



WB6 Sustainability Charter Monitoring Report

**Energy Community Secretariat
December 2016**



Introduction



Under the Energy Community Treaty, the Western Balkan Six (WB6) countries are applying the Energy Efficiency Directives (2012/27/EU, 2010/30/EU, 2010/31/EU) as well as the Renewable Energy Directive (2009/28/EC) with a similar level of ambition and the same binding effect as Member States of the EU. The WB6 countries are also working on the best way for improving their systems for monitoring, reporting and planning their energy and climate policies and aligning them with the Emissions Monitoring Regulation (Regulation (EU) No 525/2013).

At the last Western Balkan 6 Summit on 4 July 2016, the WB6 countries signed a Sustainability Charter to serve as guidance and support for their transition towards low-carbon and climate-resilient energy sectors. The countries also reiterated their commitment to tap into their high potential for energy efficiency and renewable energy generation by agreeing on a set of measures to increase the sustainability of national and regional energy markets as well as generation and consumption patterns. At the same time, they agreed to step-up the ongoing efforts to reform and integrate electricity markets and to become a part of the global response to climate change.

The Energy Community Secretariat was tasked to support the WB6 countries in coordinating the process and monitoring the implementation of their commitments. For this purpose, the Secretariat will publish every three months a **progress report** outlining achievements and challenges ahead for the main priority areas:

1. Improving the governance for energy efficiency;
2. Implementing smart support measures that improve the sustainability of energy systems;
3. Fostering climate action and transparency of sustainable energy markets.

The present report takes stock of the current situation in the areas covered by the Charter. Assessments are based upon the Secretariat's experts' own experience and exchange, desk research as well as information collected during interviews and country missions to Albania, Montenegro and Serbia (November 2016). The analysis and indications included in the report give a sense of the scale of the reform needed.

Progress made by countries under the Sustainability Charter will be included in annual reports and discussed at Ministerial level during the next **WB6 Summit in Italy (July 2017)**.



I. Improve the Governance for Energy Efficiency

1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO (“energy service companies”) contracts, thus developing energy services markets (June 2017)

- The participation of private capital through Energy Service Companies (ESCOs) provides an option for realizing energy efficiency investments without increasing public debt. Through the ESCO Performance Contract, a private company is contracted to design, implement, finance and (optionally) operate and perform maintenance activities related to energy efficiency measures in publicly owned facilities, which results in financial savings as specified in the contract. During the contract’s duration, the public authority is obliged to use all or part of the financial savings to repay the investment and remunerate the ESCO for its services.
- The Energy Community Energy Efficiency Coordination Group regularly enables the exchange of best practices on harmonized development of primary and secondary legislation, model contracts and guidelines for ESCO projects. The Regional Energy Efficiency Programme (REEP) in the Western Balkans supported Bosnia and Herzegovina, Montenegro and Serbia in developing ESCO supporting legislation and contract templates.

2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)

- Directive 2010/31/EU on energy performance of buildings (EPBD) focuses on the utilization of the energy efficiency potential in the building sector. The Contracting Parties shall apply a methodology for calculating the energy performance of buildings and ensure that minimum energy performance requirements for buildings or building units are set with a view to achieving cost-optimal levels for energy performance requirements.
- Transposition of EPBD is currently ongoing in all WB6 countries, supported either by regional programmes (e.g. REEP) or bilateral donors (e.g. GIZ in Serbia and KfW in Montenegro). The Energy Community Energy Efficiency Coordination Group will continue to coordinate the implementation of the key EPBD requirements.

3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)

- The potential for saving energy in the WB6 building sector (both public and residential) is as high as 40%, provided that EPBD requirements are met. Reaching this potential requires countries to implement large-scale investment programmes in building rehabilitation. Programmes should envisage a more “commercial” type of financing, either through ESCOs and/or through national energy efficiency revolving funds.
- At present, the majority of programmes in the WB6 countries target public buildings and are developed in cooperation with International Financial Institutions through lending programmes to governments. The main drawback is that this approach - based on non-reimbursable financing to public authorities - is not sustainable over the long-term and cannot be scaled-up to cover a significant portion of the building stock; also, it is not suitable for residential building stock.

4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)

- District or central heating and cooling can integrate renewable electricity, biomass, geothermal and solar thermal energy, waste heat and municipal waste. It can also contribute to air quality objectives. Directive 2012/27/EU on energy efficiency requires the Contracting Parties to assess the potential for application of high-efficiency cogeneration and efficient district heating and cooling, as well as the implementation of adequate measures.
- District heating systems are present in about 80 cities and towns in the WB6 countries, with installed capacity of 7.600 MW; 42% of the total heat demand is covered by biomass, although a large majority is represented by firewood used in individual, low-efficient units. The introduction of efficient biomass-based heating could reduce the heating costs by at least 50% across the WB6; an additional 1.787 MW can be supplied with wood biomass in high-efficient appliances and 1.073 MW in district heating using agricultural waste. WB6 should adopt specific legislation and policy measures to stimulate the uptake of these new technologies.

5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)

- The establishment of new innovative financing mechanisms for energy efficiency improvement measures, in combination with the better use of existing ones, will maximize the benefits coming from multiple streams of financing. A state-level energy efficiency fund is also beneficial.
- The WB6 Summit in Paris announced 50 million EUR for the replenishment of the Regional Energy Efficiency Programme (REEP Plus) and the Green for Growth Fund (GGF). Policy and investment support has also been extended to the residential sector and a new financing mechanism - the national energy efficiency revolving fund – has been established.



II. Implement Smart Support Measures Improving Sustainability of Energy Systems

1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)

- The costs of renewable energy technologies continue to fall, however, this could not be captured efficiently in most of the support schemes currently in use. The State Aid Guidelines for Environmental Protection and Energy 2014-2020 call for more exposure of renewable energy producers to market signals. Access to support schemes has to be granted by a competitive auction process where the demand reveals the real cost of individual projects.
- Certain progress has been made in some of the Western Balkan countries with the preparation of legislation introducing market-based support schemes, e.g. in Albania and Montenegro. In terms of concrete implementation, however, the delay in the establishment of organized day-ahead markets and the complexity of the new auction scheme will put additional pressure on the administrative capacity of the countries. Trainings and pilot projects would be necessary in all the WB6 countries.

2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)

- Citizens shall be able to exercise their rights in the political, economic and social dimension of energy policy.
- The WB6 countries should implement effective strategies and legislation allowing citizens to play an active role in the energy system, for example by producing energy from renewables – as individuals or as communities - and in demand side management. The promotion of community energy projects is important as it develops the local economy, contributes to energy independence and increases acceptance of renewables.

3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)

- Citizens need to be at the centre of the energy system; they have to be informed, engaged and activated. As stated in Article 14 of Directive 2009/28/EC, information, awareness-raising, guidance and training programmes are crucial to make the legal frameworks on renewables easier to navigate, to build local capacity as well as to promote the uptake of renewable energy technology.
- The WB6 countries should ensure that information on practicalities and support measures for renewable energy deployment is made available to all relevant actors, including individual citizens. Currently, concrete community action is still hampered by a number of non-technological barriers (administrative, financial and regulatory).

