Financing Renewable Energy in Developing Countries

Drivers and barriers for private finance in sub-Saharan Africa

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Sub-Saharan Africa Energy Access at a Glance

- **Low access but high demand**
  - Sub-Saharan Africa has the world's lowest electricity access rate, at only 24 per cent (Eberhard et al., 2008)
  - To meet increasing demand, the power sector needs to install an estimated 7,000 MW of new generation capacity each year. Many benefits if much of this comes from renewables
- **High price tag**
  - Investments in the order of USD 41 billion per year, or 6.4% of the region's GDP, are required to build this infrastructure
- **A financing gap**
  - The price tag for energy infrastructure (be it renewable or not) exceeds the capacity of public budgets alone

Private investment and finance at scale needs to be mobilized to close the gap

Why renewable energy?

- Deployable in a decentralized and modular manner
- Potential many times the current demand
- Domestic resource offering alternatives to uncertain and pricey imports of fossil fuels
- Renewable energy's grid parity
- International revenue streams via carbon markets

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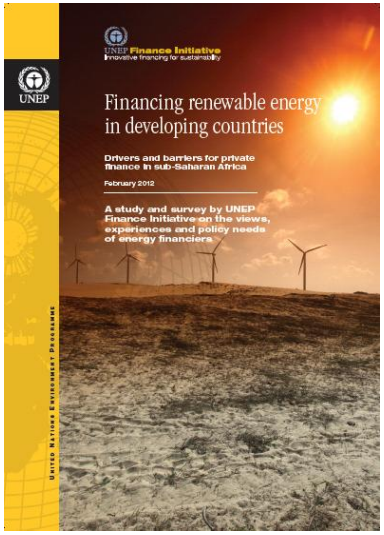
What are barriers to more private climate mitigation finance in sub-Saharan Africa?

UNEP FI study

38 energy infrastructure financiers surveyed

Recommendations

Private finance mobilization to deploy renewable energy technologies in sub-Saharan Africa will require national governments and the international community to address three critical barriers:



1. **No level playing field between high-carbon and low-carbon investment alternatives**
2. **Regulatory barriers in developing countries. In the energy sector, for instance, there is often no easy market/grid access for low-carbon technologies**
3. **Political and regulatory investment risks**

What are barriers to more private climate mitigation finance?

1. No ‘level playing field’ between high-carbon and low-carbon investment alternatives:

- The costs of creating electricity by low-carbon technologies are typically more expensive, despite fastly becoming increasingly competitive
- High capital intensity of low-carbon energy options
- Higher transaction costs
- Fossil fuel subsidies

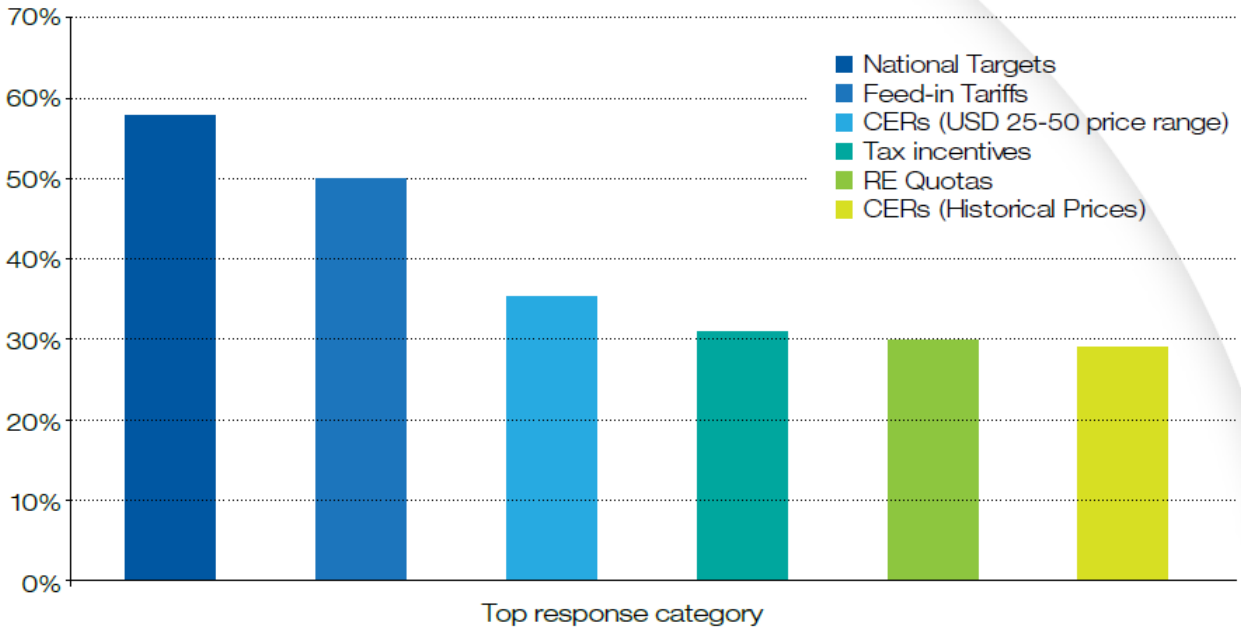
What can governments and the international community do about this? How can the barriers be overcome?

