



**International
Finance Corporation**
World Bank Group

Commercial financing structures for municipal energy efficiency projects

Ian Crosby, Projects Officer

November 13, 2006 Moscow

International Finance Corporation

- IFC is the private sector arm of the World Bank Group
- Our mission is to promote sustainable private sector investment in developing countries, helping to reduce poverty and improve people's lives.
- IFC promotes private businesses in developing countries by making loans and equity investments, helping companies mobilize financing in the international financial markets, and providing advice and technical assistance to businesses and governments.
- Since its creation, IFC has committed more than \$49 billion of its own funds and has arranged \$24 billion in syndications for 3,319 companies in 140 developing countries.
- As of FY05 was \$19.3 billion for its own account and \$5.3 billion held for participants in loan syndications.
- Energy Efficiency finance (including Renewables Energy Sources finance) is one of IFC's strategic priorities.



IFC

**International
Finance Corporation**
World Bank Group

Energy Efficiency Finance Products

- **Credit line for energy efficiency product on-lending**
 - Medium to long term financing designed to address FI's liquidity/lending restrictions for projects that require long-term tenors.
- **Guarantee products**
 - Risk-sharing instruments to address FI's risk concerns in entering a new market segment.
- **Quasi-equity type instruments**
 - Mezzanine financing including quasi-equity and quasi-loans with features to share risk/returns, and provide support to FIs entering new markets.



IFC

**International
Finance Corporation**
World Bank Group

Advisory Services

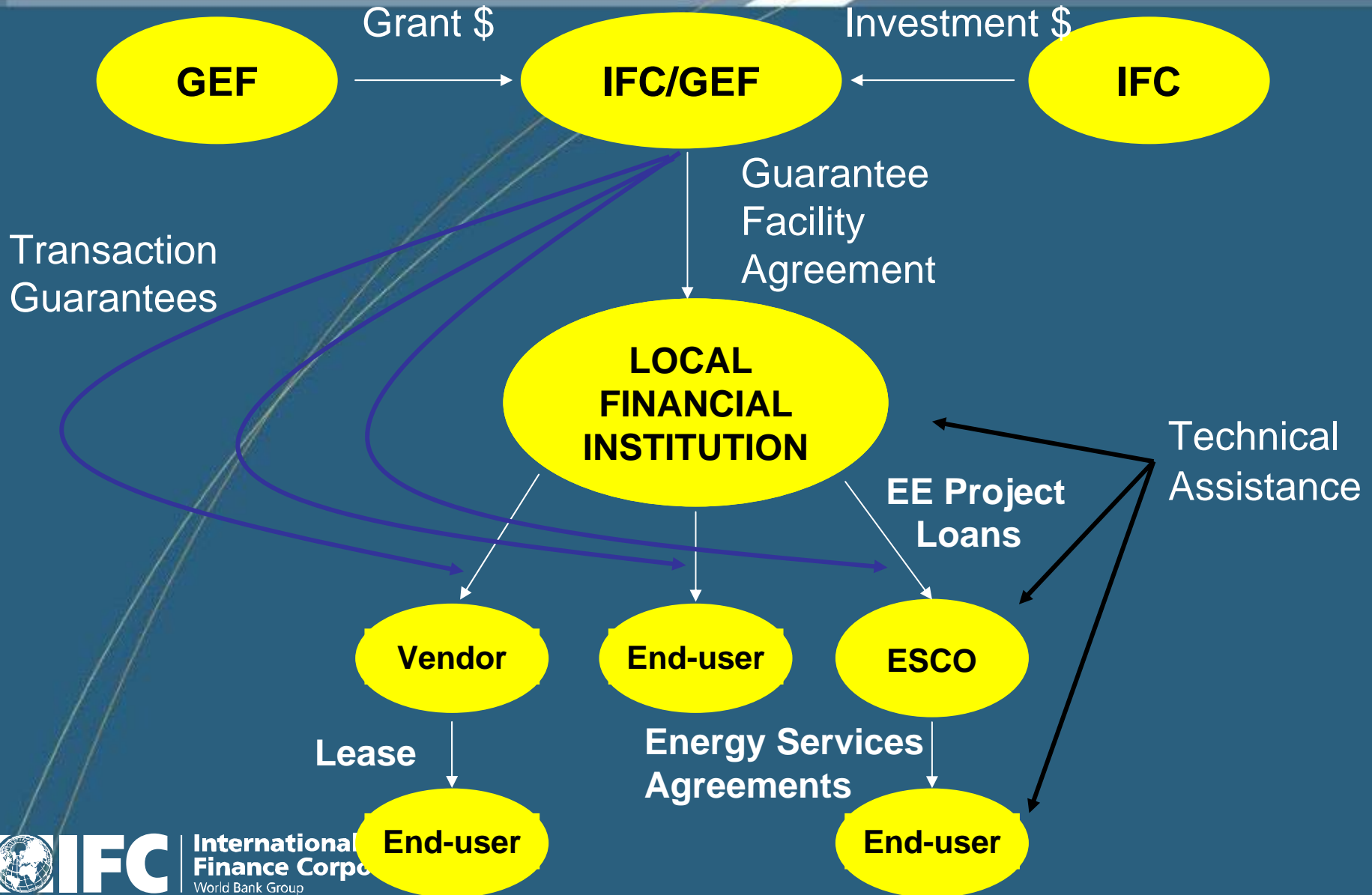
- Market diagnostics and opportunity assessments:
 - Central and Eastern Europe, Southern Europe and Central Asia, East Asia, Africa.
- Product design and development:
 - Support FIs to develop and structure the right financial products to finance EE projects.
- Capacity building:
 - Strengthen capacity of FIs in assessing sustainability projects and businesses.
- Market development for energy efficiency-related activities, products and services:
 - Strengthen capacity of project sponsors and developers to design bankable projects with maximum impact.



