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# PEER REVIEW 23 – 26 OCTOBER, BULGARIA SOUTH WEST AND SOUTH CENTRAL PLANNING REGIONS

## 1. FOCUS OF THE PEER REVIEW

### 1.1 Please briefly define the focus of your region's Peer Review.

In Bulgaria, one of the few existing frameworks for energy efficiency and renewable energy is the Operational Programme Regions in Growth and OP Innovation and Competitiveness 2014-2020.

The peer review will examine:
a) How this existing framework can be used as a policy basis for partnerships with community energy groups;
b) Will identify potential business models for such partnerships, and will recommend practical steps, which can be taken to enable these partnerships to be established.

### 1.2 Please state any specific questions that, as the Host Region, you wish to ask the Peer Review Team.

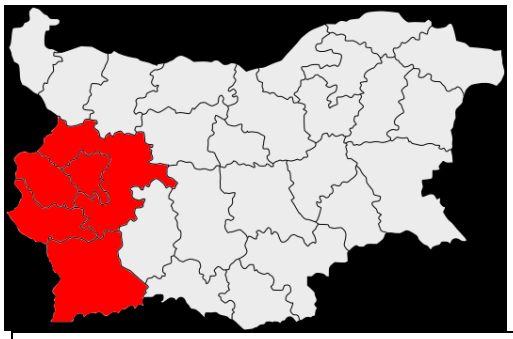
1. How the existing policies and support programmes for energy efficiency and renewable energy can be upgraded and used as a basis for establishment of community energy groups and projects?
2. How to stimulate the active participation of all relevant parties like municipalities, households and business to establish and manage community energy groups?
3. What business models are most suited for such partnerships?
4. How to support local authorities and households in development of better and most efficient projects for application for financing under OP Regions in Growth 2014-2020.

### 1.3 Please state any specific outcomes you expect to achieve from this Peer Review (development of a particular field / project, etc.).

1. Working ideas on how to engage municipalities, businesses and civil society in regional EE and RES policy development and implementation
2. Recommendations on mesures and actions to support development of projects on community level allowing them to become self sufficient and sustainable in energy.

## 2. REGIONAL FIGURES

### 2.1. General economic indicators

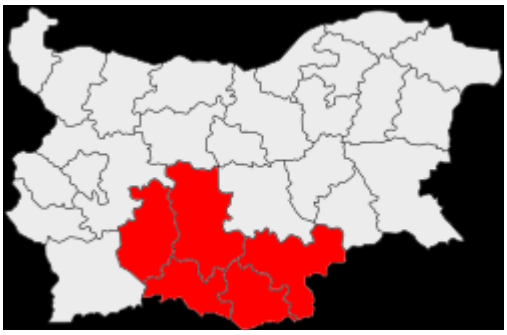


**South West Planning Region** includes 5 Districts: Sofia City, Greater Sofia District, Pernik, Kyustendil and Blagoevgrad. **Sofia (Capital City)** offers the best social-economic condition. It is significantly different from those of the other districts, for the fifth successive year. It has the highest GDP per capita – almost twice the average national level, the largest average annual income per household member, the highest average salary, and the lowest poverty level.

| Indicators | Sofia (Capital) | Greater Sofia District |
|---|---|---|
| Population (2015) | 1,318,181 | 237,571 |
| Area (sq. km) | 1,348.9 | 7,062.3 |
| Number of settlements | 38 | 286 |
| Share of urban population (%) | 95.5 | 60.9 |
| GDP per capita (EUR, current prices) | 13,647 | 6,638 |
| Average annual income per household member (EUR) | 3,554 | 1,930 |
| Relative share of households with internet access (%) | 75 | |

The Grater Sofia District is performing around the average for the country. The investment activity rose in 2015 and 2016, and the EU funds utilized so far by municipalities in the district have surpassed average levels by a wide margin. Infrastructure is well developed but road surface quality is worse than elsewhere in the country.

**The South Central Planning Region** includes 5 Districts –Plovdiv, Pazardjik, Kardjali, Haskovo and Smolyan with 58 Municipalities in total.



The highest GDP per capita is in the district of Plovdiv. EU fund utilization by municipal administrations in the district continued to lag behind the average rate in the country. Payments to municipal beneficiaries from OPs in the district of Plovdiv as of 31 May 2016 amounted to 270 EUR per capita v/s 314 EUR in district of Pazardjik. Due to its natural location and the numerous settlements and municipalities in it, Plovdiv and Pazardjik are among the districts with the highest road and railway network density.

| Indicators | Plovdiv | Pazardjik |
|---|---|---|
| Population (2015) | 674,435 | 265,090 |
| Area (sq. km) | 5,972.9 | 4,456.9 |
| Number of settlements | 224 | 117 |

| | | |
|---|---|---|
| Share of urban population (%) | 74.9 | 62.4 |
| GDP per capita (EUR, current prices) | 5,201.5 | 4,055 |
| Average annual income per household member (EUR) | 2,200 | 1,906 |
| Relative share of households with internet access (%) | 75 | |

### 2.2 Estimated no. of businesses involved in community energy

In Bulgaria and respectively in the Regions under review the community energy is practically non-existent. Cooperative law is outdated, there are no existing financial instruments that can support community power and people themselves are not used to cooperate in the name of achieving synergy and common good. The first step towards community owned energy saving projects are the multifamily residential buildings eligible for up to 100 % subsidy for renovation in case a condominium association is established. Regardless the proposed subsidy the owners of the buildings (note in Bulgaria more than 90% of the appartments in the residential buildings are private ownership of the families) find it very difficult to unite efforts and resources for preparation of such projects.

