TOWARDS SUSTAINABLE ENERGY

with civil sector and industry in Serbia

ASOR

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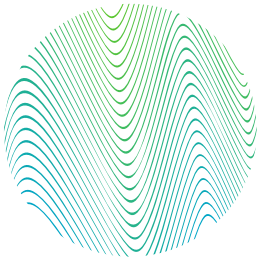

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LIST OF ACRONYMS	
EK	Evropska komisija
EC	European Community
EU	European Union
EPS	Elektroprivreda Srbije
EMS	Elektromreza Srbije
EnC	Energy Community
PCL	Law on Planning and Construction
LCP	Large Combustion Plants Directive
IED	Industrial Emissions Directive
NERP	National Emission Reduction Plan
LEC	Local Energy Communities
DSO	Distribution System Operator
RES	Renewable Energy Sources
RS	Republic of Serbia
SAA	Stabilization and Association Agreement
EnCT	Treaty establishing the Energy Community

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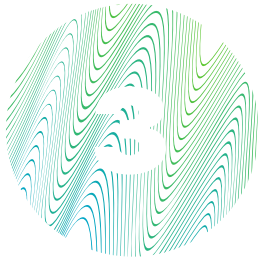


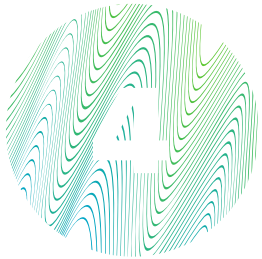
WE ALL PAY FOR THE CONSEQUENCES OF UNSUSTAINABLE ENERGY

The question arising at the beginning is what sustainable energy represents? The impression is that this phrase is used in many contexts, so there is a risk of losing its right meaning. Sustainability in the field of energy represents the adoption of energy and environmental policies, which at the same time enable economic growth. On the other hand, energy policy is the way in which the state decides on the creation and development of the energy sector, that is, the sector of production, transmission, distribution and consumption of energy. As a result, a strategic and legal framework is adopted at the national level, which is in line with international treaties and other international acts. From these definitions, it is noted that sustainability is actually a link between energy and environmental protection; therefore it represents a balance between social, economic and environmental goals. In practice, sustainability means that we all today meet our needs without incurring any costs to future generations, which encourages us to think of sustainability in the long run.

One must not ignore that environmental sustainability is just one of the elements of the energy trilemma, which also includes energy security and energy equity, that is, equal availability and accessibility of energy supplies. It is precisely the element of environmental sustainability that has been recognized as the weakest point of the Republic of Serbia (hereinafter: RS) in the 2018 Energy Trilemma Index, where Serbia occupies 73rd place. Namely, the World Energy Council ranks the general effect in achieving a sustainable policy mix in as many as 125 countries, and the final result shows how well the states balance the elements of the energy trilemma. Denmark, Switzerland and Sweden are among the top ranked countries, and among the Energy Community (hereinafter: EnC) countries, there are Montenegro (49), Macedonia (63), Georgia (69), Albania (79) and Moldova (97).

There is a broad scientific consensus that the current mode of production and use of energy is not on a sustainable path. If the trends affecting global climate system change continue, the consequences will be felt by everyone. According to the United Nations Environment Program data, production and use of energy are responsible for as much as two-thirds of the emissions of greenhouse gases produced by human activity. In October 2018, the Intergovernmental Panel on Climate Change issued a Special Report on the effects of global warming at the invitation of the United Nations Framework Convention on Climate Change.

According to research, it is likely that in the period 2030-2052 global warming will reach 1.5°C. The fact is that we already feel the effects of warming of 1°C, such as extreme weather conditions and sea level rise. Therefore, the Report warns that if we want to reduce the risks and remain at the level of global warming of 1.5°C, urgent and



far-reaching actions are necessary, which will be crucial in the coming years.[1]

We can already feel the consequences of irresponsible energy policy. Unsustainable patterns of production and use of energy not only threaten ecosystems and contribute to climate change, but also affect human health and quality of life. According to the 2017 European Environment Agency Report data, air pollution with fine dust particles is the cause of more than 400.000 premature deaths in Europe. Study named "The unpaid health bill - how coal power plants in the Western Balkans make us sick" of Health and Environment Alliance warns that economic cost of early deaths from air pollution in Serbia is at 33.5% of national GDP. At the same time, in 2013, thermal power plants produced more than 80 percent of national SO2 emissions and half of NO2 emissions. As the most common consequences for human health there are problems with the lower respiratory tract, chronic bronchitis and asthma, but also cases of hospitalization due to cardiovascular problems and premature death. [2]

A path towards sustainable energy is a necessity, taking into account pollution caused by the operation of the energy sector. This has been recognized by the European Union (hereinafter: the EU) in a new energy package, based on changing the paradigm of energy policy, integration with climate policy and putting consumers at the center of energy transition. Bearing in mind the process of European integration of the RS, when discussing harmonization with new EU tendencies in energy policy, momentum currently in place and new EU energy legislative framework envisaged for 2030 should also be taken into account. A comprehensive transition is not possible without the involvement of all stakeholders, since the new approach does not aim only to change the behavior of existing participants and their activities, but also to introduce new active participants to the market.

EU ENERGY TENDENCIES

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It is often mistakenly interpreted that the EU imposes on member states and consequently to candidate countries either, what their national energy mix should be. The determination of energy mix in the EU is considered a matter of national interest and is the subject of national plans (see Article 194 of the Treaty on the Functioning of the EU). Therefore, it is up to each country to decide what its future energy mix will be, applying thereupon the principles of ensuring security of supply, competitiveness, market transparency, non-discrimination, etc. Once countries reach a common agreement towards sustainable energy and achievement of goals, such as the 2030 goals in the EU, the countries are certainly to comply with such agreement. By reaching the agreement, in this case, the states agreed to create a specific energy mix for purposes such as protecting the health of the population as well as the environment.

The precondition for creating a sustainable energy policy is to achieve political agreement and consensus on the essential points. In October 2014, an agreement was reached in the EU on the 2030 Strategy, which contains targets for the period 2020-2030. Namely, in order to reach the long-term goal of reducing greenhouse gas emissions for 2050, it was agreed that by 2030 this emissions should be reduced to 40% compared to 1990. [3] In addition, the achievement of at least 27% of the share of energy consumption from renewable sources has been agreed, as well as raising energy efficiency to at least 27%, as well as the support to the internal market in order to reach the goal regarding the existing interconnections of electricity up to 10% by 2020, with the prospect of reaching a level of 15% by 2030.[4] The goals are determined as a result of a detailed economic analysis, which measures the most cost-effective way to achieve the decarbonization of the sector by 2050. With this, the EU sent a message to the market to encourage investments in technologies with low carbon emissions. The logic behind this message is that the costs of achieving these goals are not necessarily different from the price that the EU would have to pay to replace the worn-out energy system. Therefore, the main financial effect of decarbonization will be to redirect costs from sources of (fossil) fuels to technologies with low carbon emissions. Interestingly, the first idea of the new management system appeared already in 2015, which was based on national plans following a common EU approach, in order to ensure greater investor safety, better transparency, increase the coherence of policies and improve coordination within the EU.[5] These national plans are precursors of the proposal of Governance Regulation as well as precursors of integrated energy and climate plans that will be discussed in detail later.

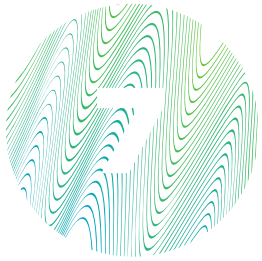
In order to translate the goals of the 2030 Strategy into policies, in the EU, in 2015, the Energy Union was recognized as one of the priorities. The European Commission (hereinafter: the EC) assigned a task to unite Member States on the path to a cleaner energy mix.

The EC therefore defined the field of operation of the Energy Union. As shown in Figure 1, the Energy Union focuses on energy security and solidarity; then on the integration of the internal energy market; stimulation of development, innovation and competitiveness in the market; it also recognizes the process of decarbonization of the economy where renewable energy sources (hereinafter referred to as: RES) are emphasized as a key factor, and last but not least, it works on moderation of demand, which in practice means focusing on energy efficiency.

Figure 1

Fields covered by the Energy Union

In order to implement these goals, the EC created a proposal of a new legislative package in the field of energy - the Clean Energy Package. The new EU legislative package, launched in November 2016, aims to provide clean energy for all Europeans. As a solution to the problem of energy impacts on climate change, decarbonization process is recognized, with the focus being on increasing the share of RES and the implementation of energy efficiency measures. The electricity sector has the key role in the decarbonization of the economy in general, so it was the focus of this project, either. In order to work towards achieving goals, Member States are encouraged to create integrated energy and climate policies at the national level. The new role in the energy market is given to active consumers, i.e. prosumers (producer+consumer=prosumer), who are allowed to produce, store, use, but also sell the excess electricity.



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THE BETTER REGULATION GUIDELINES

When drafting new legislative initiatives and proposals, but also during the management and evaluation of the existing legislation, the principles set out in the Guidelines for Better Regulation are applied in the EU. These principles are applied at every stage of creation of legislation, and the point is that the basis of legislation currently in force keeps pace with general political, social and technical development. Determining when and how the legislation will be adopted i.e. changed is a political decision, but the quality of this decision can be improved. Namely, in addition to the fact that policy making should be aimed at achieving goals with minimum investment, it is necessary to ensure that political decisions are made in an open, transparent manner, with the participation of all stakeholders in the process.

