

National EED Implementation Report (NIR) 2021

EED implementation in Bulgaria

Introduction

The implementation of the Energy Efficiency Directive (EED) (2012/27/EU) is the responsibility of the Ministry of Energy. The activities implementing the State energy efficiency improvement policy are carried out by the executive agency under the Minister of Energy – Sustainable Energy Development Agency (SEDA). SEDA is also responsible for the monitoring and evaluation of the energy efficiency at national and sectoral level and for the control over the observance of legislation in the field of energy efficiency. SEDA is the monitoring body of the national cumulative target according to Article 7 EED.

This National Implementation Report (NIR) of the Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency (EED) builds on the 2016 NIR. This version includes the implementation of the amendment of this Directive (Directive (EU) 2018/2002 of the European Parliament and of the Council of 11th December 2018 amending Directive 2012/27/EU on energy efficiency) and Governance Regulation (Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11th December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) and Directives, among which 2012/27/EU (NECPs and reporting/Energy Efficiency dimension related to EED).

1. Legal context

To implement the EED, changes have been made to several national laws:

- Energy Efficiency Law, last amended March 2021
- Energy Law, last amended March 2021

In Bulgaria the EED obligations are also subject to secondary legislation under the Energy Efficiency Law as follows:

- Ordinance for the methodologies for setting the national energy efficiency target, the setting of the total cumulative target, the setting up of an energy savings obligation scheme and the allocation of the individual energy savings targets to the obligated parties.
- Ordinance for the eligible measures for obtaining energy savings in final consumption, the manner of proving the energy savings obtained the requirements to the methodologies for evaluation of energy savings and the manner for confirming energy savings.



• Ordinance for the cost-optimal levels of minimum energy performance requirements for buildings or parts thereof, the energy efficiency technical requirements and indicators, as well as the method/ standards for determining annual energy expenditure in buildings, including of nearly zero-energy buildings.

CONCERTED ACTION

ENERGY EFFICIENCY DIRECTIVE

- Ordinance for the circumstances subject to entry of the qualified energy auditors into the public register, the procedure for entry into the register and for obtaining information, as well as the terms and procedure for the attainment of qualification of the auditors.
- Ordinance for the terms and procedure for performing an energy efficiency audit and certification of building, of parts of buildings, as well as the terms and procedure for preparing an energy savings evaluation.
- Ordinance for the terms and procedure for performing the energy efficiency inspection of heating systems with hot-water boilers and of air-conditioning systems, the terms and procedure for preparing an energy savings evaluation.
- Ordinance for the indicators of energy expenditure, the energy performance of enterprises, industrial systems and outdoor lighting systems, as well as the terms and procedure for performing an energy efficiency audit and preparing an energy savings evaluation in industrial enterprises.

2. Status of the implementation

2.1. Legislative provisions

This table contains information on how the EED has been implemented by article, including any relevant web links.

| EED Article | Implementation status |
|-------------|--|
| Article 3 | National Energy Efficiency Target is set in the <u>Integrated Energy And Climate</u> <u>Plan of the Republic of Bulgaria 2021-2030</u> . |
| | In 2030, Bulgaria plans to achieve a decrease in the consumption of primary energy by 27.89 % and a decrease by 31.67 % in final energy consumption as compared to the PRIMES 2007 reference scenario. As regards the target for energy consumption in 2030 expressed in absolute terms, Bulgaria has set a target of 17,466 ktoe for primary energy consumption and a target of 10,318 ktoe for final energy consumption. |
| Article 4 | Long-term National Strategy to Support the Renovation of the National Building Stock of Residential and Non-residential Buildings by 2050 was adopted in January 2021. |
| | It includes an overview of the national building stock (housing and public buildings), packages of economically efficient approaches to improving the energy performance of buildings and policies and measures structured in groups of strategic priorities. In the Strategy there is an evaluation of the investments needed for the renovation of the building stock as well as an analysis of the possible financial programmes and instruments (existed and planned). |