The other main barrier is the heavy procedure to get a permit for integrating a small scale renewable energy capacity to the grid and even greater challenge for integrating small renewable heat into an existing district heating network. The procedures are a nightmare and despite the promises of three consecutive governments they did not become very simplified.

The way ahead is small decentralized renewable energy owned by people and used by the people locally. In the poorest member state of EU it is even more crucial for the energy independence that the community power schemes get established against the odds.

## 3. AMBITIONS, GOALS AND POLICY

### 3.1 What are the national ambitions on community energy sources (RES) and energy efficiency (EE)?

The Energy Efficiency targets in Bulgaria are first set on National Level and based on that the Municipalities are setting their targets. Under the Renewable and Alternative Energy Sources and Biofuels Act, Municipalities are under an obligation to elaborate programmes promoting the development of renewable energy sources and biofuels.

The targets are set in compliance with the requirements of the EU Energy Efficiency Directive 2012/27/EU. In the National Energy Efficiency Action Plan (NEEAP). The progress made in implementation the Energy Efficiency Policy is presented in Annual reports.

National Energy Efficiency Target is set in the National Energy Efficiency Action Plan is:

- Energy savings at Final Energy Consumption (FEC) level: 716 ktoe/y

- Energy savings at Primay Energy Consumption (PEC) level: 1 590 ktoe/y, including 169 ktoe/y in energy transformation, transmission and distribution processes.

Annual report on the implementation of the NEEAP in 2015 contains an evaluation of the progress towards the achievement of the National target – 26% of the whole target is achieved in the period 2014-2015.

Regarding the progress in reaching the national targets under the Europe 2020 Strategy, Bulgaria appears already to be well ahead of its targets in regard to reducing greenhouse gas emissions and increasing the share of renewable energy, and progressing well in regard to energy efficiency. With a renewable energy share of 18% in 2015, Bulgaria is already above its 16% target for 2020.

The National EE target was allocated as individual targets between the obligated persons. The obligated persons are separated in three groups:

- Energy Traders;
- Owners of state and municipal buildings
- Owners of industrial enterprises with annual consumption more than 3 000 MWh.

The total number of obligated persons is 3951, of whom :

- Energy traders - 37
- Owners of buildings - 3564
- Owners of industrial systems - 350

In order to reach their individual targets, the obligated parties may implement energy-saving measures in all final customer sectors - industry, transport, households, commerce, civil society organizations, agriculture, forestry and fishery, services, etc. The obligated parties may implement measures that achieve energy savings in the energy transformation, distribution and transmission sectors, including by means of efficient district heating and cooling systems infrastructure. In order to reach their targets, the obligated parties may implement horizontal measures aimed at increasing the energy efficiency of final customers, such as awareness and promotional campaigns. They may also pay contributions to the Energy Efficiency and Renewable Sources Fund or other specialised funds, programmes, measures, schemes and mechanisms used to finance measures to increase the energy efficiency of final customers, including agreements concluded with beneficiaries.

Annually, not later than the 1st day of March, the obligated persons submit reports to SEDA on the implementation of the EE measures and the progress towards the achievement of their individual EE targets. Based on the reports submitted to SEDA by 01 March 2016 the evaluation of the EEOS results were included in the Annual report on the implementation of the NEEAP. For the period 2008-2015 the obligated energy traders achieved 43 % of their total energy savings target.

The National Renewable Energy Action Plan for the period 2010-2020 defined indicative targets by 2-year periods as follows:

- 2015 - 2016 – 12.4%
- 2017 - 2018 – 13.7%

The statistics show that the targets have been overpassed, as the share of RES in 2016 has reached 19,1%.

### 3.2 What national policy instruments are in place to achieve these ambitions?

(Please state the most relevant)

- Public funding (national subsidies)
- Private funding (fully private, public companies, private law, public- private partnerships)
- Direct (direct investments in a project)
- Indirect (support to a third party to invest in a project, laws or regulations that ease investments, tax measures)

**Energy efficiency**

Significant policy and program initiatives have been undertaken over the past several years. By and large these initiatives are focused on public and residential buildings, and companies. Bulgaria has adopted the Energy Efficiency Act, last amended in March 2013. The Act aims to promote energy efficiency through a system of policy measures and actions at national, sectoral, regional and municipal level as a key factor for enhancing economic competitiveness, security of energy supply and environmental protection. The measures and activities to improve energy end-use efficiency include:

1. Energy efficiency certification of new buildings[1]
2. Energy auditing and energy efficiency certification of existing buildings
3. Energy auditing of industrial systems – mandatory for industrial systems with annual energy consumption above 3000 MWh, and carried out at least once every 5 years
4. Inspection of the energy efficiency of heating systems with boilers (with capacity above 20 kW) and air conditioning systems (with capacity above 12 kW) in buildings for public services
5. Energy efficiency management in buildings and industrial systems through development and implementation of annual energy efficiency plans and programmes, reporting on the implementation of the plans/programmes to the national Sustainable Energy Development Agency (SEDA), and appointing at least one staff person to be responsible for these activities
6. Improvement of the energy characteristics of outdoor lighting

The EE Law provides regulations for these measures and activities.

