

Untapped Potential for Climate Action - Renewable Energy in African NDCs

Toshiaki Nagata

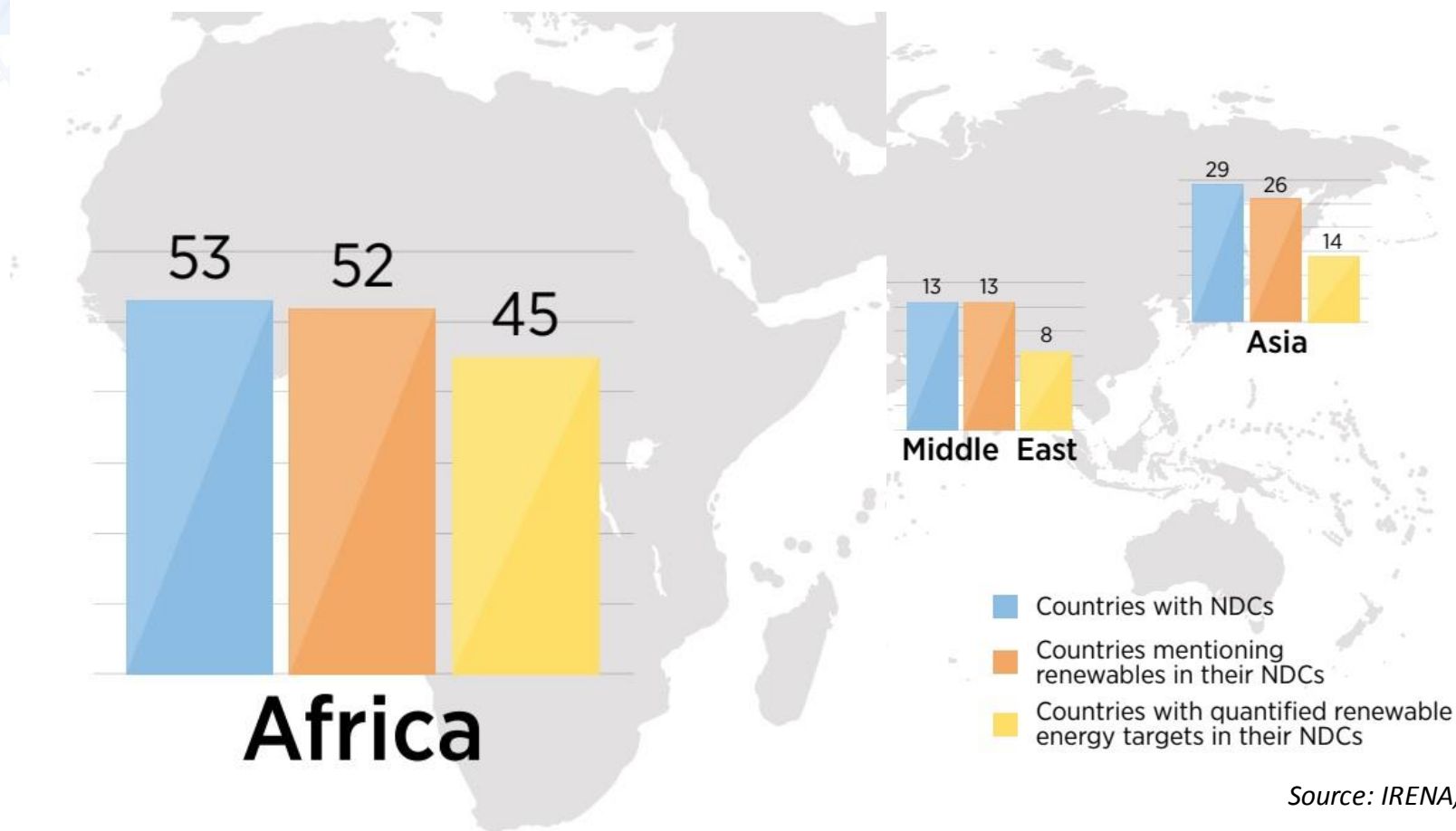
Senior Programme Officer, NDC Implementation,
The Knowledge, Policy and Finance Centre, IRENA

