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# Regionalna energetska politika i promocija obnovljivih izvora energije sa osvrtom na Elektroprivredu Republike Srpske

## Regional Energy Policy and Promotion of Renewable Energy Sources with a Focus on the Power Utility of the Republic of Srpska

### Rezime

Regionalnoj strategiji razvoja energetike nedostaje koordinisan pristup za strategiju razvoja krupnih energetskih izvora, što se u praksi zapravo svodi na promociju obnovljivih izvora energije (OIE) i komercijalni pristup. Dakle, akcenat regionalne strategije stavljen je na promociju OIE, međutim, treba imati u vidu da, pored podrške investitorima za njihovu gradnju kroz otkupne cijene (nema rizika), te korištenje novih tehnologija uz minimalan broj novih radnih mjesta, sa druge strane postoje ograničenja jer je potrebna ozbiljna struktura baznih izvora (npr. vjetar – neupravljiv izvor) i kvalitetna prenosna mreža. Svjetski savjet za energiju (WEC) – globalna nevladina organizacija koju čine nacionalni komiteti zemalja članica, kao i glavne međunarodne organizacije u oblasti energetike stava su da su zemlje potpisnice Sporazuma o Energetskoj zajednici Jugoistočne Evrope prihvatile obavezu stvaranja zajedničkog tržišta energije, te da je logično da postoji i regionalna strategija razvoja energetike, a da iz te strategije proizlaze usaglašene nacionalne strategije zemalja potpisnica umjesto toga da se radi regionalna strategija kao zbir nacionalnih. Važno je da otvaranje energetskog tržišta bude postepeno i da ga prati set mjera zaštite, a na zainteresovanim stranama je da odluče o pristupu i mogućnostima za uspostavljanje regionalnog tržišta. Potrebno je izabrati optimalna rješenja, a prioritetni zadaci Elektroprivrede Republike Srpske vezani su za nove investicije i promociju obnovljivih izvora električne energije u skladu sa Strategijom razvoja energetike RS.

**Ključne riječi:** energetska politika, obnovljivi izvori energije, tržište električne energije, ERS.

### Abstract

The Regional Energy Development Strategy lacks a coordinated approach to the development of large energy sources strategy, which in practice actually implies the promotion of renewable energy sources (RES) and commercial approach. Therefore, the emphasis of the regional strategy is given on the promotion of RES, however, in addition to supporting investors for RES construction through redemption prices (there is no risk), and using new technologies with a minimum number of new workplaces, while on the other hand there are limitations because a stable structure of basic sources is needed (e.g. wind – non-managable source) and a high quality transmission network. The World Energy Council (WEC) is a global non-governmental organization composed of the national committees of the member states and the main international organizations in the field of energy; their standpoint is that the signatories to the South East Europe Energy Community Agreement have accepted the obligation to create a common energy market and that it is logical that there is a regional strategy for energy development and as an outcome of that strategy the harmonized national strategies of the signatories arise, instead of creating a regional strategy as a sum of national ones. It is important that the opening of the energy market is gradual and followed by a set of protection measures, while the stakeholders should decide on the approach and the possibilities for establishing regional market. It is necessary to choose optimal solutions, the priority tasks of Elektroprivreda Republike Srpske are related to new investments and the promotion of renewable energy sources in accordance with the Energy Development Strategy of the Republic of Srpska by 2030, adopted by the Government of the Republic of Srpska.

