



Implementation of EED in Republic of Serbia

Ministry of Mining and Energy

Antonela Solujić, Head of EE Department

Viena, 01 June 2016, EECG



NATIONAL FRAMEWORK

- Legal framework:
 - **Law on Efficient Use of Energy** („OG RS“, no 25/2013),
 - **Energy Law** („OG RS“, no 145/2014),



Law on Efficient Use of Energy

Articles 7.-9. Energy efficiency Action plan and targets

• **Action Plan for Energy Efficiency in the Republic of Serbia**

- To be adopted by Government for the period of 3 years and defines:
 - **Planned national energy saving targets** in the Republic of Serbia for that period
 - Energy efficiency measures, activities, parties responsible for the implementation of these activities, deadlines and estimates of expected results of each of the measures intended to achieve the identified target
 - Financial, legal and other instruments envisaged for implementation of planned measures and activities for efficient energy use
 - An assessment of achieved level of implementation of the energy savings target from the previous Action Plan
- **The Ministry in charge for energy- responsible for implementation and control of the Action Plan implementation** and to monitor, verify and assess the energy savings
- **State administration bodies, relevant Autonomous Province bodies and bodies of the local self-government are responsible, within their respective remits, for the implementation of the Action Plan**
- **Rulebook** on the way and terms of submitting data necessary for **monitoring of Action Plan** of Energy Efficiency in the Republic of Serbia implementation and on **methodology for monitoring, verification and evaluation** of its implementation (Official Gazette RS, No. 37/15 of 24 April 2015)



Law on Efficient Use of Energy

Articles 7.-9. Energy efficiency Action plan and targets

- **1 NEEAP 2010-2012 adopted July 2010**
 - Target by 2012 : 1.5% FEC in 2008 (achieved 1.22/81.5%)
 - Target by 2018: 9% FEC in 2008
- **2.NEEAP 2013-2015 adopted October 2013**
 - Target by 2015: 3.5% FEC in 2008
- **3.NEEAP 2016-2018 drafted/some work still pending**

- **Rulebook** on the way and terms of submitting data necessary for **monitoring of Action Plan** of Energy Efficiency in the Republic of Serbia implementation and on **methodology for monitoring, verification and evaluation** of its implementation (Official Gazette RS, No. 37/15 of 24 April 2015)



Law on Efficient Use of Energy

Articles 13.-37. Energy Management System (EMS)

- **Energy Management System (EMS) introduction is mandatory for:**
 - Companies with the main activities in production sector(industrial plants)/ trade and service sector– if they consume more energy than set as threshold
 - Public buildings of State Government and Municipalities over 20000 inhabitants
- **Obligations of Energy Management Designated Organizations:**
 - Appoint the required number of Energy Managers
 - Prepare an Energy Efficiency Program (3 years) and Plan (1 year)
 - Realize energy savings targets prescribed by the Government
 - Deliver to the Ministry annual Reports on achievement of targets
 - Provide for the implementation of energy audits



Law on Efficient Use of Energy

Articles 13.-37. Energy Audits

- **Energy Audits:**

- performed by authorized Energy Auditors
- Performed in accordance with the Methodology to be prescribed in the rulebook
- Resulting in Energy Audit Report
- **Obligatory for Energy Management Designated organizations at least once in a 5 years/10 years for buildings above 500m², (only Legal entity may perform audit for EMS Designated organization)**
- Obligatory for Buildings / parts of buildings in case of change of use, of owners or if for rent

- **Authorized Energy Auditors:**

- A natural person may perform Energy Audits if it holds the Authorised Energy Auditor's license
- Legal entity registered in register of Energy Auditors which:
 - Is registered for: design, expert supervision of construction works, technical advisory services, scientific and research work, technological research and development, scientific and expert services in the energy sector,
 - Employing a minimum of two persons holding adequate educational degrees and Authorised Energy Auditor's licences
 - With no final court judgment against it for any economic crime offence



Law on Efficient Use of Energy

Articles 13.-37. EMS Licensing & training

- **Requirements for Energy Managers Licence**
 - BSc in technical sciences + training for EM + passed exam for EM or
 - MSc in the field of mechanical engineering, electrical engineering or technology+ passed exam for EM
 - 3 years of professional experience
- **Requirements for Energy Auditors Licence:**
 - MSc - master in the field of technical sciences
 - passed the exam for EM
 - minimum of 3 years experience in energy audits / design / technical inspection / field testing
 - completed training for AEA and
 - passed the exam for AEA
- **Training:** By authorised Training organization based on Programme defined in the rulebook
- **Licence:** By Minister in charge for energy