A crucial part of policy drafting and assessment is exactly the one referring to consultations with stakeholders, because the development of quality policies is based on openness. In order for all stakeholders to be informed about the content of the proposal and the process dynamics, a consultation strategy is developed to identify stakeholders and activities that will be carried out in the consultation process. The value of this process is feedback, i.e. content obtained from stakeholders, which support the process. It is therefore important to start consultations as soon as possible, in order to leave enough time and opportunities to contribute in the form of comments, participation in workshops, conferences, responding to questionnaires, etc. On the other hand, it is necessary to have feedback on how the contributions of stakeholders will be used. It was also the new legislative proposal in the field of energy that was created in accordance with the mentioned principles and after the evaluation of the existing legal framework in the EU.

Source:

https://ec.europa.eu/info/sites/info/files/better-regulation-guidelines-better-regulation-commission.pdf

MECHANISM OF THE EU INTEGRATIONS AND ENERGY

Figure 2

Mechanism of the EU integrations – energy sector

Major reform initiator in the energy sector in the RS is currently the process of European integration, which is the broadest political context. In this regard, when determining the energy policy frameworks, it is important to bear in mind three narrower contexts:

» Negotiations with the EU;

» Stabilization and Association Agreement;

» Treaty establishing the EnC.

All three processes shown in Figure 2 are, although in principle independent, at the same time connected because they represent gears within the European integration mechanism leading the Republic of Serbia towards the EU membership.

» Within the process of negotiating of the RS with the EU, Chapter 15 refers to the field of energy. The acquis in the field of energy consists of rules and policies regarding security of supply, competition rights, state aid (including the coal sector), internal energy market (opening of the electricity and gas market, promotion of RES), energy efficiency, nuclear energy and nuclear safety and radiation protection. Prior to the negotiation process on the specific topics of each chapter, the screening of the current level of harmonization of national legislation with the EU legislation is carried out. In the case of Serbian legislation, it was determined that certain benchmarks should be met, i.e. pre-steps for opening a chapter. Namely, the conclusions of the 2014 screening recommend that the negotiations under this chapter are opened after the fulfillment of two foreseen criteria: the adoption of an Action Plan aimed at harmonizing the acquis on minimum stocks of oil and/or petroleum products, as well as the adoption of a legally binding plan for the complete separation of activities in the gas sector. [6] Only when these two preconditions are fulfilled may the negotiations begin about all mentioned topics, including the sustainability of the energy sector.

» In the negotiation process, it is necessary to define very clearly rights and obligations of both the Republic of Serbia and the European Union, and to show the expectations of both sides. It is precisely the expectations, rights and obligations contained in the Stabilization and Association Agreement (hereinafter: the SAA) which, after signing in 2008, awaited to enter into force by 2013. Article 109 of the SAA prescribes not only compliance with the fundamental principles of the EU in the field of energy, but also goes a step further, and as a mechanism for attaining these goals, provides for the Treaty establishing the Energy Community.

» The Treaty establishing the Energy Community (hereinafter: EnCT) was ratified in 2006 by the Republic of Serbia. The aforementioned treaty established the EnC, an international organization that brings together the EU

and neighboring countries with the aim of creating an integrated pan-European energy market. The difference of the EnCT in relation to the negotiation process and the SAA is that the EnCT goes further than the principle. Namely, the treaty determines the specific obligations that the Republic of Serbia should not only transpose into its legal framework, but afterwards apply it both in the energy sector and in other areas that are closely related to energy, such as the environment, the rules on protection of competition and state aid, etc.

In order to harmonize national regulations with obligations under the SAA and EnCT, the Republic of Serbia adopted a strategic and legal framework.

The National Sustainable Development Strategy adopted in 2008 through a holistic approach defines sustainable development as a target-oriented and long-term process that affects all aspects of life (economic, social, institutional and environmental aspects) at all levels. Energy is recognized in the Strategy as a key area for investment and improvement of the environment and the main direction of movement towards sustainable development. [7] Bearing in mind that the Strategy defines the vision by 2017, questions arise as to whether its provisions have ceased to apply or they still apply, or whether the document could, after the evaluation carried out, serve as a framework for some subsequent act that would include time the period ahead.

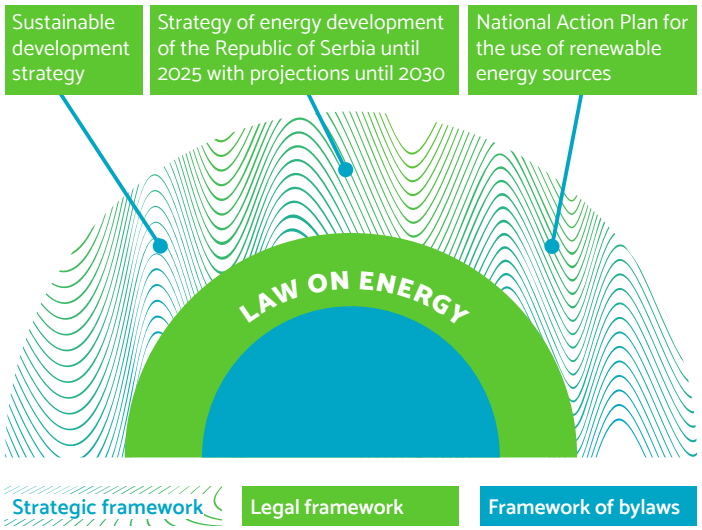
The Energy Development Strategy of the Republic of Serbia until 2025 with projections until 2030 contains the priorities of the development of energy policy, goals and activities, i.e. the operation directions. The comprehensive transition towards sustainable energy, as the principle in which energy policy is to be developed by 2030, is highlighted in the Strategy as one of the key priorities of the RS energy development. [8] On the other hand, interestingly, the Strategy for the period after 2050 still gives the coal sector a key role in ensuring the security of electricity supply of consumers in Serbia [9], despite the established potential of the RES and the implementation of energy efficiency measures as priority goals.

The RES energy sector is insufficiently present both in the National Energy Strategy, but also in the Sustainable Development Strategy, contrary to its identified significant potential. On the other hand, a detailed legal framework was requested to be adopted to encourage investment in the RES. For the RES sector, a review of the national strategic, legal and sub-legal framework is shown in Figure 3.

Having ratified the EnCT, Serbia has committed itself to implementing the 2009 Renewable Energy Directive (2009/28/EC). In order to transpose the provisions of the Directive, the National Action Plan for the Use of

Figure 3

Overview of strategic and legal framework in Serbia for the sector of renewable energy sources



Renewable Energy Sources (NAPRES) has been adopted. In accordance with the mentioned Directive 2009/28/EC and the Decision of the Ministerial Council of the Energy Community dated 18 October 2012 (D/2012/04/MS - EnC), the target for the Republic of Serbia was set at 27% of the RES in its gross final consumption energy by 2020.

The same Decision defines that the National Action Plan for Renewable Energy Sources of the Republic of Serbia shall be prepared in accordance with the adopted model for the preparation of this document (Decision 2009/548/EC). [10] The Action Plan sets out the goals for the RES until 2020 and the way in which the objectives will be achieved. The 2017 EnC report recommended the revision of this plan in the direction of creating new measures, in order to ensure fulfillment of the foreseen objectives. The 2018 EC report comes up with the data that in 2016, Serbia achieved a 20.9% share in gross final energy consumption from renewable sources, instead of 23.8% of the foreseen share for 2015-2016 [11]. The reasons for this are a major increase in final energy consumption and limited investment in new RES capacities, which together seriously undermines Serbia's ability to reach the target of 27% of the RES share in total energy consumption by 2020. On the other hand, the 2030 EU targets have already been defined, whereas the EnC discusses the monitoring of these goals by the states signatories of the EnCT [12] as soon as they enter into force in the EU. This opened a discussion on how important it is to take the advantage of the moment and create a long-term energy policy that will be ambitious, but will at the same time monitor the capacity and capabilities of the market.

Regarding the harmonization of the legal framework with the obligations of the EnCT, the RS adopted the Law on Energy in 2014. After that, EnC was recognized as an active partner in this process, bearing in mind that the 3rd Energy Package was transposed by the said Law. On the other hand, the implementation i.e. application of the provisions envisaged in the law has been recognized as a challenge. In addition to the law, numerous bylaws have also been adopted in order to regulate the area in line with the EU tendencies. Among other things in the field of the RES, in 2016, the following bylaws were adopted: the Regulation on the conditions and procedure for acquiring a privileged electricity producer, a temporary privileged producer and producer of electricity from renewable energy sources, the Regulation on incentive measures for the production of electricity from renewable energy sources and from the highly efficient combined production of electricity and heat, the Regulation on the electricity purchase agreement and the Regulation on compensation for the incentive of privileged electricity producers (framework of bylaws in Figure 3).

