ACCELERATING INVESTMENT IN CLEAN ENERGY IN EMERGING AND DEVELOPING ECONOMIES

IEA-EPRI CHALLENGES IN DECARBONISATION WORKSHOP | OCTOBER 6, 2022





A massive scale-up of clean energy investment is needed to accelerate and enable the energy transition in low- and middle-income economies

LICs & MICs will need to mobilize many times more capital than they do today to finance a just power sector transition

- To be on track for a global net-zero emissions pathway by 2050, power sector investment in LICs & MICs, excluding China, needs to rise <u>from an average of USD 240 billion</u> <u>annually in 2016-20 up to USD 1 trillion in 2030 (IEA, 2021)</u>.
- 8 MICs will need to phase out over 1,440 GW of coal and replace with new technologies by 2050, at an <u>estimated cost of USD 2,750 Billion (World Bank, 2019)</u>
- LICs & MICs are spending close to <u>USD 500 billion annually on fossil fuels for power generation</u> (2019 prices), half of which is on coal and one-third on natural gas (World Bank estimate).



Developing economies face a unique set of barriers in delivering the energy transition at the scale and pace that is required to meet both, their development needs, and global climate goals

3 critical barriers:

1. Affordability

Limited fiscal space to make catalytic public investments and limited consumer ability to pay for increased costs

2. Limited Access to Private Capital

Owing to barriers such as underdeveloped domestic capital markets and inadequate alignment with standards of international capital

3. Cost of Capital

Influenced by bad credit and risks from underdeveloped policy and regulatory frameworks, weak capacity of institutions, absence of an open/transparent procurement and other.



Mobilizing all pools of capital and customizing financial solutions (blended finance) - including tailored de-risking- will be essential

The World Bank focuses on (i) creating demand for (just) energy transition projects, mobilizing all pools of capital and ensuring affordability of capital, and (ii) forging deep partnerships between governments, donors, the private sector and development financing institutions.

(1) Pipeline development, project design

Use of ESMAP —a multi-donor trust fund- for upstream analytics and technical assistance

Implementation of Comprehensive Integrated Approaches Customized support to Project Design Multi-sectorial solutions Capacity Building, Training

Enabling Environment: Customized Planning, Strategy/Roadmaps, Critical Facilities, Economic and Technical Assessments, Policy and Regulation, Procurement, Transaction Advisory, Financial Analysis, Convening Services

Relies on grants (Bank and Recipient Executed)



(2) Blended Finance: Custom Financing Solutions

Blending of concessional finance (IBRD/IDA loans), climate finance (GCF, CIF and other climate funds), grant financing (ESMAP and other MDTFs), and commercial finance.

Development finance (IBRD/IDA) bring a wide spectrum of instruments (Investment Project Finance, Guarantees and other Risk Management Products, Bonds) with different levels of concessionally

Climate Financing: World Bank projects tap into Climate Investment Funds, Green Climate Fund, Global Environmental Facility and other funds/facilities.

Grant Financing. From multi-donor trust funds like **ESMAP** to support specific components, e.g.; technology innovation or specific niches (last mile, bottom of the pyramid)

Private capital mobilization (PCM). A robust enabling environment for PCM and custom financing solutions attract private sector participation

(3) Results Based Finance

Results-based financing (banking on development impact) ensures that development funding is linked to pre-agreed and verified results, and that funding is provided when the results are achieved.

Through a range of mechanisms, RBF helps deliver development outcomes, improves accountability, and drives both innovation and efficiency.

The new World Bank's Climate Emissions Reduction Facility (CERF) will deliver Results Based Climate Finance with Access to Carbon Markets

Relies on a range of instruments including grants from ESMAP, CERF and other Trust Funds



ESMAP's Sustainable Renewables Risk Mitigation Initiative (SRMI)

Focuses on strengthening enabling the environment for investments in renewable energy, making sure public sector deploys critical infrastructure and procures projects in an open and transparent way, and relies on different pools of capital to deliver a bankable and sustainable pipeline of RE projects

Enabling Environment

(upstream support incl. generation & transmission planning, variable renewables (VRE) integration, regulatory and strategic support)

Robust Procurement

(downstream TA support incl. transaction advisory, feasibility studies, E&S instruments)

Critical Public Investments

(transmission lines, solar/wind park infrastructure and PPP minigrids/SHS)

Risk Mitigation Coverage

(guarantees for IPPs for gridconnected and off-grid projects, geothermal resource de-risking)

Blended with climate finance

(lowering the cost of targeted public investments and the risk premium embedded in the tariff through tailored de-risking)

Leveraging private investments at scale while maximizing socio-economic benefits



KEY MESSAGE

It is only through a systematic reduction of the spectrum and magnitude of risks (considering a whole-of-system or holistic approach), effective use of different pools of capital, and the convening of global partnerships (for knowledge exchange)

that investment in clean energy can be scaled-up and accelerated



THANK YOU

