

INOGate Workshop “Capacity Building for Financing of EE/RES Projects”

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EXAMPLES OF LENDING FOR EE/RES

Stephen Strauss

Chief of Party,
USAID Finance for Economic Development (FED) Program
Yerevan, Armenia

THIS PRESENTATION WILL COVER TWO TOPICS

1. Some Risk Factors in Energy Project Financing.

Country example: Albania's financing and energy sector--comparison with Armenia.

2. Financing of small-scale energy efficiency investments in Albania and in Armenia

ENERGY (HPP) PROJECT FINANCING: COVERAGE OF LENDER RISKS

Loan repayment (credit risk):

First way out: Project cash flows; selling price

Second way out: Pledge of project assets

Third way out: Investor guarantees

Completion risk: Investor equity; Assignment of concession agreement

Performance risk: Equipment suppliers, construction contractors (performance bond)

Damage, natural disasters, force majeure: Insurance, investors' guarantees.

Political risks: Investors' guarantees

COUNTRY EXAMPLE: ALBANIA

Similar size, population, energy sector:

Area 28,748 sq km (Armenia 29,743)

Population 2.9 million (Armenia 3.2 million)

Similarities in energy sector: Extensive hydropower resources, large number of small HPP concessions (over 100 built or refurbished)

Differences in energy sector: Albania has no gas or nuclear power sources. Hydro is 98 % of energy use (oil 2 %)

Before 2003: importer of electricity; now an exporter due to major HPP development and new international grids.

New sources (wind, solar) being explored, minimal so far.

(Albania an EU association country since 2006 (SAA); should achieve EU accession candidate status by end of 2013)

COUNTRY EXAMPLE: ALBANIA

FINANCING OF HPP PROJECTS:

Strong banking sector: 16 banks, of which 2 are local, others international (Austrian, French, Italian, Greek, Bulgarian).

HPP projects mostly financed by 3 banks:
Raiffeisen Bank (Austrian), Societe Generale (French), First Investment Bank (Bulgarian)

COUNTRY EXAMPLE: ALBANIA

Banks often cover project risks by assignment of concession agreement (by agreement between bank and State concession authority). If the investor fails to complete or perform, bank can take over concession rights and bring in another operator.

Banks may finance based on agreement with supplier of equipment and technology (turbines). Bank provides buyer financing, with performance guarantees from supplier through installation and operation. Example: First Investment Bank project financing to Albanian HPP project based on agreement with Bulgarian supplier.

COUNTRY EXAMPLE: ALBANIA

PRICING STRUCTURE FOR ELECTRICITY (State regulatory body sets prices every two years):

Small HPP producers sell to State production company at \$ 93/MWh (if new HPP) or \$ 63/MWh (if existing HPP)

State production company sells own production to distribution company at \$ 27/MWh.

Distributor sells to public at \$ 120/MWh.

(Pricing structure and margin is similar to Armenia's)

Solar, wind: no clear pricing structure in Albanian yet, making financing for such projects difficult.

SMALL-SCALE ENERGY EFFICIENCY LOANS

Specialized financing can be made available for small-scale energy efficiency investments for homeowners, SMEs, hotels (building insulation, lighting, heating including solar). Some benefits are:

- Thermal insulation of houses or apartment buildings reduces energy needs, can save up to 50-80 % per year in reduced heating-cooling expense
- Replacement of inefficient boilers with new models can reduce heating costs by up to 25 %.

SMALL-SCALE ENERGY EFFICIENCY LOANS

COUNTRY EXAMPLE: ALBANIA

Pro-Credit Bank offers energy-efficiency loans to SMEs and retail borrowers. Amounts up to \$ 60,000, tenors up to 10 years for individuals, and up to 15 years for businesses. Loans are in local currency, interest rates are lower than standard loan rates. Purposes include:

- Cooling and heating processes
- Building rehabilitation, fixtures and fittings
- Electrical equipment
- Fuel-efficient transportation
- Solar installations

Also: new program of loans to municipalities to invest in energy efficiency, in coordination with the Albania-EU Energy Efficiency Center.

COUNTRY EXAMPLE: ALBANIA

SMALL-SCALE ENERGY EFFICIENCY LOANS

National Commercial Bank offers “green loans” to households and businesses (local currency), with two loan products: (1) Up to USD 5,000 (no collateral) (b) USD 5,000-60,000: collateral required. Tenors up to 10 years.

“Green loans” are made to businesses for many purposes to reduce energy consumption and increase efficiency of energy use:

- Modernization of production processes to reduce energy use.
- Thermo insulation of buildings, warehouses, production facilities (replacement of roofs, windows, doors);
- Improvements in heating/cooling systems (including solar)
- Improving furnaces (biomass), ventilation, A/C, pumps/motors, compressors, refrigeration, lighting.
- Heat capture from production facilities
- Agriculture: energy-efficient tractors, harvesters, irrigation, buildings₁₀

SMALL-SCALE ENERGY EFFICIENCY LOANS EXAMPLE OF PROGRAM IN ARMENIA: HABITAT FOR HUMANITY

Habitat for Humanity, with regional funding from USAID, has programs in Armenia for improving energy efficiency for housing for low and middle-income housing units.

Due to failure of prior construction and heating methods to focus on energy efficiency, residential heating is more than 30 % of energy use. Household energy consumption is high, very costly to consumers, and inefficient.

Habitat for Humanity's EE loan initiative aims to bring EE financing to refurbish residential housing units.

SMALL-SCALE ENERGY EFFICIENCY LOANS

EXAMPLE OF PROGRAM IN ARMENIA: HABITAT FOR HUMANITY

- Habitat for Humanity’s “REELIH” Project (Residential Energy for Low-Income Households in Eurasia) aims to improve the residential energy efficiency investment environment in the region, and to develop and test replicable financing models.
- Habitat for Humanity has provided funding to two UCOs, who make loans to households specifically for investing in building refurbishment.

SMALL-SCALE ENERGY EFFICIENCY LOANS EXAMPLE OF PROGRAM IN ARMENIA: HABITAT FOR HUMANITY

- Habitat for Humanity also has a pilot program for refurbishing multi-unit apartment buildings in Yerevan for energy efficiency. Habitat for Humanity has provided funding to one participating Armenian bank, who makes loans for this purpose.
- The borrowers are the building's owners' associations, with cross-guarantees from at least 75 % of the apartment owners in the building so that the association is able to service the loan.