

WORLD BANK EE FINANCING

EXAMPLES FROM TURKEY

US DOE ENERGY EFFICIENCY FORUM, ISTANBUL 2013

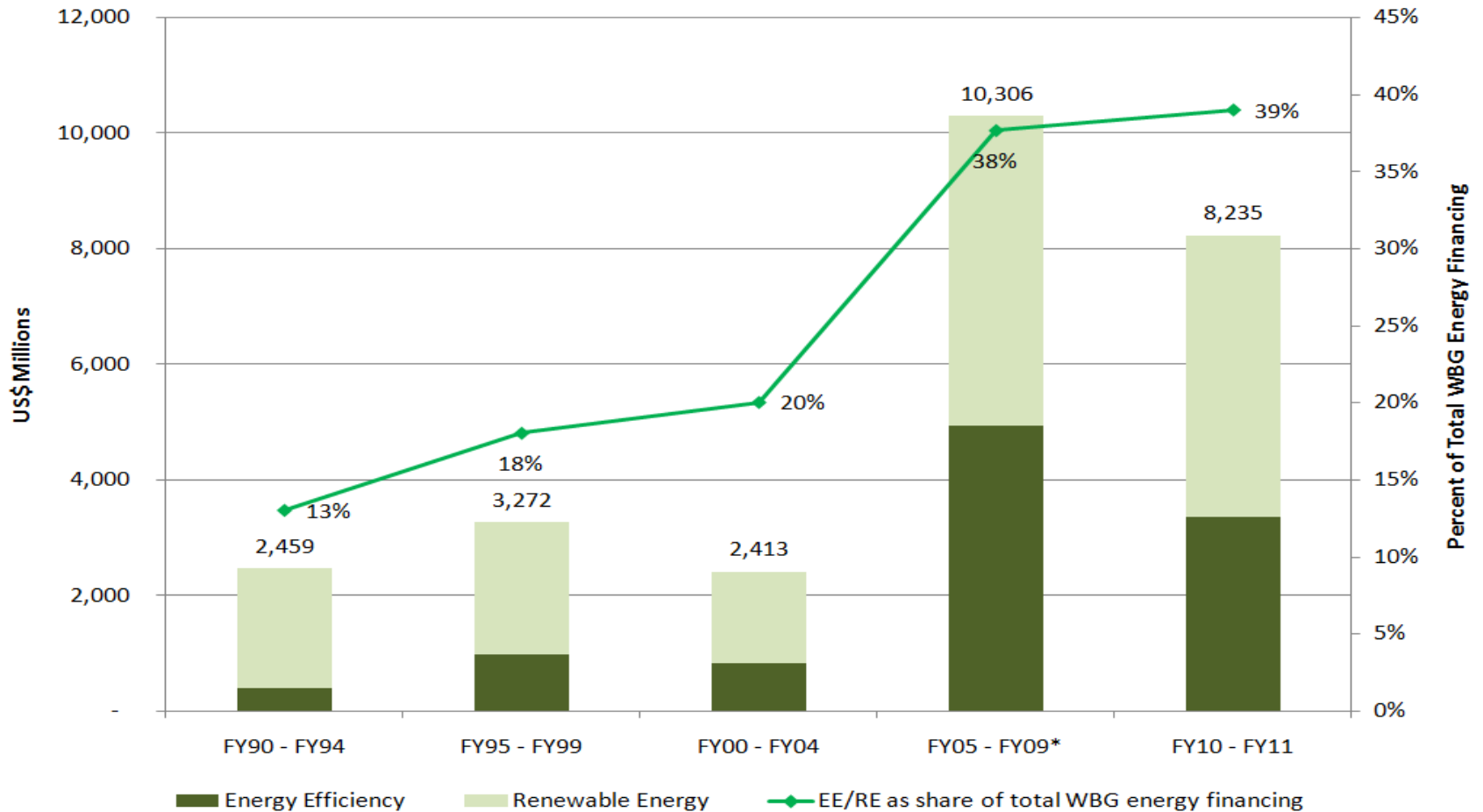


Why Finance Energy Efficiency

- Improve economic industrial competitiveness
- Relieve power infrastructure bottlenecks
- Improve energy security
- Reduce GHG foot print
- Reduce energy costs

WB Group Overall Energy Efficiency Financing

World Bank Group Financing for Energy Efficiency and Renewable Energy, FY1990 - FY2011