4. Including energy efficiency and use of renewable resources in the curriculum in education and offering professional training (June 2019)

- An urgent demand exists for more post-graduate trained staff, specialized in renewable energy technology and energy efficiency. The establishment of dedicated university and professional programmes in these sectors will provide students with the appropriate expertise.
- Most of the WB6 countries are currently collaborating with leading EU universities – for example within the framework of the EU Tempus programme – to develop Master's and PhD programmes, professional training and laboratories with the aim to prepare a new generation of skilled experts in these sectors.

5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)

- Using waste as an energy source maximizes the energy output and contributes to achieving environmental and climate change objectives, while also improving the security of energy supply.
- The WB6 countries face the common challenge to manage their waste with an appropriate strategy, segregation and recycling system, through which a significant quantity can be diverted from landfills for material recovery and for conversion into a resource for electricity and heat generation.

6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)

- The WB6 countries shall ensure that certification, accreditation or equivalent qualification schemes are available for providers of energy services, energy auditors, energy managers and installers of energy-related building elements or small-scale renewable installations.
- Despite some ongoing activities in the region, the WB6 countries are still lacking fully qualified experts. It is recommended to take a coordinated approach to the requirements established in different directives. The Energy Community Secretariat – through the Energy Efficiency and Renewable Energy Coordination Groups - will facilitate regional cooperation in this respect.



III. Foster Climate Action and Transparency of Sustainable Energy Markets

1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013

- Regulation (EU) No 525/2013 (MMR) includes a number of important provisions for monitoring and reporting greenhouse gas emissions, including, but not limited to: establishing GHG emission inventories, developing low-carbon development strategies, improving national systems for reporting on policies and measures and for reporting on projections of anthropogenic greenhouse gas emissions.
- The WB6 countries have a good understanding of the MMR and the challenges preventing its full implementation. In general, GHG emission inventories and the MMR are being implemented on an informal basis, due to the lack of clear institutional arrangements and proper legal regulations. A key barrier to making further progress is the lack of human resources.

2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations

- Reporting obligations under the UNFCCC of the WB6 countries (non-Annex I) include – but are not limited to - the submission of National Communications on climate change (NCs), Biennial Update Reports (BURs), National Adaptation Programmes of Actions (NAPAs), etc.
- With few exceptions, the countries are generally fulfilling their reporting obligations under the UNFCCC. There is also a number of ongoing cooperation initiatives that strive to assist the countries towards the development of climate-resilient strategies, including by helping them to improve national systems for monitoring, reporting and verification (MRV). Closer collaboration between the Contracting Parties and the Energy Community would contribute to a higher quality of monitoring and reporting.

3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets

- The WB6 countries shall ensure that their renewable energy markets are safe and attractive for both national and foreign investors. Measures to establish investor confidence should be identified and a roadmap should be developed in cooperation with the Secretariat and adopted by the governments. A focal point should be designated for each of the WB6 countries, who will work closely with the Secretariat. A first draft of the roadmap is expected by mid-2017.
- With regard to incentives and facilities for investors, whereas they exist in most WB6 countries, access to such incentives and facilities is not always transparent. On a positive note, chambers of commerce and business associations seem to have a very active role in disseminating information and encouraging investment.

4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner

- Investors need additional support from the national authorities. Single administrative contact points should be established and provide guidelines in English. The contact points should undergo regular audits and deliver annual work programmes with detailed measures aimed at supporting investors. In addition to a transparent and corruption-free judicial system, investors should also be given the opportunity to choose arbitration as a way of dispute settlement, both at national and international level.
- Most of the WB6 countries do have administrative authorities dealing with investor protection and promotion, but they still need to start acting as single administrative contact points for investors. Such support should be offered not only when an investment is initiated, but also afterwards. National arbitral institutions, if non-existent, should be established in all WB6 countries.



I. Improve the Governance for Energy Efficiency





<p>1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO (“energy service companies”) contracts, thus developing energy services markets (June 2017)</p> <ul style="list-style-type: none"> The 2015 Energy Efficiency Law introduces the ESCO concept and energy performance contracting. A by-law on licensing of energy audits to be adopted by the Ministry of Energy and Industry (MEI) is under development. The energy services market is still not developed and no ESCO activities were reported in Albania to date. In principle, energy services can be provided under private law contracts with freely negotiated terms and conditions, unless they are included under a programme financed by the (planned) Energy Efficiency Fund for the support of ESCO projects in the public sector. Municipal multi-annual budgeting should be allowed, either through the Budget Law or through an interpretation by the Ministry of Finance, to be able to retain energy cost savings and pay the ESCO from these. The Public Procurement Law should be amended to allow for service/technology cost life based procurement, which is more suitable for ESCO service contracting in the public sector as opposed to the current practice based on minimum offer value. 	
<p>2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)</p> <ul style="list-style-type: none"> The Law on Energy Performance of Buildings (transposing Directive 2010/31/EU) was adopted by the Parliament in November 2016. The methodology for calculating the energy performance of buildings is currently being developed by the Ministry of Energy and Industry. Currently there is no progress regarding the establishment of the energy performance certification of buildings and the independent control systems. 	
<p>3. Establishing well targeted programmes for public and residential buildings rehabilitation to achieve minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)</p> <ul style="list-style-type: none"> Albania is missing targeted programmes or an assigned public authority for public or residential buildings rehabilitation. There is currently a limited number of small projects implemented in the public and residential sector, financed by international donors. The typology of the public and residential building stock in Albania was developed; it includes classification of existing building stock as well as modelling and analysis of future retrofitting options. The draft Energy Efficiency Action Plan (EEAP) is expected to include the target and programmes for the renovation of public buildings. 	
<p>4. Assessing in detail the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)</p> <ul style="list-style-type: none"> Albania has no district heating or cooling systems at present, not even in regions with high building densities. Attaining a sustainable wood biomass supply would be a significant challenge. Currently there are no activities to adopt the methodology or conduct a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling, based on a country-wide cost-benefit analysis. 	
<p>5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)</p> <ul style="list-style-type: none"> An Energy Efficiency Fund is still not established. The 2015 Energy Efficiency Law foresees the establishment of a fund as a non-profit organization, which can finance investments in energy efficiency measures in the entire energy chain from production to consumption. A working group was established within the Ministry of Energy and Industry to prepare a law governing the functioning of the fund. Albania should further improve other financing mechanisms to support energy efficiency investments (including energy efficiency criteria in services and goods public procurement and involvement of private sector/ESCOs) and better utilise available external financing provided by regional assistance programmes. 	