| EED Article | Implementation status |
|-------------|--|
| Article 5 | According to Bulgarian <u>Energy Efficiency Law</u> , to help reach the national energy efficiency target, measures to enhance the energy performance of at least 5% of the total floor area shall be taken annually in all heated and/or cooled State- owned buildings occupied by the State administration. For these purposes, the State bodies shall develop and adopt energy efficiency programmes and are bound to implement energy efficiency management, including submitting annual reports on energy efficiency management and the energy efficiency programmes to SEDA. |
| Article 6 | The central government and the local authorities have been purchasing sustainably since 2010 when "Instructions for implementation of the requirements for energy efficiency and energy savings in public procurement for the supply of equipment and vehicles to minimize costs for the duration of their exploitation" were adopted. The Instructions were developed jointly by SEDA and Public Procurement Agency. On the Public Procurement Agency web page are also published: Practical guide for green public contracting; calculators, List of product groups suitable for the inclusion of "green" criteria in public procurement, Guide to Green Public Procurements, Information on environmentally friendly criteria for certain product groups. |
| Article 7 | The mandatory energy savings for the period 2014 to 2020 inclusive amounted to 1,942.50 ktoe, in accordance with the Energy Efficiency Act and the National Energy-Efficiency Action Plan. The total cumulative target for the 2014-2020 period is set as a cumulation of new energy savings each year of at least 1.5 per cent of the average annual value of the total volume of energy sales to final customers within the territory of the country in 2010, 2011 and 2012, excluding the volume of sales of energy used in the transport sector, under Eurostat Code B_101900. For the period of 2014-2020 Bulgaria opted to take mixed approach – Energy efficiency obligation scheme and alternative measures. The mandatory energy savings for the period 2021 to 2030 amount to 4,357.55 ktoe are set in the Bulgarian NECP. The target is again subject of mixed implementation of EEOS and alternative measures. The alternative measures are the grant programs for households, services and industry that continue after 2020. |



| EED Article | Implementation status |
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| Article 8 (1) | Energy Efficiency legislation in Bulgaria provides a set of very strict criteria ensuring the qualification of the energy auditors. They should be listed in SEDA's public register only if they meet the criteria set in " <u>Ordinance № E-P∏-04-</u> 01/03.01.2018 for the circumstances subject to entry of the qualified energy auditors into the public register, the procedure for entry into the register and for obtaining information, as well as the terms and procedure for the attainment of qualification of the auditors" (in Bulgarian). |
| | Subject of mandatory audits are: |
| | All buildings in use with a total floor area of over 250 square meters (Article 38 EE Law) |
| | Industrial systems and buildings that are not part of the industrial systems of production or services enterprises other than small and medium enterprises (Article 57 EE Law) |
| | Industrial systems with annual energy consumption exceeding 3,000 MWh (Article 57 EE Law) |
| | Outdoor lighting systems, located in a nucleated settlement with a population exceeding 20,000 residents (Article 57 EE Law) |
| | All large enterprises, the industrial systems with annual energy consumption exceeding 3,000 MWh and the outdoor lighting systems shall repeat their energy audit at least every four years. |
| Article 8 (5) | The energy audit's requirements, the indicators of energy expenditure, the energy performance of enterprises, industrial systems and outdoor lighting systems, as well as the terms and procedure for performing an energy efficiency audit and preparing an energy savings evaluation are subject to special ordinance under EE Law. A set of very strict criteria ensure the qualification and accreditation of the energy auditors and guarantee the quality of the audits. Audits and energy auditors are subject to quality control, performed by the SEDA and regulated in the EE Law. |