Recent WB Financing of EE in Turkey

- US\$1Billion Private Sector Renewable Energy and Energy Efficiency Project (Approved in 2009)

Funding Source	Amount in US\$ (millions) - Actual
CTF	100
World Bank	1,000
Turkey ¹	66
Others ²	365
Total	1,531

- US\$300million SME Energy Efficiency Project (2014)

Financing Source	Amount in US\$(millions) - Planned
CTF	50
World Bank	200
Turkey	45
Others ³	11
Total	307

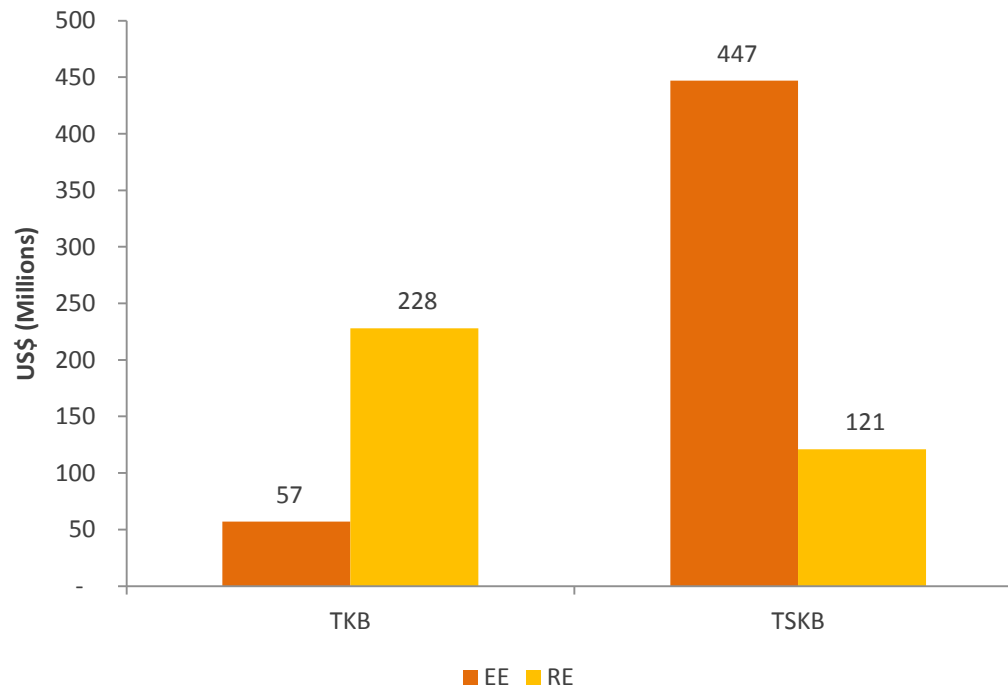
¹ Including the government, project sponsors, and local banks

² Other financing sources include other public financiers such as AfD, KfW, CEB and EIB