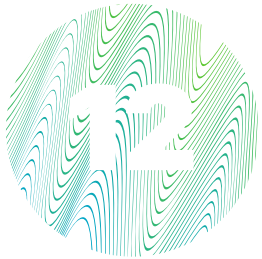
ABOUT THE PROJECT

In order for national energy policy, as well as legislation, to be in line with current economic and social tendencies and technological development, it is necessary that all stakeholders be involved in the process of their creation. The role of stakeholders is to give a critical view of the current energy policy, point out both positive examples, as well as challenges they face and, more importantly, come up with specific proposals in accordance with their experience, in order to overcome the established barriers and improve the energy sector. This inclusive approach particularly is becoming more and more important, bearing in mind the challenging goals that countries have committed to by signing the Paris Agreement, and the EU's tendency to integrate energy and climate change policy in order to attain the set goals. At the same time, in line with the EU's recommendations and attitudes, effective and effective legal solutions are only achieved if all stakeholders in the society are involved in the creation of legal policy.

The creation of a national policy in the energy sector of the RS has so far been limited by partial involvement of community of experts and disproportionate representation of all other segments of society. One gets the impression that representatives of the industry and civil sector most often have not had the opportunity to be part of the process during which the energy policy is drafted, and even when they took part, it seems that their opinion was not taken into consideration in the full extent or just a form of public insight was fulfilled, just before adopting the acts, without essential interaction between all stakeholders and responsible entities. This has created the risk that the RS fails to fulfill its commitments and lags behind international trends in terms of harmonization of policies. On the other hand, the idea of "clean energy for all citizens" does not take the place it deserves, both in the process of policy making and in the legal framework itself.

The project named Mobilization and Inclusion of Stakeholders in the Porcess of Creating Serbia's Sustainable Energy Policy in addition to aiming to change the approach to the creation of energy policy in the Republic of Serbia, by establishing mechanisms for involving the targeted stakeholders in this process, it also aims to substantially contribute to the improvement of the national energy legislation by creating recommendations for its implementation through cooperation with different sectors and users of energy policy. In addition, the project aimed to improve the efficiency and quality of cross-sectoral cooperation, as well as to introduce regular consulting mechanisms by involving the community of experts.

The project addresses several target groups, appreciating their importance and impact in society. The target groups were decision makers at the state level, representatives of the industrial sector and civil society organizations active



in the field of sustainable energy and RES in Serbia. The idea was to offer them a discussion platform based on which some specific ideas and proposals would be created for improving the country's energy policy. Participating in the workshops, in addition to exchanging experiences and challenges they face, they had the opportunity to hear more about the tendencies in creating a sustainable energy policy in the EU, which gave them a basis for proactive participation in the process of drafting future policies and laws.

The project was realized using the discussion method within the focus groups in order to address these challenges. Focus groups are the most common technique of qualitative research, in the form of discussion about a particular topic, which takes place in an informal manner. Regardless of the fact that there are different approaches to the definition of this technique, its most important determinant is that it is a type of group interview, in which the moderator defines topics discussed, while the social interaction between the participants and moderators themselves is the most important source for the analysis and interpretation of presented attitudes.

As part of the project, three focus groups were held in total. In all focus groups, emphasis was put on presenting the EU's tendencies in the field of sustainable energy, giving an overview of the legal and technical framework of the new EC legislation proposal. The first focus group was organized in cooperation with the National Convention on the European Union, a platform for the cooperation of civil society organizations within which the thematically structured debate on Serbia's accession to the European Union takes place, and it gathered more than 20 participants from 16 leading civil society organizations in Serbia, active in the field of energy and climate change. The second focus group was held in cooperation with the Chamber of Commerce of Serbia and gathered representatives of the industrial sector, who develop and/or have realized projects in the field of the RES. A total of 18 investors participated in the field of wind energy, solar energy, biomass, biogas and small hydropower plants. The third focus group was dedicated to representatives of government institutions and the public sector (competent ministries, the Cabinet of the Prime Minister, regulators, network operators, universities) and presented conclusions from the first two workshops. At the last focus group, where 18 participants were present, special attention was paid to the integration of new players in the electricity market (prosumers, aggregators and local energy communities).

The final phase of the project is the creation of a document that contains the summary and results of focus group discussions, and specific recommendations of participants to overcome recognized challenges in the existing legal framework and guidelines for its harmonization with international practice and directions of the development of the EU legal framework. The project, as designed and realized, represents a significant contribution to the future chain of decisions related not only to the energy sector of the RS, especially to the RES sector, but also to a solid platform for further communication among important actors in this field of activity.

PRIORITY TOPIC OF NEW ENERGY POLICY

Focus groups aimed to present relevant topics for creating a sustainable energy policy in Serbia and, through a discussion with stakeholders, try to answer the following questions:

What are the tendencies of the new EU legislative package and the implications for Serbia's energy policy?
What are the integrated energy and climate plans and why is it important for Serbia adopt them?
How to integrate new players into the electricity market (prosumers, aggregators, local energy communities) in Serbia?
What are the advantages of evaluating strategic and legislative acts, and what is the role of stakeholders in this process?
How can the civil sector contribute to the creation of a sustainable energy policy?
How is it possible to raise the level of investment in the RES in Serbia?

In order to set the framework preceding the answer to these questions, the fundamentals of principles of the sustainable energy policy have been presented. Also, presentations have been provided of the obligations that exist in the field of environment and the fight against climate change in energy, as well as novelties in the area of state aid and competition protection. With particular reference to the new EU energy package, its essential provisions have been "unpacked" with an emphasis on the role of new players in the market and requirements regarding the integration of energy and climate policies.

INCLUSION OF SUSTAINABILITY PRINCIPLES IN THE ENERGY POLICY

Energy policy principles in the EU are defined by the Treaty on the Functioning of the EU and refer to ensuring security of supply, ensuring the functioning of the energy market, promotion of energy efficiency, development of the RES and promotion of the interconnection of energy networks. [13] The same principles are provided in the EnCT, either.

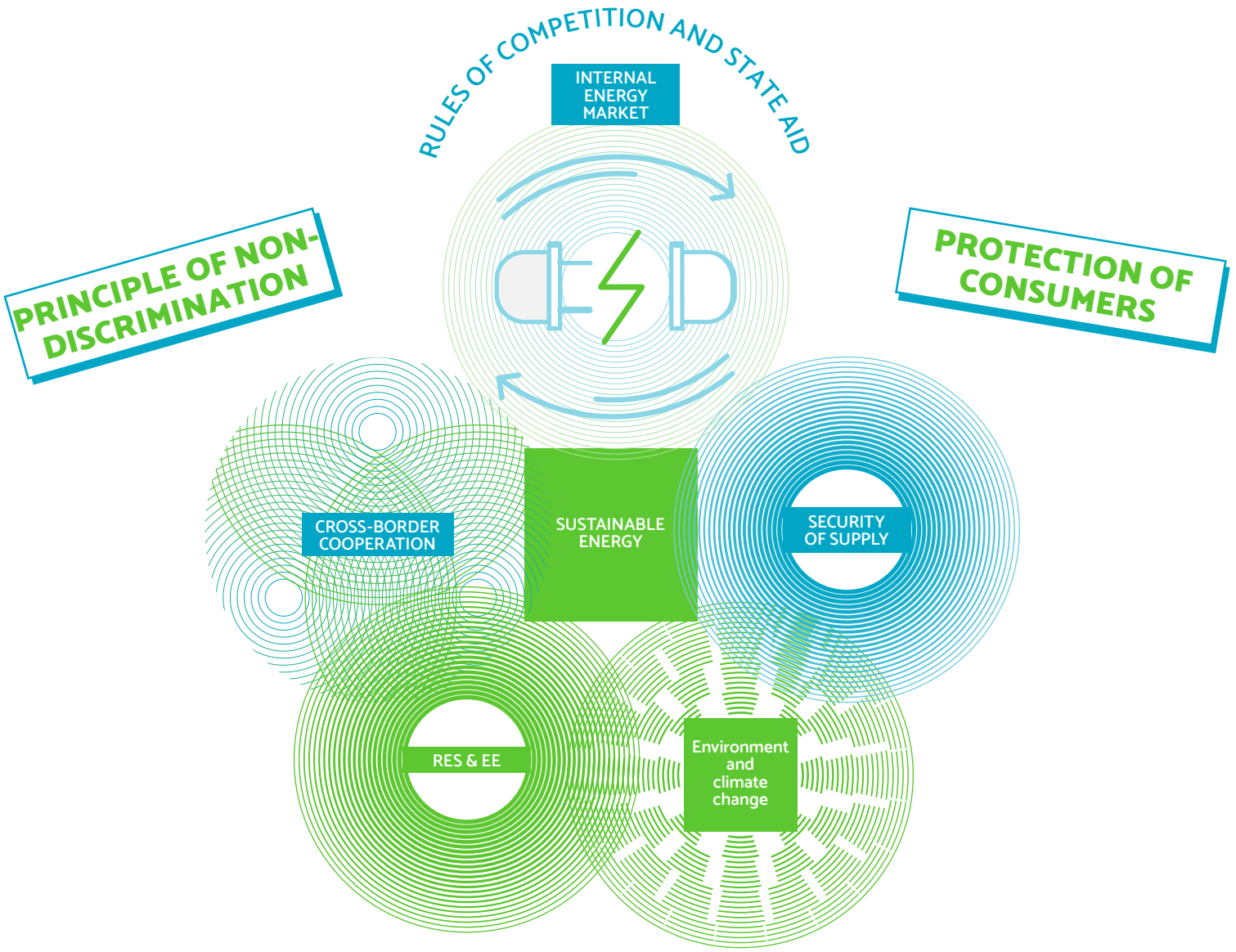
Security of supply is a complex concept that represents the constant satisfaction of energy demand at affordable prices, through supplies that are reliable and satisfactory in terms of capacity. The concept of security of supply has changed over time, so energy accessibility and affordability used to be in the foreground, whereas today, in the long run, security of supply is provided only taking into account sustainability as a characteristic of the energy source. The balance between the three aforementioned elements of security of supply (availability, accessibility and sustainability) depends on the capacity of natural resources, the level of economic development, but also on the environmental protection priority of a state [14]. The integrated energy market is the most cost-effective way to ensure safe and affordable energy supply in the EU. The purpose of the common market and rules on cross-border cooperation is to deliver energy produced in a EU country to consumers in another country, which maintains prices in proportion due to competition and enables consumers to choose a supplier.