1. Create a level playing field

in terms of profitability, between innovative and promising low-carbon technologies and conventional, but cheaper high-carbon options.

The most powerful incentive mechanisms for renewable energy deployment in developing countries, according to private finance practitioners

Which types of incentive mechanisms are "most powerful" in mobilizing private finance for renewable energy deployment in developing countries?



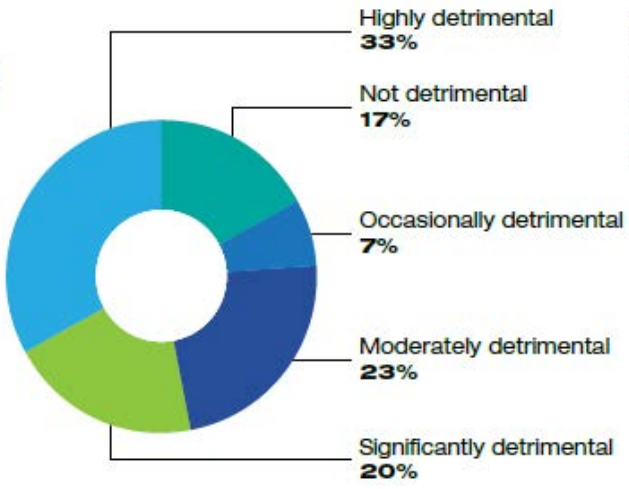
Source: UNEP Finance Initiative

What are barriers to more private climate mitigation finance?

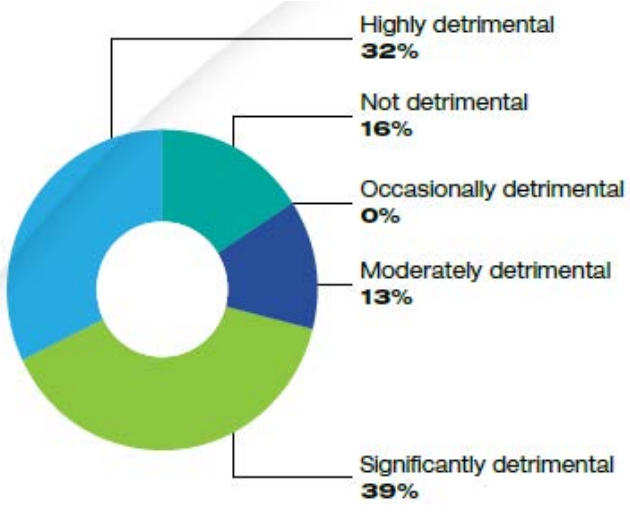
2. Regulatory barriers in the energy sector: lack of easy market/grid access for low-carbon technologies

- Manipulation of electricity prices for political reasons
- the domination of a state-owned national power utility with a legally endowed monopoly/ Difficult market access for IPPs

How detrimental are unsustainably low energy prices for the viability of renewable energy technologies in developing countries?



How detrimental are energy sector policies that hinder low-carbon technology deployment?



Source: UNEP Finance Initiative

What can governments and the international community do about this? How can the barriers be overcome?

2. Provide easier market access for low-carbon technologies

and grid access, to private sector actors on a competitive basis; without access, the required skills, technologies and financing will not move

- Energy sector reform as part of the solution
- The need for renewable energy policies

What are barriers to more private climate mitigation finance?

3. Political and regulatory investment risks, particularly…

I. Country and political risk
II. Low-carbon policy risk
III. Currency risk

What can governments and the international community do about this? How can the barriers be overcome?

3. Mitigate political and regulatory investment risk

which continue to be detrimental, particularly for sustainable technologies, even in situations where a level playing field and easy market access have been established.

I. Country and political risk → 'CLIMATE MIGA'

II. Low-carbon policy risk → 'CLIMATE MIGA'

III. Currency risk → 'CLIMATE CURRENCY FUND'

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What can governments and the international community do about this? How can the barriers be overcome?

A basket of possible instruments for discussion:

1. Mono-line insurance mechanism providing first loss guarantee
2. Loan guarantee programme
3. Mezzanine debt enhancement
4. Subsidised feed-in-tariff for renewable energy or other carbon reduction performance-based subsidy
5. Bankable purchase agreement instrument for energy efficiency ("EEPA" combined with an insurance mechanism)
6. Pooled Fund for small-scale venture capital to promote low-carbon social enterprise in LDCs
7. Revolving fund for Low-Carbon Social Enterprise focusing on energy access
8. Advanced market commitment for Bio-Carbon
9. A political risk insurance mechanism for climate related investments
10. A public-private fund to absorb potential first loss from high-risk investments

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Thank you.

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