Addis Ababa, Ethiopia

26 March 2018

Renewable energy in African NDCs

UNFCCC Parties including renewable energy in their NDCs

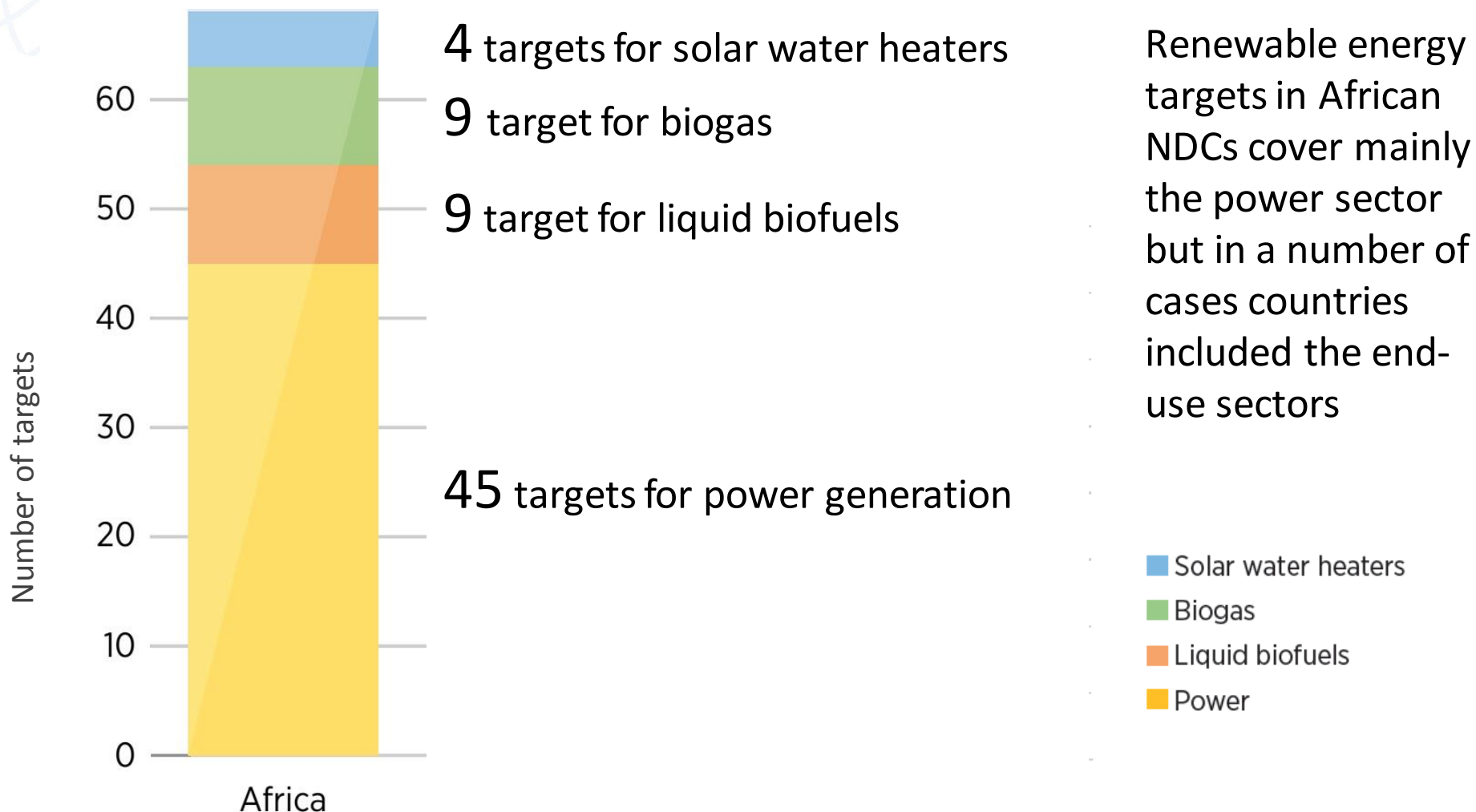


Source: IRENA, 2017

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

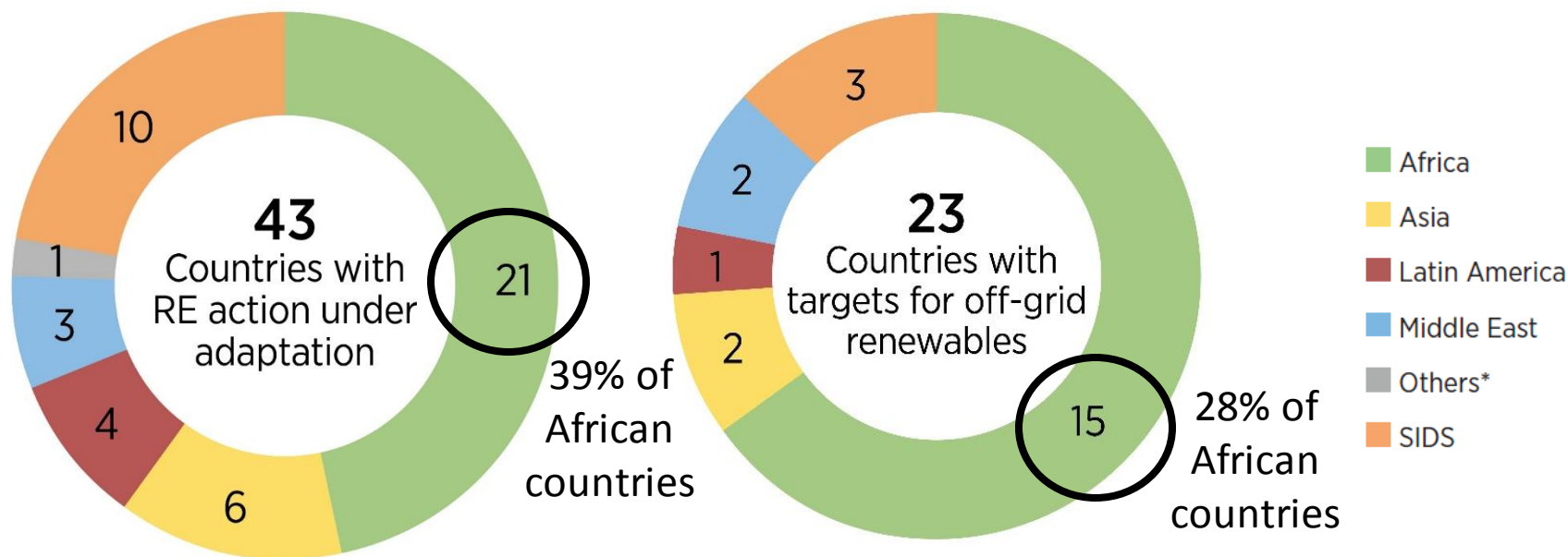
NDC-based renewable energy targets for electricity generation and end-use sectors

Renewable energy targets in African NDCs by end-use application



NDC-based renewable energy contributions for adaptation and targets for off-grid renewables

Countries with renewable energy action for adaptation and targets for off-grid renewables