II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> A feed-in tariff is currently applied only to small HPPs (below 15 MW). The new draft Law on Renewable Energy to be adopted in January 2017 will introduce market-based support schemes in the form of contracts for difference. 	
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> Currently there is no strategy in place for citizen participation in renewable energy projects. Under an initiative led by UNDP together with the Ministry of Energy and Industry and the Ministry of Environment, citizens, NGOs and local associations in Tirana and a number of municipalities have been involved in projects related to increasing solar thermal energy in public buildings (schools, hospitals, nurseries, etc.). 	
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> The National Centre for Energy Applications was designated as a one-stop shop for projects on renewable energy. The draft Law on Renewable Energy includes provisions on information sharing. 	
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> The Agricultural University and the Polytechnic University Tirana are participating in the project "Renewable Energy Studies in Western Balkan Countries" (RESI). The Faculty of Agriculture and Environment at the Agricultural University of Tirana and the Faculty of Mechanical Engineering at the Polytechnic University developed their first joint master programme on renewable energy. The Polis University developed a post-secondary study program on energy efficiency and the University Aleksander Moisiu Durres strengthened the energy efficiency dimension of its programme on Construction Management. Albania also collaborated with the Energy Community and hosted the first Energy Community Summer School in September 2016. 	
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> A National Strategy and Action Plan of Waste Management exists. The objectives include 15% energy recovery from municipal waste. Two waste-to-energy plants are being built, one in Elbasan - to become operational by the end of 2016 - and a second one in Fier. Fier is to process up to 70.000 tonnes of waste per year, with an estimated electricity output of 3,8 MW. 	
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> The 2015 Energy Efficiency Law defines categories, conditions and qualification requirements for energy auditors and energy managers. Secondary legislation still needs to be adopted. The Law on Energy Performance of Buildings adopted in November 2016 includes requirements for training building assessors; however, the building certification scheme requires further development, including the adoption of by-laws and training programmes. The draft Law on Renewable Energy envisages the adoption of certification schemes and criteria for installers of small-scale biomass furnaces and stoves, solar PV and solar thermal systems, shallow geothermal systems and heat pumps. 	

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • The national authority responsible for the GHG inventory is the National Environmental Agency (NEA). • Until now, data collection for GHG emissions has been outsourced to UNDP. For the future, Albania intends to set up its own system, under the responsibility of the Ministry of Environment. To facilitate data and information exchange, one expert from each relevant ministry is part of an ad-hoc Interministerial Working Group on Climate Change. • A draft law for transposing the Monitoring Mechanism Regulation (MMR) is expected to be adopted by April 2018. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • The Albanian Intended Nationally Determined Contribution (INDC) is under revision, as it included only CO2 emissions and no land use, land-use change and forestry (LULUCF) data, due to reliability concerns. The Third National Communication on climate change has been submitted to the UNFCCC in October 2016. So far, no Biannual Update Report (BUR) was submitted to the UNFCCC. • A climate change law, creating the legal basis to fulfil the obligations under the UNFCCC, is planned to be adopted by July 2017. The draft will be submitted for public consultation in February 2017. • In 2015, Albania started developing a National Adaptation Planning (NAP). The NAP – to be adopted by September 2017 - will focus on 15 priority actions (e.g. capacity development, early warning systems, integrated coastal zone management) and be translated into concrete projects. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • Albania's Law on Foreign Investments guarantees full protection and national treatment for foreign investments and allows 100% company ownership by foreigners. In the Law on Strategic Investments, "energy and mining" is a strategic area. Investors benefit from an expedited administrative procedure when investing in energy. Sometimes investors may obtain incentives or more favourable treatment by bilateral negotiations. • Albania has chambers of commerce and a foreign investors association, which organise investor meetings. Membership is not compulsory. • A focal point for investors within the Government should be established, along with a list of tailor-made measures (e.g. incentives and facilities) to increase investor confidence in the energy sector. • Investors in renewable energy cooperate with the Secretariat in their disputes with the Government. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • A number of authorities are dealing with foreign investment: the National Agency of Natural Resources (AKBN), the Albanian Investment Development Agency (AIDA) and the Investment Council. One should be designated as the single administrative contact point for investors. • Lack of transparency, together with corruption and political influence in the judiciary system, have been identified as serious obstacles to foreign investment. • Despite the fact that the Albanian Investment Development Agency offers some information in English, investors need to find their own way in dealing with the Albanian authorities, which may be challenging, expensive and time-consuming. Guidelines for foreign investors in the renewable energy sector should be drafted, translated into English and made publicly available. • Albania is a signatory to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, the ICSID Convention and the Energy Charter Treaty, as well as party to over 40 bilateral investment treaties. 	



I. Improve the Governance for Energy Efficiency

1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO ("energy service companies") contracts, thus developing energy services markets (June 2017)

- BiH is currently developing a legal framework and model contracts for energy performance contracting in public buildings and public lighting.
- While Republika Srpska (RS) adopted an Energy Efficiency Law and an ESCO enabling regulation, the Federation of Bosnia and Herzegovina (FBiH) has not yet adopted a primary energy efficiency law and therefore the ESCO concept is not recognized.
- A Public Private Partnership Law in RS requires the further simplification of ESCO services. In FBiH, only a draft law exists, that needs to be adopted by the Parliament.
- The state level Public Procurement Law should be amended in 2017 in order to allow the use of energy efficiency criteria and the technology life-cycle cost method in the tender evaluation, instead of using the upfront investment cost approach, which is not suitable for ESCO projects.



2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)

- In FBiH, Directive 2010/31/EU is implemented by the 2013 Law on Physical Planning and Land Utilization and several by-laws.
- In RS, the key requirements of Directive 2010/31/EU are implemented by the 2013 Law on Physical Planning and Construction, including energy performance of new and existing buildings, certification of buildings and energy audits of buildings.
- There are no activities related to transposition or implementation of Directive 2010/31/EU in the Brcko District.



3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)

- BiH is currently implementing several projects for rehabilitation of public buildings.
- However, BiH has to further develop long-term renovation strategies and targeted programmes for residential buildings as well.



4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)

- Bosnia and Herzegovina has 22 district heating systems. Their combined capacity is around 1 200 MWth, of which 200 MWth are out of operation. Of these, 64 MW of coal based systems (14%) may be replaced by wood chip based systems (5%). An additional 380 MW based on woody waste could be installed, along with 60 MW based on agricultural waste.
- Currently there are no activities in Bosnia and Herzegovina to adopt a methodology or conduct a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling, based on a country-wide cost-benefit analysis.



5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)

- Within the existing Environmental Protection Fund in FBiH, an Energy Efficiency Revolving Fund (EERF) was set up in 2016 to finance projects in public and residential sectors, industrial processes, energy production and distribution and renewable energy use. The EERF offers soft loans; the first call for proposals was launched in August 2016 for the amount of approx. 1 million EUR.
- In RS, the Environmental Protection and Energy Efficiency Fund (recently launched) can, in principle, finance energy efficiency projects, mostly in the form of grants.
- In 2014, a study supported by the Green Economic Development Programme (UNDP and SIDA) identified the modalities to introduce an energy efficiency window in the existing Environmental Funds in both entities and how to introduce new financing mechanisms such as loans, revolving and performance based grants, guarantees, a guarantee fund and forfeiting.









II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> Support schemes for various technologies were adopted by both entities (feed-in tariff); a competitive procedure to grant support has still to be introduced. 	
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> Currently there is no strategy or legislation in place for citizen participation in renewable energy projects. 	
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> There is not a designated one-stop shop providing guidance and information to citizens willing to invest into renewable energy projects. Burdensome administrative procedures remain a major barrier. 	
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> Within the Tempus programme, the University of Zenica and the University of Mostar are participating to Renewable Energy Studies in Western Balkan Countries (RESI). The new Master's programme "Renewable Energy Sources" was launched by the Faculty of Mechanical Engineering of the University of Mostar for the academic year 2015/16. Three new laboratories (solar, geothermal and wind energy) were also established within the frame of RESI (Faculty of Engineering, University of Mostar). 	
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> A Law on Waste Management has been adopted both in FBiH and RS. FBiH harmonized its waste management legislation with the Strategy on Environmental Protection (2008-2018), covering waste recycling, separation of biodegradable waste, treatment of waste, etc. The implementation of waste management laws and measures remains poor; the involvement of the private sector - for example through public private partnerships in the field of separation and recycling - is also unsatisfactory. 	
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> There are ongoing activities on establishment of energy management skills in public buildings, including trainings on energy management and use of energy management software tools. Further development of a system for training and accreditation of installers and energy managers is planned under the draft Energy Efficiency Action Plan. 	