| EED Article | Implementation status |
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| Article 8 (6) | Article 8 (6) of the Directive states that enterprises that are not SMEs and that implement an energy or environmental management system – certified by an independent body according to the relevant European or International Standards – are exempt from the requirement to carry out an energy audit once every four years under the Directive. |
| | According to Article 57 (7) of the National EE Law, large enterprises and the industrial systems with annual energy consumption exceeding 3,000 MWh, which implement an energy or an environmental management system subject to certification by an independent body for conformity to European or International Standards, shall be exempted from the requirements for mandatory energy efficiency audits, provided that the management system implemented thereby meets the minimum requirements to energy audits stipulated by the ordinance under EE law – Ordinance Nº E-PA-104-05/08.09.2016 for the indicators. of energy expenditure, the energy performance of enterprises, industrial systems and outdoor lighting systems, as well as the terms and procedure. for performing an energy efficiency audit and preparing an energy savings. evaluation in industrial enterprises (in Bulgarian). |
| Article 8 (7) | Article 8 (7) of the EED states that Member States may implement incentive and support schemes for the implementation of recommendations from energy audits and similar measures. <u>Operational Program "Innovation and Competitiveness"</u> offers up to 50% grant for energy efficiency measures implementation both for SMEs and non-SMEs. |
| Articles 9-11 | Electricity: The 2003 Energy Act stipulates that for the purpose of measuring quantities of electricity, the TSOs and operators of distribution networks in accordance with the issued licences provide: 1. technical and metrological provision, development and modernisation of the commercial metering devices; 2. maintaining database registration of commercial metering devices. |
| | District heating: |
| | One of the main approaches for reading the consumed heat energy in households, the so called "heat accounting" system, was introduced in Bulgaria with the Energy Act in 1999. By using the devices for shared distribution – valves, water meters, apartment meters – the total energy for heating and hot water can be divided between individual properties. The shared distribution of heat in the building condominium (multi-residential buildings) is subject to a special methodology – application of Decree № 16-334 for Heating. The DH substations in Bulgaria are equipped with meters, which are reported at the end of each month by a representative of DH Company. The reported heat is distributed between customers on the basis of consumption of each property from the previous heating season. Each month DH Company sends to their consumers invoices reflecting these data. After reading the data at the end of the heating season, the heat accountant prepares a balance bill. It is calculated based on actual consumption for each property. |



| EED Article | Implementation status |
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| Articles 9-11 | Natural Gas: |
| | Reporting of quantities of natural gas transported in the gas network is carried out in gas measuring points owned by the transmission company, located on the transmission network complied with the statutory requirements for the network's design, construction and operation. The quantity of natural gas transported through the gas distribution network is measured by a gas metering device placed before the user, but owned by the gas distribution company. The servicing of the commercial metering of gas transmission and distribution network is the responsibility of the operator of the network in accordance with the regulations for commercial measurements. |
| | Also according to the Energy Efficiency Act the obligated parties under EEOS, jointly with the owners of commercial metering devices of the energy supplied to final customers may provide, as a competitively priced energy service for the purpose of ensuring traceability of energy costs by final customers, replacement of the existing commercial metering devices by intelligent measurement and control systems or other technical solutions visualising the current energy consumption; the previous bill and the momentary energy load. |
| | The methods and conditions for billing the end users are regulated by the Energy Act. According to the law the energy companies are obligated to provide their customers energy services information for: |
| | Methods of payment, prices for suspension or restoration of supply, prices for services which provide for maintenance and other service charges associated with the licensed activity. |
| | 2. The procedure for switching and information that users of energy services do not owe additional payments when changing supplier. |
| | 3. Actually consumed quantities and costs incurred with no obligation for extra payment for this service. |
| | 4. Preparation of a final closure account following any change of supplier. |
| | The share of each source of energy in the total energy supplied by the provider during the preceding calendar year in an understandable and clearly comparable manner. |
| | Existing sources of publicly available information on the environmental impact in terms of at least emissions of carbon dioxide and radioactive waste – resulting from the production of electricity from different energy sources in total energy supplied by the provider during the preceding year. |
| | Also the Energy Act obliges the end supplier to inform the customer every six months together with the invoice when the reported consumption of electricity or natural gas by this final customer for the period is higher than 50% of the reported consumption for the corresponding period of the previous calendar year. |