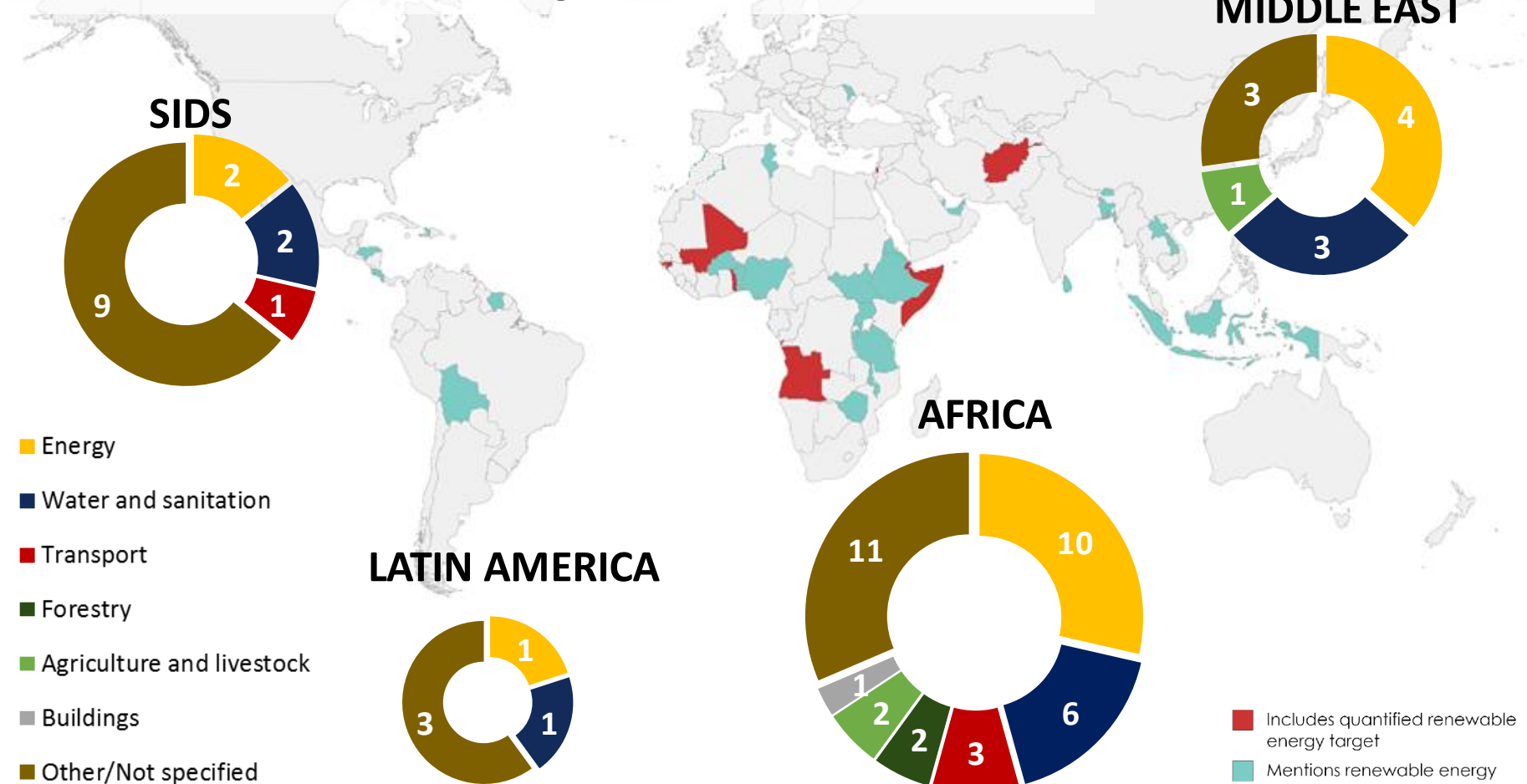
*Eurasia, Europe, North America and Oceania