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • The energy sector (mainly thermal power plants and heating plants) is the most significant in terms of GHG emissions, representing more than 77% of the total emissions. • BiH does not have a clearly defined system for data collection and processing, quality assurance and control of input data, or a reporting and monitoring system. • Nevertheless, the country reported its GHG inventories for the years 2010 and 2011 to the UNFCCC using the revised 1996 IPCC Guidelines. Most of the data were collected according to official statistical publications, questionnaires, sectoral development strategies, approved projects and published papers and by using expert judgement. • In order to align with the MMR, BiH must put in place institutional arrangements and proper legal regulations to fully define competences and responsibilities in this area. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • BiH is reporting regularly to the UNFCCC; two National Communications on climate change (2010, 2013) have been submitted, along with a Climate Change Adaptation and Low-Emission Development Strategy. The Intended Nationally Determined Contribution (INDC, October 2015) and three Biannual Update Reports (BURs, the latest on 18 August 2016) were also submitted to the UNFCCC. • Most of the work has been so far coordinated by UNDP because of limited national capacity; BiH should set up its own system, strengthening institutional capacity and focus on the development of technical models assessing climate change scenarios and impacts in all sectors of the economy. • In addition, BiH's current climate strategy needs to be further revised, due to unreliability of data. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • The Law on the Policy of Foreign Direct Investment grants foreign investors national treatment in Bosnia and Herzegovina. • The Foreign Trade Chamber of Bosnia and Herzegovina is active in promoting investments, but it does not seem to address the sustainable energy sector. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • Compared to other countries in the region, BiH scores poorly when it comes to the ease of doing business due to the legislative and administrative set-up. Important reforms should be carried out, especially with regard to fighting corruption. Legislation in English is easily available; however, guidelines for foreign investors should be compiled. • The Foreign Investment Promotion Agency of Bosnia and Herzegovina promotes investment opportunities in the country, but with no special focus on sustainable energy. It would be appropriate to designate it as the single administrative contact point for investors. • Bosnia and Herzegovina is a signatory of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, the ICSID Convention and the Energy Charter Treaty, as well as party to over 35 bilateral investment treaties. 	



I. Improve the Governance for Energy Efficiency

1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO ("energy service companies") contracts, thus developing energy services markets (June 2017)

- The 2011 Energy Efficiency Law does not mention ESCOs. A new law is under preparation and expected to include provisions on ESCOs and energy services.
- Model energy performance contracts are not available in Kosovo*.
- An energy services market is still not developed and there are many barriers to be removed: ESCO investments are considered as public debt; multi-annual budgeting is not permitted; and public procurement legislation does not foresee ESCO projects and the possibility to procure on a life-cycle cost basis.



2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)

- The Law on Energy Performance of Buildings (transposing Directive 2010/31/EU) was adopted by the Parliament in December 2016.
- A set of secondary legislation required by the new law has already been prepared (including the methodology and software for calculating the energy performance of buildings) and is expected to be adopted soon.



3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)

- Kosovo* is currently implementing a programme for the rehabilitation of 30 public buildings, with international support. Assistance includes the development of local capacity for energy auditing of buildings.
- There are no programmes for residential buildings renovation. This should be developed by the authorities as a priority.



4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)

- District heating represents approximately 5% of the heat supply. The largest part of district heating in Pristina is based on the supply of waste heat from lignite-fuelled TPP "Kosovo* B". The remaining district heating plants (Gjakova, Mitrovica) are based on heavy fuel oil, but only Gjakova is in operation.
- Currently there are no activities in Kosovo* to adopt a methodology or conduct a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling, based on a country-wide cost-benefit analysis. The 3rd EEAP is under development and should include a roadmap for implementation of this measure in the future.



5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)

- Article 11 of the 2011 Energy Efficiency Law stipulates how energy efficiency measures should be funded (e.g. public budget, international financial institutions), without explicitly mentioning an energy efficiency fund.
- The Government is currently considering setting up an Energy Efficiency Revolving Fund (EERF), based on a Concept Note prepared in October 2016.









II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> The Energy Regulatory Office sets feed-in tariffs for small hydro, wind, solar PV, and biomass, as well as a power purchase agreement (PPA) template for producers of renewables (Rule on Support Scheme). A competitive procedure to grant support has still to be introduced. 	⏸
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> Currently there are no strategies in place addressing participation of citizens in renewable energy projects. 	🛑
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> Although administrative procedures have been streamlined in the past few years, the lack of information at local level, limited access to capital and complex authorization procedures for water, forests and land use are preventing the development of renewable energy projects. A one-stop shop does not exist. 	🛑
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> The Faculty of Mechanical Engineering (University of Pristina) has a certified Bachelor's programme on "Renewable Energy Systems". The Faculty of Construction and Architecture (University of Pristina) developed a Master's programme on "Energy Efficiency". 	▶▶
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> Kosovo* adopted a Strategy on Waste Management for 2012-2021. However, this strategy does not focus on waste to energy. 	⏸
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> A training and certification system for energy auditing and energy management in Kosovo* is required by the Energy Efficiency Law and further regulated by secondary regulation and measures under the EEAP. A Commission for certification of energy auditors and managers was established by the Ministry of Economic Development to manage the system. The 2016 Law on Energy Performance of Buildings includes requirements for the licensing of experts dealing with energy certification of buildings and the inspection of heating and air-conditioning systems, as well as the establishment of an independent control system. The Ministry of Economic Development is responsible for the certification and specification of training requirements of independent experts. 	▶

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • Kosovo* is not a party to the UNFCCC, however, it intends to align its legislation and policy framework to the EU climate acquis. A reference to climate change was introduced in the Environment Protection Law, followed by the adoption of several administrative instructions, including on the establishment of a GHG inventory. • In 2012, Kosovo* developed its first GHG inventory, covering the period 2008-2009. Carbon dioxide represented around 80% of all emissions, while methane and nitrous oxide together represented around 10%. The combustion sector is the most important source of GHG emissions, representing roughly 80% of all emissions. • A new GHG inventory, using 2006 IPCC guidelines, is expected to be finalized by the end of the year. • A National Council on Climate Change has been established. A working group involving a large number of stakeholders and experts is responsible for data collection and the preparation of an inventory report. • Kosovo* has already adopted an administrative instruction for transposing the MMR into national law and is in the early stages of implementation. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • Kosovo* has developed a Climate Change Framework Strategy (CCFS), identified as a priority in the National Environmental Strategy. It consists of two components: a Low Emission Development Strategy (LEDS) and a National Adaptation Strategy (NAS). • One of the key challenge identified is to set meaningful mitigation objectives in terms of quantitative emission reduction targets. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • The Law on Foreign Investment grants foreign investors fair and equitable treatment and protects them against illegal expropriation. • The Kosovo* Chamber of Commerce is the leading business association, providing useful information on its website. The American Chamber of Commerce seems to be particularly active in disseminating information about the investment environment. • A focal point for investors should be established; the Government will have to adopt a roadmap with tailor-made measures to increase investor confidence in the energy sector. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • Administrative efforts are being made, especially regarding the ease of doing business. Legislation is available in English. However, Kosovo* scores very poorly when it comes to corruption. • The Kosovo* Investment and Enterprise Support Agency, subordinated to the Ministry of Trade and Industry, is responsible for promoting and protecting investment. It mainly promotes investment in lignite exploitation, and only marginally mentions the country's renewables potential. Ideally, it should be designated as the single administrative contact point for investors. Guidelines for investors in the renewable energy sector should be drafted, translated into English and made publicly available. • Kosovo* is a signatory of the ICSID Convention; its Law on Foreign Investment also provides for UNCITRAL and ICC arbitration. The country seems to have entered around 30 bilateral investment treaties. 	