| EED Article | Implementation status |
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| Articles 12 and 17 | The energy suppliers publish on their websites energy saving advice and, in some cases, information about the estimated consumption of the most frequently used household appliances. The internet pages of almost all energy suppliers provide an energy calculator which customers can use to calculate the energy consumption in their homes. |
| | SEDA distributes information via the internet about financial instruments for EE measures, training and information campaigns, FAQ on the legislation or other policy aspects, calculators for energy savings in households, guidelines for EEOS implementation, analyses and various other related information. |
| | In 2020 and 2021 SEDA organized series of training courses for energy managers in industrial enterprises from all Bulgaria. Up to 800 energy managers are already trained. |
| Article 14 | The development of the comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling is required by the Energy Act. Bulgaria made the <u>Assessment in 2016</u> . Comprehensive assessment update 2021 was published for public consultations in August 2021. |



| EED Article | Implementation status |
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| Article 15 | For efficient use of energy in terms of its production, transmission and distribution, the Energy Act provides for requirements which the Energy and Water Regulatory Commission (EWRC) takes into consideration in establishing the prices of electricity, heat and natural gas. In the exercise of their authorities under this Act, EWRC: |
| | establishes the maximum value of process costs in the production, transmission and distribution of electricity, in the production and transmission of heat, and in the transmission, distribution and storage of natural gas, which may be recognised in pricing according to the methodology or guidelines adopted by the Commission; |
| | demands from electricity and gas network operators to assess the energy efficiency potential of the respective networks by reducing process costs, including analysis of load transmission, distribution and management, efficient network operation and the capability of joining distributed generation facilities; |
| | • an obligation is imposed on network operators, when drawing up network development plans, to include measures and plan the corresponding investments for energy efficiency improvement in gas and electricity grids, as well as a schedule for their implementation. |
| | In addition, the Energy Act ensures that by exercising their regulatory powers in the field of energy efficiency, EWRC is guided by the following general principles: promoting energy efficiency improvement in the production, transmission, distribution and final consumption of energy and natural gas, and creating stimuli for the operators of transmission and distribution networks to provide system services to end-users which enable them to implement energy efficiency improvement measures by introducing smart grids, taking into account the costs and benefits associated with each measure to ensure the security of the system. |
| | With regard to price regulation, EWRC sets as its objective that electricity transmission and distribution prices should not be a restrictive factor militating against any of the following: energy efficiency improvement in the production, transmission and distribution of energy; the inclusion of demand response in efforts to balance markets; the provision of ancillary services and the incorporation in network tariffs of reduced network costs achieved by consumers; the optimisation of energy consumption, the decentralisation of production, the lowering of the cost of delivery or of network investment; optimisation of network operation. |
| | In terms of demand response, EWRC is guided by the principle that electricity transmission and distribution prices should allow increased end-user involvement in the improvement of efficiency of the power system by optimising consumption. Moreover, it makes efforts to encourage transmission and distribution system operators to offer system services for electricity demand response, demand management and distributed generation on organised electricity markets and to improve efficiency in networks' design and operation. |



| EED Article | Implementation status |
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| Article 16 | The level of competence, objectivity and reliability of energy auditors in Bulgaria is very high. The qualification and certification process of the auditors is ensured by the control activities of SEDA covering all the aspects of the qualification and the competence of the energy auditors and the reliability of the companies they represent. The needed technical education of the energy auditors is ensured by the Bulgarian technical universities and is as follows: |
| | For buildings: |
| | 1. Architecture or industrial and civil construction, or construction of buildings and facilities. |
| | 2. Heating technology or power systems. |
| | 3. Electrical power engineering and / or electrical power. |
| | For Industry: |
| | 1. Power systems. |
| | 2. Heating technology. |
| | 3. Electrical power engineering or electric equipment engineering and/or electrical power supply and electric equipment engineering. |
| | In addition to a university or college education, qualification for energy efficiency audits of industrial systems is acquired after full workload training according to a certain curriculum and after passing an exam in Bulgarian higher technical schools specialising in professional directions "Energy" and "Electrical Engineering". The minimum requirements for the curriculum is regulated in a special ordinance by the EE Law. The list of universities that deliver training for certification of buildings and energy efficiency auditing of an industrial system is published on SEDA's web page. |
| Article 18 | The provision of energy services is regulated by the Energy Efficiency Law. According to the law, energy services aim to combine the supply of energy with an energy efficient technology and/or an action encompassing the operation, maintenance and management necessary for the delivery of the service, and leading to verifiable, measurable or estimable energy efficiency improvement and/or saving primary energy resources. The EE law also defines the persons who can perform energy services – natural or legal persons who are merchants within the meaning given by the Commerce Act or within the meaning given by the legislation of another Member State of the European Union, or of another State which is a Contracting Party to the Agreement on the European Economic Area, or of the Swiss Confederation. A vital role in stimulating the market for energy services is the implementation of energy performance contracts (ESCO). On <u>SEDA's web page</u> are published: Template for ESCO contract, example of ESCO contract, guidelines for ESCO contracting and other supportive materials. |