³ The Government, banks (incl. Halkbank, etc.), and ESCOs

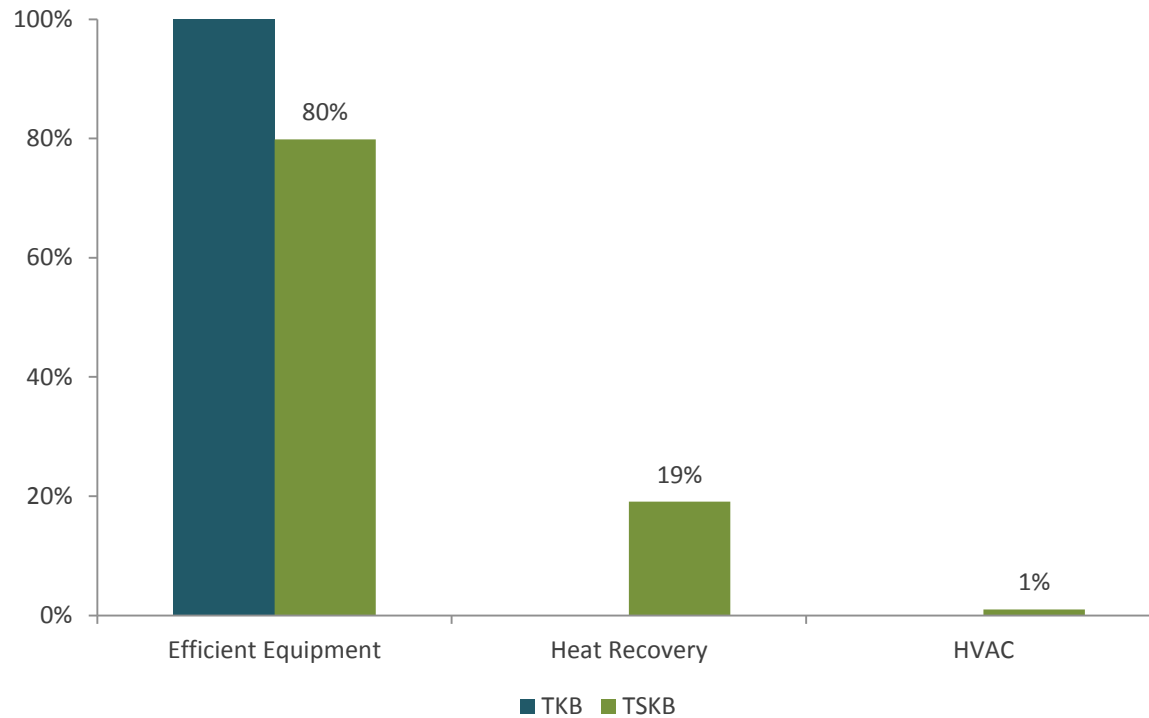
WB Private Sector RE/EE Project

- Focused on large-scale industrial energy efficiency
- Provided loans through privately-owned Industrial Development Bank of Turkey (TSKB) and the government-owned Development Bank of Turkey (TKB).
- Overall 60% of financing was provided for energy efficiency: TKB 20% and TSKB 80%



WB Private Sector RE/EE Project

- In EE, most of the loans were used to acquire more efficient equipment



WB SME Energy Efficiency Project

- Focuses on providing energy efficiency financing for the SME sector trying to address the following:
 - High transaction costs for small SME EE investments
 - Lack of knowledge of EE opportunities
 - Financing constraints due to high collateral requirements
- Supports alternative transactions:
 - equipment leasing where lease payments are paid from estimated energy savings
 - Firms offering blend of services – from audits to design and implementation with some guarantee to make sure savings can service the loan
- Engendering the ESCO industry in Turkey

Its often challenging to grow an ESCO industry

Institutional Frameworks

- Policy framework
- Regulatory framework
- Legal framework

Financing

- Financial expertise
- Perceived project high risk
- Client credit worthiness hence high collateral requirements
- ESCO credit worthiness
- High transaction costs for small EE investments

Common ESCO Challenges

Information

- Lack of information about EE opportunities, hence low priority among SMEs
- Willingness to accept ESCO contracts

Technical

- Strong technical EE skills
- Skills to assess EE benefits and costs in the banking sector
- Ability to assume performance risk
- Track record

World Bank SME Energy Efficiency Project

Financing

Institutional
Framework

Technical
Expertise

Information

- Partnered with Halkbank, Vakifbank and Ziraatbank
- Providing finance (IBRD, CTF and local bank co-financing) to the banks with the Government of Turkey's Guarantee
- Providing EE financing training to the banks
- GEF grant facilitating risk sharing

World Bank SME Energy Efficiency Project

Financing

**Institutional
Framework**

Technical
Expertise

Information

- **Government**

- Passed the 2007 National Energy Efficiency Law
- Approved the National Energy Efficiency Strategy in 2012
- Working with European Commission on the preparation of a multi-year technical assistance for enhance EE in Turkey

- **World Bank**

- Policy support to General Directorate of Renewable Energy (GDRE) within MENR:
 - Reviewing EE primary and supplemental policies
 - Reviewing EE incentive and transformational programs,
 - Reviewing institutional arrangements

World Bank SME Energy Efficiency Project

Financing

Institutional
Framework

Technical
Expertise

Information

- Technical assistance provided to FIs
- Sharing lessons learned - FIs obliged to document subproject results to share with other banks
- Dissemination of EE screening tool
- FI and GDRE staff training

