

Government Policies and Measures promoting investments for EE and RE

Ministry of Energy of Georgia

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Energy Efficiency Programs

- Low Emission Development Strategy (LEDC) by USAID and Government of Georgia
- NEEAP-National Energy Action Plan (EBRD)
- Covenant of Mayors

Low Emission Development Strategy

Program Purpose, Goals and Objectives

- Support Georgia's efforts to increase climate change mitigation through energy efficiency and clean energy;
- Enable more responsible management and development of Georgia's natural endowments;
- Support and facilitate private-sector investments in energy efficiency and green buildings;
- Promote and facilitate private-sector investments in energy efficiency and green buildings;
- Build the capacity of the Government of Georgia (GOG) to develop and implement a national low Emission Development Strategy in support.

Low Emission Development Strategy

Program Purpose, Goals and Objectives

Over the five years of the program, Georgia EC-LEDS Clean Energy is expected to:

- Facilitate US\$14 M in private investment
- Lead to energy savings up to 315 GWh
- Reduce GHG emissions in Georgia by at least 236,372.9 metric tons of CO₂ equivalent

Covenant of Mayors initiatives

The Ministry of Energy is actively involved in the promotion of **Covenant of Mayors**, which is concentrated on the sustainable development, including reduction of emissions, utilization of renewable energy sources and promotion of energy efficiency measures. In this regard, Georgia major cities and municipalities (12 - in total) signed the agreement among which the four cities have already elaborated the sustainable energy action plans (SEAP) and another four are drafting them. In addition, in January 30th of 2014, the partnership agreement was signed between the Ministry of Energy of Georgia and Directorate General for Energy of the European Commission regarding the strengthening of the competence of the ministry in the promotion of the Covenant of Mayors among municipalities and to reinforce its support to the municipalities who decide to formalize their commitment to the Covenant. Besides, it is planned to sign the Memorandum of Understanding between the Ministry of Energy and the Ministry of Environment and Natural Resources Protection of Georgia. The Memorandum of Understanding envisages supporting municipalities in preparation of the SEAPs and in facilitation of relations with donor organizations to develop projects which will be outlined in the SEAPs. Through the implementation of Sustainable Energy Action Plans and utilization of renewable energy sources Georgia will contribute to the global process of the development of clean environment.

NEEAP-National Energy Action Plan

- The Government of Georgia is committed to increasing the level of Energy Efficiency in the country and unlocking the potential for the development of EE across all sectors. The signing of the EU Association Agreement and current negotiations with the Energy Community for becoming its full fledged member are two recent examples of this policy commitment. The Ministry of Energy of Georgia has requested assistance from the EBRD with the development of the first NEEAP as set out in Directive 2006/32/EC of the European Parliament and of the Council on energy end-use efficiency and energy services with an appropriate adaptation of its content to the environment in Georgia and the country's EE policy targets.
- The NEEAP shall identify significant EE improvement measures and expected energy savings in all sectors (e.g., buildings, transport, power, products, processes and services) taking account of the country's potential and national EE targets, with a view to achieving high EE performance of the economy.

NEEAP-National Energy Action Plan

- A term of Reference is approved and currently EBRD is negotiating with international organization regarding concept proposal for the NEEAP. NEEAP will be developed by the international and local (Georgian) experts. The Ministry of Energy will be presented as a counter party. Project is envisaged to be launching in mid of May 2015 and after ten month document should be ready.

Renewable Energy Potential

- **Hydro**

- Technically and economically feasible hydropower potential is equal to 50 TW/h
- 300 rivers out of total 26,000 in Georgia are significant for the electricity generation.
- Only 18% of the hydro potential is utilized.
- Currently 64 HPPs are operating.

- **Hydro Projects**

- In 2012-2014 years, 8 new HPPs has been exploited; total installed capacity 145.8 MW and out of them, 7 are small and medium size HPPs.
- **Currently, 15 HPPs are under constriction - total installed capacity 526.3 MW; 7 HPPs are under licensing – total installed capacity 996.6 MW**
- **60 HPPs are under feasibility study-expected total installed capacity to be 2309 MW;**

Renewable Energy Potential

- **Wind Potential**

- Average annual electricity generation of wind potential is evaluated at 4 billion KWh and installed capacity – 1500 MW.

- **Ongoing Projects**

- Construction of the first WPP with 20 MW capacity (with perspective to increase approximately to 100 MW) will start in 2016.
- Energo Windpower Ltd is studying and analysis wind power data to build, own and operate the Wind Power Plant in Georgia

Renewable Energy Potential

- **Solar**
 - Georgia has big potential of Solar energy; there are 250-280 sunny days in a year in most regions and the average annual numbers hours of Sunshine is over 2000.
- **Geothermal**
 - Georgian geothermal water reserves reach 250 mln m³ per year.
 - At present there are more than 250 natural and artificial water channels where the average temperature of geothermal waters ranges from 30 to 110 C⁰, while the total debit is 160 000 m³ per day and night.
- **Georgia has significant recourse of Biomass as well**

Energy Policy of Georgia

The one of priority of core directions of National Energy Policy (draft) Direction:

- Diversification of supply sources and optimal exploration of local energy resources;
- **Utilization of Georgia's renewable energy resources;**
- Georgia – regional platform for generation and trade of clean energy;
- Improving energy market and energy trading mechanism;
- Strengthen Georgia's importance as a transit route in the region;
- **To Develop and implement an integrated approach to energy efficiency in Georgia;**
- Taking into account components of environmental protection when implementing energy projects;
- Etc.

Promotion of Energy Efficiency

- Energy Efficiency Strategy is part of National Energy Strategy which is currently under elaboration
- Draft of New Building Code is ready for ratification

THANK YOU FOR YOUR ATTENTION