



Supporting Renewable Energy Production with Sound Regulatory Frameworks: Insights into the Global Energy Transfer Feed-in Tariffs

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Background

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- ✓ The electricity sector was unbundled in 2001 separating generation, transmission and distribution.
- ✓ Established an independent electricity regulator “Electricity Regulatory Authority”.
- ✓ The regulator is responsible for issuance of licenses, setting and enforcement of standards, setting of tariffs and other charges, etc.

Overview of the Electricity Sector

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- ✓ More than 80% of power supply is from hydro.
- ✓ Uganda suffered severe load shedding between 2005 and early 2012.
- ✓ Peak demand for electricity stands at about 512 MW.
- ✓ Load shedding reached 150 MW or 30% of total demand in 2011.
- ✓ The commissioning of the 250 MW Bujagali hydropower plant helped to eliminate load shedding significantly.
- ✓ Demand for electricity is growing at 12% per annum.
- ✓ Projections indicate that the country might return to load shedding by end 2014 or switch on expensive HFO generators.

Renewable Energy Potential

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- ✓ Uganda has unexploited RE potential (hydro, bagasse cogeneration, biomass, solar, etc).
- ✓ **Key challenges highlighted by private investors included:**
 - § Lack financial viability of investments (low FITs);
 - § Significant perceived political risk;
 - § Lack of creditworthiness by the off taker;
 - § Absence of a standardised PPA leading to long and protracted negotiations;
 - § Lack of clarity on the interconnection arrangements.

What is GETFiT?

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- ✓ Global Energy Transfer for Feed-in-Tariff (GETFiT) is a program to fast track development of Renewable energy projects in East Africa (EA).
- ✓ Main objective of GETFiT is to assist EA nations pursue climate resilient low-carbon development.
- ✓ To be achieved through supporting development of small-scale RE generation projects by private developers.
- ✓ Uganda is the pilot country.

Why Uganda became a Pilot Country?

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- ✓ The institutional and legal framework is conducive for private sector participation.
- ✓ Clear RE policy.
- ✓ Regulatory commitment to increase tariffs to cost reflective levels.
- ✓ A comprehensive study initiated by the regulator to review the REFIT phase 2 had already been initiated in 2011.
- ✓ The review of the REFIT was aimed at providing a special incentive scheme to fast track the uptake of RE.

Revised REFIT

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Technology	Current REFIT (Usc/kWh)	Revised REFIT (USc/kWh)	Top Premium (Usc/kWh)
Hydro (9>=<=20 MW)	8.5	9.8	1.3
Hydro (1>=<=9MW)	9.8	11.1	1.3
Hydro (0.5>=<=1MW)	10.9	12.7	1.8
Bagasse	8.1	9.1	1
Biomass	10.3	10.9	0.6
Biogas	11.5	11.5	0
Landfill gas	8.9	8.9	0
Geothermal	7.7	7.8	0.1
Wind	12.4	13.0	0.6

Instruments Under GETiT

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- ✓ GETFiT utilises three separate instruments:-
 - 1) FiT Premium/top-up payment mechanism
 - 2) Off taker and Political Risk Guarantee from World Bank
 - 3) Private Sector Financing

Participating Partners

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- i. Norway
- ii. Germany
- iii. UK
- iv. World Bank
- v. EU
- vi. Deutsche Bank
- vii. KfW

Eligibility Criteria

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- ✓ Must be a RE project covered by the REFiT.
- ✓ Projects should be holding relevant permits and licenses prescribed by the Electricity Act, 1999.
- ✓ Projects must satisfy the technical, financial as well as environmental/social due diligence.

Governance Structure of GETFiT

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- 1) Steering Committee
- 2) Investment Committee
- 3) Secretariat

Expected Benefits

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- ✓ Help stabilize power sector financing by adding least cost RE generation capacity.
- ✓ Funding by Development Partners expected to exceed 95 mil Euro.
- ✓ Reduce average generation costs.
- ✓ Foster competition in Ugandan RE construction space.
- ✓ Reduce transaction costs for future RE projects through use of standardized PPA, cost reflective REFiT, improved permit & licensing procedures, etc

GETFiT Progress

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- ✓ In April 2013 the Program called for proposals for 1st phase.
- ✓ 15 private developers applied to GETFiT for consideration.
- ✓ Second Round of GETFiT Call for Proposals will be in November 2013.