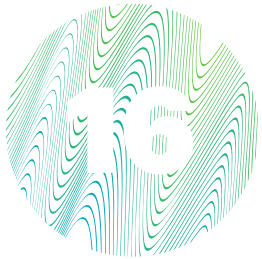
Exactly the cross-border cooperation and increased transparency in the retail market to the benefit of consumers in addition to the separation of distribution system operators from the market, and strengthening the independence of the regulator are the basic requirements of the Third EU Energy Package. The third energy package was adopted to enable the functioning of the internal energy market and the solution of structural reforms, and for the signatory states of the EnCT it has become obligatory since 01 January 2015. In addition, within the framework of the rules on the market, the emphasis was put on the rules of competition and state aid, as well as on the protection of consumers.

On the other hand, as a result of raising awareness of climate change and the impact of energy on the environment, it was necessary to take these aspects either into account when creating energy policy. Therefore, in addition to the rules on security of supply, market regulation and cross-border cooperation (shown in Figure 4 in blue), environmental principles and the fight against climate change, as well as energy efficiency and the RES are also distinguished as principles of energy (shown in Figure 4 in green) that bring the attribute of sustainability into energy policy (Figure 4). Finally, the general principle of non-discrimination is present throughout all the basic principles of energy.

Figure 4

Sustainable energy principles





ENVIRONMENT, CLIMATE CHANGE AND ENERGY

The principle of environmental protection in energy is viewed through the prism of reducing the negative impacts of the energy on the environment, i.e. contribution to the preservation of the environment. Having ratified the EnCT, Serbia has committed itself to transposing legislation, among other things in the area of the assessment of impact and strategic assessment of environmental impact, reduction of sulfur content in liquid fuels, protection of wild birds, etc.

Within the framework of the obligations envisaged by the EnCT, certainly the most challenging one is the part concerning the reduction of pollution from thermal power plants, that is, respecting emission limit values and regulation of standards related to sulfur dioxide, nitrogen oxides and particulate matter. These obligations are contained in two directives, Large Combustion Plants Directive, LCP and Industrial Emission Directive, IED. Both have been legally binding for Serbia since 2018.

Taking into account strict standards that these Directives envisage, modeled after EU, the EnC has foreseen certain opportunities for the transition period, during which countries would gradually adopt the prescribed standards. The LCP Directive provides for an opt-out mechanism or the possibility of a limited lifetime derogation of energy installations. There are two criteria for the opt-out mechanism and the energy installations that have opted for this possibility (according to the EnC data, four plants from the RS has opted for this option [15]) in the period from 01 January 2018 to 31 December 2023 can work a total of 20.000 hours. It is up to the plants themselves to decide whether to operate at full capacity during this period, and thus reach 20.000 hours after 2 or 3 years, or coordinate the number of hours so that the mentioned 20.000 hours expire no later than 31 December 2023. In the first case after exhaustion of the allowed working hours or, in the second case, after the final deadline, the plants have the ability to either harmonize their technology with standards or stop working. On the other hand, the state needs to keep records of hours from 01 January 2019 and to report on this to the Secretariat of the EnC (the EC Secretariat is a permanent EC institution responsible for providing support to the EC activities and monitoring the implementation of the Treaty establishing the Energy Community). Another option, which is envisaged as the “bridge” from the LCP to the IED Directive, is the inclusion of thermal power plants that are not part of the opt-out mechanism in the National Emission Reduction Plan (NERP). This option enables that the limit emission values are not verified for each power plant individually, but the values of the emission limits are determined at the state level, by 31 December 2027. The 2018 EC report emphasizes that it is imperative the RS to adopt the National Emission Reduction Plan as soon as possible, paying particular attention to exempt from

the Plan the installations confirmed to use the opt-out mechanism.[16]

These two options provide some flexibility to the energy sector to comply with standards and plan the dynamics of the necessary investments. It is important to emphasize that this flexible approach does not delay the application of the provisions of the said Directives. In the area of climate change, which is necessarily part of the discussion on the impact of energy on the environment, the EC has so far adopted the Recommendation on creating integrated energy and climate plans and the Recommendation on the preparation for the implementation of the Regulation on the mechanism for monitoring and reporting on emissions of greenhouse gases. Since both acts were adopted in the form of recommendations of the Energy Community, they have an advisory function and are not legally binding acts, unlike decisions as legal acts that are legally binding for all contract signatories. The recommendations of the EC are precisely to provide states with the opportunity to prepare for the decision-making (legally binding acts) and to prepare for their implementation, because otherwise, already on the date of entry into force of future decisions, states will be in default.

STATE AID AND ENERGY

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The Law on Energy was adopted in the Republic of Serbia in 2014 while mentioned Guidelines were adopted in the same year in the EU. Bearing in mind that EnC adopted a recommendation on the application of the Guidelines by state signatories, the 2018 Annual Report of the EC Secretariat proposes Serbia to take into account the provisions of the Guidelines, in particular the rules on granting aid through competitive procedures and in the form of a premium to market prices of electricity [17] (instead of so far incentive scheme via feed-in tariffs). Given that the auctions were unknown even in some EU Member States, the European Bank for Reconstruction and Development (EBRD) together with the EC prepared a document in March 2018 entitled „Competitive selection process and support for the RES - Policy Guidelines". This document lists examples of good practice from countries that have already introduced auctions, and the idea is to serve as a model and make it easier for the EnCT member states to create auctions for the RES.

For the purpose of applying the rules on state aid and determining the conditions and restrictions for state aid, it is necessary to take into account the State Aid Guidelines in the field of environmental protection and energy for the period 2014-2020 (EU State Aid Guidelines).

Namely, the Guidelines suggest that states should establish procedures for granting state aid that are transparent, non-discriminatory i.e. open to all, and it is advisable to launch the auction process for the RES. There is wide consensus among energy policy makers that competition is actually a transparent way to determine the appropriate level of support for renewable energy projects. For the purposes of the Guidelines, the term "auction" refers to approaches that rely on competitive processes rather than administrative decisions. Auctions encourage bidders to reveal costs and promote cost-effective development. In addition, they provide a transparent and objective means of identifying the recipient of this financial support. Namely, the primary objective of renewable energy auctions is to achieve the goals in the field of the RES in the most cost-effective way. Consumers benefit from lower costs, while policymakers exercise greater control over the development of the RES sector. On the other hand, auctions enable policymakers to be sure that regulation provides an adequate level of support for the RES and excessive fees for investors are avoided. Finally, investors also benefit from transparency provided by well-designed auctions, enabling them to compete on equal terms. [18] The focus of Guidelines is on large-scale projects because it is likely that the benefits of the competition will not be realized for small-scale projects, and therefore they are exempt from auctions (projects smaller than 1MW and with wind power plants, the ones smaller than 6MW [19]). The second goal of the Guideline is the integration of the RES into the market and it will be implemented through feed-in premium tariffs, which will replace current feed-in tariffs, which means adding premium to market prices, and therefore the practical market will control the level of premium. There are also some exceptions form this rule, too i.e. there will be exceptions for small-scale projects, so the rules will not apply to projects smaller than 500kW, and with wind power plants, the ones smaller than 3MW [20].

TRENDS IN NEW EU ENERGY PACKAGE

The European Union has ambitiously approached the challenge of sustainable energy policy and set itself high targets. The main incentive for the proposal of new energy package is meeting the obligations of the Paris Agreement on Climate Change, with the creation of a stable, competitive and sustainable energy sector that will stimulate investments in clean energy.

The goals are putting energy efficiency at the top of the priority list through the proposal of Energy Efficiency Directive and the Energy Performance Directive in the building sector. Then, the goal is for the EU to become a global leader in the RES through the proposal of Renewable Energy Sources Directive. The third objective is to provide fair offer to consumers and to include consumers as actors in the energy market, which, as a principle, is present throughout the legislative package.