The schemes and mechanisms for increasing energy efficiency include:

- Voluntary agreements
- Energy performance contracting
- Financial support schemes and mechanisms, including:
  - Financing from the Energy Efficiency and Renewable Sources Fund
  - Other national or European supporting schemes and mechanisms

The voluntary agreements aim at encouraging the energy consumption reduction through:

1) providing energy services and/or performing activities and measures for energy efficiency by the energy traders;
2) energy audit and/or undertaking relevant measures by the energy end-users.

Voluntary agreements may be concluded between the Sustainable Energy Development Agency and owners of industrial systems with energy consumption above 3000 MWh and energy traders. Such voluntary agreement is concluded with CHEZ, the energy distribution company, serving Sofia Region among others.

ESCO contracts can be assigned by energy end-users, and contractors – companies-providers of energy services. The EE Law defines that contractors shall ensure the funding from their own funds, or take an obligation to provide the financing from a third party. The Law includes provision that for buildings state or municipal property, which are subject to ESCO contract, funds shall be planned and provided in the budgets of the Ministries, institutions and municipalities, which, for the term of the contract implementation, shall correspond to the normal energy expenses of these buildings.

Financial support schemes and mechanisms include loans, grants and guarantees as well as technical assistance in structuring and implementation. They usually cover both energy efficiency and renewable energy initiatives and will be presented later in this section.

The National EE Action Plans (NEEAPs) 2014-2020 is the major instrument to ensure the achievement of the national energy saving targets. The NEEAP[2] includes energy efficiency measures by sectors:

[1] All public buildings with a total floor area of over 500 $m^2$ will be subject to energy certification (previous threshold was 1000 $m^2$), according to the bill, and the threshold will drop to 250 $m^2$ in 2015

[2] http://www.seea.government.bg/documents/Second_Energy_Efficiency_Action_Plan_EN.pdf

energy generation and transmission, industry, transport, households, services, agriculture, and cross-cutting measures.

Very important policy instrument is the allocation of individual energy saving targets to energy traders, building owners and owners of industrial systems, presented in Annexes 2 and 3 of the plan.

**Renewable energy**

The policies and measures to promote the production of energy from renewable sources were introduced by the Renewable Energy Act, adopted in 2011 and amended several times since then, the late amendment being the one from 30 December 2017.

The major policies and measures to promote the production of electricity from renewable sources include:

- A preferential feed-in tariff system, which provides greater certainty to investors. Feed-in tariff rates are set by the State Energy and Water Regulatory Commission (SEWRC) by 31 March each year[3].
- Obligatory connection to the network of the transmission or distribution companies
- Guaranteed access of energy generated from renewable sources to transmission and distribution networks
- Payment only of the direct costs of connection to the electricity transmission or distribution networks
- Long-term power purchase agreements (25 years with respect to electricity produced from geothermal and solar energy and 15 years with respect to electricity produced from hydropower plants of up to 10 MW installed capacity and electricity produced from other types of renewable sources)
- Obligatory purchase of the electricity produced from renewable sources

The production of heating and cooling energy from RES is stimulated by:

- Support for projects for construction of heating networks for utilization of renewables in specific urban areas
- Support for projects for construction of small decentralized systems for heating and cooling
- Connection of RES heat generating facilities to the heating network and purchase of the produced heat by the DH company
- Financial support (co-financing) for investments in heating and cooling from RES, in case of substantial reduction of energy consumption

In Bulgaria, the use of renewable energy for heating and cooling is promoted through a subsidy from the European Regional Development Fund, several loan schemes and through an exemption for building owners from property tax.

Mechanisms for the promotion of the use of biofuels:

- Compulsory blending of biofuels with mineral oil derivatives
- Reduced rate of excise duty for biofuel blends of a specified percentage.

The National Renewable Energy Action Plan (NREAP) is the main instrument developed to ensure the achievement of the national renewable energy targets. The NREAP establishes the general framework to be followed and implemented in the national legislation and outlines the actions to be taken by the local, regional and national authorities by 2020 in order to promote the use of renewable energy.

[3] http://www.dker.bg/pagebg.php?P=401&SP=402

### 3.3 What are regional, local ambitions on RES and EE?

- - Short term (<5 year)
- - Long term (< 5 year)

As explained earlier the two planning regions SouthWest and South Central Regions as such do not have individual targets for energy savings as an administrative territorial unit. The municipalities in the two planning regions are the ones with their own individual targets for energy savings in municipal buildings until 2020 – less than 5 years. Long term targets are not yet defined.