| EED Article | Implementation status |
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| Article 20 | In Bulgaria Energy Efficiency and Renewable Sources Fund (EERSF) was established pursuant to the Energy Efficiency Act, with intergovernmental agreements between the Global Environment Facility (through the World Bank), the Government of Austria and the Government of Bulgaria. The fund operates according to the provisions of the Energy Efficiency Act and the Energy from Renewable Sources Act. EERSF has the combined capacity of a lending institution, a credit guarantee facility and a consulting company. It provides technical assistance to Bulgarian enterprises, municipalities and private individuals in developing energy efficiency investment projects and then assists their financing, co-financing or plays the role of guarantor in front of other financing institutions. The underlying principle of EERSF's operations is a public-private partnership. According to the requirements in Article 20 (6) of EED, the Bulgarian Energy Efficiency Act foresees the opportunity for the EEOS obligated parties to make contributions to the Energy Efficiency and Renewable Sources Fund or to other financial intermediaries for financing energy efficiency activities and measures in the amount of the investments necessary to implement measures to reach the individual targets of the said obligated parties. |

2.2. Non-legislative provisions

In Bulgaria there are several financial instruments under the EU Structural funds. The instruments are offering grant support for EE and RES measures. The previous period ended in 2020 and currently the new operational programmes for the period 2021-2027 are under preparation:

- <u>Competitiveness and Innovation in Enterprises Programme</u> is directly aimed at achieving intelligent and sustainable growth of the Bulgarian economy, as well as the implementation of industrial and digital transformation. The main target group of the programme is enterprises with a focus on small and medium enterprises. The programme is structured in two priorities: Priority 1 "Innovation and Growth" and Priority 2 "Circular Economy", each of which is aimed at addressing challenges in specific areas that are key to economic development and in respect of which the country follows to make an effort.
- <u>Regional Development Programme</u> is a continuation of the programme "Regions in Growth" 2014-2020. A specific priority of the programme is to ensure better development of economic potential, mobility and an attractive living environment with opportunities for access to adequate housing, quality and affordable health, education and social services, culture, entertainment, sports, work and leisure in order to increase standard of living and to help tackle the problem of demographic imbalances as well as the serious consequences of the crisis caused by the spread of COVID-19.
- <u>Strategic plan for development of agriculture and rural areas</u> is a continuation of the Rural Development Programme 2014-2020. It aims to ensure fair conditions and a stable economic future for farmers; setting more ambitious targets for environmental and climate action; maintaining the central place of agriculture in European society.
- <u>Transport Connection Programme</u> is a continuation of the Operational programme on "Transport and Transport Infrastructure" 2014-2020. The realisation of the programme will contribute to the policy objective "A greener, lower-carbon Europe by promoting a clean and equitable energy transition, green and blue investments, a circular economy, climate change adaptation and risk prevention and management" with a specific objective: "Promoting energy efficiency and reduction of greenhouse gas emissions".



The main programme in Bulgaria that aims to the energy efficiency measures in households is the <u>National Programme for Energy Efficiency of Residential Buildings</u>. One billion BGN under the programme are provided by the Government in the form of a bank guarantee, which the Council of Ministers provides to the Bulgarian Development Bank to attract the resources and secure the financing for the programme's activities. The programme ended in 2020. Its continuation is planned as an investment in the (draft) <u>National Resilience and Recovery Plan</u> (up to September 2021 the Plan had not yet been adopted).

