FINANCING CLEAN ENERGY: EMERGING EXPERIENCE AND CORPORATE DIRECTION

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Energy and Extractives Global Practice

Plenary Session: Global Stock Take with Financial Institutions
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What does the World Bank Group offer?

The WBG’s Strategic Objectives...

1. Eliminate extreme poverty
2. Build shared prosperity
   with environmental, social and fiscal sustainability

+ SDGs

...are supported via three Key Roles...

Country development partner | Private sector partner | Global development partner

...which are achieved through three broad Types of Services, mostly delivered in packages...

Financial Services
- Investment & policy finance for public sector
- Equity and debt finance for private sector
- Resource mobilization and management
- Guarantees and risk mitigation for both public and private sectors
- Financial intermediary and TF manager
- Treasury services (both IFC and WB)

Knowledge Services
- Global knowledge and data
- Single and multisector technical and policy advice for public clients, and advisory services for private sector, built on global experience
- Environmental, social, and fiduciary risk mitigation and capacity building to complement investments

Convening Services
- Platform for convening public and private stakeholders at global, regional, national, and local levels
- Ability to underpin multi-stakeholder dialog and agreements with technical knowledge, long-term relationships, and operational capabilities

...and which are in turn built on a foundation of four Core Capabilities.

Global breadth
- Global presence and relationships
- Ability to transfer global lessons from one side of the world to another
- Can operationalize global agendas at the country level and with the private sector
- Extensive network of clients, partners, investors/funding sources

Country depth
- Presence in over 100 country offices
- Multi-sectoral engagements in core country challenges
- Long-term relationships with local public and private players

Financial Base
- AAA rating and substantial capital base
- Capabilities to design and provide a variety of public and private instruments/platforms for investment, resource mobilization, and risk management
- Deep experience in treasury and fiduciary management functions

Analytic Capacity
- Technical depth across key sectors
- Integrated and multidisciplinary solutions
- Safeguard approaches and standards that build trust, de-risk investments
- Sustainable and credible open data platforms as a public good
The WBG offers a wide range of financial services and products

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<td>• Cross-Industry (Supply Chain, CG, E&amp;S)</td>
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Through World Bank (IBRD) Green Bonds, investors make an impact by supporting the financing of a wide range of projects that support transition to low carbon and climate resilient growth

10 year anniversary!!: 150 green bonds in 20 currencies: **US$ 13 Billion in funding**

As of FY18, RE/EE represented largest sector in the Green Bond eligible project portfolio (44%)

Program relies on Strong M&V, impact reporting as integral part of the process
INSTITUTIONAL - CORPORATE COMMITMENTS

Increasingly Ambitious Targets

- **WBG Climate Action Plan (2016-2020)**
  - **Doubling RE additions**: 20 GW (RE) + 10 GW (enabling/grid infrastructure)
  - **EE/ Resilient Buildings in urban areas**: at least 10 operations, US$ 1 Billion commercial funds mobilized
  - Introduce best practice for standards and labeling

- **International Development Association (IDA1) commitments**
  - **Renewable Energy**: Addition of 5 GW by 2020 (FY18-FY20)

**Green Competitiveness**
Greening global value chains and trade (standards/labelling)

Transparent Reporting of Green/Climate Related Financing

- Detailed information of all projects is available at: [http://projects.worldbank.org](http://projects.worldbank.org)

Systematic Evaluation of Performance

The Bank committed about **US$ 29 Billion** to both renewable energy and energy efficiency in the period 2010-2018 and mobilized an additional **US$ 12.7 Billion** in private sector capital, ~50 corresponded to EE

### Energy Efficiency Commitments by Category, and by Type of Financial Instrument

**FY18**
- Industrial: 38%
- Commercial: 20%
- Public: 17%
- Residential: 6%
- Heating: 6%
- Power: 19%

**FY10-19**
- Credit Lines: 58%
- Public ESCO: 15%
- Grants / Rebates: 14%
- Direct Investment: 7%
- EE Funds: 6%
- Transportation: 3%
- Other: 12%
Corporate Guidance Applying to Energy

1. Infrastructure investment gap: focus on spending efficiency
   - Shift focus from “spending more” to “spending better”, focus on “service gap”
   - Develop flexible grids: RE/DER integration (EE/DR, EV charging, rooftop solar, DER in cities)
   - Deploy smart enabling infrastructure (smart grid and digital infrastructure) to realize system efficiency gains (EE/DR, visibility and interactions with the grid)
   - Spending efficiency depends on the quality of the planning/operational functions, policy and regulation