Some of the municipalities in the regions have Three municipalities in the Great Sofia Region (Godech, Ihtiman and Kostinbrod) have become signatories to the Covenant of Mayors, and have committed to reduce the $CO_2$ emissions on their territories with more than 20% until 2020. Municipality of Ihtiman has adopted a Sustainable Energy Action Plan (SEAP) with $CO_2$ emission reduction target of 56%. The same applies for Municipality of Bratsigovo from South Central Region

### 3.4 What regional local policy instruments are in place to achieve these ambitions?

The role of regional authorities in Bulgaria in the area of energy efficiency and RES is to support the implementation of national policies, and they do not possess instruments other than the national ones to achieve the regional goals. The regional authority can invest state budget funds in its own facilities, if approved. Regional authorities can be beneficiaries in some of the Operational Programmes. Regional administration may participate in public-private partnerships including in the field of EE and RES by providing land/buildings if they are in possession of such assets.

The actual investment decisions in the region are made by the municipalities for public investments and by private companies.

Municipalities, as local self-governance units, can initiate direct investments in EE and RES projects from their budgets. They can also establish public-private partnerships (as in the case of Svoge municipality for the Middle Iskar hydropower project, and the case of Ihtiman municipality for the photovoltaic project). Municipalities are the major beneficiary of most of the financial incentive programmes for energy efficiency and RES on national level. A number of the municipalities in the SouthWest and South Central Region have received funding for energy efficiency and RES projects under these programmes.

### 3.5 Is there an 'energy master plan' for the region?

Bulgarian legal framework does not require the development of energy master plans on regional level.

The provisions of the EE Act include mandatory preparation of energy efficiency improvement plans and programmes for their implementation by central and local government authorities (local, regional and public administrations). Such energy efficiency plans are developed by the municipalities till 2020.

### 3.6 Is there an inventory of all the RES / EE projects: realised, initiatives, chances?

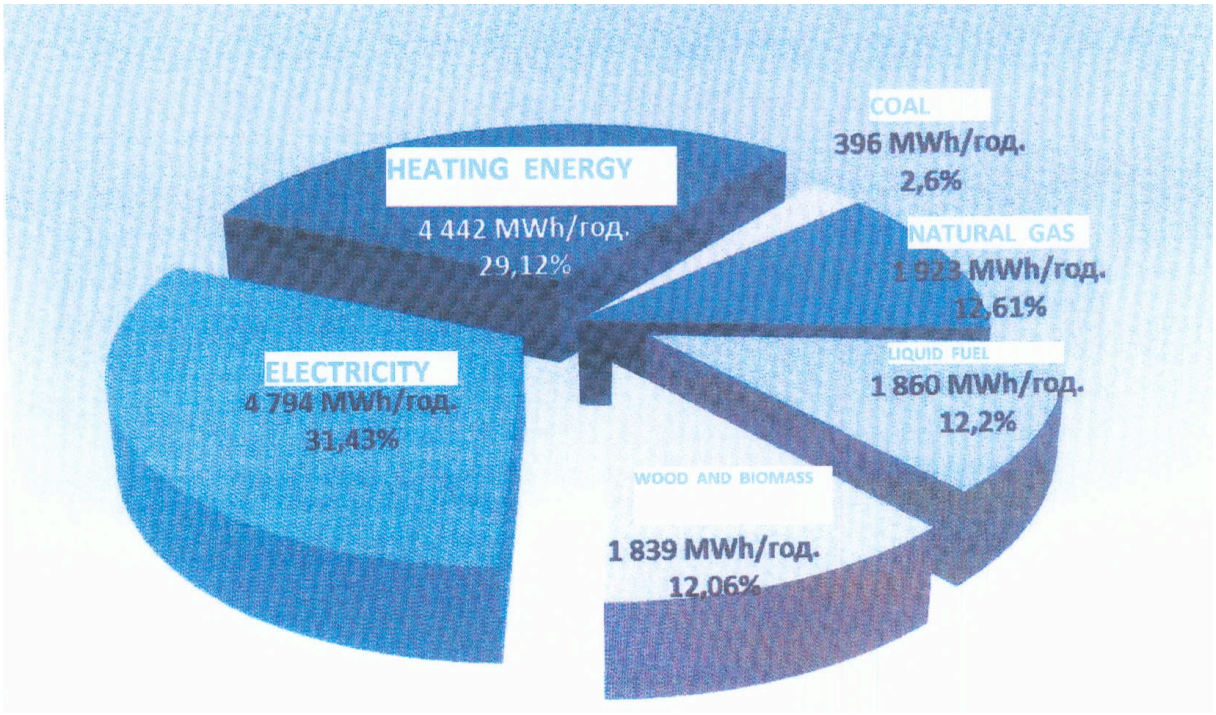
According to the Analysis of SEDA published in 2017 the regions under the peer review have achieved the following results:

SouthWest Region has declared in 2016 the following effect from applied Energy Efficiency Measures:

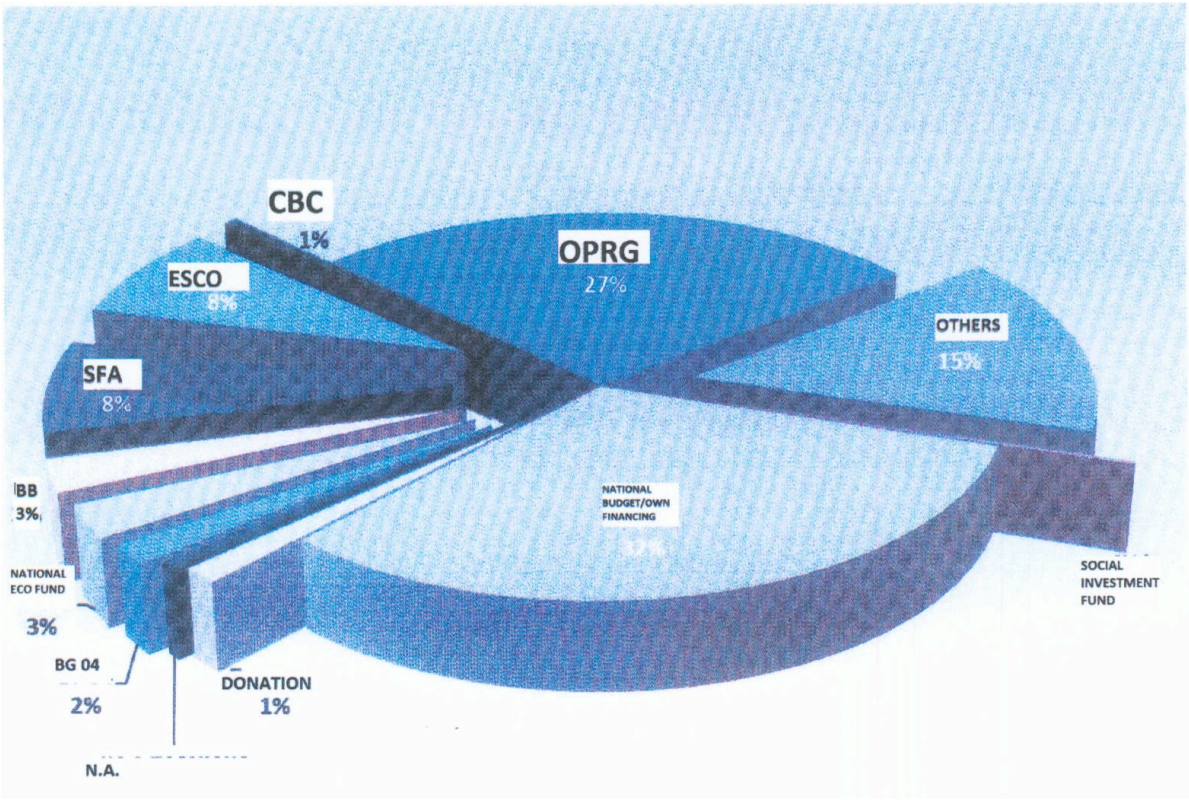
- ✓ 15 255 MWh/year. saved fossil fuel and energy
- ✓ 1 220 th. euro/year savings
- ✓ 6 717 t/year saved CO2 emissions
- ✓ 33 mln. euro investments

The type of saved fuel and energy is presented on the figure bellow:

**Fig. 1 Saved fuel and energy**




The share of sources of financing RES/EE projects is presented on **Fig.2**
**Fig. 2 Source of financing of RES/EE projects**




The abbreviation of the different sources of financing include:
OPRG – Operataional programme Regions in Growth – planning period 2007 – 2013
SFA – State Fund Agriculture/Rural Development Program 2007 – 2013
CBC – Cross Border Cooperation

National Budget/Own Financing – 32 % represents the largest share of the financing sources.

The majority of the realized projects in the field of EE are from local and state authorities in the field of renovation of municipal and state owned buildings, replacement of fossil fuel boilers with biomass ones and installation of solar panels.

The South Central Region has declared in 2016 the following effect from applied Energy Efficiency Measures:

- ✓ 11 576 MWh/year. saved fossil fuel and energy
- ✓ 993 th. euro/year savings
- ✓ 4 129 t/year saved CO2 emissions
- ✓ 10 360 mln. euro investments

The structure of the saved fuel and energy and source of finacing are similar in distribution compared to South West Region.

### 3.7 What is the main sector of energy sustainability policy?

Focusing on for example mobility, housing, industry, etc.

The main sector of energy efficiency policy on regional and local level is defined by the legal responsibilities of public authorities and their responsibilities prescribed by the Energy Efficiency Act. The main sector for energy efficiency is the sector of public buildings, for which individual targets for energy savings are prescribed, as well as obligation for certification. Outside the public sector, the main sector is industry and in particular sectors with higher energy consumptions of the production process.

As for renewable energy policy, it is dependent on the potential of local renewable energy resources. For South West Region and in particular Sofia (Capital) and Great Sofia District and its municipalities the main sector is that of small hydropower and photovoltaic solar energy.

For South Central Region applies the same.

## 4, ORGANISATION

### 4.1 What organisations play an important role in the energy field in your region? (From the point of view of the government)

**Ministry of Energy**

The implementation of the Energy Efficiency Directive (EED) (2012/27/EU) is the responsibility of the **Ministry of Energy.** The tasks and goals of the Ministry are:

- Achieving of economically effective and secure delivery of electricity, meeting the requirements for environment protection;
- Turning Bulgaria into energy independent and competitive country;
- Protection of customers' interests by providing of equal access, transparent procedures and economically founded prices;
- Effective management of mineral resources to defend the national interests;
- Active participation of the country in construction of unified and stable European energy market;
- Refinement of the energy infrastructure;
- Improving of energy efficiency and reducing of greenhouse emissions in accordance with the priorities of "Europe 2020" strategy;
- Development of nuclear energy in accordance with contemporary requirements for reliability, safety and efficiency.