Another programme directly aimed at energy efficiency measures is <u>Renewable Energy, Energy</u>. <u>Efficiency and Energy Security Programme</u> financed by the Financial Mechanism of the European Economic Area 2014-2021. The programme accepts project proposals for efficient use of hydropower potential; utilisation of geothermal energy for heating or cooling, as well as for industrial purposes; rehabilitation and modernisation of municipal infrastructure; improving energy efficiency in buildings; training in energy management and others. The programme's financial resources amount to nearly 33 million euros, of which 28 million euros are grants.

<u>Fund Manager of Financial Instruments in Bulgaria</u> EAD (FMFIB) operates as a Fund of Funds (FoF); it allocates targeted public funds from European Union programmes and national co-financing, using special financing schemes (financial instruments). FMFIB's mission is to ensure efficient use of EU financial resources, to support business competitiveness and sustainability, to assist projects with a growth potential, and to improve the quality of life in towns and regions.

2.3. Implementing bodies

The implementation of the EED is regulated in the <u>Energy Efficiency Law</u> with provisions on the different institutions' responsibilities.

The state energy efficiency policy shall be implemented by:

- 1. The <u>Ministry of Energy</u>: in the field of energy efficiency in energy production, transmission and distribution, as well as in final energy consumption.
- 2. The <u>Ministry of Economy</u>: in the field of improvement of energy efficiency in small and mediumsized enterprises, as well as in energy use by industrial systems.
- 3. The <u>Ministry of Regional Development and Public Works</u> in the field of development, harmonisation and implementation of technical rules and standard specifications for the energy performance of buildings, implementing projects and programmes related to renovation of the residential building stock and improvement of energy efficiency in residential buildings in the Republic of Bulgaria.
- 4. The <u>Ministry of Transport</u>, <u>Information Technology and Communications</u>: in the field of energy efficiency in the transport sector.

The activities implementing the state energy efficiency improvement policy are entrusted by the EE Law to the Sustainable Energy Development Agency (SEDA).



3. Implementation of revised EED articles

The full transposition of the EED revised in 2018 is regulated in the last amendment of the Energy Efficiency Law and the Energy Law (both adopted March 2021). Most of the policies and measures were already announced with the NECP and the National LTRS in 2020. The main enhancement is envisaged for Article 7 EED policies, more specifically on the alternative measures for the national cumulative target implementation. One of the completely new policies is the National Decarbonisation Fund. Structuring the Fund is envisaged in the NECP, the LTRS and is included as a reform in the (draft) National Resilience and Recovery Plan.

Organised as a consolidated and clearly identifiable fund, it will include a wide range of stakeholders and will successfully address the need for funding for a wide group of beneficiaries in order to maximise the objectives to be set. The Fund will operate at national level and will be managed by an independent manager (fund manager). It will consist of three separate sub-funds, according to the type of final beneficiaries: (i) Public Sector Sub-Fund ("SubF1"), (ii) Commercial Sub-Fund ("SubF2") and (iiii) Residential Buildings Sub-Fund ("SubF3"). Such a structure provides the necessary flexibility with regard to future (legal and regulatory) requirements for specific recipients or future implementation of more detailed national segmentation. The Fund will be used to offer grants and financial instruments, including credit lines and guarantees and/or a combination thereof. Last but not least, the Fund will provide a single point for technical assistance to applicants through one-stop shops or similar mechanisms. As regards targeted measures, the Fund will encourage investment in energy efficiency packages of measures by providing a more comprehensive approach leading to greater energy savings.

The plans are for the Fund to become operational in 2022-2023.

4. Relevant information

Integrated Energy and Climate Plan of the Republic of Bulgaria 2021–2030

Long-term National Strategy to Support the Renovation of the National Building Stock of Residential and Non-residential Buildings by 2050

Energy Efficiency Law

Ordinances to the Energy Efficiency Law (in Bulgarian only)