2. Mobilizing Finance for Development (MFD) approach
   - Promote judicious use of both public and concessional resources, crowding in commercial capital, minimizing the public debt burden
   - Support Public Finance Institutions: strengthen their role in (i) mitigating risk, (ii) unlocking institutional investment, and (iii) promoting investments in clean energy

3. Develop quality Infrastructure
   - Organizations, policy/legal/regulatory frameworks, practices needed to support and enhance the quality, safety and environmental soundness of goods, services, and processes
   - Relies on metrology, standardization, accreditation and testing/inspection/certification
   - WB starting to support clients on developing their “national quality infrastructure”
   - International standards: ISO 9001, ISO 14001, ISO 50001
How to Achieve Greater Scale-Up of Emerging Demand Side Markets

1. Concessional finance is consistently highlighted as a key factor of success in kick starting nascent markets

2. Concessional finance is finite and sustainable energy markets must learn to operate on commercial terms

Key elements for this transition include: (i) introduce the appropriate legal and regulatory reforms (cost of service regulation, pricing, incentives) and best practice standards, procedures, contracts, accreditation schemes, (ii) gradual step changes in the level of concessionality, (iii) continuous training of “permanent teams” (in public financial institutions and other key entities).

3. Attracting institutional investors requires “customizing” products at scale

Fundamental aspects include: (i) develop a credible pipeline (ii) standardized and aggregate EE investments to reduce transaction costs (scale-up), (iii) develop guarantees, insurance, and other products to mitigate risk
Objective is to unlock private financing for urban energy efficiency projects in Brazil by reducing the credit risk and enhancing the technical quality of efficient street lighting and industrial energy efficiency subprojects.

Financial Intermediary, Caixa Economica Federal (CEF), a public bank, will establish a facility to finance subprojects, which will blend commercial and concessional funding to lend to subprojects.

1. **Guarantee product** to mitigate risk of commercial lenders

2. **Technical assistance** will be provided under the project to help strengthen CEF's implementation capacity and help develop a pipeline of high-quality subprojects.

3. **Global Infrastructure Facility (GIF) grant** to support cities in structuring PPP tender for EE street lighting projects.

India EE Scale-Up Program: Support to Super ESCO (EE Services Limited, EESL): US$1.3 Billion Program

Objective is to scale-up energy savings in residential and public sectors, strengthen EESL’s capacity, and enhance its access to commercial financing

❖ EESL: multinational public-owned company, world leader in clean energy and innovation (promoted by the Ministry of Power)

❖ Operates in the context of a robust EE Policy Framework and targets

❖ Needs to expand role as “Super ESCO”, work with private sector ESCOs, and learn to mobilize capital

**IBRD P4R Loan:** 220 USDM  
**IBRD Guarantee:** 80 USDM (leverage 200 USDM)  
**ESSL Contribution:** 380 USDM  
**Development partners (ADB, AfD, KfW, GEF):** 550 USDM
THANK YOU

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Maximizing Finance for Development (MFD)

A significant increase in infrastructure investments in Emerging Market and Developing Economies (EMDEs) is needed to sustainably address poverty reduction and shared prosperity: ~ 1.2 trillion per year until 2030 is required to meet SDG7

➢ **MFD Approach:** Promote judicious use of both public and concessional resources, crowding in commercial capital, minimizing the public debt burden

![Diagram showing the MFD approach with steps:]

1. **Commercial Financing**
   - Can commercial financing be cost-effectively mobilized for sustainable investment? If not...
2. **Upstream Reforms & Market Failures**
   - Country and Sector Policies
   - Regulations and Pricing
   - Institutions and Capacity
   - Can upstream reforms be put in place to address market failures? If not...
3. **Public and Concessional Resources for Risk Instruments and Credit Enhancements**
   - Guarantees
   - First Loss
   - Can risk instruments & credit enhancements cost-effectively cover remaining risks? If not...
4. **Public and Concessional Financing, including Sub-Sovereign**
   - Public finance (incl. national development banks and domestic SWF)
   - MDBs and DFIs
   - Can development objectives be resolved with scarce public financing?
KEY PUBLICATIONS