**Sustainable Energy Development Agency (SEDA)**

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 control over the observance of legislation in the field of energy efficiency and for the conformation of the amount of energy savings as a result of energy efficiency services provided and other energy efficiency improvement measures by issuing energy savings certificates.

SEDA interacts with the central and regional bodies, with associations of employers, with industry organisations, associations of users and with non-for-profit legal persons in implementing the measures and activities for promoting the energy efficiency. SEDA assist the central government and local self-government bodies, as well as the participants in the energy services market while implementing their duties, as provided by the EE law.

**Municipal authorities**

Major role in energy efficiency and renewable energy policy on local level is played by municipal authorities. Under the EE Act and the Renewable Energy Act municipalities have to develop and implement municipal EE plans and municipal renewable energy plans. As owners of buildings, they are "obligated persons" with specific quantitative targets for energy savings and responsibilities for certification of buildings. They have specific reporting obligations as well.

Municipalities can have investment initiative within their budgets for energy efficiency and renewable energy projects, can borrow financial resources from commercial banks, and can be beneficiaries in most of the energy efficiency and renewable energy supporting mechanisms in the country.

### 4.2 Is there structured cooperation between the above organisations?

The sytem is centralised with the Ministry of Energy being the main governmental body defining the policy in the energy field. The Executive Agency SEDA is under the Ministry of Energy. The cooperation of municipalities with SEDA is rather formal, based on the reporting obligations of municipalities. Still, SEDA can provide advice and support to municipalities upon request. There are no specifically established forms of cooperation between the regional administration and SEDA.

### 4.3 What is the involvement of your region in the development and implementation of investments in sustainable energy strategies?

The Regions in Bulgaria are not directly involved in the development and implementation of investments in sustainable energy strategies.

The municipal authorities are the ones developing EE and RES plans and programmes (see 3.5.), which become the basis for their investment in sustainable energy projects. The regional authority is not involved in the municipal energy efficiency and renewable energy planning process.

### 4.5 What are your views on the strengths and weaknesses of such policies?

A regional sustainable energy policy has important strengths, because it would:

- develop a consistent regional planning framework for energy efficiency initiatives and expansion of renewable energy technologies, sufficiently considering autonomy of local self-government
- develop a better basis for the municipal EE and RES plans and programmes, and strengthen the regional collaboration among municipalities for their implementation
- promote the regional potential for EE and RES investments to private investors and thus improve the business environment in the region for such investments
- strengthen the possibilities for fund raising for regional and municipal programmes and projects
- increase all benefits attained by sustainable energy – economic, environmental and social – for the region, its businesses and population
- provide framework for implementation of community owned and led energy projects

The weaknesses of a regional sustainable energy policy are linked to the limited instruments at disposal of the regional administration, and its limited institutional and financial resources and capacity. In fact, such policy would depend to a great extent on the understanding and commitment of the regional governor and the regional administration who in general have no capacity at this point in developing such policies.

### 4.6 Is there specific knowledge on energy issues available in your region?

For example, a University faculty.

In the capital Sofia there two main universities providing knowledge in the field of energy efficiency and RES. These are the Technical University, which is leading in the energy knowledge in the country and

University of Architecture, Civil Engineering and Geodesy, which is an important knowledge centre for energy efficiency in buildings.

### 4.7 What are the skills shortages and training opportunities in your region?

The knowledge and skills of both regional and municipal administrations on EE and RES issues are not enough. There are no experts in the regional and in the local administrations, specifically assigned for managing EE and RES policies and programmes. There is not enough understanding in the administrations on the need to look for training opportunities in this area.

Businesses are better informed, but also still need skills to incorporate EE and RES into their business practices. The awareness of the general public has increased during the last couple of years.

Another important training is needed in the field of development and implementation of tradable certificate schemes.

### 4.8 What is the quality of physical infrastructure in your region?

The quality of the physical infrastructure in the energy field is good. The renewable energy installations have been recently built, involving proven technologies. Natural gas distribution networks have entered into operation after the beginning of the 21$^{st}$ century. The only network with long exploitation is the power supply and distribution network, but no specific problems with this are encountered.

## 5. REALISATION OF PROJECTS

### 5.1 Are there any plans to implement RES/ EE projects in the region?

Please explain.

The main projects under preparation are in line with the national energy efficiency policy and the imposed responsibilities and obligations on municipal authorities related to energy efficiency planning, mandatory certification of buildings and the individual energy saving targets, combined with the financing incentive programmes initiated. The projects are following the active structural funds call for propolsals under OP Regions in Growth 2014 -2020 targeted at investments in energy efficiency, especially in public buildings and the National National programme for energy efficiency in multifamily residential buildings.

It must be noted that the budget of the OP OP Regions in Growth 2014 -2020 is quite limited and many of the needs for further realisation of EE Measures and investments in RES is expected to be channelled through new financial schemes and special purpose Funds which are currently under development.

### 5.2 In which phase are these projects currently at?

i.e. Idea, exploration, feasibility, business case.

