



Energy Efficiency Law and National Energy Efficiency Action Plan

A brief overview of basic issues of Energy Efficiency Law and National
Energy Efficiency Action Plan

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Energy Efficiency Law and National Energy Efficiency Action Plan Current Situation

- There are four main factors for preparation of energy efficiency regulatory framework:
 - Instead of financing energy imports, investment in local economies and creation of workplaces - annual savings of 1 GWh energy will release 20-50 thousand EUR
 - Energy security - reduction of energy dependence
 - Reduction of greenhouse gas emissions (GHG) and other environmental pollutants
 - EU aspiration / transposition and implementation of the obligations undertaken under the Energy Community Treaty - EU Legislation

Energy Efficiency Law and National Energy Efficiency Action Plan Current Situation

- Basic EU Directives related to energy efficiency:
 - Energy Efficiency Directive
 - Energy Performance of Buildings Directive
 - Energy Labeling Directive
 - Ecodesign Directive
- Above Directives are also in relation with the Renewable Energy Directive, as well as with the regulatory documents for sustainable energy development and greenhouse gas emissions reduction (e.g. Emissions Trading Directive)
- Current normative-legislative framework in Georgia does not regulate energy efficiency. However, the requirements for regulation of energy efficiency are generally mentioned in the current regulatory acts.

Other International Commitments related to Energy Efficiency

- In accordance with the commitments taken under the **Paris Agreement**, Georgia has been unconditionally advised to reduce the amount of greenhouse gas emissions by 15% compared to BAU - according to the estimations of the Energy Efficiency Law and NEEAP, Georgia can fulfill its commitments.
- 23 municipalities, including large municipalities (Tbilisi, Kutaisi, Batumi, Zugdidi, Rustavi and Poti) joined the **Covenant of Mayors** and took the commitment to significantly reduce the greenhouse gas emissions from their territories in the atmosphere, which will be basically achieved through introduction of EE&GE technologies.

Energy Efficiency Law and National Energy Efficiency Action Plan Current Situation

- As a result of the processes of EU association and integration into the Energy Community, Georgia took the obligation to transpose the Energy Efficiency Directive (EED) 2012/27 EU by **December 31, 2018**.
- **Stages of preparation of legislation relevant to Energy Efficiency Directive EED (2012/27/EU):**
 - **First** → Development and adoption of the National Energy Efficiency Action Plan (NEEAP) - the process started in early 2015, the “Complete version of the plan” - in the fall of 2017.
 - **Second** → Development and adoption of the Energy Efficiency Law and amendments to the applicable Legislation - the draft law is prepared, which complies with the Energy Efficiency Directive (EED) and is submitted to the Ministry of Economy and the donor. The final version dates back to April of this year. Its is approved by the Cabinet of Ministers through consideration of the comments.
 - **Third** → Development of relevant sub-legislative acts and the mechanisms for their enactment - essential part of the sub-legislative acts has been developed, but the remaining legislative acts should be prepared after enactment of the law.

However...

Energy Efficiency Law - Basic Aspects: Capacity Building and Planning Cycle

Article from the Draft Law on Energy Efficiency	NEEAP-related Measures		Considering the EU Legislation / Instructions	Energy Savings in 2025 (GWh)	Internal Return Rate (IRR) / Financial Benefit	Annual Investment of Government / Public Sector	Increased Staff required after Implementation	Private Investments annually up to 2030 (EUR)
6. Creation of energy efficiency implementing authority / capacity building	H-1	Alternative policy measures - energy efficiency financing schemes	Recommended by Energy Efficiency Directive EED (art. 20)	Not calculated - facilitating, planning and reporting activities			13	N/A
	H-3	Alternative policy measures - training, education, including energy advisory programs	Recommended by Energy Efficiency Directive EED (art. 17)					
10. Obliges the Government of Georgia to approve a three-year NEEAP and to develop annual action plans at national and municipal level	N/A It should be considered in the planning cycle		Required by Energy Efficiency Directive EED (art. 24) at national level, recommended by the consultant at local level.					
11. Measurement and confirmation platform as well as the energy management system shall be created in the public sector	N/A - However, it should be considered during planning and is a reporting tool		Required by Energy Efficiency Directive EED (art. 7)					

Energy Efficiency Law - Basic Aspects: Energy Efficiency Agreement

The possibility of introduction of an energy efficiency agreement where the source of coverage of the investment is the energy tax saved by the site owner through investment

- Inside and outside of the public sector
- Requires additional sub-legislative acts for implementation

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12. For energy performance contracts of public liabilities institutions	N/A -A political instrument for potential increase of investment	Required by Energy Efficiency Directive EED (art. 18) and is presented as the best practice	Calculated - facilitating activities	N/A	N/A	Considers the appropriate experience, however it does not require a new staff unless it takes a large scale	Unknown
13. Energy performance contracting (EPC) - General							
14. Energy performance contracting (EPC) - Household buildings							

Energy Efficiency Law - Basic Aspects: Information available in Internet about Experts in Georgia

Requires creation of a web-site where the energy efficiency experts database will be posted.

