Key findings

Piloting and Scaling Up Clean Energy Transitions: The Role of Development Finance Institutions

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THE VISIBLE HAND: Development Banks in Transition

The world urgently needs to combat the climate emergency and shift to low-carbon, climate-resilient growth pathways. This will require a swift and radical transformation of our energy systems, at the heart of which scaling renewable energy (RE). Private investment, however, does not naturally flow into this kind of investment. Development Finance Institutions (DFIs) can play a key role here thanks to their development mandate and access to affordable long-term finance.

Objectives and research questions

Little has been done to systematically investigate DFIs' role in supporting the clean energy transition. The paper aims to fill this gap by exploring the following questions: what are the key barriers to financing RE, how do such barriers or binding constraints vary at different stages of development, what financing models do DFIs deploy to pilot and scale up RE investment, and what comparative advantages do DFIs have in doing this?

Methods

For this research, the authors primarily examine case studies to grasp the nature of risks and underlying mechanisms that DFIs deploy to tackle such risks. To ensure a representative case selection, the authors have selected 9 DFIs of varying geographical scope, ownership, and bank size.

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Results

The paper identifies four main categories of risk that DFIs face as they seek to finance renewable energy (RE) across the world: technology risk; political, policy and regulatory risk; macroeconomic risks and bankability risks. Technology risk is the top risk hindering the piloting of new RE, whereas political, policy and regulatory risks are the core binding constraint to scaling up RE investment.

All barriers occur regardless of the level of development of the country in question, except for foreign exchange risk, which is especially pertinent in developing countries.

The study finds that:

- The vast majority of DFI instruments and approaches focus on scaling or piloting investment of established renewable energy technologies (solar, onshore wind and hydro).
- Traditional senior lending and co-financing dominate the DFI approach. The more innovative instruments and approaches tend to be financed using blended finance or the deployment of special funds managed off balance by the DFIs. Very few deploy capital recycling models such as securitization.
- DFIs, especially in developing countries, play a very important role in building the project pipeline in close collaboration with multilateral DFIs.
- Foreign exchange risk is a big barrier to scaling RE investment, and remains an unresolved issue.
- National DFIs are key intermediators of international climate funds at the country level.

DFIs have a key role to play based on the following comparative advantages in piloting and scaling up investment in RE: the provision of affordable patient capital, technical expertise, country risk mitigation, demonstration effect to overcome the first-mover challenge and a coordinated approach to scale up RE.

Recommendations

➔ **Large multilateral DFIs (MDFIs) who have access to external/cheaper capital than national DFIs (NDFIs) should seek to step up their engagement** and actively support the development of new frontier RE technologies, either directly or indirectly through fund investment.

➔ **MDFIs should step up their engagement with NDFIs and channel more concessional financing through them.** The Green Climate Fund should work with regional DFI associations to review accreditation barriers, explore how to prioritize NDB accreditation and develop new forms of access for NDBs.

➔ **Foreign exchange risk is a big barrier to scaling RE investment in developing countries.** The use of guarantees and local currency-denominated on-lending from MDBs should be explored by DFIs to solve foreign exchange risk.

➔ **Policy coherence is key:** in several countries, policy and regulatory uncertainty worked against NDFI efforts to pilot and/or scale up RE investment.

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Access the research paper

PILOTING AND SCALING UP CLEAN ENERGY TRANSITIONS: THE ROLE OF DEVELOPMENT FINANCE INSTITUTIONS