Policy development for solar PV deployment in sub-Saharan Africa
Remuneration schemes

09/07/21

Silvia Piana, Head of Regulatory Affairs Africa, Asia and Oceania – Enel Green Power
KPIs to assess PV potential: what to look for

- Sub-Saharan Africa’s macro-economics/demographic trends clearly suggest that all efforts should be put in place to unlock its renewable energy potential.

- Policy and regulatory framework represent one of the main barriers to the deployment of RE in the continent.
Remuneration schemes for PV in Sub-Saharan Africa

- Feed-in regimes
- Carbon Offsets
- Tender / Auction
- Net Metering
- RES quota obligations
Remuneration schemes for PV in Sub-Saharan Africa

If not well designed and implemented, might be unsustainable for public finances in the long run. Retrospective renegotiations undermine investments’ sustainability and confidence.

Feed-in regimes

Soon available in South Africa; very effective in stimulating emissions reductions

Carbon Offsets

Tender / Auction

Complex remuneration scheme in terms of organization but also the most effective.

RES quota obligations

Available but not implemented. Usually complemented by Green Certificates.

Implementation often missing and/or for small-scale plants. Re-injection of electricity needed for wheeling.

Net Metering
Many African countries have supporting schemes for solar power.

- South Africa has the more advanced framework thanks to the success of REIPPPP and the possibility to operate in the C&I PPA market
- Countries such as Ethiopia, Zambia and Senegal have been supported by multilateral institutions to develop competitive procurement processes
### De-risking investments to scale up PV deployment

Best practices, with room for improvements

#### Scaling Solar

1. Ensures **political support**
2. Ensures bidders’ **reliability and competitiveness**
3. Fully developed **project agreements and credit**

#### GetFit

1. Fair **risk allocation** between public and private sector
2. Public sector to absorb the credit risk in relation to the single offtaker of electricity (counterparty risk guarantee)

#### REIPPPP

1. **First structured auction program in the continent** (2011)
2. Delivered **almost 4.5 GW in operation** of wind and solar plants
3. Bankable PPA backed by **sovereign guarantee**

#### Strengths

- **GetFit**
  - Ensures political support
  - Ensures bidders’ reliability and competitiveness
  - Fully developed project agreements and credit
- **REIPPPP**
  - First structured auction program in the continent (2011)
  - Delivered almost 4.5 GW in operation of wind and solar plants
  - Bankable PPA backed by sovereign guarantee

#### Weaknesses

- **Scaling Solar**
  - Limited technological and geographical coverage
  - After 5 years since the launch of the initiative, operational plants only in Zambia and Senegal
- **GetFit**
  - Limited to small scale projects
  - Private sector to absorb all manageable risks, particularly technological and operational risk
- **REIPPPP**
  - Undue interferences by the State-owned offtaker Eskom caused delays
  - Grid connection issues (costs higher than expected)
  - Challenging local content/ownership requirements (vs limited local manufacturing capacity)

Source: RES4Africa, Enel Green Power
Launched in 2019, renewAfrica is an industry-backed Initiative advocating for the creation of a European comprehensive Programme for RE investments in Africa to be promoted and owned by EU institutions.

renewAfrica aims to unlock Africa’s RE potential by supporting the creation of a sustainable pipeline of bankable and sustainable RE projects and greater use of PPPs models.

The future EU-led Programme should support the entire project lifecycle for all RE technologies, infrastructure and grids, with a focus on utility-scale projects.

What motivated renewAfrica was the recognition that existing European instruments do not meet Africa’s needs, and the willingness of the EU to fix this issue via the Green Deal and other strategic documents.
The way to go

• There is **no silver bullet** to set remuneration schemes.

• **Competitive procurement process** such as auctions (...with bankable PPAs!) proved to be the most effective way to integrate solar generation.

• **International institutions and development partners can play a key role** with supporting programme and technical/capacity building assistance for the implementation of competitive procurement process (eg renewAfrica);
…but remuneration schemes are just a part of the wider picture!

KPIs to attract private investments in solar generation

**Openness:** Credible long term energy strategy, unbundled national utility and non-discriminatory rules for network access. FDIs sound regulation and reasonable local content rules marks a further step in the level of openness.

**Attractiveness:** *Remuneration schemes* and a clear and fair process of procurement of electricity. A streamlined process for permitting and bankable PPAs are further essential steps to attract private investors.

**Readiness:** Availability of routes-to-market, network capacity to integrate RE and clear and effective legislation (combined with efficient implementation of regulations) are the ultimate step to be ready for renewable energy deployment.