Clean Energy Finance: What Does it Mean for a FI?

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Presentation outline

01 Business opportunities in the climate space

02 IFC’s Strategy for climate investments

03 Role of governments in the climate financing

04 Examples around the world
What does it mean “be green” for a FI?

<table>
<thead>
<tr>
<th>Corporate identity</th>
<th>Being green is fashionable today and helps to sell all products, finance are not different</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with standards</td>
<td>Internationally/nationally required by laws or voluntary agreements</td>
</tr>
<tr>
<td>Risk management</td>
<td>Portfolios are threatened by various threads, incl. climate change</td>
</tr>
<tr>
<td>Business opportunity for further growth</td>
<td>Markets are huge in the “green space”</td>
</tr>
</tbody>
</table>
01 – Business opportunities in the climate space

Where is the business opportunity?

Energy Efficiency (EE)
- Investing into fixed asset to reduce energy bill of end-users through increased efficiency of energy use (minimal threshold 15% savings against baseline)
  - Home EE renovation loans, SME loans, Corporate EE finance etc.

Renewable Energy (RE)
- Investing into technologies generating power or heat from renewable resources
  - Project finance: Hydro power plants, wind, solar etc.

Cleaner Production (CP)
- Investing into technologies minimizing waste and emissions from industrial processes and maximizing product output, including water efficiency
  - Improved industrial processes, waste water treatment, water efficiency

Other, Cross-Cutting Areas
- Transport - supporting close-to-zero emissions vehicles
- Green Buildings, ESCos, Supply-chains, general sustainability, etc.
01 – Business opportunities in the climate space

ECA regional opportunities

Climate-Smart Business:
INVESTMENT POTENTIAL in EMENA

**Ukraine**
- Heavy industries have investment potential of $2.1 billion
- Power sector modernization is a $3.9 billion investment opportunity
- Biomass opportunities estimated at over $6 billion

**Russia**
- $31 billion of investment potential in heavy industries
- Important legislative changes in the buildings sector
- Energy generation, transmission and distribution have investment potential of over $48 billion

**Modernizing the CIS**
- $48 billion of investment potential in electricity transmission, infrastructure modernization
- Over $8 billion in cement industries and $12 billion in metal industries in Kazakhstan, Russia, and Ukraine
- 43 billion cubic metres of associated petroleum gas awaiting commercialization
01 Business opportunities in the climate space

02 IFC’s Strategy for climate investments

03 Role of governments in the climate financing

04 Examples around the world
02 – IFC’s Strategy for climate investments

IFC at a Glance

IFC, Member of the World Bank Group

- Largest multilateral source of financing for Emerging Markets’ private sector
- Founded in 1956, currently with 184 member countries
- AAA rated by S&P and Moody’s
- 3 Main Businesses: Investment Services, Advisory Services and Asset Management Company (AMC)
- Takes market risk with no sovereign guarantees
- Promoter of environmental, social, and corporate governance standards
- Resources and know-how of a global development bank + flexibility of investment bank
- Has 2073 active partner institutions
- Holds equity in over 800+ companies worldwide
- More than 104 offices worldwide in 95 countries

**IFC FY13 Highlights***

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFC Commitments (FY13)</td>
<td>$24.8 bn</td>
</tr>
<tr>
<td>IFC’s Own Account</td>
<td>$18.3 bn</td>
</tr>
<tr>
<td>Mobilization</td>
<td>$6.5 bn</td>
</tr>
<tr>
<td>Number of Projects</td>
<td>612</td>
</tr>
<tr>
<td>IFC Committed Portfolio</td>
<td>51.6 bn</td>
</tr>
</tbody>
</table>

*FY end June 30.

**IFC’s Three Businesses**

- Investment Services
- Advisory Services
- IFC Asset Management Company
- Financial Institutions
- Infrastructure
- Manufacturing and Services
IFC’s Climate Smart Investment volume thorough FIs (in US$)

IFC’s Climate Change Commitment through FIs FY03–13 (USD millions)

**02 – IFC’s Strategy for climate investments**

**IFC’s Climate Smart Business through FIs**

**Climate Smart Business through FIs**:
Since 1997, IFC has supported more than **125 FI clients with more than 135 sustainability and climate projects in 35 countries**, providing **$3.8 billion in financing** and helping to reduce over 30 million tons of carbon dioxide emissions. Within the past 10 years, IFC’s climate financing has increased by more than 54% annually on average, with a resulting record annual commitment in FY13 of $1,023 million in financing provided to banks for climate smart business (energy efficiency, renewable energy and cleaner production projects).

**Corporate wide**, IFC have invested more than **$11 billion in some 600 projects** related to energy efficiency, renewable energy generation, clean production, sustainable agriculture, green buildings, and climate adaptation since 2005. Additionally, IFC Treasury has issued **$3.4 billion in green bonds** and we have helped to develop Green Bonds principles.
What a Financial Institution should have done to tap the “green” market?