I. Improve the Governance for Energy Efficiency





<p>1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO (“energy service companies”) contracts, thus developing energy services markets (June 2017)</p> <ul style="list-style-type: none"> The energy services market is not yet developed in former Yugoslav Republic of Macedonia. The current legislation (Energy Law) covers the ESCO concept only superficially, without including all the aspects needed to enable ESCO contracting. Energy service contracting is tailored mainly to the public sector by using the legal provisions described in the 2015 Law for Concessions and Public Private Partnership. The 2007 Public Procurement Law does not stipulate any special rules related to the procedure for the award of public procurement agreements to ESCOs and it is not suitable for them. Also, according to the Law on Financing of Municipalities (2004) and the Law on Budgeting (2005), public sector entities are not allowed to borrow on their own, but via the Ministry of Finance. Public budgeting is not possible on a multi-year basis. 	
<p>2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)</p> <ul style="list-style-type: none"> Directive 2010/31/EU has been partially transposed by the Energy Law and the 2013 Rulebook on Energy Performance of Buildings. The country should adopt the draft energy efficiency package comprised of a new regulation stipulating minimum energy performance requirements of buildings, a national calculation methodology, energy performance certification of buildings and inspection of heating and air-conditioning systems. 	
<p>3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)</p> <ul style="list-style-type: none"> A good model in form of a small revolving loan for the implementation of energy efficiency measures in 31 buildings for collective housing was implemented, but later discontinued. A comprehensive residential buildings programme should be developed and adopted by the national authorities. The Ministry of Economy runs a small programme (100.000 EUR annually) of subsidies for installation of solar thermal collectors in households. A draft National Programme for Energy Efficiency in Public Buildings (NPEEPB) was developed to ensure large scale refurbishments of public buildings. However, it has not been adopted until now. The new draft 3rd EEAP envisages the official start of the NPEEPB in 2017, after the establishment of a national energy efficiency fund. It also envisages the preparation of a strategy for mobilising long-term investments in residential and commercial buildings during 2017. 	
<p>4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)</p> <ul style="list-style-type: none"> The existing district heating system in Skopje has an installed capacity of 660 MW, supplied by natural gas, representing approx. 7% of the total heating demand. A district heating system based on waste heat from the thermal power plant in Bitola is under construction. An additional 240 MW could be supplied with wood chips to multi-storey apartment buildings, replacing approx. 19% of the electric heating. Currently there are no activities in former Yugoslav Republic of Macedonia to adopt a methodology or conduct a comprehensive assessment of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling, based on a country-wide cost-benefit analysis. 	
<p>5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)</p> <ul style="list-style-type: none"> The Energy Law provides for the establishment of an Energy Efficiency Fund, which would disburse support for the public and private sectors when implementing obligations under the law and help foster the development of an ESCO market. The Government has not taken a decision on the structure of an energy efficiency revolving fund yet. A 2011 World Bank report recommend options for financing energy efficiency investments in public sector buildings, including establishment of an energy efficiency revolving fund. 	

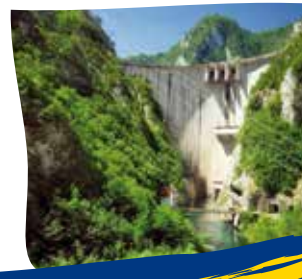


II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> Former Yugoslav Republic of Macedonia has established feed-in tariffs for small hydro, wind, solar PV, and power plants using biogas and biomass. Eligible renewable energy developers receive the feed-in tariff via a power purchase agreement (PPA) with the market operator, valid for 20 years for wind farms and small hydro and 15 years for the other technologies. A feed-in premium should be introduced once there is a competitive liquid market; otherwise, a competitive procedure to grant support based on auctions should be implemented. 	
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> Currently there is no strategy or legislation in place which supports citizen participation on renewable energy projects. Citizens are incentivized to use water heating from solar energy through a „lottery system“ (public drawing); selected citizens can be reimbursed for up to 30% of their investment, up to a maximum of 300 EUR. 	
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> The City of Skopje and the Energy Agency established two information centres for dissemination of benefits from improved energy efficiency and utilization of renewables in the country. Information on feed-in tariffs and supporting measures for using renewables in heating and cooling are published on the Ministry of Economy's official website and Official Gazette. 	
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> The South East European University of Skopje offers a Master on energy management and sustainable development, with a focus on energy efficiency and renewable energy technology. The Faculty of Electrical Engineering and Information Technologies of SS. Cyril and Methodius University of Skopje offers specialized first degree studies on power systems, automatization and renewables as well as a Master of Science course in renewable energy sources and energy efficiency, environment and sustainable development. 	
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> Former Yugoslav Republic of Macedonia has improved its administrative capacity and started to implement an integrated waste management system, based on the Law on Waste Management and the National Waste Management Strategy (up to 2020). Municipal waste is mainly disposed in landfills; some examples of biogas plants using farm waste to produce electricity exist at rural level (e.g. Bitola, Veze Sharri). 	
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> A national scheme for training and qualification of energy auditors is being implemented since 2013, following the requirements of the Law on Energy, the rulebook on energy audit and the programme for training and examination of energy auditors. Former Yugoslav Republic of Macedonia is participating to the project “Build Up Skills”, which is dedicated to the professional training of craftsmen and other on-site construction workers and system installers in the building sector and small renewable installations. The Government intends to launch training programmes to motivate SMEs to implement the energy management standard ISO 50001. 	

