Green Energy Finance: A Public-Private Partnership Model

Belgrade, 18 June 2013
Agenda

1. How can financing work for EE investments?


3. The Role of PPP: How do we fix it?

4. Case Study: Can it Work?
What is needed to make EE finance work?

A Complex Ecosystem

- Banks facilitate the conversion of savings into productive loans
- Credit bureaus allow banks to comfortably lend to new clients
- Legal and regulatory system ensures enforceability of contracts
- Clear property rights incentivize investment (HOAs, etc.)
- Standard savings methodology produces predictable savings
- Adequate levels of know-how reduced perceived risks
- Available & competent network of contractors & suppliers
What is needed to make EE finance work?

- Banks
- Debt
- ESCOs
- Service & Supply COs
- Energy Audits
- Credit Bureau
- Legal Environment
- Know-How
- Consumption-Based Billing
- HOAs
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Where are the roadblocks for successful EE financing?

An economic actor perspective – financial actors and market actors

- Fixed cost of lending incentivizes banks to focus on large corporate loans
- Information asymmetry between banks and borrowers
  - Adverse selection: Average pricing will attract risky borrowers and turn away attractive borrowers
  - Moral Hazard: Risky behavior as borrower knows that Bank has imperfect oversight
- Lack Credit bureaus and clear credit history increases cost of risk assessment
- Inadequate stock of knowledge and experience with the product
- Insufficient price signals – consumption disconnected from cost
- Network of contractors & suppliers unavailable or inexperienced
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How can a Public-Private Partnership help?

Guiding Principles of a PPP Structure

- Donor support is a limited and valuable resource
- Additionality – address underserved market segments
- Complementarity – work hand in hand with existing programs
- Crowd-in private investors for demonstration effects
- Address the larger ecosystem with a multi-level approach
- Non-distortion – where possible, work with already functioning markets
- Triple bottom line
How can a Public-Private Partnership help?

Creation of a new PPP structure
How can a Public-Private Partnership help?

Banks

ESCOs

Service & Supply COs

PPP

Technical Assistance

DECOs

Energy Audits

Debt

IFIs

Development Agencies

Know-How

Energy Community

Green for Growth Fund Southeast Europe
Investing in Energy Efficiency and Renewable Energy
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Case Study: Green for Growth Fund

Private Investors

IFIs & Private

IFIs

Donor Funds
Green for Growth Fund: Institutional Structure

INVESTORS

DONORS

GENERAL SHAREHOLDER ASSEMBLY

BOARD OF DIRECTORS

INVESTMENT COMMITTEE

TECHNICAL ASSISTANCE FACILITY COMMITTEE

INVESTMENT MANAGEMENT

SAL. OPPENHEIM

Investment Manager
Oppenheim Asset
Management Services

Investment Advisor
Finance in Motion

TECHNICAL ADVISOR
MACS Management & Consulting Services

FUND ADMINISTRATOR
European Fund Administration

CUSTODIAN,
CENTRAL ADMINISTRATION AND DOMICILIATION
Banque de Luxembourg

GREEN FOR GROWTH FUND
SOUTHEAST EUROPE
INVESTING IN ENERGY EFFICIENCY AND RENEWABLE ENERGY

GREEN FOR GROWTH FUND
SOUTHEAST EUROPE
TECHNICAL ASSISTANCE FACILITY

CONFIDENTIAL
Green for Growth Fund

Target Partners

- GGF operates in **13** Target Partners in SEE and ENR:
  - Albania
  - Armenia
  - Azerbaijan
  - Bosnia & Herzegovina
  - Croatia
  - Georgia
  - Kosovo
  - FYR Macedonia
  - Moldova
  - Montenegro
  - Serbia
  - Turkey
  - Ukraine

*indicates local GGF office*
Green for Growth Fund

Measures Financed Since Inception

- The majority of loans financed have supported building envelope improvements including the replacement of windows, doors and insulation
- Fuel-switching and the integration of residential and SME-level renewable energy comprise the majority of remaining loans

Graphs indicate number of loans as a proportion of the total subloan portfolio.
GGF Technical Assistance Facility

Key figures since inception

- 79 TA projects
- Volume of projects: EUR 5.8 million
- Working with 24 Partner Institutions (or potential PIs): 20 FIs + 4 NFIs
- Utilizing 29 different service providers and consulting companies
- Committed TAF Volume EUR 11 million

GGF TAF projects approved since inception (by no. of projects)

- Capacity development of financial institutions: 70%
- Impact analyses & energy audits: 14%
- Capacity development of non-financial institutions: 6%
- Awareness raising & market enabling: 5%
- Research & analyses: 5%
GGF Technical Assistance Facility

Capacity Building for Our Partner Institutions

- GGF offers a variety of both standardized and customized TA measures
- A joint TA needs assessment is conducted during Energy Capacity Assessment Workshop
- A definition of tailor-made Capacity Building activities is defined at the workshop in order to implement Sustainable EE Lending Operations at PI

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<tr>
<th>EE Strategy and Product development</th>
<th>Monitoring &amp; Reporting Tool “eSave”</th>
<th>Implementation of Energy Audit Services</th>
<th>RE Project Finance support</th>
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![Image of eSave tool](image-url)

![Image of Capacity Building activities](image-url)
How does GGF’s PPP approach overcome market challenges?

- Donor support leveraged to attract private capital
- Additionality – GGF covers gaps in the market such as small-scale RE
- Complementarity – GGF works with other green energy finance sources (e.g. IFIs) to ensure a comprehensive, coordinated approach
- Inclusive governance structure facilitates GGF’s constructive role in further developing the green energy enabling environment and ecosystem
- Market-based approach to climate change mitigation
- Strong focus on environmental and social issues as well as capacity building of partner institutions to adopt best practices in the region
Thank you for your attention!