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

Mali

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

Djibouti

Construction of an innovative desalination plant fueled by renewable energy

Guinea-Bissau

80% renewables share in energy mix

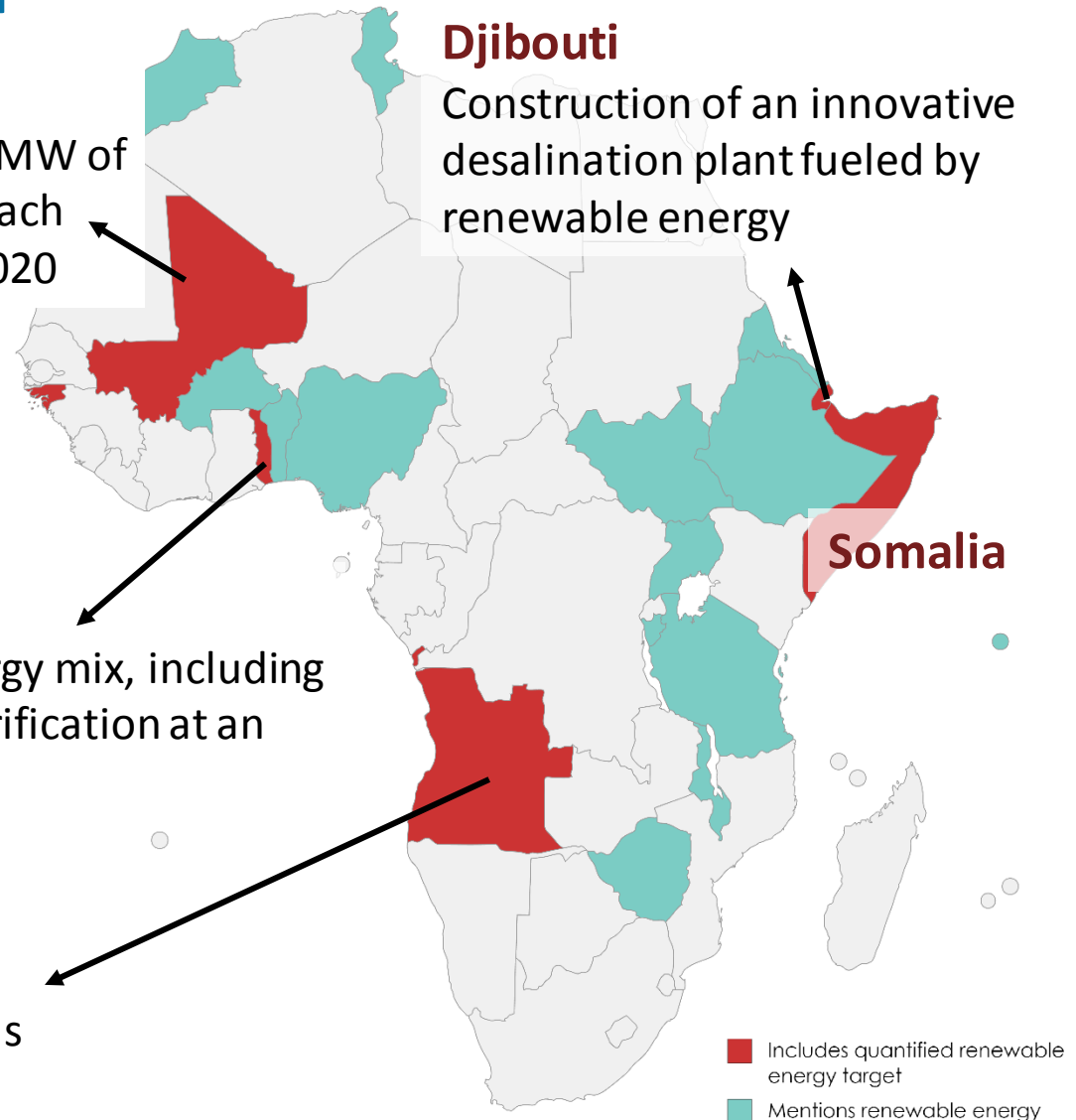
Togo

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

Somalia

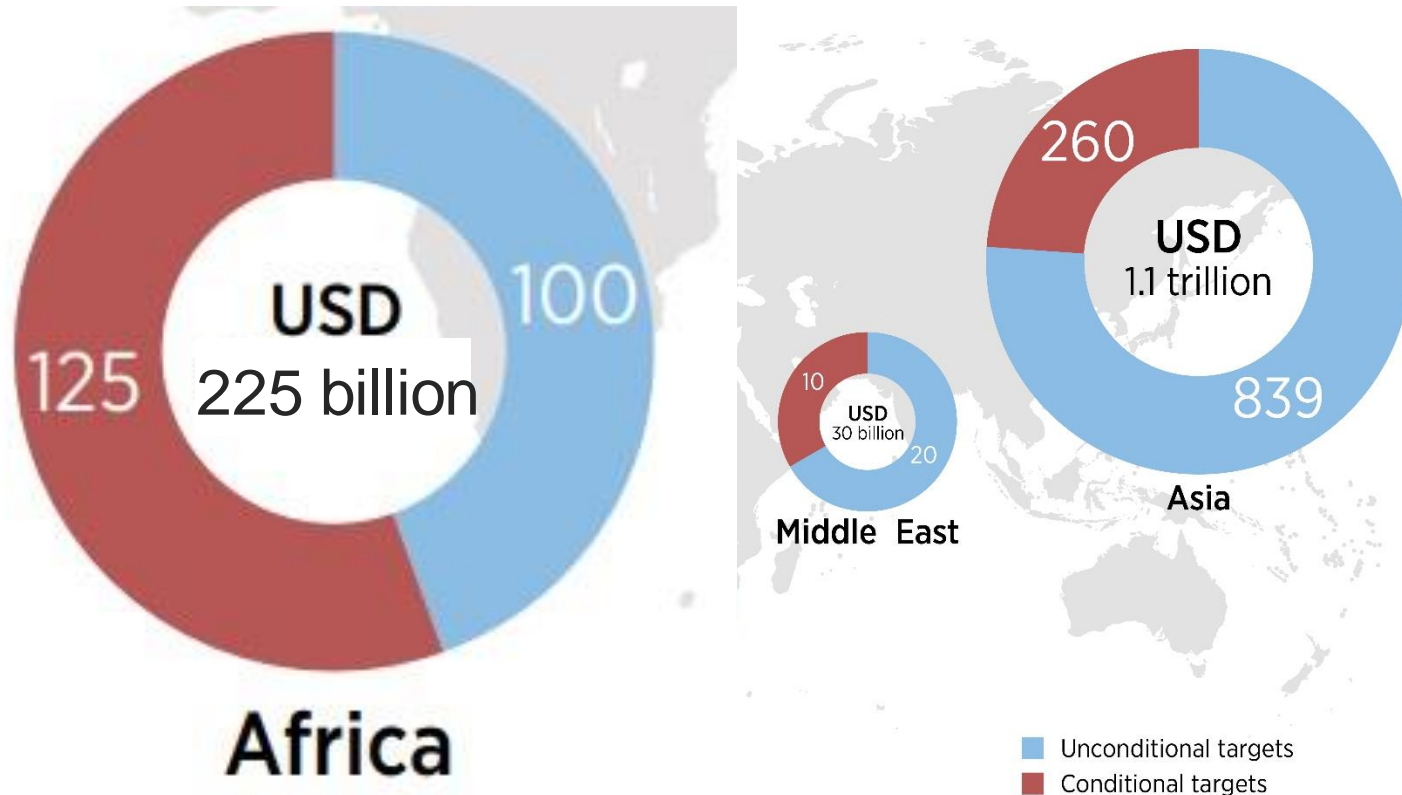
Angola

100 MW of solar power in rural areas ("Solar Village" Programme) at an estimated cost of USD 150 million