Law on Efficient Use of Energy

EMS - Secondary legislation

- **Decree on Thresholds of Annual Consumption** of Energy for Defining Designated Organisations of Energy Management System, on Energy Savings Targets on Annual Level, along with Application Form on Achieved Energy Consumption (Official Gazette RS, No. 18/16 of 1 March 2016)
- **Rulebook** on the **format of Periodical Report** on Achieved Energy Savings (Official Gazette RS, No. 32/16 of 30 March 2016)
- **Rule book** on **condition of appointing energy managers in local self government unit 's bodies** (Official Gazette RS, No. 31/16 of 25 March 2016)
- **Rulebook** about the **conditions** in terms of personnel, equipment and space **of the organization conducting training** for Energy Manager and Accredited Energy Auditors (Official Gazette RS, No. 12/15 of 31 January 2015),
- **Rulebook on** the way and **program of training** for Energy Manager, training fees, as well as on conditions, program and **way of taking exam for Energy Manager** (Official Gazette RS, No. 12/15 of 31 January 2015),
- **The Decision on authorising** the Faculty of Mechanical Engineering of Belgrade University **for the Training** of Energy Managers and Authorised Energy Auditors (Official Gazette RS, No. 95/15 of 20 November 2015)



Law on Efficient Use of Energy

Articles 45.-46. Minimum EE Requirements and CHP

- **New and reconstructed facilities for generation, transmission/transport and distribution of power, heat and gas:**
 - Have to meet minimum energy efficiency requirements in accordance with the Decree to be adopted by the Government (**drafted**)
 - **For energy permit** – Study on energy efficiency must be enclosed showing fulfillment of minimum energy efficiency requirements
 - For energy generation facilities Study on energy efficiency shall contain the technical and economic analysis of the energy efficiency rate increase for the plant that would be achieved if CHP is implemented.
 - **Content of the Study** should be prescribed by the Minister in charge for Energy in the rulebook (**drafted**)



Energy Law

Articles 70.-81. CHP

- **Privileged electricity producers**
 - include high efficiency CHP plants up to 10MW- if they meet requirements
 - The incentive measures for privileged electricity producers include:
 - the obligation of purchasing electricity from a privileged producer;
 - prices at which such electricity is purchased,
 - the validity period of the electricity purchase obligation,
 - undertaking balance responsibility
 - Issuance of guarantee of origin
 - Obligations of privileged electricity producers are: selling the overall produced electricity exclusively to the guaranteed supplier, keeping records on the consumption of energy-generating products, submitting plans of activities to the guaranteed supplier
- **Conditions/incentives/obligation** set in secondary legislation:
 - Decree on conditions and procedure for acquiring the status of privileged power producer (drafted)
 - Decree on incentive measures for privileged power producers (drafted)



Law on Efficient Use of Energy

Articles 45.-46. Tariff systems

- **Tariff systems:**
 - Have to **include measured/delivered** amount of energy
 - Competent authorities shall take **measures to prevent encouragement of unnecessary increase** of the amount of distributed and/or transmitted energy
 - **Distribution**
 - Heat energy: Price of tariff elements limited by prescribed maximal allowed losses
 - Transmission/Transportation/Distribution of electricity and natural gas: values of losses must be in compliance with the methodologies for calculation of price of access to the transmission and distribution systems as set according to the Energy Law /in case of non compliance: Plan for reduction of losses to be submitted to the Energy Agency



Law on Efficient Use of Energy

Articles 45.-46. Information

- **Information:**
 - Public enterprises and other companies engaged in **distribution and supply** of electricity and heat and delivery and supply of natural gas **have to inform buyers on a monthly basis** on:
 - amount delivered to the buyer in the previous month
 - average energy price for the particular buyer
 - Yearly consumption
 - amount of energy delivered to the buyer compared to the average energy amount delivered to the buyers in the same category
 - Information on energy efficiency measures etc



Law on Efficient Use of Energy

Articles 45.-46. DHS requirements

- **District Heating Companies:**

- **For the new buildings/connections:** Define all criteria and information for preparation of **technical documentation for design, equipping and refurbishment of heating installations**, and especially for installing of the devices for:
 - **regulation of heat delivery and metering** of heat delivered to the building;
 - **metering of heat delivered to each part of the buildings** (apartments, commercial units etc.)
 - **controlled regulation of heat delivery on each individual heating system unit** (radiator etc)
- **For the new/existing connections:**
 - **Install** device for **metering** of delivered heat, which provides exact data on actually delivered heat and on exact time of heat delivery to the building and device for **automatic regulation** of heat delivery to the building
 - **Test** all the previously fitted metering devices for metering of heat delivered to the building