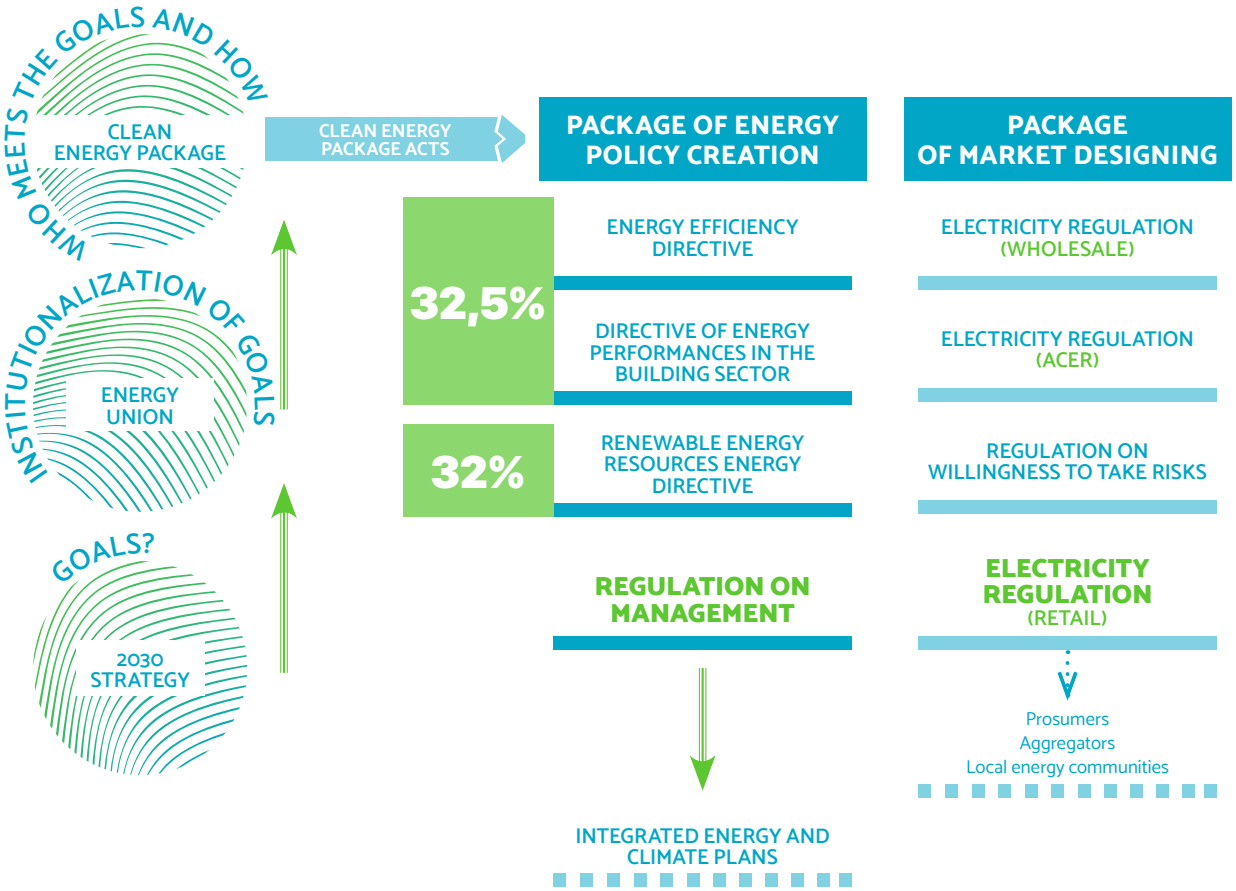
As shown in Figure 5, it was exactly the objectives from the 2030 Strategies, after obtaining the institutional framework in the form of the Energy Union, that were transferred to the proposals of new legislative framework, in order to answer the questions who is responsible for their fulfillment and in which manner. A Clean Energy Package, which according to the EU plan should be adopted by the end of 2018, consists of a total of eight legislative proposals that can be divided into two groups: acts related to the creation of energy policy and acts related to market design (Figure 5).

It is important to note that of these acts only the Governance Regulation and the Risk-preparedness Regulation are completely new acts, while others are modified and amended versions of the existing acts.

The directive on energy performances in the building sector is the first of the acts from the new package that came into force in June 2018. In the first half of 2018, political agreement was reached on the energy efficiency targets of 32.5% as envisaged in the Energy Efficiency Directive, with the RES target being 32% (Renewable Energy Sources Directive). Both goals relate to 2030. It is noted that the goals are higher in relation to the ones set out in the 2030 Strategy, which shows the awareness of the EU about the necessity of the rapid reaction of the energy sector to the changes. Also, in June 2018, political agreement was reached also in relation to the provisions of the Regulation on Governance, which regulates the Integrated Energy and Climate Plans. The acts related to market design continue to be negotiated at the inter-institutional level in the EU. New market players are defined in the proposal of Electricity Directive and the proposal of Renewable Energy Sources Directive.

Figure 5

Overview of the course from political (goals) to legislative level (obligations)



New role of consumers

In order to realize the idea of inclusion of consumers as active players in the electricity market, the proposal of Electricity Directive defines these new actors. These are primarily the so-called prosumers, who can produce and consume the electricity they produce, primarily for their own consumption, while delivering the excess to the grid. In addition to prosumers, the Directive defines aggregators and local energy communities (hereinafter: LEC), as shown in Table 1.

In the new legislative package, prosumers are defined by the directives, which means that the formulations from the directives will be transposed into the national legislation of the Member States. Therefore, all the legal challenges already being discussed in the EU should be considered in detail by the states in the transposition process. In this process, one should pay attention to the fact that prosumers retain the status of consumers as well as all the rights they have in the meantime. Also, the definition must be sufficiently clear and, at the same time, flexible enough to cover all potential activities and participants who may be prosumers. [21] It is also important to protect the data of individual users, that is, whether current data protection regulations are sufficient to protect new relationships envisaged in the so-called clean energy package or the implementation of additional security measures is necessary.

Referring to the legal and regulatory framework, it is crucial that the whole system of integration of prosumers is market-oriented, that is to cause as little distortion in the market on any issue. On the other hand, the key pricing principles for the use of distribution system by prosumers (cost effectiveness and cost recovery) should be protected to the highest extent, avoiding cross-subsidization between different grid users. This directly implies that prosumers need to bear the appropriate i.e. corresponding portion of the cost of the system, that is, the costs for services of using the grid must not be transferred to users of the grid that do not have the possibility to become prosumers. Particular attention is paid to the issue of grid costs, since the distribution company determines the size of the grid according to the total annual consumption, regardless of whether there are prosumers in it or not, so the fixed operating costs of the grid remain unchanged.

Table 1

Definitions of prosumers, aggregators and local energy communities

	PROSUMERS	AGGREGATORS	LOCAL ENERGY COMMUNITIES
Legal organization form	User or group of users	Market players	Association, cooperative, partnership, non-profit organization or other legal entity controlled by shareholders or society members
Activity	Produce, use and store electricity	Combine consumption or produced electricity of multiple users	Produce electricity and can perform activities of the distribution system operator, supplier or aggregator at the local level
Participation in regulated market	Trade in electricity in the regulated market independently or through aggregators or suppliers, provided that it does not represent their core business	Trade in electricity in the regulated market	Trade in electricity in the regulated market, directly, through aggregators or suppliers, in an non-discriminatory manner

Prosumers are integrated into the grid through their own consumption patterns, net metering or net calculation, as shown in Figure 6 In terms of the integration of prosumers into the grid, as a result of the activity of the working group of the electricity distribution network operator, the document " Distributed Generation for Self-Consumption Key Aspects and Recommendations of Good Practice," was created, which examines in detail the issue of the integration of prosumers. This document was the basis for the "Policy Guidelines for the Integration of New Players in the Market", adopted in EnC in February 2018 (as shown in detail in Table 2).

When it comes to technology selection, all types of technologies should be allowed for self-consumption connection. On the other hand, when it comes to installed capacities, it is common to predict two types of limits. The first limitation is a general limit, for example, for small installations, which would apply to households and small commercial customers. Each state should determine a reasonable threshold as to the overall limit for someone to qualify for a scheme of self-consumption. In the literature one may found that the thresholds of this limit range from 20 to 50 kilowatts in terms of the installed power of the production plant. The second limitation refers to the installed power of a single connection, where it is necessary to satisfy the basic principle of net calculation - that the total annual production of prosumers needs be lower than their annual consumption. Prosumers have to spend more than they produce annually.