**Investment Products & ...**

tailored to the needs of diverse markets

- Credit lines and senior loans (medium- to long-term)
- Risk sharing products and partial guarantees
- Mezzanine financing and subordinated debt
- Trade guarantees

**& Advisory Services**

designed for help to build a profitable climate business

- Market development, analysis and product development
- Capacity building, trainings for staff on all levels
- Tools and resources
- Linkages with contractors/ESCo/s/vendors
Product Details: Overall Approach

Type 1.

Risk positions at the level of the Bank:
- Credit lines;
- Equity;
- Subordinated debt;
- Currency swap;
- Trade finance

Type 2.

Risk positions at the level of the underlying assets:
- Guarantees;
- Portfolio Risk Sharing;
- RE Mezzanine Facility.

Financial Products

Local Financial Institution

Bank Loans to Sustainability Projects

Project A.

Project B.

Project C.

Portfolio of Sustainability Projects
## Product must be tailored to needs of FIs:

<table>
<thead>
<tr>
<th>IFC Financial Product</th>
<th>Solution at the client’s side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Sharing Facility (unfunded / funded)</td>
<td>Risk management and exposure</td>
</tr>
<tr>
<td>Credit Line</td>
<td>Liquidity shortfall</td>
</tr>
<tr>
<td>Long term credit line</td>
<td>Liability matching/liquidity</td>
</tr>
<tr>
<td>Sub-debt/mezzanine financing</td>
<td>Risk appetite/financing shortfall</td>
</tr>
<tr>
<td>Private Equity Funds</td>
<td>Capital for climate friendly projects/companies</td>
</tr>
<tr>
<td>Trade Guarantees</td>
<td>Trade risk mitigation</td>
</tr>
</tbody>
</table>

... all on market price with limited role of concessional support
What does it mean "Concessional Support"?

Financing at softer terms through price, tenor, rank, security or a combination to de-risk project

- Concessional First-loss Guarantee;
- Senior Debt with subsidy;
- Early stage equity at submarket price;
- Loans with performance bonuses;
- Grants

Blended Finance = Concessional Finance + IFC Investment

Market-based Financing

02 – IFC’s Strategy for climate investments
Business opportunities in the climate space

IFC’s Strategy for climate investments

Role of governments in the climate financing

Examples around the world
Requirements to Scale up Climate Financing

- **Demand**
  - End users
  - Other beneficiaries

- **Sustainability**
  - Market can sustain after incentives have been phased out

- **Product/Service to meet demand**
  - Equipment Manufacturers
  - Service providers
  - Technical Firms

- **Financing of products and demand fulfillment**
  - Investors
  - Financiers

- **Driven by enabling frameworks**

- **Pure Commercial finance**

- **Market Capacity Creation**

- **Scaling up financing**

03 – Role of governments in supporting climate investments
## Climate Finance – Market Development Path

<table>
<thead>
<tr>
<th>Stage</th>
<th>Technology Research</th>
<th>Technology Development and Pilots</th>
<th>Scaling up and Large scale Demonstration</th>
<th>Mainstream roll out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government/Public Funds</td>
<td>Research Grants</td>
<td>Grants for pilots</td>
<td>Grants/subsidies for reduction of transaction costs, and for creating the pipeline of projects</td>
<td>Not required</td>
</tr>
<tr>
<td>MDBs/DFI</td>
<td>Selective Equity, Debt and mezzanine financing</td>
<td>Equity, Debt and mezzanine financing with Blended finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>Limited Angel investing</td>
<td>Angel/Venture investing</td>
<td>Private equity</td>
<td>Public equity markets</td>
</tr>
<tr>
<td>Debt</td>
<td>Not available</td>
<td>Limited, low leverage financing</td>
<td>Commercial Financing available but constrained by risk appetite and risk perceptions</td>
<td>Bank and market financing easily available</td>
</tr>
</tbody>
</table>
## EE Policy - Typical Roles for Public Finance

<table>
<thead>
<tr>
<th>Type of intervention</th>
<th>Role of public finance</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing the necessary regulatory framework</td>
<td>Grants and Technical Assistance</td>
<td>Frameworks are necessary to create the demand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Help price public goods: Water, energy, other resources</td>
</tr>
<tr>
<td>Financing pilot products in new/emerging technologies</td>
<td>Capital/interest subsidies as Grants to make project viable</td>
<td>Demonstration will lead to lowering of technology costs and to scale up</td>
</tr>
<tr>
<td>Establishing capacity in the market</td>
<td>Grants and Technical Assistance</td>
<td>Capacity is necessary to create a pipeline of projects for scale up</td>
</tr>
<tr>
<td>Performance based incentives</td>
<td>Performance based subsidies to transform market behavior</td>
<td>Market behavior changes lead to scale up</td>
</tr>
<tr>
<td>Blended finance: (State first loss blended with commercial funds for equity, mezzanine and debt)</td>
<td>Higher risk investments</td>
<td>Reduces risk of private financial investors leading to higher risk appetite and scaling up</td>
</tr>
</tbody>
</table>
### 03 – Role of governments in supporting climate investments