World Bank SME Energy Efficiency Project

Financing

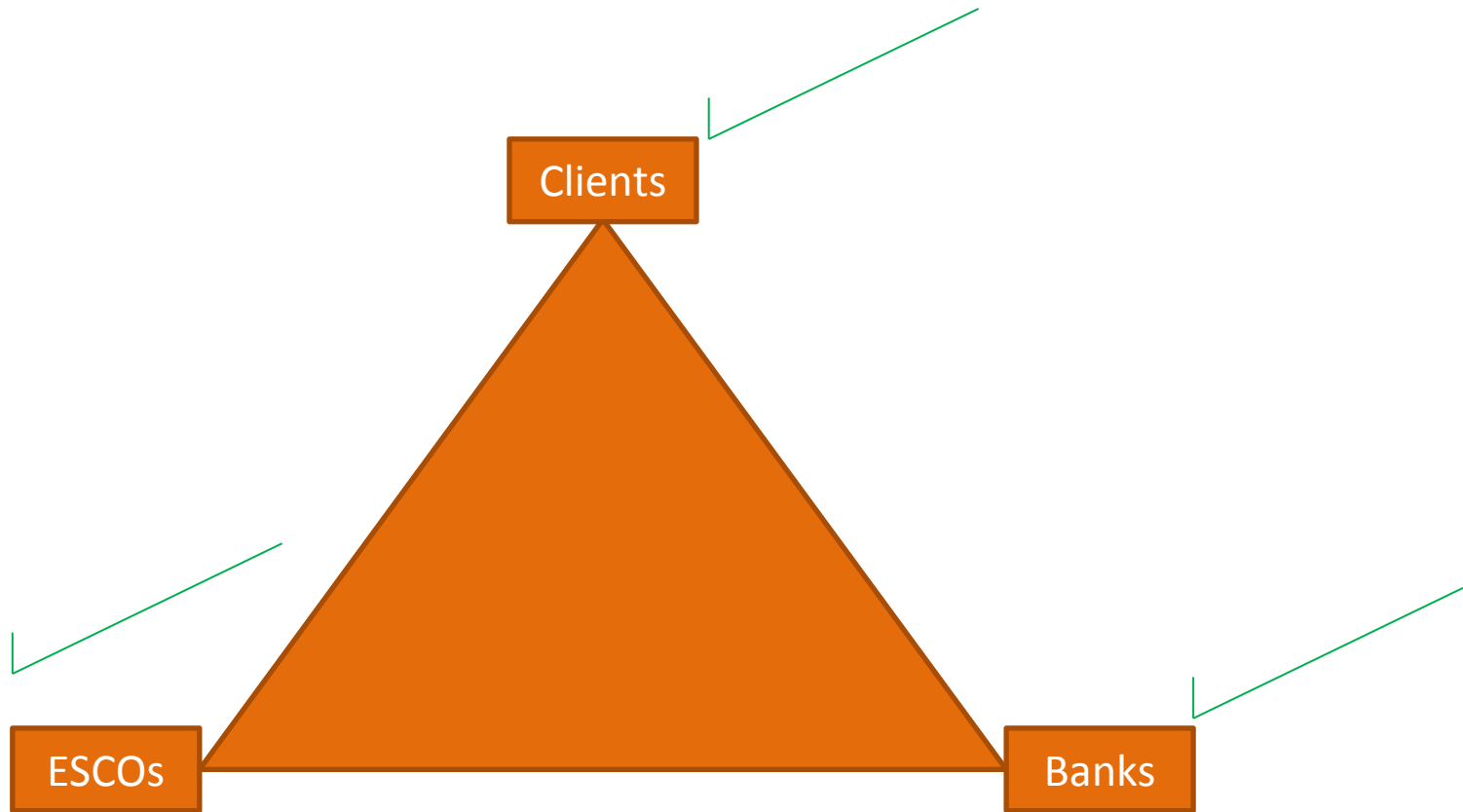
Institutional
Framework

Technical
Expertise

Information

- Support to GDRE enabling
 - Awareness and information dissemination on energy efficiency opportunities
 - Stakeholder dialogue through round tables
 - Pilot ESCO project case studies
 - Market studies, assessments and options paper
- Support to FIs enabling:
 - Targeted market and technical studies

Opportunity to Initiate ESCO Transactions



Contact Project Manager:
Shinya Nishimura
Email: snishimura@worldbank.org
Phone: (USA) 202 458 9063

Many Thanks

Pedzi Makumbe
pmakumbe@worldbank.org
(USA) 202 473 9371