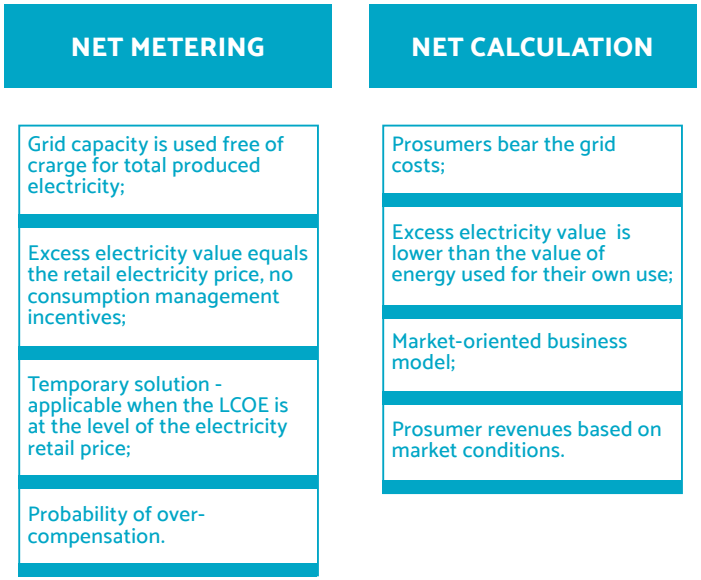
In terms of connection, there is a grid code that at the EU level defines the conditions for connection of power plants to the transmission and distribution network, and most of the plants for their own consumption will probably fall into the so-called " class A generator (whose installed power is greater than 0.8 kilowatts) and will have to meet the technical requirements defined by the grid code (as shown in more detail in Table 2). Legislation should ensure that the connection procedure and authorization of distributed production is efficient and maximally simplified, and administrative costs minimized.

The national regulatory framework should also determine a manner in which the excess energy prosumers inject into the grid, as well as the corresponding compensation they receive for it, will be treated. In doing so, incentive schemes such as feed-in tariffs are not recommended for the evaluation of excess electricity, in order to avoid duplicate incentives. This principle will contribute to the development of the consumer market, their aggregation and further integration into the balance market.

Finally, in terms of settling the imbalance, majority of prosumers with small installed power falls under a category not subject to common balance responsibilities.

Figure 6

Commercial self-consumption schemes



The standard balance responsibility threshold set in the State Aid Guidelines for Environmental Protection and Energy amounts to 500 kilowatts.

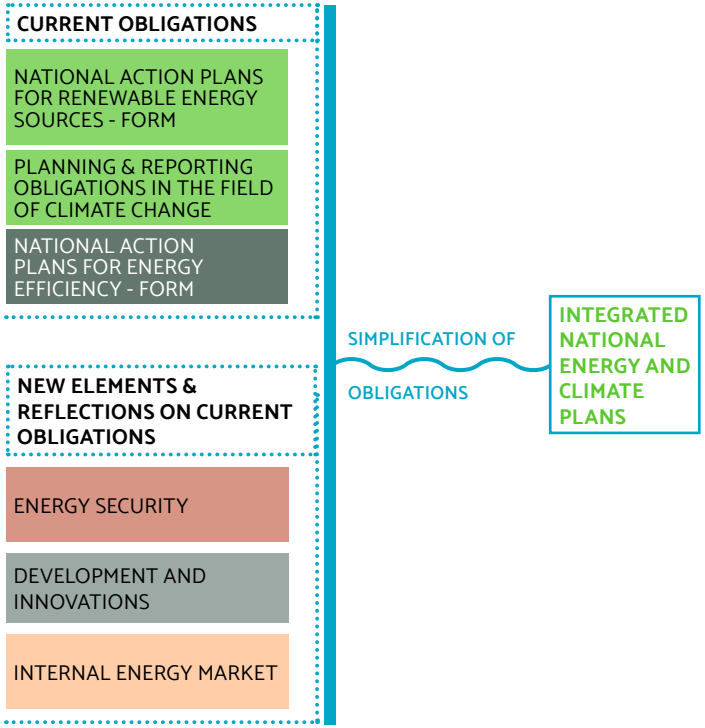
Most of the prosumers will be below that threshold, therefore they have no explicit balance responsibilities. However, their supplier is a company with balance responsibility towards the system operator, due to which reasonable the costs of the supplier in terms of imbalance should be recognized when evaluating the excess electricity. This is due to the change in standard load profiles of small customers that can be well planned today, be it households or small commercial customers; while the connection of the power plant beyond the measuring point will completely change the load profile.

Licensing of the LECs is another the legal challenge because it is not specified in the Directive itself, but it leaves the possibility for countries to create their own procedures by which the licensing process will be regulated. Of course, as a long-term challenge, since LECs are a new concept, the question arises whether there will be a need to limit the number of LECs for the higher interest of providing a sufficiently large base of system users due to the socialization of grid costs.[22]

Although the EU is intensively discussing many challenges for the integration of new market players, only the long-term application of these rules in practice will crystallize the benefits, as well as legal and technical challenges for new players.

Figure 7

Simplification of oblications in the field of planning



In addition to new market players, the Governance Regulation for the first time integrates energy and climate policies in the new energy package. Namely, the EU Member States will be obliged to adopt integrated energy and climate plans and provide for the following therein:

» National goals and contributions for each of the 5 areas (energy security and solidarity, integration of the internal energy market, development, innovations and competitiveness, decarbonization and energy efficiency) covered by the Energy Union;

» Policies and measures that will enable the achievement of goals.

The greatest benefit of integrated plans is their unified content that reduces the administrative burden as it integrates about fifty individual plans into one. In practice, this means that in this way, not only planning (Figure 7), but also reporting and monitoring will be directed to an integrated process for 5 areas covered by the Energy Union. Moreover, in the reporting process, an integrated approach facilitates comparative analysis between Member States, so it will be possible to see if certain countries are leading, whether some countries have more or less application challenges and why.

Integrated plans have a comprehensive approach, so when determining national policies and measures, it is necessary to take into account other sectors, i.e. the impact of a clean energy transition on the employment sector, the environmental sector, then the industry sector (not just the industry that deals with energy, but other industries, as well) and the social protection sector. Also, the Governance Regulation encourages the participation of all stakeholders i.e. public in the planning process: citizens, businesses and all levels of government, from local to regional. They participate in the entire process, from the moment of drafting integrated plans until the adoption of final plans, during the implementation of plans and finally in the evaluation process. Perhaps the most important feature of integrated plans is precisely that they provide security for investors to plan and place their investments in line with national goals in the field of energy and climate change.

The Recommendation on Integrated Energy and Climate Plans [23], which is one of the pillars of the new energy package in the EU, advises the states gathered in the EC to begin with long-term and integrated planning as soon as possible, ideally at the same time as the EU Member States do. Especially taking into account that after Serbia's EU accession, the goals of the EU (such as mentioned goal of reducing greenhouse gas emissions to 40% compared to 1990) will become the goals of the RS, either.

As one example of good practice in terms of supporting the creation of energy and climate policies, the Covenant of Mayors for Climate and Energy has been recognized.

Launched back in 2008, the Covenant gathers cities and local governments, not only from the EU, but from around the world, who are willing to work on climate and energy policies. Due to population density, cities represent large sources of pollution, therefore the Covenant 's "bottom up" approach allows them to see the effects of climate change at the local level and anticipate activities to reduce pollution. According to the Covenant's data, among cities in Serbia, Nis is a signatory who, in addition to accession, also submitted the Action Plan for Sustainable Energy and Climate, in which it offers its citizens the quality of life at the local level, which is sustainable and resistant to climate change. One of the benefits of Covenant membership is the support to administrations through twinning programs that provide the opportunity to improve administrative capacity and knowledge in the field of climate change through the exchange of experience and examples of good practice among cities and local governments.

Evaluation of laws and strategic documents exists in the EU as a process preceding the legislative process itself. It is a process in which after a certain period of implementation of a legislative act or legislative package, the EC evaluates the ex-ante assessment (pre-assessment). Namely, it is estimated how effective this legislation was, how much it contributed to goals, what problems, risks and barriers exist and what their causes are. Stakeholders are also invited to give their opinion during the evaluation.

PUBLIC DISCOURSE ON SUSTAINABLE ENERGY POLICY

As a result of the constructive discussion during and after focus groups, topics presented in this chapter were highlighted. Both positive solutions and challenges in domestic and international practice were identified, and potential ways to overcome these challenges were analyzed in order to improve the energy sector in the direction of sustainability.

EU INTEGRATION AND ENERGY

The challenge resulting from the EU integration process is the process of transposition of the European regulations into the national legal framework. The general impression of the focus group participants is that the transposition process does not comply with the technique i.e. the manner of adoption of regulations in Serbia. The principle of hierarchy is an important principle of creating a legal framework, and all legal acts at the national level should be harmonized horizontally i.e. in relation to other indirectly and directly related sectors and areas, as well as vertically, i.e. in relation to different levels of regulation within a single sector. In practice, the scope of the application of the EU regulations, which should be transposed into national legislation, is in fact broader than the basic document by which it was transposed. This results in the fact that at the national level, in the absence of a fundamental approach to transposition, the regulations that are directly and directly related to the topic are not harmonized with the basic act. In practice, this is recognized through the existence of legal gaps and mismatches. The mismatch of laws thus exists not only in the field of energy i.e. at the level of vertical harmonization between laws and by-laws, but also in other related areas, such as planning and construction of buildings, environmental regulations, tax regulations, etc. which are examples of horizontal mismatch.

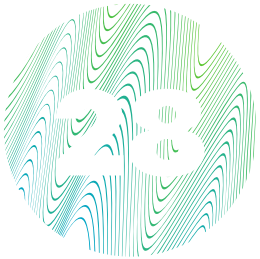
The EU transition and accession processes affecting frequent changes in regulations should not be an excuse for the lack of harmonization of regulations, since there are responsible persons in the public administration whose focus is to harmonize new acts with existing ones while adopting regulations, thereby preventing discrepancies.

