved with additional on-grid energy capacity of up to 170 MW (hydro, biomass, solar)
→ Energy production increase of 20% (800 GWh p.a.)
→ Access to energy for > 200,000 households (1.2 million people) also in rural areas
→ USD 500 million in private investments leveraged with limited amount of grant funding (leverage factor of 4.5)
→ Transparent and efficient legal and regulatory framework for RE IPPs is in place
→ Experience gained by public sector to manage IPP transactions
→ Compliance with IFC Social and Environmental Performance Standards
→ Uganda is SSA country with second highest number of IPPs in Africa after South Africa
GET FIT Programme Uganda - Stimulating private investments into RE

Focus on 3 support elements to initialize a sustainable renewable energy sector development:

- Direct incentives
- Risk allocation strategies
- Technical assistance

Enabling environment
(supportive regulatory environment rather than project-related support)

- Top-up of RE feed-in tariff
- Grants/ concessional financing for grid integration
- Political risk insurance products
- Commercial risk insurance
- FiT implementation guidelines
- Standardized contract documents (PPAs, grid connection)
- Competitive procurement process
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GET FIT - Roll Out Programme

Preparatory Studies to assess the prospects of a GET FiT type programme in: Ghana, Mali, Nigeria, Ethiopia, Kenya; Rwanda, Tanzania, Malawi, Mozambique, Namibia

- Supply situation generation & transmission
- Share & future opportunities for RE
- Financial performance of the sector

- Current energy sector framework
- Policies incentivising investments into RE
- Analysis of existing PPA and related documents for RE
- Identification of key stakeholders facilitating RE development

- Developers
- Equity partners
- Technologies
- Locations
- Envisaged tariff

- Political risks & requirements for risk mitigation
- Commercial risks & requirements for risk mitigation
- Legal and regulatory risks
- Review of existing REFiTs
- Grid integration issues

- REFiT Tariff Support
- Off-taker Support
- Grid Integration
- RE portfolio composition (~250 MW)
- Technical Assistance
- Economic Impacts
- Buy-in commitment from partner governments
### Content

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MARKET STUDY:
SUMMARY RESULTS FOR DUE DILIGENCE AREAS

An assessment of readiness, political will and economic justification for GET FiT; 
*not* an overall score for “GET FiT Appropriateness”

<table>
<thead>
<tr>
<th>Country</th>
<th>RE potential and power market situation</th>
<th>Legal/ regulatory/ policy framework</th>
<th>IPP pipeline</th>
<th>Financial landscape</th>
<th>Implementation considerations</th>
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<tr>
<td><strong>Southern Africa</strong></td>
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<tr>
<td>Malawi</td>
<td>Readiness: 🔴</td>
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<td>Outlook: ➡️</td>
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<tr>
<td>Mozambique</td>
<td>Readiness: ?</td>
<td>🔴</td>
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SECTOR CONTEXT & RATIONALE

• Power sector dynamics and challenges
  • Strong demand growth
  • long distances from production to load areas
  • transmission constraints
• Abundant and well mapped renewable energy resources
  • Dispersed generation opportunities gaining attention
• Improve supply security
• Stabilize systems
• Regulatory momentum:
  • Renewable energy policy and strategy
  • REFIT programme
  • Cost-plus based REFITs (cost-reflective??)
KEY BARRIERS TO A SUCCESSFUL RE IPP FRAMEWORK

• Perception of ‘reasonable price’ and the value of dispersed (RE) power production
• Political and off-taker risk – attract investors and financiers
• Weak RE IPP track-record and experience in key institutions
• REFIT framework new, incomplete and untested
• Institutional constraints
  • The Energy Regulator (ARENE) will be active from December 2017, and will take time to be full operational;
  • Human Resources
  • Efficiency and transparency in bureaucratic and formal processes and procedures
• Programmatic risk mitigation
  • Political risk insurance products
  • Commercial risk insurance products to mitigate e.g. off-taker risks; forex risk

• Bridging the viability gap
  • REFITs vs. investors’ requirements
  • REFITs vs. alternative power sources - EDM incremental cost

• Technical knowledge base strengthening

• Support to financial and developer community

• Ensure effective REFIT implementation
  • MIREME as host institution
  • Complete set of standardized transactional documentation (IA, PPA, GCA)
  • Efficient procurement (REFIT/Auction)
GET FIT Mozambique – Country Specific Project Design

- Incentive mechanism
  - Results-based buy-down of REFiT to reduce cost burden for EDM

- Guarantee Framework
  - Political risk insurance products
  - Commercial risk insurance products to mitigate e.g. off-taker risks; forex risks

- Standardized Contract Documentation
  - PPA
  - Implementation Agreement
  - Grid Integration Agreement

- Studies
  - RE Grid integration

- Technical Assistance
  - Local GET FIT Coordinator and GET FiT Secretariat to support host institution during implementation
Design Study
Plans and Approach

• Funding for FS available from UK Gov. (DECC)

• Design Study:
  • Review of regulatory framework, development of draft PPA
  • Programme design, risk mitigation requirements, calculation of tariff support
  • Grid integration study, identification of project pipeline

• GET FiT Coordinator based in Maputo:
  • Coordinate implementation of FS
  • Coordination among key stakeholders
  • Develop communication platform for developers and financiers

• Timeline:
German Financial Cooperation in Mozambique
Project Portfolio in Energy Sector

Objective: Cost-Efficient and Environmentally-Friendly Energy Supply

Rehabilitation of Mavuzi (52 MW) and Chicamba (38 MW) HPPs
Loan € 18 m (signed in 2013)
Status: 95% completion

New Tsate HPP (50 MW)
Total costs up to € 210 m
Financiers: KfW, Sida, EIB
Status: Feasibility Study completed, ESIA 2018, financial close 2020

EDM Power Network Modernisation Programme
Loan € 21.8 Mio. (signed in 2017)
Status: Detailed Design to begin 2017

EDM Short-Term Investment Programme (STIP)
Grant € 9 m (signed in 2016), co-financing with EIB & Norad
Status: Detailed Design

Mozambique – Malawi Interconnector
Grant € 30 m
Status: Appraisal 2018
Get in touch – we would be happy to advise you

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