In a preparation phase – enrgy odits and planning.

## 6. FINANCING

### 6.1 What national financial instruments are available?

Please describe: Conditions; Reliability; Accessibility (procedures, are they well-known, etc.); How they are used

The main financial incentives implemented in the country to promote energy efficiency and the production and consumption of energy from renewable sources are as follows:

- public funding and co-funding

- low-interest and interest-free loans
- grants
- loans combined with grants
- free technical assistance

The funds are mainly targeted at municipal and state beneficieries and private companies. There are no actual possibilities for support of different kinds of communities - groups of citizens, cooperatives, clusters of SMEs, condominiums etc. to build their small energy projects. Ensuring possibilities for support of community owned and led projects will provide an important basis of the transition to decentralized energy and a real alternative to achieve energy independence and energy security, while ensuring social justice, maintaining a healthy environment and ensuring a safe climate future.

Energy efficiency and renewable energy deserve strong institutional and financial support, given the past decades and the ongoing public financial support for conventional energy. Currently most programs in Bulgaria that provide grants for renewable energy and energy efficiency, as well as the relevant financial instruments often suggests high thresholds to fund projects and heavy administration. In many cases the access to these funds by small organizations, and associations and those with a short history is actually impossible.

**Overview of financial support schemes**

| Type of financing instrument | Type of projects covered by the instrument | Name and description of the instrument | Links |
|---|---|---|---|
| Non repayable subsidies (state loan from EBRD) | Energy efficiency in residential buildings, Household refurbishment | National programme for energy efficiency in multifamily residential buildings: 100 % financing of certain types of residential pre-fabricated concrete buildings | http://mrrb.government.bg/?controller=category&catid=117 |
| Non repayable subsidies (EU structural funds) | Energy efficiency and RES in municipalities | Operational programme Regions in Growth 2014-2020 – especially applicable for municipal buildings<br><br>Usually around 70-80 % of project costs the rest is covered by municipal own funding | https://www.eufunds.bg/en/programming-period-2014-2020/operational-programmes-2014-2020/operational-programme-regions-in-growth-2014-2020 |
| Non repayable subsidies (EU structural funds) | Energy efficiency and RES in companies.<br>Replacement of equipment with energy saving one; refurbishment of buildings; installation of RES for own use. | Operational programme Innovation and Competitiveness 2014-2020 – especially applicable for production companies with high level of energy consumption<br><br>Usually between 50-70 % of project costs are subsidy, the rest is covered by companies own funding | http://www.opcompetitiveness.bg/module4.php?menu_id=364&id=139 |

| | | | |
|---|---|---|---|
| Low interest credit | Energy efficiency in buildings | Energy Efficiency Fund Revolving fund:<br>provides soft loans to municipalities;<br><br>Acts as a guarantee fund for ESCO projects | www.bgeef.com |
| Energy Efficiency Certification | Energy efficiency projects | Tradable white certificate scheme (forthcoming) | http://www.seea.government.bg/bg/component/content/article?id=9374%20 |
| Feed-in tariff | Energy Generation from renewable energy sources, incl. RES based CHP | Act for the Energy from RES, published in State Gazette, Issue 35 from 03.05.2011.<br><br>Establishment of feed-in tariffs depending on the RE sources used and priority connection to the grid | http://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=48899 |
| Feed-in tariff | Electricity generated by CHP | Energy Act, published in State Gazette, Issue 107 from 09.12.200 | http://lex.bg/laws/ldoc/2135475623 |
| ESCOs | Energy efficiency and RES integration in buildings | Public-Private Partnerships (PPP) – e.g. renting municipal roofs for PV installation to private sector, concession for biomass fueled DH, etc. | http://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=48899 |

### 6.2 Are there tax measures that favour investments in community/renewables?

No real tax measures exist that favour investments in community renewables.

The only tax exemption, which is applied currently, is for multy family buildings being brought in use before 1st January 2005 and having obtained building certificate, issued under the procedure of the Energy Efficiency Law. This is valid only for buildings, which are renovated with non-public funds.

There are some taxation incentives for companies making a donation in favor of the Energy Efficiency and Renewable Sources Fund – such donations can reduce up to 10 percent of their positive accounting financial result.

### 6.3 What regional, local financial instruments are available?

Please describe:

- Conditions
- Reliability

- Accessibility (procedures, are they well-known, etc.)
- How they are used

There are no local financial instruments available. The financial instruments for stimulating energy efficiency and RES utilization are established on national level.

### 6.4 Are there any private investors? (Banks, private equity, pension funds, etc.)

Please describe:

- Criteria for these investors to participate / invest
- Risk profile, requested rate of return, investment volume
- In what phase of the project do the investors step in (idea, exploration, feasibility, business case)

Bulgarian commercial banks participate in some of the financial schemes supporting energy efficiency and renewable energy projects. For example, the Bulgarian banks participating in the REECL Programme include: Procredit Bank, Raiffeisen Bank, DSK Bank, and CIBANK. The Bulgarian Energy Efficiency and Renewable Sources Fund has signed general framework agreements for co-financing with the following Bulgarian commercial banks: UniCredit Bulbank and Bulgarian Development Bank.