Achieve greater horizontal as well as vertical harmonization of regulations currently in force in the RS;

When reforming the legal energy framework in the context of the EU integration, take into account the coherence of legislative system, rather than partial approach to changing the individual law;

At the moment when the new energy package rules are transposed into national legislation, they should be seen and transposed as a whole.

Note: The views expressed in this section are the result of discussions by the focus group participants and do not necessarily reflect the views of the organization or author.



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Bearing in mind the national potential in the field of the RES identified in strategic documents, representatives of the civil sector expressed concern about the set goals that are not ambitious enough to encourage market development. One gets the impression is that there is a gap between the energy and environmental sectors in terms of harmonization of the long-term emission reduction strategy.

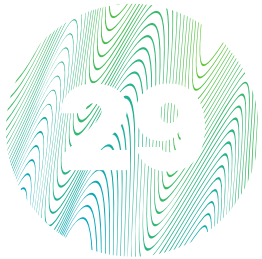
mplementation i.e. application of adopted strategic document and laws is a challenge recognized by the focus group participants. This challenge is specific, not only to the energy sector, because its nature requires a systemic approach to its resolution.

If we compare the RS with the EU, the absence of national strategy in the field of energy and climate change may be noticed, both in the short and in the long run. On the other hand, the EU has launched a public debate on the adoption of a long-term strategy to reduce greenhouse gas emissions by 2050. This strategy should bring a new vision of the development of low-carbon economy, which at the same time strengthens the economy and keeps the planet from pollution.

Involve all stakeholders as soon as at the time of the discussion on the transposition of the EU acts in order to look at future provisions from the practical side and thus contribute to the creation of regulations to be applied in the future.

Achieve political agreement and clear strategic commitment to transition and wider use of the RES in all sectors, which simplifies the process of coordination of energy and climate policies;

Create a long-term vision of the development of energy, achieved by agreement at the national level of all stakeholders, thus achieving a sense of ownership of goals and motivation for their achievement.



TOWARDS SUSTAINABLE ENERGY
with civil sector and industry in Serbia

PUBLIC INFORMATION, PARTICIPATION IN POLICY AND LAW ADOPTION AND TRANSPARENCY OF THE PROCESS

Focus group participants believe that it is often thought that renewable energy sources are the goal the EU or the EnC requires from us, while marginalizing their benefits, primarily contribution to reducing pollution by producing cleaner energy. Also, there is an opinion that the RES are only a cost that incurs additional costs to consumers, while on the other hand insufficient mention is made of the medical costs incurred by the current mode of production and use of energy. Therefore, it is very important how these topics are presented, who presents them, and for what purpose one works on raising public awareness about sustainable energy and its benefits for society.

As an example of good practice of public involvement, the procedure of public debates held on the occasion of the discussion on the proposal of the Law on Climate Change and a campaign conducted during this process was mentioned. Focus group participants pointed to several examples when the law adoption process is transparent, but it is not inclusive so there is no possibility for all stakeholders to be involved during the process. On the other hand, there are frequent cases when representatives of the civil sector participate in the process of adoption of laws, but the process itself is not transparent.

It is necessary to strengthen the role of the consumer protection association, especially bearing in mind the long-term planning and future application of the Clean Energy Package in Serbia.

Community of experts needs to provide citizens and the industry with timely information on the directions of development of policy and the EU legal framework in order to prepare them for future regulatory changes.

It is necessary to increase public participation when making strategic decisions on the direction and manner of energy development, as well as in the process of adoption of laws, in the proposal stage already. Public participation assumes the involvement of business entities from the energy sector both from the public and private sectors, as well as the participation of energy users - consumers and citizens' representatives whose property and environment the energy sector has an impact on, as well as all other stakeholders.

It is important to ensure the presence of representatives of civil society organizations, industry, consumer protection associations, as well as representatives of the academic community in working groups for the drafting of strategic documents.

It is necessary to ensure the transparency of the process of preparation and adoption of laws in these areas.

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Civil society representatives were interested in finding out how they could contribute to the compliance with the acquis of the Energy Community, whom to address and how to in case of violations and what the procedure for resolving violations was. Consequently, there was a need for a detailed clarification of the EC mechanisms so that civil society organizations can contribute to the full extent to the process of clean energy transition, for example, by participation in transposing and applying legislation, filing submissions in case of violations, etc.

The situation with the current discussion on modifications and amendments to the Law on Environmental Impact Assessment shows that although civil sector representatives have contributed to the public debate procedure, it is not known how it has been taken into consideration. In practice, the civil sector continues to face non-transparent procedures, non-compliance with the rules for conducting a public debate, and the problem of failures to publish or update documents on the websites of public institutions. With the growing role of social networks, they are becoming an important source of information, which at the same time fosters public debate. In this regard, during the discussion, it was suggested that it was important to establish regular communication with public institutions on social networks, in addition to other communication channels such as websites and the media, in order to bring the work of public institutions closer to the public and encourage public discussion.

At the EU level, all stakeholders are regularly given the opportunity to discuss and review goals and policies at annual conferences, on which occasion all institutions, and especially the EC, give major support to this process. This model also exists within the Secretariat of the Energy Community for the EnCT signatory states, which in various fields of its competence organizes meetings for the community of experts and stakeholders.

Establish a practice of gathering at the national conference level, where, in addition to the decision-makers, industry, civil society organizations, representatives of the academic community and other stakeholders will also be present, in order to openly discuss topics related to challenges and tendencies in the energy sector. This approach gives a sense of ownership to all participants in the process over the established goals and policies, as well as the sense of responsibility for their achievement.

EVALUATION OF LAWS AND STRATEGIC DOCUMENTS

Evaluation of laws and strategic documents is a process that can contribute to long-term planning and consistency of policies in the field of energy. The impression is that in our country process of checking the fulfillment of goals from the existing legislation is seen as a critique, so this process is not institutionalized. Focus group participants expressed concern about the lack of understanding of how much benefit an institutionalized evaluation could have, which aims to highlight omissions and suggest necessary changes. It should also be kept in mind that the evaluation process requires great administrative and financial capacity, but also that the value of the process itself is much higher than the capacity invested.

Conduct a pilot evaluation project (for example, for the Sustainable Development Strategy) that will show whether the document was successful, i.e. perform an analysis of the set goals and their fulfillment. The EU practice is that the content of the next legislative proposal is most often a conclusion from the evaluation process.

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The trend of energy policy in the EU is shutting down power plants not meeting environmental and efficiency standards. Part of the market and demand for missing energy are compensated by the production of energy from renewable sources, with the application of the highest standards and the most efficient technologies.

INVESTMENTS IN THE RES

Energy is a particularly important economic area that contributes to economic development and provides security of energy supply through the use of raw materials from other areas (such as link of forestry and agriculture with energy, mining with energy, as well as all other industries, including traffic). At the focus group with representatives of industry, emphasis was put on a stable regulatory framework as a prerequisite for investment in the RES sector. Legal uncertainty in all areas of business and all stages of investment, especially in long-term facilities such as energy facilities, has been recognized as a major challenge for the industry, and in addition, the existence of a political risk has been identified which influence reflects in increasing the risk of investment and the costs of capital, which further makes investments more expensive.

During the discussion, possible ways of overcoming barriers in the existing legal framework, as well as potential changes in the legal framework, were clearly identified, taking into account the international practice and directions of the development of the EU legal framework in this area. It was concluded that the investment did not take place with the dynamics provided for in the strategic documents, which was explained by the delay in the adoption of bylaws enabling the implementation of legal solutions in the field of the RES.

The Regulation on Incentive Measures for the Production of Electricity from Renewable Energy Sources expires on 31 December 2018 and it is unknown what the regulatory regime for the RES will be in the coming period, which would allow investors to direct their plans and activities. Also, it was suggested that conservatively set quotas for wind and solar energy were not in line with trends regarding the cost price and efficiency of technologies in cost-effectiveness and technology.

The challenge faced by decision-makers and state administration at all levels is reduced administrative capacity, which primarily relates to insufficient number of officials dealing with energy issues. In this regard, it is not surprising that the EC in the 2018 Progress Report for Serbia [24] recommends strengthening of human resources in the field of the RES. In addition to the reduced administrative capacity in the public sector, representatives of the industrial sector pointed to the fact that in the near future, the lack of professional staff could be expected, especially with the system operators. There is a concern because the current system of education, the labor market and the selection of staff did not provide adequate resources that could continue to perform the most demanding tasks within the necessary time frame. On the other hand, there are programs in the EU for re-training workers working in the

field RES and energy efficiency, in order to provide “green jobs” and at the same time ensure the social security of employees.

In order to identify specific challenges, recognize shortcomings but also the benefits of the national policy in the domain of the RES, representatives of the industrial sector filled out a survey where they presented their experience and obstacles they encountered in the development and implementation of the RES projects. Ten investors were selected for the survey with a total of 23 projects in the field of wind energy, photovoltaic technology, biogas and small hydropower plants. The results of the survey, which included projects at different stages of realization, which makes a total of 9 realized projects and 14 projects under development, are summarized in Table 3 .

