



# Zambia Renewable Energy Financing Framework

2018 Forum of the Standing Committee on Finance

July 5, 2018



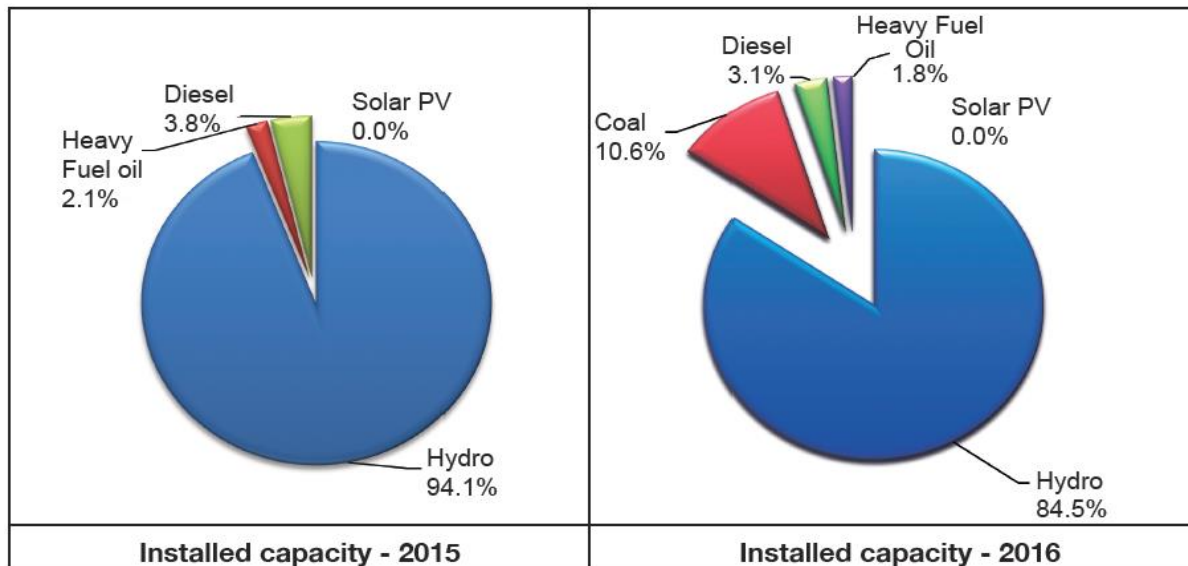
GREEN  
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# Zambia's Power Sector Overview



- Energy generation capacity in Zambia relies almost entirely on hydro power (~90% out of a total installed generation capacity of 2,827MW).
- The country has a low electrification rate of approximately 20%, while an electricity demand growth of 4.5% per annum is projected.
- The Zambian energy market, heavily reliant on hydropower, is vulnerable to climate shocks: Serious power shortages since 2015 due to drought.



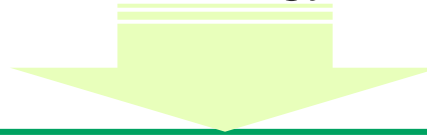
## Ambitious policies and targets

- The GRZ is committed to increase renewable alternative sources of energy as formulated in the **Zambia Vision 2030**.
- Under the **Nationally Determined Contributions (NDC)**, Zambia intends to reduce its CO<sub>2</sub>eq emissions by 25% by 2030 compared to the baseline business-as-usual scenario through domestic efforts with limited international support, and by 47% with substantial international support.
- **Renewable Energy Feed-in-Tariff (REFiT) policy** targeting 200MW of RE generation through small- to medium-scale IPP projects (1-20MW each) was launched in October 2017.
- Overall **power sector reforms** and introduction of cost-reflective tariffs are on the way.

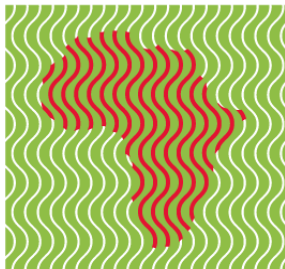
# Renewable Energy IPP as a Viable Solution



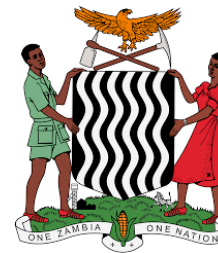
- Private investment in the RE sector by Independent Power Producers (IPPs) can accelerate the achievement of Zambia's generation targets and diversification of its energy mix.