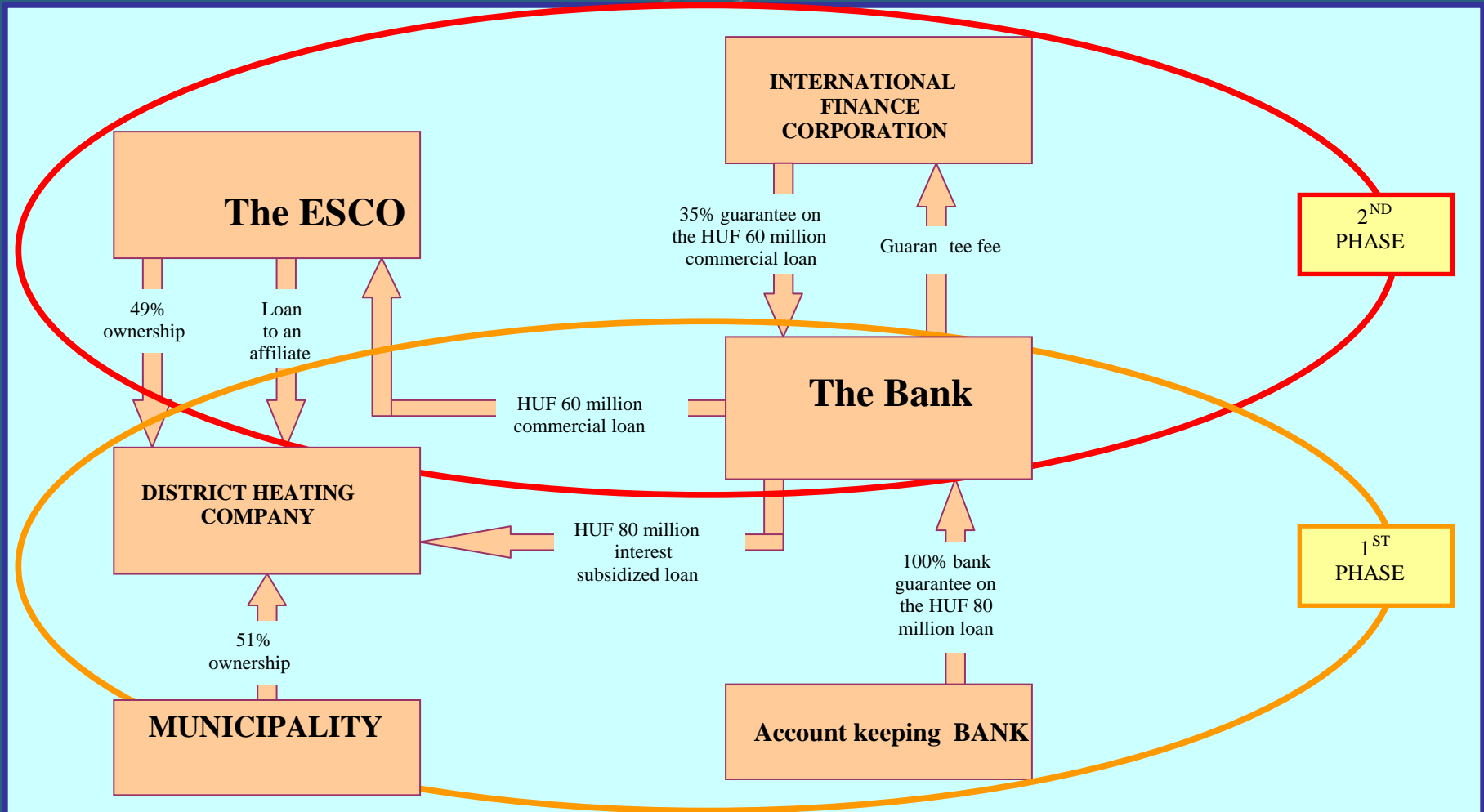
IFC

**International
Finance Corporation**
World Bank Group

Guarantee Program Structure

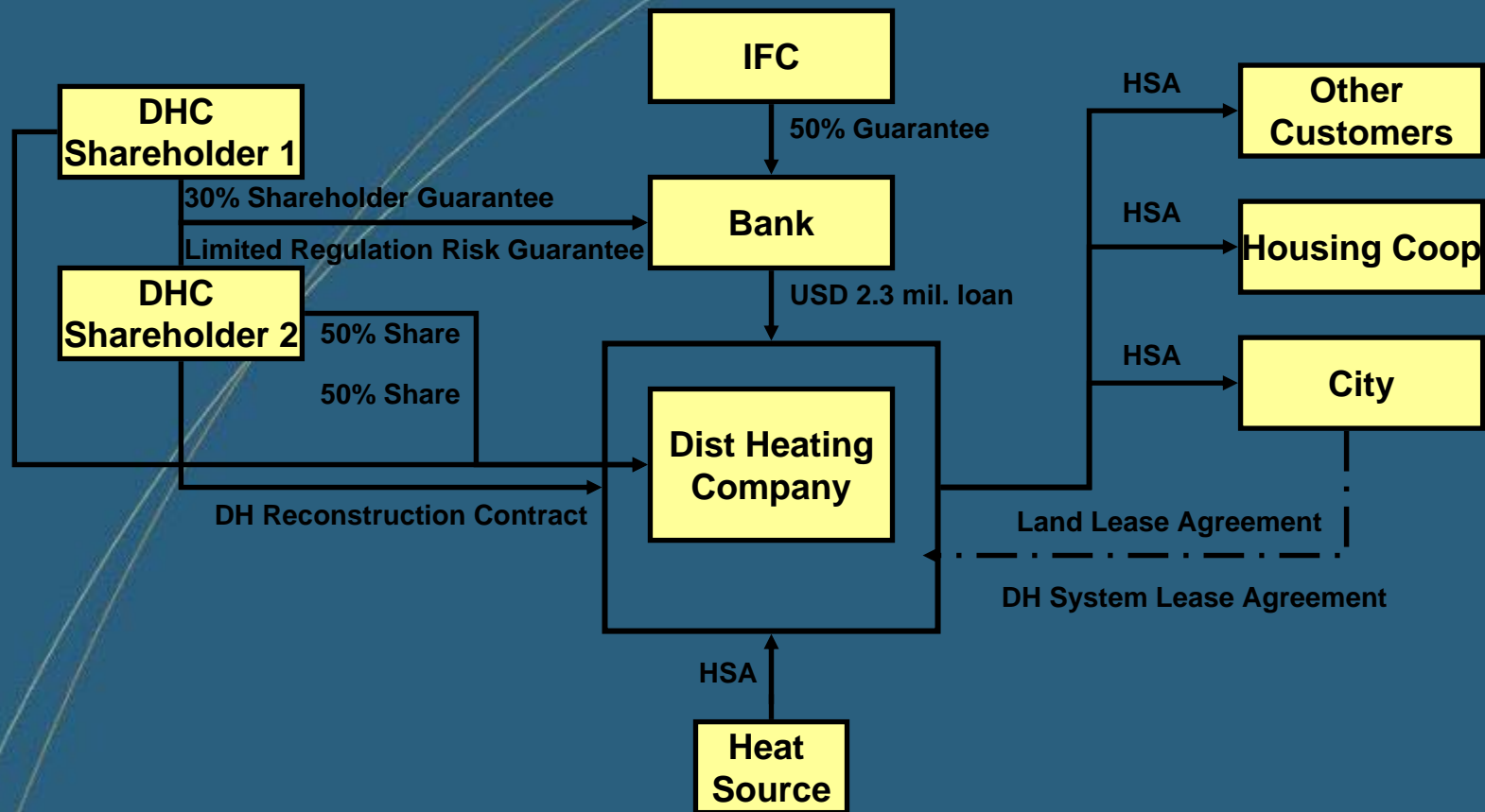


District Heating