#### Role of Govt. I : Creation of Demand

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing capital subsidies</td>
<td>Cheaper to implement and Effective in the short term to change behavior but demand drops when subsidy is phased out.</td>
</tr>
<tr>
<td>Use based subsidies</td>
<td>More expensive to implement but less distortive and therefore more sustainable</td>
</tr>
<tr>
<td>Tax breaks</td>
<td>Needs to fit within the tax paying regime</td>
</tr>
<tr>
<td>Financing incentives</td>
<td>To enable end users to choose the desired alternative : Most efficient and least distortive</td>
</tr>
<tr>
<td>Awareness creation of benefits</td>
<td>Most important aspect required for all other interventions</td>
</tr>
</tbody>
</table>
## Role of Govt. II: Enabling Financing

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy support to enable the range of finance required</td>
<td>Early stage venture for new manufacturing Private equity, Debt Consumer and end use</td>
</tr>
<tr>
<td>Subsidizing cost of capital</td>
<td>Useful to get the process started but can become a dependence and market may fail once the subsidy is phased out</td>
</tr>
<tr>
<td>Subsidizing risk</td>
<td>Very critical and efficient as the FI gets more comfortable with the business, this can be phased out</td>
</tr>
<tr>
<td>Subsidizing transaction costs</td>
<td>Necessary and efficient as the FI builds capacity and familiarity with the market, the market grows, transaction costs drop as a % of business enabling this to be phased out</td>
</tr>
<tr>
<td>Awareness creation of benefits</td>
<td>Critically important as financiers typically tend to be conservative Special Example: Super-ESCo</td>
</tr>
</tbody>
</table>
Business opportunities in the climate space

IFC’s Strategy for climate investments

Role of governments in the climate financing

Examples around the world
## 04 - Examples around the world

### IFC’s FIs climate portfolio in EaP countries:

<table>
<thead>
<tr>
<th>Country</th>
<th>Bank</th>
<th>Loan Amount</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>ProCredit Bank</td>
<td>USD 20 million</td>
<td>2008</td>
</tr>
<tr>
<td>Belarus</td>
<td>MTBank</td>
<td>USD 10 million + AS</td>
<td>2011</td>
</tr>
<tr>
<td>Armenia</td>
<td>AmeriaBank</td>
<td>USD 15 million + AS</td>
<td>2010</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Bank Respublika</td>
<td>USD 3 million + AS</td>
<td>2013</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Erste Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td>HSBC Armenia</td>
<td>USD 26 million + AS</td>
<td>2010</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Byblos Bank</td>
<td>USD 5 million + AS</td>
<td>2010</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Credit Europe Bank</td>
<td>USD 15 million</td>
<td>2012</td>
</tr>
</tbody>
</table>
In 2008, IFC provided a first loan of US$50 million to Yapi Kredi Leasing Turkey (YKL). This investment helped YKL diversify its portfolio and increase its market share in a very competitive market.

YKL's objective was to target SME's and new products in EE and RE financing. The transaction marks the first time that the company has taken financing to direct to sustainable energy projects.

YKL Leasing focused to develop sustainable energy investments across all industry sectors.

Within two years, YKL EE/RE portfolio reached US$200 million of loans.
04 - Examples around the world

BLF Lebanon

Assistance to BLF who position itself as a leader of “green” banking in Lebanon
- Senior Level Strategy Session to identify opportunities & key strategic considerations
- Staff training on SEF to build knowledge & awareness of SEF opportunities
- In-depth industrial sector reports highlighting SEF opportunities
- Comprehensive portfolio review to segment & identify SEF targets in existing portfolio, client visits to evaluate SEF opportunities

US$ 24.4 m in approved SEF projects during pilot stage
BLF apparently SEF market leader, with 90% of total environmentally-friendly loans under BdL Circular 313
Ceska Sporitelna SE Program

Leading Czech bank looking for new market opportunities in 2004

IFC identified SEF potential in Czech market (10m people) of $7.3 bn/6 years

Bank embraced opportunity and developed FINESA (Financing Energy Saving Applications) with IFC assistance

FINESA means:

- Product with defined internal procedures
- Targeted marketing strategy and sales
- Dedicated Energy team, dealing with sustainable energy projects centrally, supporting credit officers and branches sales people

CS now leading bank in Czech SE market
In 2012, IFC provided €10 million in financing to Credins bank. This loan helps the bank provide sub-loans to Albanian companies interested in investing in energy efficient technologies and renewable energy projects.

“This partnership with IFC will help us take a leadership role in combating climate change in Albania. We believe that the potential for development of sustainable energy finance in Albania is significant and aim to offer our services to companies that plan to go green.” Artan Santo, Credins Bank CEO.
Longer tenor financing is critical to the success of sustainable energy projects, but is still relatively scarce in Turkey.

In 2013, IFC provided a US$75 million loan to Turkiye Smai Kalkmama Bankasi (TSKB). This long-term investment (7-year) is directed to pollution abatement and energy efficiency projects in various sectors.

The Scope of the project goes beyond GHG reduction by mobilizing funding for high-impact projects that help to reduce local pollutants such as dust particles.
thank you

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