Law on Efficient Use of Energy

Articles 45.-46. metering equipment

- **District Heating Companies:**
 - **For existing connections:**
 - offer to **install metering equipment** on the heating installation in order to **measure the delivered heating energy to each part of the building (if technically and economically feasible)**
 - to examine metering equipment installed by other parties and if the installed equipment provides correct data on amount and time of supplied heating energy for each part of the building (apartments, commercial units etc.), to accept the installed equipment
- **Smart meters**
 - to be **offered if technically feasible, financially justifiable** towards savings by those engaged in distribution of electricity or in natural gas supply



Law on Efficient Use of Energy

Articles 57.-63. Financing/Budget Fund for Energy Efficiency

- **Support for:**
 - Application of technical measures with the aim to achieve energy efficiency in the energy production, transmission, distribution and consumption sectors
 - Promotion and implementation of energy audits
 - CHP/RES for own purposes etc.
- **Operation of the Budget Fund:**
 - Sources: Budget/ Donations/ Loans ...
 - Annual Financing Programme – by Government
 - Allocation: Rulebook on criteria for allocation and use of the Budget Fund financing, funding allocation procedure and monitoring procedure for adequate spending of funds and realization of contractual obligations
 - In charge: Ministry of Mining and Energy
 - eligible beneficiaries: legal and physical persons from Serbia
 - award procedure: open call



Law on Efficient Use of Energy

BF Secondary legislation/Public Calls

- **The Decree on the Program for Financing Activities and Measures of Improving Energy Efficiency in 2016** ("Official Gazette" No. 13/16 of 19 February 2016) /**adopted each year**/
- **Rulebook on conditions for allocation and use of resources** of the Budgetary Fund for improvement of Energy Efficiency of the Republic of Serbia and Criteria for Exemption from Compulsory Energy Audit ("Official Gazette of RS", No. 15/16 of 25 February 2016 / **replaced the one from 2014**/
- So far implemented: **11 projects in municipalities**:
 - total value of the works is about RSD 80 million
 - **savings: 40%, or about 2 million kWh**
- **First public call for 2016** (11. April-16 May 2016) - evaluation ongoing
- **Second public call for 2016 – in second half of 2016- combined funds with GEF donation** (Project implemented with UNDP)



Law on Efficient Use of Energy

Articles 64, 66, 67 Other incentives/Energy Services

- **Other incentives:**
 - Tax, customs and other reliefs may be introduced etc
 - Budget funds/other financial support mechanisms on Local level/Autonomous region
- **Energy Services :**
 - Defines Energy Services service is the service that includes activities and actions that under normal circumstances result in verifiable and measurable or estimable increase in energy efficiency of facilities, technical systems, production processes, private and public services, and/or primary energy savings.
 - Main elements of the model contract
 - Model contract obligatory for public sector and users of Budget Fund for Energy Efficiency – to be developed by Minister in charge for energy.
 - **Rule book** on determining **model of energy service contracts** for implementing measures of energy efficiency improvement where the beneficiaries are public sector entities (Official Gazette RS, No. 37/15 of 24 April 2015).



Law on Efficient Use of Energy

Articles 68-70 Obligations of public sector

- Obligated to undertake EE measures and report savings
- Inform employees on EE measures
- Implement EMS and EA
- Set minimal EE criteria/ requirements in specifications at all levels for each purchase where Public requirement is required
 - **Rule book on minimal requirements in respect of energy efficiency in the procedure for public procurements of goods** (Official Gazette RS, No. 111/15 of 29 December 2015).
- Municipalities – prepare 3 year programs for improvement of EE in transport (first draft of regulation prepared)



Other issues

● Article 4

- TABULA (developed/ GIZ assistance)
- Discussion with GIZ on assistance

● Article 5

- GIZ assistance /new project GIZ DKTI- EE in public buildings
- UNDP- EMIS
- Establishment of WG (state institutins)

● Article 7

- Analyses of options – EBRD REEP assistance
- Establishment of WG (public companies)
- Fee on energy efficiency

● CHP potential – Study on CHP potential in Serbia finalized in 2012 (IPA)

● EED transposition – IPA 2014 project (TOR prepared) – first step Gap analysis of existing regulation



Thank you for your attention