District Heating

Sample Project Structure

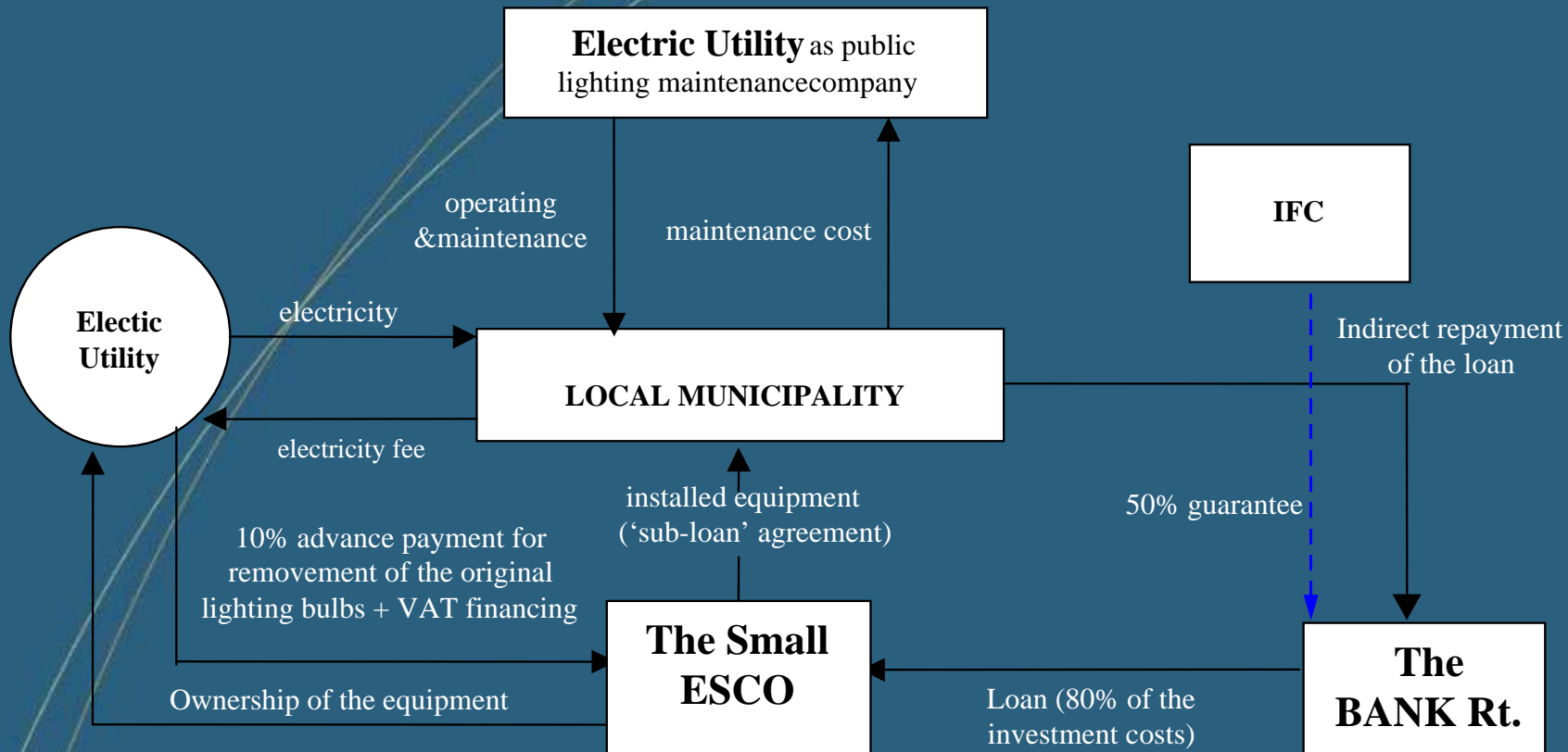


Risk Analysis

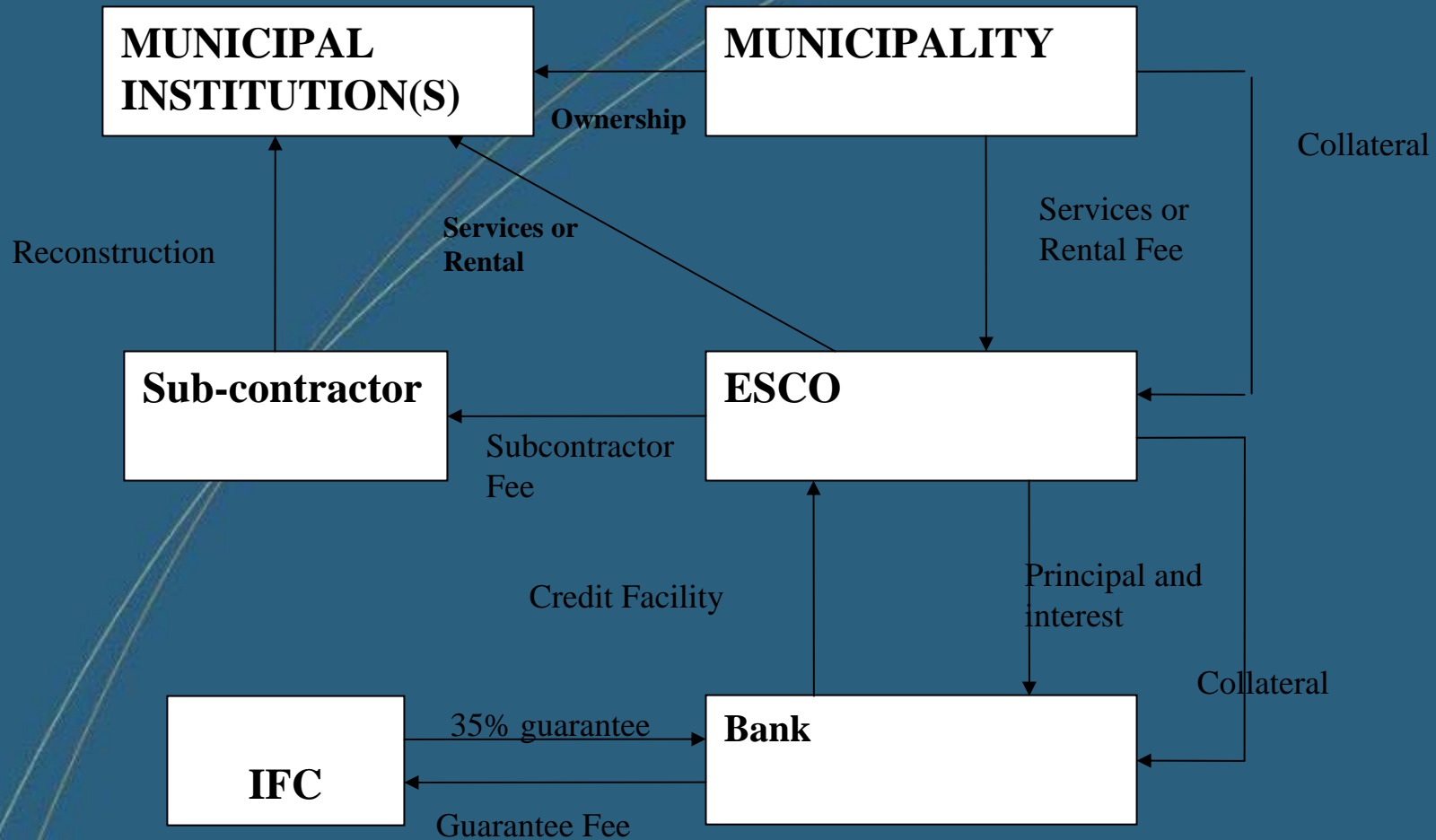
- full cost recovery and fuel pass-along provisions of tariff regulation
- limited-recourse (30% of the loan principal) to shareholders
- positive record of DH operator and its parent companies
- all construction risks assumed by shareholder
- stable market and strong heat sales agreements
- the city's commitment to DH system
- positive past payment record
- legal right of supplier to turn off the heat