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • Former Yugoslav Republic of Macedonia is preparing a GHG inventory since 2000, using 2006 IPCC methodology. The last National Inventory Summary Report was submitted to the UNFCCC in 2014, along with the Third National Communication on climate change. • Data on GHG emissions are verified by the National Academy of Sciences and Arts. • In order to align with the MMR, the institutionalization of the GHG inventory system is necessary; this is already mentioned in the Law on Environment. • Moreover, the Government should fully define competences and responsibilities in this area; for the time being, the Macedonian Environmental Information Centre (MEIC) – currently an organizational unit within the Ministry of Environment and Physical Planning (MEIC) - is in charge of collecting, processing and presenting official data. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • Three National Communications on climate change were submitted to the UNFCCC, the most recent one in 2014. • The Intended Nationally Determined Contribution (INDC) was adopted on 5 August 2015, with a 30% emission reduction compared to BAU scenario. The Biannual Update Report (BUR) was submitted to the UNFCCC in February 2015 and the summary reports on the technical analysis in September 2015. • Despite most of the reporting obligations being fulfilled, the work of Former Yugoslav Republic of Macedonia in this area is mainly project-based. It would be important to further develop national capacity on climate change and set-up an analytical unit responsible for emission monitoring and systematic reporting. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • Former Yugoslav Republic of Macedonia does not have a law on foreign investment; investment conditions are regulated in a number of sectoral laws as well as the Law on Trading Countries and the Law on Foreign Exchange Operations. • The Macedonian Chamber of Commerce provides information and legal advice for investors and is the largest business organisation in the country. • While procedures have been simplified and investor guides for various renewable energy technologies are available on the Ministry of Economy's website, a one-stop shop is still missing. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • The country carried out intensive reforms regarding the ease of doing business and investment laws; information for investors has been compiled and made available in English. • The Agency for Foreign Investments and Export Promotion (Invest Macedonia) is the primary governmental institution in charge of attracting foreign investment; it could be designated as the appropriate single administrative contact point for investors. • Former Yugoslav Republic of Macedonia is a signatory of the ICSID Convention, the Energy Charter Treaty and the New York Convention. It is also party to over 20 bilateral investment treaties. 	



I. Improve the Governance for Energy Efficiency

1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO ("energy service companies") contracts, thus developing energy services markets (June 2017)

- The energy services market is in the process of development. Montenegro adopted an enabling legal framework (articles in the Law on Efficient Use of Energy) and drafted model contracts for energy performance contracting in public buildings, water supply systems and public lighting.
- The 2014 Law on Efficient Use of Energy regulates energy services and requirements for energy performance contracting. No special registration, certification or accreditation of ESCO companies is required.
- The 3rd National Energy Efficiency Action Plan, adopted in June 2016, envisages the promotion of participation of ESCOs in public sector energy efficiency projects, through the implementation of pilot projects, the completion of an enabling legal framework and the supporting financial mechanisms. A draft Public Private Partnership Law should be adopted, multi-annual budgeting issue resolved to enable implementation of ESCO contracting.



2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)

- Directive 2010/31/EU has been transposed through the 2014 Law on Efficient Use of Energy.
- The rulebooks adopted in December 2015 further implement the law; this package introduced a calculation methodology and set minimal energy performance requirements.
- The Ministry of Economy is developing a calculation software and inventory of buildings, necessary for cost-optimal calculations. This will improve the energy performance certification scheme and issuance of certificates, obligatory from January 2016.



3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)

- The 2016 decree on reconstruction of official buildings set a 1% reconstruction target for central government buildings, prioritizing buildings with the lowest energy performance.
- A three-year plan for the reconstruction of central government buildings will be adopted by the end of 2016. It will include specific measures and an inventory of buildings.
- Montenegro is currently implementing several successful projects for public and residential buildings rehabilitation in cooperation with international and local partners.
- A residential buildings rehabilitation programme should be developed; some energy efficiency initiatives in the residential sector are supported by the Energy Efficiency Fund, but a comprehensive national programme is needed.



4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)

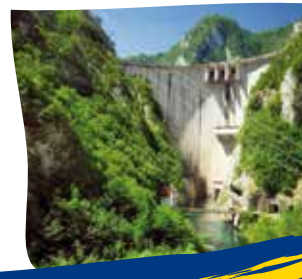
- There are no district heating systems in Montenegro. The main heating sources are biomass (68%) and electricity (28%). The largest share of stand-alone buildings is heated by inefficient firewood stoves, followed by individual electrical appliances. The same heating pattern is in the majority of dwellings in multi-storey buildings.
- High efficient cogeneration and district heating and cooling measures have been incorporated in the 2016 Action Plan of the Energy Development Strategy of Montenegro, including use of biomass, gas, heat pumps, municipal waste and waste heat.
- A study for evaluating the potential of high-efficient cogeneration and the introduction of district heating and cooling system will be completed by 2017.
- A set of by-laws (under the energy law) which will define in detail the application of efficient district heating and cooling systems is planned to be completed by 2017.



5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)

- Since 2006, a budget line called "Energy Efficiency Fund" is allocated each year from the state budget. In 2016, the allocation was 150.000 EUR. The Fund supports measures under the Energy Efficiency Action Plan. Given the small yearly allocations, the impact is limited and much smaller than the overall budget needed for implementation of 3rd NEEAP (2016-2018).
- The Government is currently analysing options for financing of energy efficiency projects, including the possible establishment of a national energy efficiency fund.









II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> Montenegro is supporting electricity producers using renewables through guaranteed purchase of electricity at feed-in tariffs for a period of 12 years. So far, eight contracts were signed with private investors, while ten new contracts are currently being approved. The 2015 Energy Law grants support for the use of renewables and high-efficiency cogeneration based on auctions. In 2017, the Government intends to adopt concrete measures on support to biofuels producers. 	
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> Montenegro does not have legislation concerning citizen participation in renewable energy projects. One pilot project, Solarni Katuni, is related to the installation of PV for private use in off-grid, summer pasture lands. Self-consumption of electricity is not foreseen by the legislation. Individuals or small communities that intend to install solar PVs are hampered by lengthy administrative procedures. Also, applications are currently on hold due to the lack of transmission and distribution capacities. For solar thermal heating, no permit is required. Citizens can even apply for up to a 5.000 EUR loan with no interest rate (e.g. Montesol project). Citizens are also incentivized by an interest-free credit line (individual loans of 3.500 EUR) to invest in heating systems on modern biomass fuel (pellets, briquettes). Informative billing and the wide deployment of smart meters reach about 70% of customers. 	
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> The Ministry of Economy provides assistance to individuals through dedicated websites (www.energetska-efikasnost.me, www.oie-res.me). A one-stop shop does not exist. The official websites of the Ministry of Sustainable Development and Tourism and the Montenegro Investment promotion Agency (MIPA) also provide relevant information on permitting, construction and licensing. Moreover, a number of dedicated workshops are regularly organized by the ministries and the Chamber of Commerce. 	
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> Montenegro is part of the European Union's Tempus programme, which supports the modernization of higher education in the Western Balkans. Within this framework, the Faculty of Civil Engineering of the University of Montenegro launched in 2014 a postgraduate Master's programme on energy efficiency. The Faculty of Architecture and the Faculty of Mechanical Engineering have similar Master's programmes. 	
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> The Waste Management Law (2011) was amended in 2016. A new National Strategy and Action Plan on Waste Management are drafted but their adoption is pending. Currently, there are many illegal landfills throughout Montenegro representing a health and environmental risk. Some recycling installations are operational (e.g. Podgorica, Nikši) but waste (co-)incineration plants do not exist. Although a project consisting of using municipal waste for cogeneration in Podgorica was proposed in the past, it has not been realized; a study assessing different scenarios and possibilities for waste management (including incineration of solid waste and contribution to energy production) has been finalized in 2015. Results from the study were taken into consideration for the development of the National Environmental Approximation Strategy. 	
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> Training of energy auditors and building assessors is ongoing since 2009, and regulated by a rulebook updated in 2015. Registers of experts, as well as eligible dealers and installers are being regularly updated and published online. The development of a system for training and accreditation of installers and energy managers is planned under the 3rd Energy Efficiency Action Plan and is expected to be implemented by 2018. 	