Approved GETFit projects phase 1

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Projects	Technology	Installed Capacity (MW)
Kakira Sugar	Bagasse	20
Kikagati	Hydro	16
Nyamwamba	Hydro	9.2
Rwimi	Hydro	5.5
Nengo Bridge	Hydro	6.7
Waki	Hydro	4.8
Siti 2	Hydro	16.5
Siti	Hydro	5
Subtotal		83.7

Deferred GETFiT projects Phase 1

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Project Name	Technology	Capacity (MW)
Sindilia / Butama Hemas	Hydro	7.5
Ndugutu / Butama Hemas	Hydro	5.1
Alarm Group Sugar & Allied	Bagasse	11.9
Kakaka	Hydro	9
Lubilia	Hydro	4
PH Industrial Farms	Biomass	1.5
Muvembe SHP	Hydro	6.5
Solar PV	Solar PV	50.0
Subtotal		95.5

Interconnection Arrangements

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- ✓ A policy on interconnection criteria has been developed.
- ✓ The feasibility for interconnection is the responsibility of project developers.
- ✓ Funding and implementation of power evacuation lines below 5KM is the responsibility of project developers.
- ✓ Government is responsible for funding and implementation of deep interconnection (i.e. above 5 KM).

Standardized PPA and IA

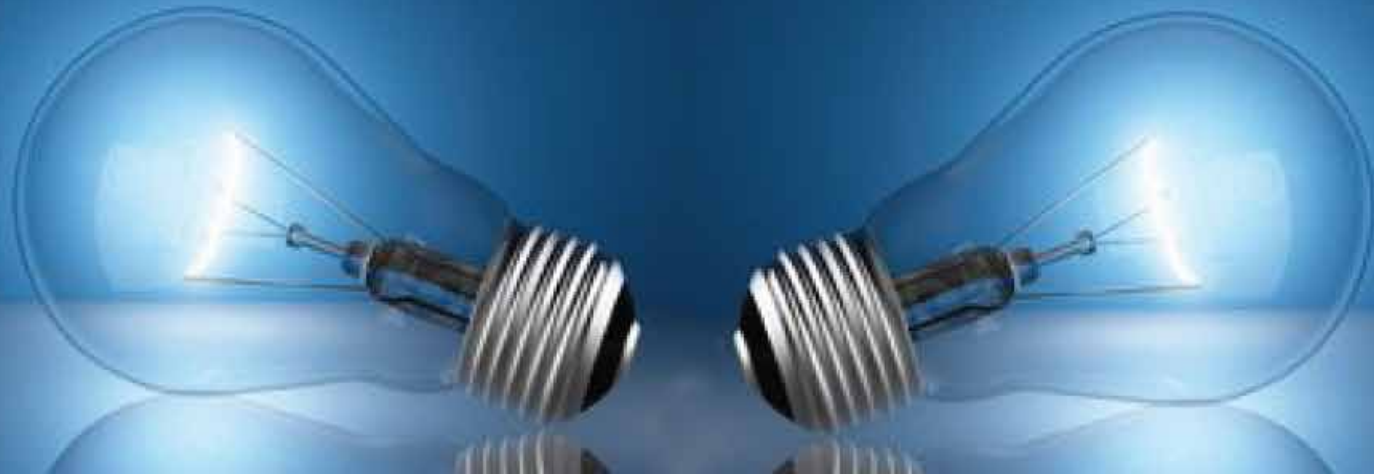
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- ✓ The standardised PPA and IA have been finalised.
- ✓ Expected to reduce transaction costs.
- ✓ Guaranteed off take.
- ✓ Contracts are for 20 years.
- ✓ Tariffs are in US Dollars and subject to escalation for inflation.
- ✓ The off taker takes the risk of the network outage.

Concluding Remarks

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- ✓ GETFiT program through leveraging private capital is helping Uganda to unlock its renewable energy potential.
- ✓ The success derives from Government's commitment to mitigate the perceived risks by lenders and project sponsors and commitment to adjust tariffs to cost reflective levels.



Thank You !

Electricity Regulatory Authority