If the energy efficiency implementation authority is not established, it should be defined who will be responsible for that

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15. Public information about experts	N/A - Useful for access to information	Recommended as the best experience	Not calculated - facilitating activities	N/A	N/A	Should be carried out by EE implementing authority	N/A

Energy Efficiency Law - Basic Aspects: Requirements in Public Sector for Buildings and General Energy Efficiency

- Requires consideration of energy efficiency in public procurement, where possible - which supposedly requires additional works in terms of staff training and development of appropriate manuals
- The requirements shall be determined for the Government to develop the reconstruction / renewal strategy of buildings

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16. Energy efficiency in public procurement	P-8	Energy efficient procurements	Required by the Energy Efficiency Directive EED (art. 6)	Not calculated - facilitating activities	N/A	N/A	Considers the appropriate experience, however it does not require a new staff	N/A
17. Building reconstruction / renewal strategy	N/A - It is not a measure, but it should be considered in the planning cycle		Required by the Energy Efficiency Directive EED (art. 4)	Not calculated - facilitating activities	N/A	N/A	Should be carried out by EE implementing authority	N/A

Energy Efficiency Law - Basic Aspects: Audit Requirements and Audit Certification in Industry

- First category enterprises are required to introduce the energy management system or energy audit (energy audit should be conducted once every 4 years – the first to end by January 2021) and to encourage small and medium businesses - which is detailed in the sub-legislative act. It is noteworthy that introduction of energy management system is very profitable.
- Describes the process of accreditation and certification of energy auditors for industry (certification of energy auditors is carried out by United National Accreditation Body - Accreditation Center - GAC)
- **Capacity building is essential.**

Article from the Draft Law on Energy Efficiency	NEEAP-related Measures		Considering the EU Legislation / Instructions	Energy Savings in 2025 (GWh)	Internal Return Rate (IRR) / Financial Benefit	Annual Investment of Government / Public Sector	Increased Staff required after Implementation	Private Investments annually up to 2030 (EUR)
21. The requirements of the energy audit for the first category enterprises in the industry are to encourage non-first-category enterprises	H-7	Energy auditors and energy management systems in industrial sector, boiler inspection	Required in accordance with the contract EED (art. 8)	432	121%	N/A	2	€397,615
22. Certification of energy auditors of enterprises	H-6	Qualification, accreditation and certification schemes - in the industry	Required in accordance with the contract EED (art. 16)					

Energy Efficiency Law - Basic Aspects: Voluntary Agreement Scheme to Stimulate Investments in Energy Efficiency in Industry

- Sets voluntary agreement frameworks that will facilitate energy efficiency of the industry - subsidizing the audits and other mechanisms that should be defined in the agreement – If it is not satisfactory, the Ministry will be able to instruct the companies to implement the energy efficient measures.
- Final approval of the Government is necessary, which includes the capacity building for implementation of this.**

Article from the Draft Law on Energy Efficiency	NEEAP-related Measures		Considering the EU Legislation / Instructions	Energy Savings in 2025 (GWh)	Internal Return Rate (IRR) / Financial Benefit	Annual Investment of Government / Public Sector	Increased Staff required after Implementation	Private Investments annually up to 2030 (EUR)
23. Voluntary agreements for promotion of energy efficiency in the industry	H-2	Alternative policy measures - stimulating / compulsory energy efficiency in the industry	Not specifically required by the EED contract, but represents a successful international experience	745	Ranges between 30 and 50%	Depended on facilitating programs	4 - Should be carried out by EE implementing authority	€12,142,769
	I-4	Energy saving activities, in metallurgy						
	I-5	Improved boilers and steam / hot water distribution systems						
	I-6	Engines, ventilation systems, pumps, compressors						
	I-7	Energy efficient refrigeration systems						
	I-8	Energy efficient lighting						

Voluntary Agreement

- An agreement made between the state agencies and one or more private individuals, which aims, in addition to the obligations defined by the legislation, to fulfill the over-normative environmental tasks or to improve the state of the environment.

Voluntary Agreement Participants

Enterprise or public agency, which has taken an obligation to achieve specific objectives under voluntary agreement or which is subject to regulation of the national policy determining document.

Motivation of the State / Government

- Reduced dependence on imported energy resources;
- Increase of competitiveness of local industry;
- Consideration of energy efficiency measures puts on the agenda and lowers optimization of consumption of non-energy resources and reduction of consumption (water, raw materials, waste, work force);
- Contribution to achieving target indicators of 2030 year in CO2 reduction obligation;
- Reduction of other types (water-soil) of pollution.