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • The legal basis for the collection of data on GHG emissions is established by the Law on Air Protection. In addition, a Rulebook on the development of GHG inventories partially transposes the Monitoring Mechanism Regulation (MMR). It would be important to formally establish the inventory system and have concrete obligations to report also on policies and measures. Nevertheless, so far the system has been carried out on an informal, voluntary basis, since the Government does not have the legal instruments to force operators that refuse to share information. • The main challenge for the implementation of the MMR will be the development of low carbon strategies. There is no capacity assigned to this task. • Emission projections could also be problematic; past work was mostly consultancy-based and there is no national capacity in place. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • Montenegro adopted its Climate Strategy and submitted its Intended Nationally Determined Contribution (INDC) to the UNFCCC (without an adaptation strategy) in September 2015. Currently the INDC is being transformed into action plans, with the addition of the financial component. The country will ratify the Paris Agreement in April 2017. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • The Foreign Investment Law guarantees national treatment for foreign investors. • The Chamber of Economy of Montenegro has a committee for Energy Efficiency and Environment. The Chamber organises meetings with investors and acts as a mediator between businesses and authorities. The Department for Investment within the Ministry of Economy is very active and could act as a focal point. • Tailor-made measures to increase investor confidence should be developed by the Government. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • Montenegro scores highly in the ease of doing business category among the countries in the region. Most of the legislation and information about the procedures are available in English. Montenegro also seems to be making serious efforts in combating corruption. • The directorate for transformation and investments within the Ministry of Economy and the Secretariat for Development Projects are dealing with the promotion of investments, even though the latter focuses on tourism. One of the authorities dealing with foreign investment should be designated as a one-stop shop and act accordingly; guidelines for foreign investors in the renewable energy sector should be adopted and made available in English. • Montenegro is a signatory of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, the ICSID Convention and the Energy Charter Treaty, as well as party to over 25 bilateral investment treaties. 	



I. Improve the Governance for Energy Efficiency




<p>1. Removing legal and regulatory barriers through amending or developing new legislation that will enable and promote ESCO (“energy service companies”) contracts, thus developing energy services markets (June 2017)</p> <ul style="list-style-type: none"> The energy services market is moderately developed in Serbia. Serbia has analysed and developed an enabling legal framework (incl. ESCO rulebook with model contracts) for energy performance contracting in public lighting and public buildings. The Law on Efficient Use of Energy defines the ESCO concept, sets rules for ESCO projects and provides the overall legal framework for energy performance contracting. A number of public lighting ESCO projects are currently being tendered. No significant changes are needed in the public procurement legislation to make the ESCO and energy performance contracting entirely feasible in Serbia. The Rulebook (under the Law on Efficient Use of Energy) regulating the minimum criteria with respect to energy efficiency in public procurement procedures was adopted in October 2015, thus facilitating performance contracting. 	
<p>2. Fully implementing the Energy Performance of Buildings Directive, especially the setting of minimum energy performance standards as a pre-requisite for large scale buildings rehabilitation programmes (June 2017)</p> <ul style="list-style-type: none"> The Law on Construction and Planning, the Law on Efficient Use of Energy, the Rulebook on Energy Efficiency of Buildings and the Rulebook on Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings transposed some provisions of Directive 2010/31/EU. The information system for the collection of data on issued energy performance certificates has been established. Full transposition of Directive 2010/31/EU and implementation of certain provisions (i.e. cost-optimal calculations and update of existing rule-books) is pending. 	
<p>3. Establishing well targeted programmes for public and residential buildings rehabilitation to the minimum energy performance and beyond, with particular focus on increasing the use of locally available renewable energy sources (decentralized solar-thermal heating, efficient biomass heating, high efficient heat pumps etc.) (March 2018)</p> <ul style="list-style-type: none"> Two significant programmes for rehabilitation of public buildings (schools and hospitals) are currently being implemented. In 2015, the state Budgetary Fund for energy efficiency financed energy efficiency measures in public buildings in 11 municipalities. The future focus should be put on a residential buildings rehabilitation programme, that still needs to be developed; as a first step, Serbia prepared a national typology of residential buildings. 	
<p>4. Assessing in details the possibilities for developing new or converting existing district or central heating and cooling systems using renewable energy, such as biomass or geothermal (November 2018)</p> <ul style="list-style-type: none"> There are 53 district heating systems based on heat-only boilers using natural gas, coal, and heavy fuel oil; the largest four (Belgrade, Novi Sad, Nis, and Kragujevac) account for 60% of installed capacity. Only Belgrade and Požarevac are supplied by a coal-fired cogeneration TPPs. Serbia has the greatest potential in terms of biomass with the possibility to replace 50% of the fossil fuel in district heating with biomass (agriculture and wood chips). Three stages of the “Programme for Rehabilitation of District Heating Systems in Serbia” have been implemented, while the fourth one on promotion of biomass and geothermal energy use is ongoing and will be finalized in first half of 2018. Several modern biomass plants for heating and process heat have been installed in the region of Vojvodina since 2008. For example, in Sremska Mitrovica, an 18 MW district heating plant is fired with sunflower husks. Victoria Group, a large agribusiness company, has installed a total capacity of 40 MWth (fired by different agro-biomass fuels) to be used in the processing plants of the company. There are currently eight heating plants running on pellets, and four running on briquettes produced from field crop residues. The draft 3rd EEAP includes new measures for reduction of primary energy consumption, including reconstruction of several district heating systems. 	
<p>5. Analysing options for the establishment of appropriate financing mechanisms, including a state level fund for co-financing of energy efficiency measures in line with the Energy Efficiency Directive 2012/27/EU, especially for the public sector (June 2018)</p> <ul style="list-style-type: none"> The 2013 Law on Efficient Use of Energy requires the establishment of the Budget Fund for Energy Efficiency Improvement for the purpose of financing energy efficiency measures. The fund was established at the end of 2014. Funding is open only to municipalities. In 2015, the Energy Efficiency Budget Fund had a budget of approx. 1,5 million EUR that was invested in 11 projects. In 2016, the Budget Fund was allocated 1,3 million EUR from the public budget and an additional 500.000 USD from GEF. In the first call, 15 projects were selected; another call will be finalized before the end of 2016. Nevertheless, given the large scale of energy efficiency investments needed, the Energy Efficiency Budget Fund has a very small impact. Moreover, the decision on the amount allocated is made by the Ministry of Finance on a yearly basis and implemented in calls for projects by the Ministry of Energy and Mining. This system does not allow effective monitoring and timeline guarantee. 	