Because of the very favourable conditions created in Bulgaria for promotion of renewable energy like preferential feed-in tarrifs, long-term power purchase agreements, obligatory Obligatory purchase of the electricity produced from renewable sources there was a great number of private investments in that area, including Bulgarian and foreign investments.

Now when the target for RES is almost reached according to the government – largely through wind and solar-PV it was realized that the feed-in-tariffs are set too high and too many investment opportunities have mushroomed. But these were mostly large developments. Currently the renewable energy in Bulgaria is under attack from public authorities that conveniently blame the new RES capacity for the increasing prices of electricity (while a careful look in the situation would prove that 2/3 of the increase are due to fossil fuel power plants).

### 6.5 Are the European Funds well-known and used?

The funding possibilities provided by the Structural Funds and respective Operational Programes are well promoted in the country and beneficiaries are generally informed about them. The Managing Authorities of the OPs as well as number of consultancy companies organize regular information campaigns. This makes the success in the utilization of the EU Funds managed through the Ops in Bulgaria.

The Specalised Funds and programs which are managed directly at EU level are not so well known and used in Bulgaria.

## 7. OTHER FACTORS

### 7.1 Describe the non-financial factors influencing the realisation of community energy projects.

(Legislation permits, etc.)

In spring 2013, a social problem with the high energy bills in the country led to negative attitude towards renewable energy among the population, but also among politicians. One argument was that the licenses given to renewable energy producers overpass substantially the initially planned renewable capacities. This led to restrictions on providing further licenses.

Later in the year, the electricity consumption in the country fell substantially below the generating capacities and restrictions were imposed on the production of energy from wind and solar power stations.

These factors have important influence on the development of the RES sector.

As explained earlier in Bulgaria there are no real community owned energy projects. An important prerequisite for the development and support of similar projects in Bulgaria in the future is to expand into the urban areas the approach for community-led local development (Community Lead Local Development, CLLD) in a way similar to the LEADER approach in the rural areas. Currently only limited pilot schemes of this kind are being considered in result of the disappointment from the application of the approach in rural areas. But we should not forget that the cities of Bulgaria concentrate the majority of the capacity and human resources and there is a better basis for the implementation of this approach.

### Organisational models for development of Community energy projects in Bulgaria

Community energy projects in theory in Bulgaria can be developped by any lose group of stakeholders. Based on the two main characteristics of community projects - joint ownership and focus on objectives beyond financial profits, few existing legal forms are possible to be used:

- community-led local development groups registered under the Act for Non-profit Legal Entities Pursuing Activities for Public Benefit;
- limited liability or joint-stock companies companies as defined by commercial law;
- co-operatives established under the cooperatives Act

**The Non-profit organizations/community-led local groups are a** not-for-profit legal form that can take business activities in order to achieve its objectives. The Local Activity Groups (LAG) are composed of representatives of the local public and private socio-economical interest, where neither the public sector nor any single interest group can have more than 49% of the voting rights at the decision-making level of the LAG.

**Co-operatives** – a legal entity in which co-operatives' members capital is put into shares of the co-operative. A cooperative is a voluntary association of natural persons (not less than 7 persons) with variable capital and a variable number of members engaging in commercial activity along the lines of mutual assistancebuilding up the capital for community energy project. Co-operative members might also consumers of energy at a discounted price.

Currently the only examples of community enregy are the energy efficiency projects for renovation of multyfamily residential buildings. The owners of appartments in the building establish an assocoiation registered in the Court and the Municipality. These associations can apply for funding from the National programme for energy efficiency.

## 8. ANY OTHER COMMENTS

Please provide any other additional information

Ensuring the possibility for different kinds of communities - groups of citizens, cooperatives, clusters of SMEs, condominiums etc. to build their small energy projects are an important basis of the transition to decentralized energy and a real alternative to achieve energy independence and energy security, while ensuring social justice, maintaining a healthy environment and ensuring a safe climate future.

Energy efficiency and renewable energy deserve strong institutional and financial support, given the past decades and the ongoing public financial support for conventional energy. At the same time the

inclusive growth we strive for in Europe presumes EU citizens would have free access to the resources of the Union.

Currently most programs in Bulgaria that provide grants for renewable energy and energy efficiency, as well as the relevant financial instruments often suggests high thresholds to fund projects and heavy administration. In many cases the access to these funds by small organizations, and associations and those with a short history is actually impossible.

The term "community energy" refers to “owned by local people and located within the community renewable energy source” (electricity and / or energy for heating or cooling). Most definitions of the term tend to indicate as a characteristic of such projects the involvement and participation of the community that builds them – this involvement goes beyond the investment process and the simple shareholder relations. It can go a lot further in terms of community benefits as part of the income from the project can be devoted to the community and be used for instance to build a community center, for the maintenance of a school and more. "Community energy" implies the possibility of control over the project by individuals from the community that builds the project,for example though the participation in cooperative, association of small businesses, condominiums and more. Projects investing in energy efficiency may also fall under a broader definition of "community energy projects."

Potential "community energy projects" can be developed in solar, micro-hydro, wind, biomass and geothermal energy sources. Within the broader definition, including Energy efficiency we can add projects on EE in buildings using natural widely available building materials, applying cheap schemes score big energy savings - energy management, recovery and more.