Investment needed by 2030 to implement renewable energy targets in current NDCs

Total investment needed by 2030 for renewable energy targets in NDCs

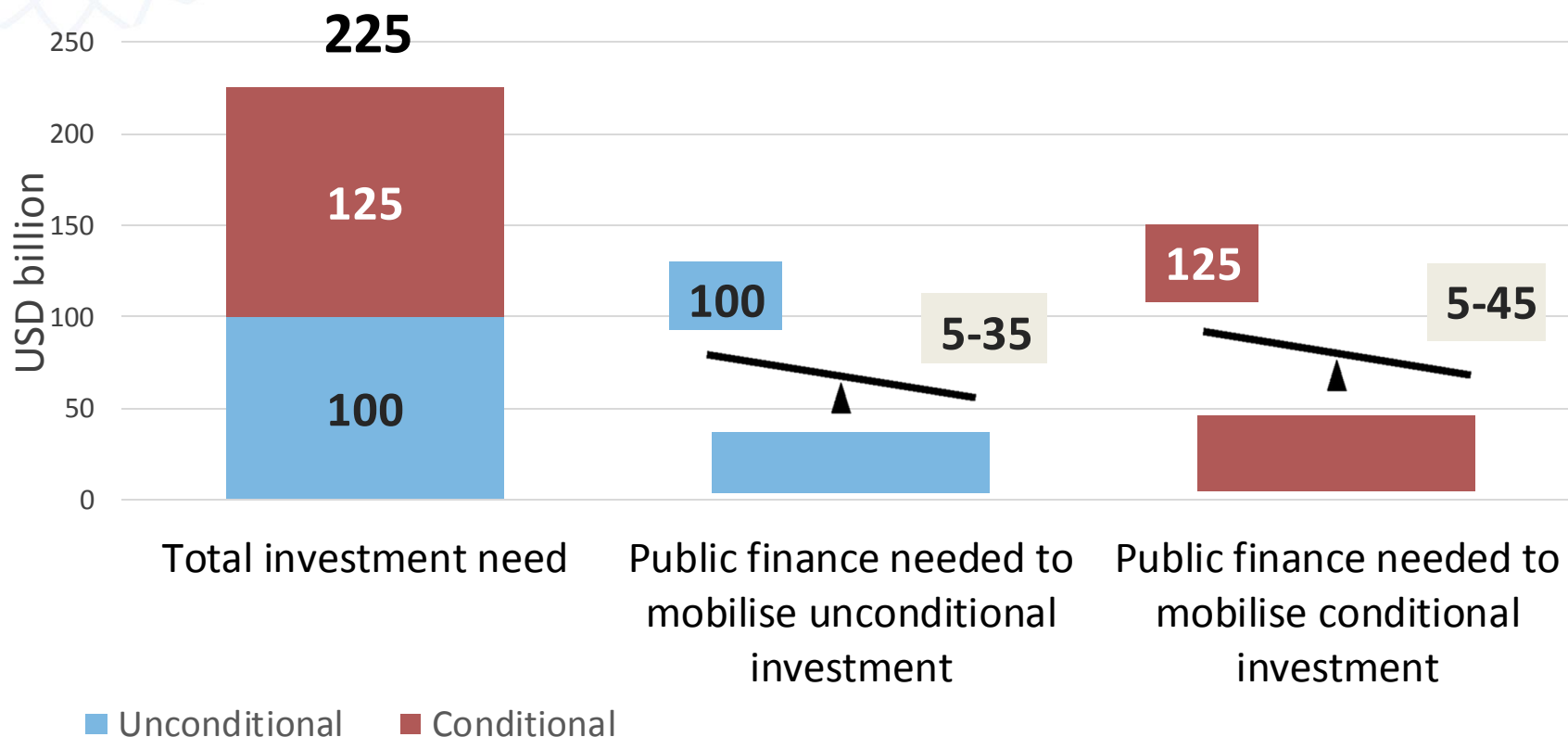


Source: IRENA, 2017

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