**Keywords:** energy policy, renewable energy sources, electricity market, Power Utility of the Republic of Srpska.

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## UVOD

Proces formiranja regionalnog elektroenergetskog tržišta Balkana i njegovo integrisanje u unutrašnje tržište Evropske unije, takozvani "atinski proces", tretira se kao jedna od najvažnijih aktivnosti na regionalnom planu u procesu pridruživanja zemalja regiona Evropskoj uniji. Cilj atinskog procesa je da se postavi dizajn institucionalne osnove za organizovanje unutrašnjeg nacionalnog tržišta električnom energijom, dizajn institucionalne osnove za organizovanje energetskog tržišta za region Jugoistočne Evrope (JIE) i integracija tog tržišta u unutrašnje tržište Evropske unije. Zemlje Jugoistočne Evrope su u saradnji sa Evropskom unijom razvile Energetsku zajednicu (EZ), kao regulatorni i tržišni okvir za regionalno tržište u Jugoistočnoj Evropi i integraciju u unutrašnje energetsko tržište Evropske unije. Zemlje JIE spoznale su da su rješenja zasnovana na izolovanim nacionalnim tržištima nedovoljna, a da rješenja zasnovana na iskustvima saradnje u energetskom sektoru, te da su prepoznavanje potencijalnih dobitaka za porast trgovine i novih investicija neophodna u cilju širenja i jačanja regionalne saradnje i unapređenja evropskih integracija. Vlade zemalja potpisale su Memorandum o razumijevanju u JIE – 8. 12. 2003. u Atini, Grčka (Državna regulatorna agencija za električnu energiju BiH, 2003). Ugovor o uspostavljanju Energetske zajednice (Ugovor) bio je potpisan u Atini 25. 10. 2005. od strane Evropske komisije u ime EU i Albanije, Bosne i Hercegovine, Bugarske, Hrvatske, Bivše Jugoslovenske Republike Makedonije, Crne Gore, Rumunije i Srbije, i takođe UNMIK (United Nations Interim Administration Kosovo, pursuant to the United States Security Council Resolution 1244), kao ugovornih strana (EC, 2005). Ugovor je postao pravosnažan 1. 7. 2006. godine. Bugarska i Rumunija su pridružene EU u januaru 2007. i postale učesnice po Ugovoru zajedno sa ostalim EU državama članicama, uključujući Austriju, Grčku, Mađarsku, Italiju i Sloveniju. Turska, Moldavija, Ukrajina, Norveška i onedavno Gruzija pridruženi su kao posmatrači, sa stanovišta mogućeg pridruživanja Energetskoj zajednici. U međuvremenu je Ugovor potpisala i Moldavija (status od aprila 2010. godine), itd. Potpisivanjem i ratifikacijom Ugovora, zemlje učesnice su se obavezale da razviju regionalno energetsko tržište (za električnu energiju i gas) u Jugoistočnoj Evropi.

Bosna i Hercegovina je ratifikovala Ugovor o uspostavljanju Energetske zajednice 27. 7. 2006. godine. Time je Bosna i Hercegovina prihvatila primjenu direktiva Evropske unije o tržištu energije, zaštiti okoline, konkurenciji i obnovljivim izvorima energije (OIE) po vremenskom rasporedu utvrđenom Ugovorom. Naime, odredbama Ugovora predviđa se sljedeće:

- implementacija od strane ugovornih strana „Acquis Communautaire“ (zakonodavstvo Evropske zajednice) o energiji, zaštiti okoline, konkurenciji i obnovljivim izvorima energije, prilagođeno institucionalnom okviru Energetske zajednice i specifičnoj situaciji svake ugovorne strane (proširenje „Acquis Communautaire“);
- uspostavljanje specifičnog regulatornog okvira koji omogućava efikasno djelovanje tržišta energije na cijeloj teritoriji ugovornih strana, te na dijelu teritorije Evropske zajednice, i stvaranje jedinstvenog mehanizma za prekogranični prenos, te nadzor unilaterlnih mjera zaštite;
- stvaranje tržišta energije bez unutrašnjih granica, uz koordinaciju uzajamne pomoći u slučaju ozbiljnijeg poremećaja u elektroenergetskoj mreži, uključujući i mogućnost uspostavljanja zajedničke energetske spoljnotrgovinske politike (stvaranje jedinstvenog tržišta energije).

Ugovorom o osnivanju Energetske zajednice osnivaju se i regionalne institucije potrebne za funkcionisanje panevropskog tržišta energije – Ministarski savjet (MS), Stalna grupa na visokom nivou (PHLG), Regulatorni odbor Energetske zajednice (ECRB), Sekretarijat

Energetske zajednice, Forum za električnu energiju, Forum za gas, Socijalni forum i Forum za naftu. Ovakva struktura preslikava institucije Evropske zajednice (Savjet ministara, Evropska komisija, Radna grupa regulatora za električnu energiju i gas – ERGEG, Firentinski i Madridski forum), kojima su, uz uvažavanje principa supsidijarnosti i proporcionalnosti, povjerene neke funkcije državne administracije.