Motivation of the Industry

- Reduction of operation costs (taxes): energy, water, raw materials, etc.;
- Increase of competitiveness;
- Access to the Government assistance:
 - Reduction of energy tariff (?)
 - Priority receipt of the EE Agency service
 - Energy audit financing
 - Promotion to attraction of investments in EE measures
- Etc.

Energy Efficiency Law - Basic Aspects: Installation of Counters, Taxes and Public Information

- Wherever possible, it is necessary to install natural gas and electricity counters
- In the case of smart counters, new requirements are created
- Requires to provide additional information to the customers – including availability of energy consumed over the past two years and average daily / monthly / annual consumption
- The text has a declarative nature that provides support for information initiatives of the consumers.

Article from the Draft Law on Energy Efficiency	NEEAP-related Measures		Considering the EU Legislation / Instructions	Energy Savings in 2025 (GWh)	Internal Return Rate (IRR) / Financial Benefit	Annual Investment of Government / Public Sector	Increased Staff required after Implementation	Private Investments annually up to 2030 (EUR)
26. Installation of counters and payment	N/A - Includes consumers' awareness and requirements for installation of counters		Required in accordance with the contract EED (art. 9)	Not calculated	Not calculated	Does not require investment	Does not require new staff	Unknown
27. Informing the consumer about energy efficiency - declarative	H-8	Consumer awareness - programs and training	Required in accordance with the contract EED (art. 12), however the specific measures are not required	413	Not calculated	Does not require investment	Should be carried out by EE implementing authority	Unknown
	T-2	Awareness raising - information campaign for transport sector						

Energy Efficiency Law - Basic Aspects: Brief Overview

Article from the Draft Law on Energy Efficiency	Considering the EU Legislation / Instructions	Energy Savings in 2025 (GWh)	Internal Return Rate (IRR) / Financial Benefit	Annual Investment of Government / Public Sector	Increased Staff required after Implementation	Private Investments annually up to 2030 (EUR)
22 NEEAP measures out of 44 are related to the legislation	Full implementation of EED	Final goal of NEEAP is 3,213 out of 11,717	Overall, positive financial benefits and also expected solid financial benefits for the private sector (especially the industry)	€1.36 million mostly in schools	Approximately 27 new employees will be required for full implementation	€ 51.9 million – in industry, energy generation (HPPs) and distribution

Prepared Sub-Legislative Acts

Draft Orders of the Minister of Economy and Sustainable Development

- **Sub-legislative act №1:** On Energy Efficiency Policy Measures (article 4 of the draft law)
- **Sub-legislative act №2:** Rule of Operation of the Energy Efficiency Policy implementing Authority (Agency)(article 6 of the draft law)
- **Sub-legislative act №3:** On Launching of Energy Savings Monitoring and Confirmation Platform (article 11 of the draft law)
- **Sub-legislative act №4:** Rule of Energy Audit and Energy Management System of Enterprises (articles 21 and 22 of the draft law)

Sub-legislative act №1: On Energy Efficiency Policy Measures Industry

3. Alternate policy measures for achievement of energy savings provided by the Article 2 of the Order are as follows:
- Alternative measure 1: Stimulating energy efficiency in industry, through introduction of energy management systems and energy audits.
 - Alternative measure 2: Implementation of training and education programs and energy consulting programs.
 - Alternative measure 3: Determination of standards and norms for energy consuming products.
 - Alternative measure 4: Improvement of energy efficiency over 1% of the total area of the public buildings foundation.

Sub-legislative act №2: Rule of Operation of the Energy Efficiency Agency

- **Article 6. Financing and annual budget**
- 1. The energy efficiency policy implementing body carries out and finances the programs, measures and actions necessary for achievement of the target indicators of the Energy Efficiency Action Plan envisaged by the Article 7(1) of the Energy Efficiency Law and the decision of the Minister “liable for energy sector”.

On Launching of Energy Savings Monitoring and Confirmation Platform

- Systemic monitoring and measurement of energy efficiency policy in Georgia.
- Approval of methodology for calculation of energy savings at national and sector level, determination of the procedures of confirmation of energy savings adopted by individual measures.
- Systematic planning of fulfillment of liabilities by the liable parties determined by law and determination of relevant ways.

Energy Audit and Energy Management System of Enterprises

- Accreditation and qualification of the experts implementing energy audits.
- Enterprises liable for regular energy audit (first category enterprises and the entities on state subsidies).
- Obligation to provide information as a result of energy audit (period - at least 4 years).
- Minimum criteria for energy audit, including the audit carried out within the energy management system.



Thank you for your attention

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EEC Georgia