Streetlighting Project



Municipal Street Lighting - ESCO



Municipal Street Lighting

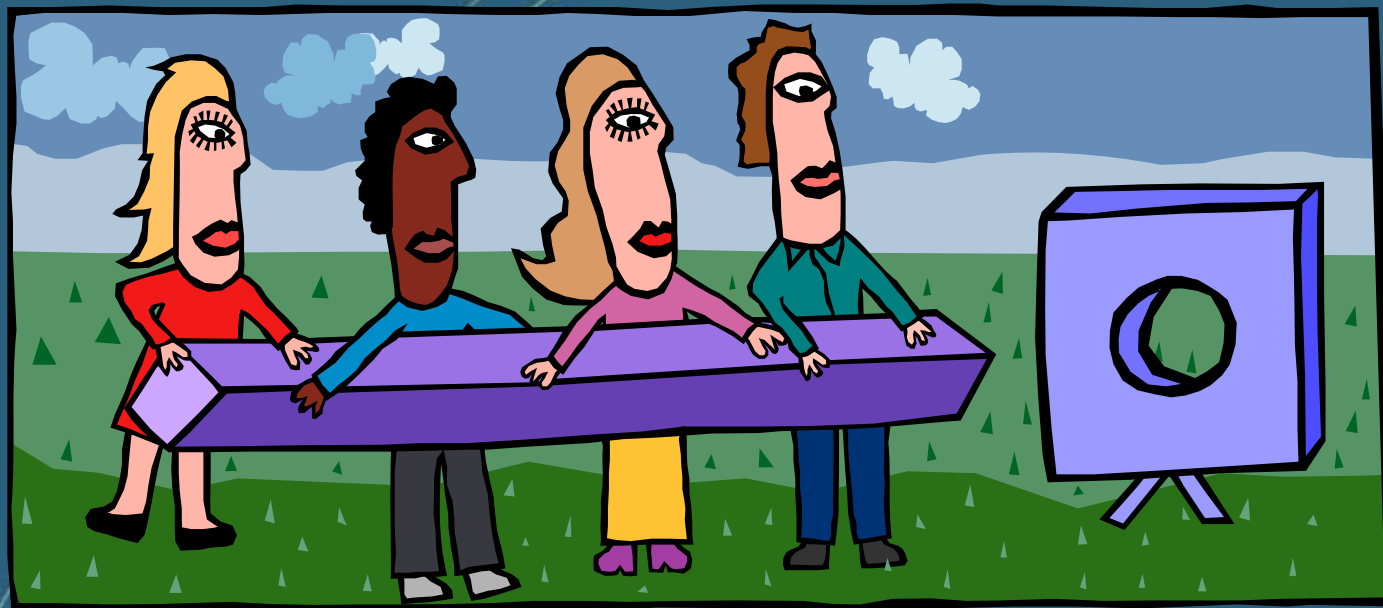
- Many smaller towns still have not upgraded
- Very old technology, huge savings possible
- Need to improve quality of lighting for transit and crime
- Municipal debt ceilings may be obstacle
- Can state subsidies be used to cover debt payments?
- Can savings be separated from general budget?
- Will public authority provide credit guarantee?



Municipal Projects – ESCO Portfolio

- Bank provides credit facility of \$8.95 million for ESCO
- Leverage is 10 to 90%
- Street lighting, indoor lighting and heating projects for municipalities
- ESCO signs “lease” or “services” agreements with municipal agencies
- Term of the credit facility is 9 years,
- 130 projects total value of \$10.29M;

A common approach to investing in energy efficiency



The more strategic approach

Careful Market Diagnosis

Identification of Real Barriers and Opportunities



Select Appropriate Tools and partners for the Market Conditions

Build on existing capacity in the market

Don't try to create completely new organizations

Adapt existing business models



Pay attention to implementation

Leveraging experience and tools across different markets