

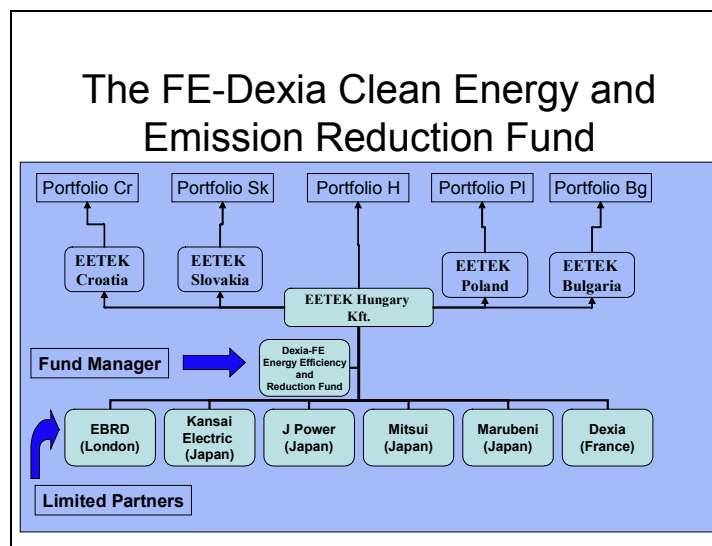
OPPORTUNITIES IN ENERGY EFFICIENCY PROJECT FINANCING

Antal Ferenc Kovács

**EETEK Hungary, Kft, H-1132 Budapest, Váci út 22 – 24, Tel: +36 1 412-0130,
fax:+36 1 412 2320, kovacs@eetek.hu**

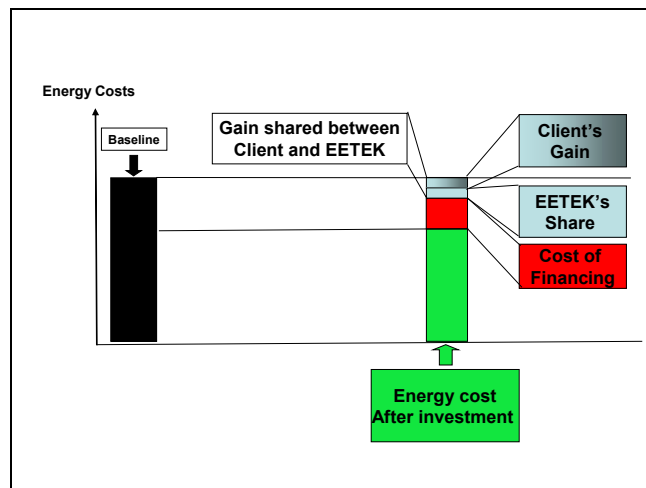
1) Investment in energy efficiency related projects requires:

- the right type of money and
- the right type of investment vehicle



2) ESCO and problems with ESCO type financing

- What is ESCO: project costs can be financed from savings and gains are shared between the parties
- Financing scheme based on ESCO principles



- c) Experiences with ESCO type financing
 - A. Why in certain cases ESCO financing can not be the right solution: improving efficiency vs. improving safety of the system, or level of service
 - (1) Simple cases
 - (2) Problematic cases
 - (3) The problem with setting the „baseline”
 - B. Financing solutions:
 - Solution A: Saving risk shared by client and contractor:
 - (i) Operations with fixed, scheduled energy consumption (e.g. public lighting)
 - (ii) Operations with alternating energy consumption: Savings calculated using exact engineering methodology: measurable/accountable differences between the efficiency of replaced vs. new system
 - Solution B: Flat financing fees

3) The role of an intelligent Energy Management System

- a) Achievable savings: direct and indirect
 - Can measure energy consumptions
 - Can regulate energy consumption
 - Can identify losses and locate leakages
 - Can reduce consumption by optimizing consumer behaviour
- b) Potential cost savings: 1-3% of total energy costs (conservative estimates)

4) Energy outsourcing:

- the efficient way of combining financing and operation of an energy system
- Targeted savings can be assured by complex services consisting of
 - Financing
 - Monitoring
 - Operation
 - Maintenance
 - Follow-up investments

5) Sharing savings risk:

- A. Both EETEK and Client is exposed to saving risk: savings shared b/w client and EETEK – Energy Performance Contract (EPC) – post contractual hazard

- B. Client only faces savings risk: flat yearly financing fee payable to EETEK over the term of the contract – similar to a lease contract, when at the end of the term of the contract ownership is transferred to the Client
- C. EETEK only is exposed to saving risk: energy sales contract

6) Sources of financing: equity vs. debt

- Stand alone projects: non recourse financing
- Providers of both the equity and debt exposed to client risk
- Availability of bank financing is a good indicator of manageable client risk
- Refinancing part of the total investment (usually 50-70%)
 - (1) Post – implementation: not preferred
 - (2) Pre-implementation: precondition to entering into the contract with the potential client

7) Monitoring customer's financial performance

- A. Portfolio monitoring – reporting to owners of EETEK
- B. Reporting to financing bank