Revise strategic documents and laws to encourage new RES investments and to introduce new dynamics to the market, while complying with the efficiency and cost price of the RES technologies; with the achievement of much better horizontal and vertical compliance.

Include the representatives of relevant industries and associations in the field of the RES when adopting and revising strategic documents and laws, in order to take into account relevant aspects from the practice. An opportunity for this is also the announced process of creating an auction system for the RES, which should inherit the existing incentive system. Precisely because of the impact of this decision on future investments, it is necessary for this process to be transparent.

It was suggested that the state aid issue was a topic that needs to be better understood, so that behavior contrary to the rules on the possibility of granting state aid not subsequently result in additional burdens on the citizens through the tax system.

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The new EU energy package is the proposal of two directorates within the European Commission, the Directorate of Environment and the Directorate for Climate Change, which until a few years ago were institutionally one directorate, and coordinated among themselves the creation of a Clean Energy Package. Also, the package is the result of the work not only of the EU institutions, but also of the industry, the civil sector and the public involved in the process of creating a new package.

IMPLEMENTATION OF NEW EU ENERGY PACKAGE

Integrated energy and climate plans

When designing national plans, the most important is to take into account all five areas covered by the Energy Union: security of supply; energy efficiency; decarbonization; creation of a functional market and competitiveness; development and innovation; which is the EU's tendency in the Clean Energy Package and the recommendations of the EnC. In order to simplify policymaking, areas covered by integrated energy and climate planning are largely linked to the principles of sustainable energy, so these two processes are actually intertwined.

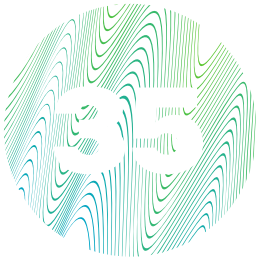
So far experience of the EU countries show that it is necessary to form multidisciplinary teams that will deal with each of the mentioned areas of integrated plans and will be part of a comprehensive analysis.

A potential challenge is recognized in the process of coordinating the development of integrated energy and climate plans, since the experience of the focus group participants show that these challenges are already being observed within the energy sector itself, when plans or documents are developed that need to be mutually compatible. Bearing in mind integrated energy and climate plans, concern has been expressed about future coordination between and within several institutions, but also with regard to the efficiency of the very process of drawing up plans within the planned time period, taking into account genuine possibilities and capacity of institutions.

Bearing in mind that the recommendation of the EnC states that 2018 will be the starting point for the drafting of integrated plans[25] in the EC countries, from the perspective of the focus group participants, Serbia should commence their preparation as soon as possible;

When creating teams that will work on the development of integrated plans in addition to representatives of institutions, include representatives of the industry and the civil sector dealing with these topics;

Regularly inform the public about the process of preparation of plans, ensure transparency of work, and enable all stakeholders, although not directly involved in the process, to contribute. Create and publish a stakeholder engagement strategy through workshops, conferences, written contributions and set the deadline in advance.



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It is expected that the biggest application of the self-consumption concept in our country will be in the form of the LEC. An example of this is a residential building on which the tenants want to install solar panels, and to aggregate the meters of common consumption (for example, for an elevator, staircase, boiler room) to one measuring point as the LEC. In this regard, it is crucial to take into account that relationship between the distribution company operator and the LEC is regulated in terms of measuring point and closing the balance, as well as in terms of the costs of maintaining the grid.

Challenges regarding the integration of new players on the market

Focus group participants supported the concept of consumers and other new players in the electricity market, suggesting that a process of harmonization of the legal framework, which would allow their integration, should be launched. In this way, households and small commercial consumers will be able to take an active role in the market and thus contribute to the electricity system sustainability.

The amendment of the legislation was suggested in a way to enable the implementation of self-consumption schemes through which the new players are integrated on the market, as well as define the rules about connection and measurement for consumers with the installed unit of distributed production.

Regulatory framework for prosumers and other new players should be market-oriented so that it has a minimal impact on market distortion while at the same time complying with the principle of cost-reflecting, cost recovery and avoid cross-subsidization between grid users (e.g. by excluding grid costs).

For households and small commercial customers, it was suggested that it was best to use a net calculation scheme, using one year as a monetary compensation period, which means that once a year the total production and consumption is settled. On the other hand, for larger commercial and industrial customers, as VAT payers, it was recommended to use a standard supply arrangement, where two separate invoices would be issued, one for the energy they consumed from the grid, and the other for the energy they delivered to the grid.

Each connection needs to be subject to authorization by the distribution system operator, primarily because of online security (this applies, for example, to plug and play solutions with solar panels).

Consider genuine connection costs that fall at the expense of prosumers, in order to avoid unnecessary imposition of market barriers for their integration. This remark relates, for instance, to the need for the installation of two measuring points (meters) at the point of handover between the small power plant and the distribution, which increases the cost for the prosumer. The first measuring point is a generator of gross production, which measures the electricity produced in a small power plant; the second one is a bidirectional measurement at the handover point with a distribution that measures the excess the prosumer did not spend for their own needs and which is returned to the grid.

CONCLUSIONS

Raising awareness about the impact of unsustainable energy on human health, the environment and climate change leads to changing habits, both by states and by citizens. In order to address the challenges of creating a sustainable energy, a holistic approach to changing the energy paradigm is needed in both directions: from the bottom up, where the consumer is recognized as an active participant in the RES market; and bottom-down, where it is up to states to build a sustainable energy policy by integrating it into one track - energy and its impact on climate change.

Bearing in mind that the aforementioned tendencies are a global and European trend in energy, the commitment to the EU integration process is an opportunity for Serbia's national legislation to focus on the long-term planning of a sustainable energy policy - not only because of the commitments undertaken by the RS in terms of harmonization with the EU energy policy and EnC, but primarily to provide a healthy environment for its citizens.

The years to come will be crucial for the development of sustainable energy. Therefore, it is necessary to achieve a wider evidence-based consensus, with first of all coordinated work of all relevant institutions and involvement of all stakeholders, but also timely creation of signals for investors in order to create new business opportunities. The principle of sustainability obliges us to react now and quickly, but also to make long-term plans.

ABOUT SUSTAINABLE ENERGY

There are few public discussions about the costs of healthcare system incurred due to the negative impact of conventional energy production in Serbia. In communication the fact that is often neglected is that renewable energy sources, due to the trend of a dramatic decline in the cost of technology costs, are becoming competitive with conventional sources, but also that their use is not only a commitment to the EU or EnC, but plays an important role either in terms of energy by supplying current and future generations with clean energy.

Raise public awareness of sustainable energy, correlation of energy with the environment and climate change, as well as renewable energy sources, especially in the direction of demystifying the benefits and costs associated with them.

PUBLIC INVOLVEMENT AND STRENGTHENING OF CAPACITIES

For the success in the process of creating sustainable energy, the role of the broadest public is crucial. Representatives of stakeholders are ready to take a proactive role in this process, focusing on specific challenges and proposing solutions from practice.

Build a partnership between decision-makers and representatives of the civil sector, industry, scientific and academic community.

Recognizing the importance of the role of local self-governments in the creation of integrated energy and climate policies, make a special reference to local and regional level, especially in the direction of raising the capacity of civil servants dealing with these issues.

LONG-TERM AND INTEGRATED PLANNING AND STRENGTHENING OF CAPACITIES

Long-term planning towards the integration of climate and energy policies is necessary to avoid the cost of poor or unjustified investments and facilitate the integration of a larger share of the RES on the market. The key to success is the coordination of the planning process between different sectors and institutions, which is at the same time recognized as the biggest challenge.

Simultaneously work on the improvement of cross-sectoral communication and the improvement of coordination, not only within state institutions, but also between decision-makers, the civil sector, industry and other stakeholders.

IMPACT OF THE EU INTEGRATION AND NTERNATIONAL OBLIGATIONS

There is a lack of understanding of the EU integration process, the functioning of the EU and EnC institutions and their impact on the creation of national policy, as well as the process of negotiating and ratifying international obligations in the field of sustainable energy.

Initiate an open discussion with stakeholders lacking understanding and include both general topics and specific EU law institutes and their impact on the RS law, such as state aid and competition right.

Continue with the process of education and continuous information about international obligations in the field of sustainable energy.

STRENGTHENING OF CONSUMERS

Integration of consumers as new market players taking an active role in the energy transition has been supported as a trend by both the community of experts and the civil sector and industry representatives. This transition to decentralized production has a foothold in a new energy package by meeting the goal of providing clean energy for all citizens.

It is necessary to harmonize national legislation in order to facilitate the simple and quick integration of new players into the market (e.g. commercial self-consumption schemes, grid tariff system, etc.).

Continue with thematic workshops that would involve a larger group of stakeholders, in particular the local industry based on technologies that have application for their self-consumption schemes, but also other sectors, such as the public and civil sectors.

EVALUATION

The implementation of evaluation is important because of the assessment of the success and purpose of the existing strategic and legal framework, as well as for improving the efficiency and quality of the process of adopting new policies and laws. The added value of evaluation is in the process which involves the participation of all stakeholders, during which all stakeholders are able to give their opinion and participate in public discussions.

It is necessary to introduce evaluation as a regular process in policy and law making.

Perform the evaluation of the National Strategy for Sustainable Development as a pilot project.