

Armenia's Ongoing Energy Efficiency Reform: The Energy Efficiency Law and the National Energy Efficiency Program

*Removing Barriers to Residential Energy Efficiency
in Central And Eastern Europe
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*Astghine Pasoyan
MUNEE Program Manager*

MUNEE program in Armenia works in four key directions:



1. Policy Reform
2. Residential EE and Heating
3. Education and Awareness Campaign
4. Strengthening the Municipal EE Network and Outreach to Cities

Bottom-line: Country has 25-40% energy saving potential, 1/3 of which can be no-cost or low-cost

National Policy Reform – *The groundwork*



Establishment of the **Armenian Energy Efficiency Council (AEEEC)**, -- *“the Energy Club”*

- Developing dialogue between disparate energy stakeholders
 - government, NGOs, academia, energy businesses and donors
- Identifying priority areas for national policy reform,
- Producing recommendations for legal/legislative developments regulating the field of energy efficiency,

Pursuing Policy Reform -- milestones



- ✓ Desk Review of:
 - ✓ International Experience of Energy efficiency legislation – **22 countries**
 - ✓ International Experience on Renewable Energy Policy – **35 countries**
 - ✓ The taxation environment of the Republic of Armenia (RoA)
 - ✓ Regulation of Foreign Investments in the RoA
 - ✓ Energy Tariff Policy in the RoA
- ✓ Conceptual Framework development
- ✓ Development of the draft law
- ✓ EIA and state budget implications
- ✓ Presentation of the draft to national, international, and public organizations
- ✓ Presentation to the AEEC
- ✓ Public Hearing
- ✓ Submission to the Government and review
- ✓ Revision and editing, approval and submission to the Parliament
- ✓ Hearing in the Parliament (1st, 2nd...) , and adoption
- ✓ Ratification by the President

Enforcement Framework



- Setting up National Responsible body
 - Ministry of Energy in charge
 - Government Coordination Board with NGO participation
- Funding Mechanism
 - Renewable Energy and Energy Saving Fund
 - Operations Manual
 - IDA Loan agreement signed
- Secondary Legislation
 - EE Indicators & Standards
 - Energy Examination Procedures
- National EE Program
- National RE Master-plan

Technical Equipment Standards, Certification and Labeling



- Define efficiency indicators for devices, equipment, appliances, machine-tools and technologies for with high energy consumption, buildings, areas (as assigned by the Government);
 - *integrate into the national standards' and codes' system.*
- Establish procedures and other guidance evaluating compliance with EE Indicators
 - *State energy examination procedures*
- Start certification and labeling based on examination
 - *mandatory (building codes, passports) and voluntary (standards)*
- Provide incentives for compliance with EE indicators

Energy examination (audit)



- Rules and procedures for conducting energy examination and producing conclusions on the efficiency of energy consumption at particular sites with the auditors' conclusions to be used for providing EE incentives.
- Requirement and limitations for energy auditors, their certification, licensing and professional requirements for conducting energy audits.

Economic and Tax incentives for energy efficiency measures



- Provisions for financial, tax or customs incentives and privileges (including accelerated depreciation),
- Customs exemptions for EE&RE products
- Favorable crediting for:
 - energy efficiency-related activities,
 - producers of energy saving equipment,
 - appliances and materials,
 - metering & control means,
 - management of fuels and energy consumption, etc.

Energy saving and renewable energy fund



The Fund provides four main categories of financial instruments:

- on-lending through participating FIs for
 - Energy efficiency,
 - Heating, -- *coming into operation in 2006*
 - Renewable energy projects
- partial credit guarantees to participating FIs,
- targeted grants to the poor,
- technical assistance, awareness and research.

Energy Efficiency Program



- Trends analysis and valuation of sectoral energy saving potentials
- Setting energy saving targets
- Outlining short-, medium- and long-term programs of sectoral energy efficiency measures
- Action plans and timeframes
- Monitoring and evaluation procedures

Ongoing EE Program Development Steps



The activities required for national program development included:

- Collection and analysis of macroeconomic indicators and trends for the Republic of Armenia for the period from 2001 to 2004, identification of development trends, analysis of development indicators, recommendations based on GDP, its energy intensity, fuel and electricity consumption and distribution by economic sectors, products and services, operational energy generational capacities, etc;
- Comparative analysis of Armenia's macroeconomic indicators with those of other countries in the region and a sample of progressive economics for the years 2000-2004;
- Review of Armenia's fuel-energy balance for 2001-2004 to reveal the recent dynamics in integrated indicators, such as fuel resources, renewable energy resources, fuel refinery products, fuel combustion energy-by-products, electricity and heat energy;

AP1

will skim through this and following 2 slides, not read out, too much detail
Astghine V. Pasoyan, 2/5/2006

Ongoing EE Program

Development Steps – cont'd



- Identification and analysis of trends in power generation, fuel supply in 10 year retrospect, derivation of conclusions with respect to all electric power stations, small hydro-power stations and renewable energy;
- Analysis of the structure and dynamics of fuel consumption, trend analysis with application of state-of-the-art computer modeling and statistical analysis tools, development of conclusions;
- Development of projections for fuel and energy resource balance, analysis based on macroeconomic indicators and energy consumption data with consideration of energy saving and renewable energy resources and secondary energy resources;
- Identification of areas and technologies with highest priority and energy saving potential;

Ongoing EE Program

Development Steps – cont'd 2



- Energy carrier use for heating purposes during 2000-2004 by main economic sectors (residential, public, education, services and food, etc.);
- Assessment and analysis of the volumes of industrial heat supply, energy intensities by heat sources and supply systems during 2000-2004.
- Assessment of energy use in the residential sector during 2000-2004, assessment of energy intensity by heat sources and heat supply systems;
- Provide conclusions based on the above analysis and develop the national program for energy saving (short-term).
- Propose further actions for the development of the long-term national program for energy saving and respective action plan and legislative documents; and
- Presentation of the results to the Ministry of Energy and the Armenian EE Council.

For More Information



Astghine V. Pasoyan
MUNEE Program Manager
Alliance to Save Energy

E-mail: apasoyan@ase.org

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www.ase.org and www.munee.org