II. Implement Smart Support Measures Improving Sustainability of Energy Systems

<p>1. Designing and implementing market-based support schemes for the promotion of renewable energy, if needed, therefore ensuring a more cost-effective renewable energy deployment compliant with the Energy Community rules (June 2017)</p> <ul style="list-style-type: none"> • Support schemes in the form of a feed-in tariff have been fixed for various renewable energy technologies, along with specific by-laws on measures and a procedure for acquiring the status of privileged producer (guaranteed for a period of 12 years) and a standard model for power purchase agreements (PPA). • Renewable energy quotas have been fixed by the Government in the NREAP to 2020 (e.g. 500 MW for wind, 10 MW for solar PV). • The Ministry of Mining and Energy must review its framework and introduce market-based support schemes in 2019 (e.g. granting the aid in a competitive procedure and in the form of a feed-in premium) as required by the State Aid Guidelines for Environmental Protection and Energy 2014 - 2020. 	
<p>2. Developing effective strategies enabling the voluntary participation and engagement of citizens in renewable energy projects (June 2018)</p> <ul style="list-style-type: none"> • The quota devoted to small scale solar projects was very small and almost entirely exhausted by 2016. Moreover, citizen participation in renewable energy projects is not addressed by current legislation. • The available legislation on cooperatives is sufficiently wide to possibly include community power initiatives. The adoption of the new action plan for the energy sector - to be adopted early next year as follow-up to the Energy Strategy – should include concrete measures and a more prominent role for community power projects. • Citizens wanting to install small-scale solar PV should get the approval from system operators. 	
<p>3. Providing suitable information and guidance in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources (June 2018)</p> <ul style="list-style-type: none"> • The website of the Ministry of Energy and Mining is very informative and regularly updated. It includes information on legislation, regulations, projects, quotas and investment opportunities; when it comes to administrative procedures (e.g. authorization, licensing and connection), there is still no one-stop shop as required by the revised Law on Construction and Planning. 	
<p>4. Including energy efficiency and use of renewable resources in education and offering professional training (June 2019)</p> <ul style="list-style-type: none"> • Energy efficiency and renewable energy are not included in school curricula. • As a part of the programme Higher Education, Research and Development in the Western Balkans (HERD), the University of Belgrade is cooperating with the Norwegian University of Science and Technology (NTNU) to introduce new Master's programmes in the field of sustainable energy and environment in a number of partner universities. • The University of Belgrade (Faculty of Architecture) is offering a Programme on Energy Efficient and Green Architecture. • Professional training for energy managers, energy auditors and experts for certification of buildings is well established and conducted by the authorized institutions. 	
<p>5. Developing a strategy for collection and use of municipal waste for electricity and heat generation, in both public and private sectors (November 2018)</p> <ul style="list-style-type: none"> • The Waste Management Strategy of Serbia (2010-2019) refers to incineration of waste, together with its energy use and integrated approaches to waste management (reduction, re-use and recycling). • The recently adopted decree on incentive measures for renewable energy sources includes support also for power plants using municipal waste as fuel. However, the administrative procedures to perform energy-related activities are quite lengthy. • An example of waste-to-energy is the rehabilitation of the Vinca landfill site into a facility converting waste into electricity and heat for the district heating system. The project is in its early stages, with five private companies shortlisted to cooperate with the City of Belgrade (public private partnership model). The installation should be operational by the end of 2019. • Streamlined procedures and a strategy focused solely on waste-to-energy to be developed within a shorter time span should be introduced. 	
<p>6. Setting up qualification / accreditation / or certification schemes to develop the necessary skills and competences of small and medium enterprises / individuals to offer services in the areas of energy efficiency and renewables (building assessors, energy auditors, installers etc.) (June 2018)</p> <ul style="list-style-type: none"> • Trainings, qualification, accreditation and certification schemes for energy auditors and energy managers are defined by the Law on Efficient Use of Energy and the set of rulebooks adopted in 2015. Trainings and first professional certifications were conducted in 2016 for energy managers in municipalities and industry, and will in 2017 continue for the buildings sector. • The energy performance certification of buildings is regulated by the 2012 Rulebook on the Conditions, Content and Manner of Issuance of Certificates of Energy Performance of Buildings. More than 1.500 experts have been trained and accredited. An online database of experts, organisations and certificates is available (http://www.crep.gov.rs). • The current legislation does not prescribe similar schemes for small and medium enterprises (e.g. energy service providers) and installers of energy-related building elements. 	

III. Foster Climate Action and Transparency of Sustainable Energy Markets

<p>1. Reviewing the national greenhouse gas emissions monitoring and reporting systems with a view to align with the Regulation (EU) No 525/2013 (March 2018)</p> <ul style="list-style-type: none"> • The legal basis for a national GHG inventory is established by the Law on Air Quality; additional legislation transposing the MMR is to be finalized only by the end of 2018. • The competent authority for data collection is the Environmental Protection Agency (EPA). EPA started to prepare the inventories in early 2013, covering the period 1990 – 2013, and updates the inventory on a regular basis. The country is using the methodology of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. • Doubts remain on the quality of the data gathered which results in a certain level of uncertainty about the preciseness of the inventories. For the time being verification is carried out mainly by EPA, with serious constraints in terms of human resources. 	
<p>2. Identifying gaps between current practices in monitoring, reporting and planning on climate and energy policies domestically and meeting the international reporting obligations (March 2018)</p> <ul style="list-style-type: none"> • A key challenge for approximation to the MMR identified by the ministries is the need of mainstreaming climate change in all sectors (energy, transport, etc.). • A new National Climate Change Strategy will revise Serbia's Intended Nationally Determined Contributions (INDCs). The strategy will be adopted by the end of 2018. • A law that transposes the MRV provisions of the EU Emissions Trading Scheme (ETS) is expected to be approved by the Government still in 2016. It will enable Serbia to establish a proper verification platform. From 2018 onwards, reporting will have to comply with the new legislation. • One National Communication on climate change (2010) and the Biannual Update Report (BUR, 2016) were submitted to the UNFCCC. • Additional training on cost-benefit analysis would be necessary for the Government to understand the cost of concretely implementing climate measures. 	
<p>3. Establishing national indicative roadmaps for implementing measures required to increase investor confidence in sustainable energy markets</p> <ul style="list-style-type: none"> • Serbia's Law on Investments is a general framework for direct investments in Serbia. It guarantees national treatment, full protection and security for foreign investors, as well as protection from illegal expropriation. • On investment incentives, the Council for Economic Development and the Serbian Agency for Development are the leading institutions. • Serbia has a few chambers of commerce, out of which the Chamber of Commerce and Industry of Serbia seems the only one active in supporting investors. Together with UNDP, it is establishing an online platform called "Green Energy", where renewables investors will find all relevant information. It will also be used as an energy trading platform. • A focal point for investment within the Government should be established urgently, along with a list of tailor-made measures to increase investor confidence, including incentives and facilities for the energy sector compliant with State aid legislation. 	
<p>4. Strengthening the capacity of national administrative authorities to oversee and govern the national and regional sustainable energy markets in an independent, proactive and transparent manner</p> <ul style="list-style-type: none"> • There is still no one-stop shop as required by the revised Law on Construction and Planning. Red-tape is a significant obstacle for investing in Serbia. Also, guidelines for foreign investors in the renewable energy sector should be prepared in English and made publicly available. • The Development Agency of Serbia (RAS) should be acting as a single administrative contact point for investors. The information on their website is not comprehensive and the agency should improve its transparency and openness. A schedule of informational meetings for foreign investors should be also prepared. • Serbia is a signatory of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, the ICSID Convention and the Energy Charter Treaty, as well as party to almost 50 bilateral investment treaties. 	