Session 4: Developing and implementing policy frameworks at the local level

Deploying Renewables in Georgia

Murman Margvelashvili WEG – World Experience for Georgia September 2014





Georgia Context

- Large untapped HPP potential
- Hydropower 8TWh -80% of total generation
- Fuel wood about 20% of TPES, other RES negligible
- Gas prices subsidized, electricity tariffs stable over 8 years, even decreasing.
- Summer surplus and winter shortage of electricity production - spilling the water (similar to CA)



• Intensive HPP development over recent years: 60MW SHPPs commissioned in 2013, about 400MW under construction (85MW in testing). Plus development and construction of larger HPPs.

Support policies (mainly HPPs)

- State program Renewable Energy 2008 (amended)
 - Simplified system of memoranda and preferences
 - Market Rules PPAs with ESCO (feed-in tariff makes no sense)
 - Preselected sites offered to investor
 - Investor relations and marketing
 - Tax benefits (depreciation for income tax)
 - Georgian Energy Development Fund
 - Prefeasibility studies, equity participation co-financing, etc.
 - Wind power project development 20MW underway
- Decisive factor New 500kW 700MW back-to back connection to Turkey, opening export market
 - Establishment of cross-border trade mechanisms underway



Other RES & EE underdeveloped

 No RES or EE laws, strategies or action plans, Donor projects – capacity building (EC LEDS, NAMAs etc.)

Covenant of Mayors (SEAPs), Pilot Projects
 Lack of policy and technical capacity and information
 No wide scale development – although weak market signs are visible.

- EBRD Energy Credit
 - High interest rates grant component helps
 - Strict procedures for Entry of new products and projects,
 - Strict bank procedures –switching to ordinary loans for minor violation
 - Poor qualification of vendors, low awareness of consumers.
 - Difficulties for corporate clients



Lessons learned and Replicability

- Hydro-dominated power systems require stable seasonal exchange mechanisms for development of renewable electricity. Inter-connection to a new market can open up the opportunity for SHPPs irrespective to competition from large HPPs (which are slow in development). This is likely to happen in Kyrgyzstan and Tajikistan (CASA1000 project)
- State services can play an important role in preparing the grounds for SHPP development and should be made more effective. Qualified state support, transparency, better policies and more technical skills for project preparation
- Solar HW, wind, biomass and geothermal still lagging behind irrespective to increasing energy dependence. <u>Donor projects mostly fragmentary addressing part of the problem and only some links of value chain</u>. Split of responsibilities between institutions, lack of strategic vision and systems approach are major impediment to enabling environment.

Comprehensive Systems Approach Needed

Solar Water Heaters

Energy Efficient Construction