**GETFiT Program**, designed to assist the implementation of the REFiT strategy, will procure a total 100 MW solar PV projects during the Phase I through a reverse auction (launched in Q1 2018) while the second tender will call for small-hydro.



**GET FiT  
ZAMBIA**



**KFW**



- **The AfDB-GCF framework** will create a financing package of up to US\$ 100 million to provide **senior debt and standby loans (tenor extension instrument)** to selected and interested GETFiT projects (primarily targeting Phase I 100MW solar PV).
- In addition, **technical assistance grants** of US\$ 4 million will be allocated for 1) accelerating the development of rural electrification through private-led mini-/off-grid deployment, and 2) enhancing local financial institutions' RE and project financing capabilities.



# 1) Senior debt and standby loans to IPP projects

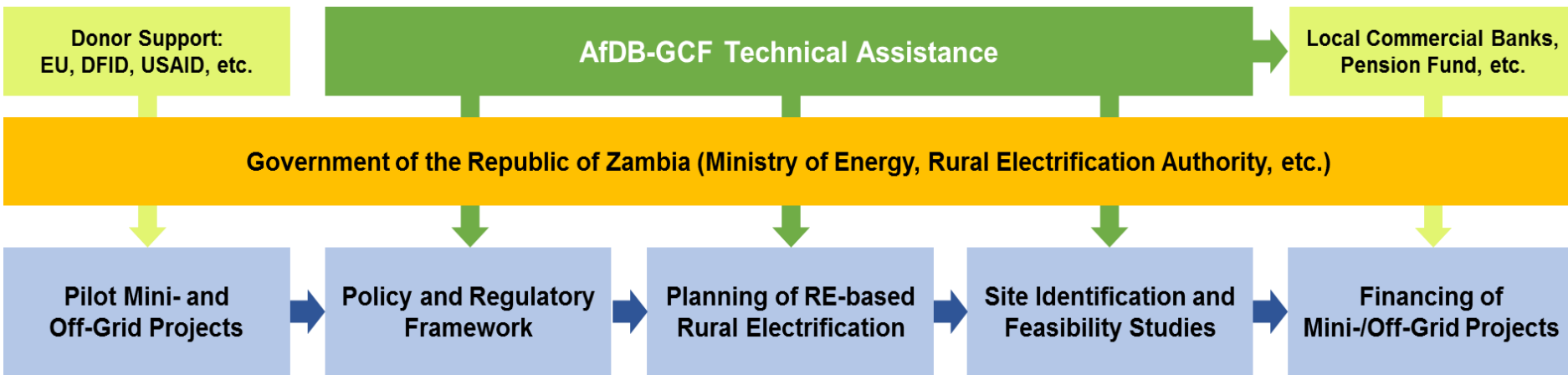


- Long-term and concessional financing provided by GCF and AfDB will directly address the bottleneck for RE financing in Zambia (insufficient volume, high cost, and short tenor), enhancing the commercial viability of RE IPP projects while ensuring affordable tariffs.
- The scheme proposes to crowd-in co-investors:
  - Local commercial banks, supported by the AfDB-GCF standby loan facility for tenor extension, and
  - National pension fund managed by NAPSA who are capable of offering long-term financing for development projects.



This financial structure is expected to 1) kick-start the market for private capital investment into the power sector and build a process whereby a similar scheme will be replicated for other projects, and 2) enhance the country ownership as it paves the way for active participation from local financial institutions.

## 2) Technical assistance grants



Development of ecosystem and value chain for RE-based rural electrification

***Power deficit reduction with renewables-based generation (100MW)***

***Diversification of the national energy mix for climate resilience***

***Demonstrating of a viable model of private-led RE project financing***

***Promotion of small-scale RE for grid stability and local participation***

***Open up a market for domestic commercial banks/institutional investors participation to RE projects – high potential for replication***

***Support increased energy access with decentralized energy solutions***

***GHGs emission reduction – up to 4 million tCO<sub>2</sub>eq over 25 years***



# THANK YOU