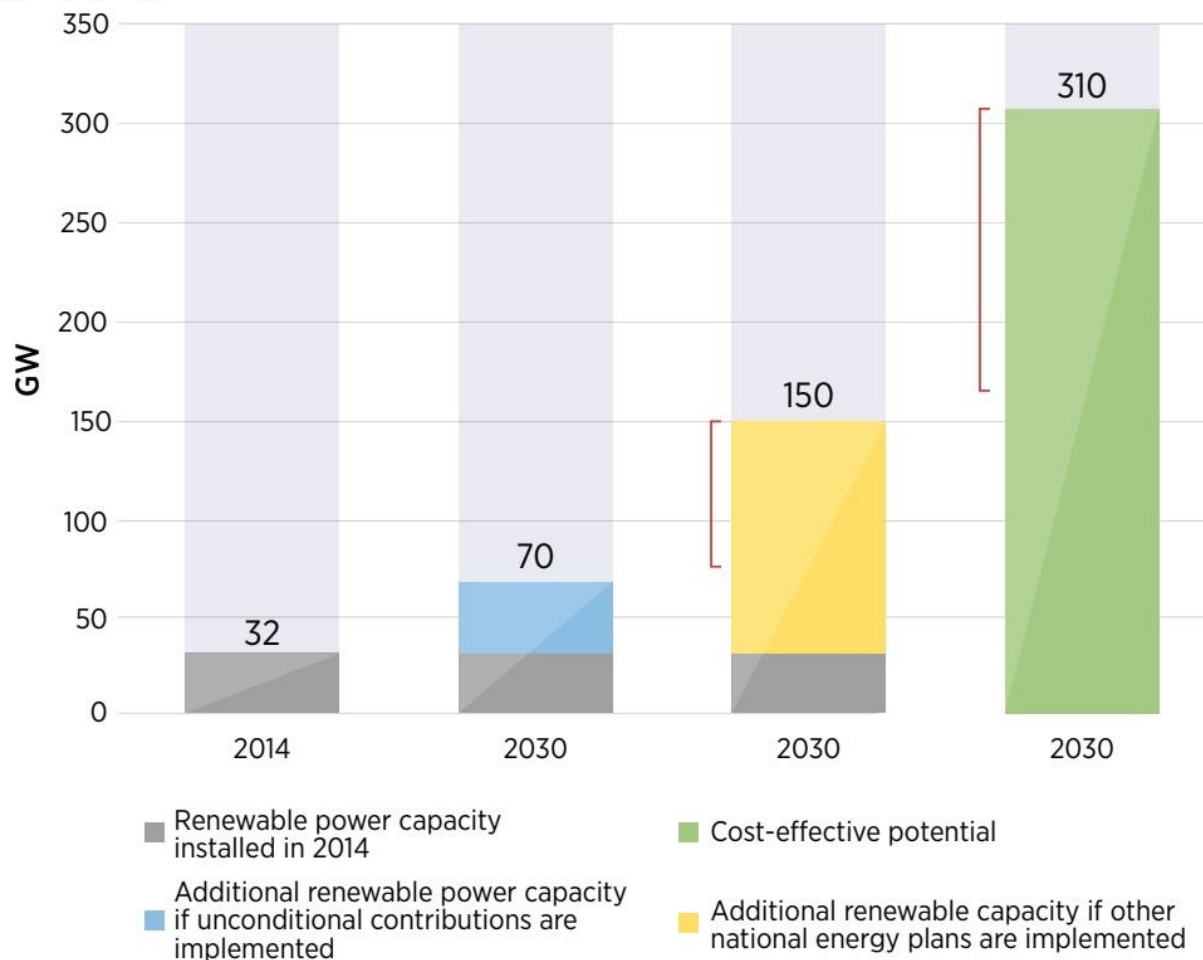


Source: IRENA, 2017

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

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



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



Thank you!

[#Renewables4Climate](#)