Untapped Potential for Climate Action - Renewable Energy in African NDCs

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Virtually all African countries mention renewables in their NDCs and 85% of them include quantified renewable energy targets.

Source: IRENA, 2017
Renewable energy targets in African NDCs cover mainly the power sector but in a number of cases countries included the end-use sectors.

- **4 targets for solar water heaters**
- **9 targets for biogas**
- **9 targets for liquid biofuels**
- **45 targets for power generation**

Source: IRENA, 2017
NDCs offer an opportunity to capture the benefits renewables offer for climate resilient infrastructure, including improved energy access through off-grid renewable energy technologies.
Countries with renewable energy measures for adaptation by sector

The role of renewables for energy access and security is widely recognised, followed by their contribution to a more sustainable water management.
Renewable energy measures for adaptation and resilience building in Africa

**Djibouti**
Construction of an innovative desalination plant fueled by renewable energy

**Mali**
Installation of over 100 MW of renewable energy, to reach 10% of energy mix by 2020

**Guinea-Bissau**
80% renewables share in energy mix

**Togo**
Renewables to reach 4% of the energy mix, including mini hybrid networks for rural electrification at an estimated cost of USD 30 million

**Angola**
100 MW of solar power in rural areas (“Solar Village” Programme) at an estimated cost of USD 150 million
USD 225 billion will be needed by 2030 to implement the renewable energy targets set out in African NDCs, of which 44% for unconditional targets.
Leveraging private investment to implement renewable energy targets in African NDCs

Public finance needed by 2030 for renewable energy targets in African NDCs

- Total investment need: 225 USD billion
- Public finance needed to mobilise unconditional investment: 125 USD billion
- Public finance needed to mobilise conditional investment: 125 USD billion

Public finance should focus on crowding in private investment through the use of risk mitigation instruments and structured finance

Source: IRENA, 2017
Renewable energy targets in NDCs are often less ambitious than targets in national energy plans and strategies. African countries can progressively increase the ambition of renewable energy targets in the next round of NDCs to tap the full cost-effective potential.

Comparison of NDC targets with existing national plans and cost-effective potential

Renewable energy components in African NDCs, in other existing national plans and strategies and cost-effective potential

Source: IRENA, 2017
Thank you!

#Renewables4Climate