## 1. TEORIJSKI MODELI REGIONALNE ENERGETSKE POLITIKE

Tokom protekle dvije decenije, Evropa je prošla kroz burni period razvoja, sa brojnim problemima u širokom dijapazonu društvenih i ekonomskih promjena u regionu. Zemlje Centralne i Istočne Evrope prilagođavaju se tržišnoj ekonomiji i prolaze kroz složene političke i ekonomske reforme. Uporedo sa razvojem i modernizacijom svojih privreda, pojedine zemlje su takođe postepeno integrisane u evropske strukture, uključujući i stvaranje bližih međusobnih veza zasnovanih na ovim temeljima. Sve ove aktivnosti dovode do povećane potrošnje, a stoga i tražnje za energijom. To znači da energetske sektor postaje sve važniji kao ključni dio nacionalnih privreda. Zemlje koje su nedavno pristupile Evropskoj uniji moraju posvetiti odgovarajuću pažnju ovom trendu, kao i multilateralnoj saradnji u okviru Evropske unije, što je takođe dovelo do potrebe da se uskladi energetska politika, kao i da se prilagodi energetska infrastruktura zemalja koje su nedavno pristupile sa postojećim evropskim standardima, a zatim, dalje, stvaranje zajedničke strategije i infrastrukture koje će odgovarati zahtjevima ove zajednice. Događaji u posljednjih nekoliko godina pokazali su da raste potražnja za energijom, kao i da je neophodno obezbijediti sigurnost isporuke, što zahtijeva veliku pažnju i koordinisani pristup između evropskih zemalja. Takođe, treba da se osigura energetska bezbjednost u skladu sa nastupajućim klimatskim promjenama. Još jedan ograničavajući faktor je globalna finansijska kriza, koja utiče na iznos sredstava koja se mogu izdvojiti za sprovođenje predloženih mjera.

Da bi evropska energetska politika postala stvarni faktor promovisanja energetske nezavisnosti, Evropska unija mora biti jedinstvena, sa jedinstvenom energetskom politikom. Proizvodnja i ušteda energije predstavljaju glavne pravce unapređenja energetske bezbjednosti, konkurentnosti, kao i šansu da se postigne cilj smanjenja emisije gasova staklene bašte i poboljšanja zaštite životne sredine. Prioritetni zadaci bili bi stvaranje zajedničkog pravnog okvira kako bi se poboljšala slobodna trgovina u Evropi i stvorio jedinstven i uzajamno povezan energetski prostor. Da bi se ovo obezbijedilo, potrebno je uložiti dodatne napore unutar Unije i omogućiti veću solidarnost između država članica kroz nalaženje zajedničkih osnova za ostvarenje zajedničkih dugoročnih ciljeva na polju energije.



Slika 1. Regionalna tržišta Evrope

## INTRODUCTION

The establishing process of regional energy market of the Balkans and its integration into the Internal Energy Market of the European Union, the so called Athens Process, is treated as one of the most important activities at regional level in the process of joining the countries of the region to the European Union. The objective of the Athens Process is to set the design of the institutional basis for organising internal national electricity market, the design of institutional basis for organising energy market for the region of South East Europe (SEE) and integration of that market into the Internal Energy Market of the European Union. The countries of Southeast Europe in cooperation with the European Union have developed the Energy Community (EC) as a regulatory and market framework for regional market in Southeast Europe and integration into the Internal Energy Market of the European Union. SEE countries have realised that solutions based on isolated national markets are inadequate, whereas the solutions based on the experiences of cooperation in energy sector as well as the recognition of potential gains for the growth of trade and new investments, are necessary in order to expand and strengthen regional cooperation and advancement of European integrations. Governments of the countries signed the Memorandum of Understanding in SEE on 8 December 2003 in Athens, Greece (Bosnia and Herzegovina State Electricity Regulatory Commission, 2003). The Treaty establishing the Energy Community (the Treaty) was signed in Athens on 25 October 2005 by the European Commission on behalf of the EU and Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Montenegro, Romania and Serbia, and also UNMIK (United Nations Interim Administration and Kosovo, pursuant to the United States Security Council Resolution 1244), as Contracting Parties (EC, 2005). The Treaty came into effect on 01 July 2006. Bulgaria and Romania joined the EU in 2007 and they became participants under the Treaty along with other EU member states including Austria, Greece, Hungary, Italy and Slovenia. Turkey, Moldova, Ukraine, Norway and just recently Georgia were associated as Observers, from the standpoint of a possible joining to the Energy Community. In the meantime, the Treaty was signed by Moldova (the status as of April 2010) etc. Since the signature and ratification of the Treaty, the participating states have undertaken to develop the regional energy market (for electricity and gas) in Southeast Europe.

Bosnia and Herzegovina has ratified the Treaty establishing the Energy Community on 27 July 2016. By doing so, Bosnia and Herzegovina accepted the implementation of the European Union Directives on the energy market, protection of the environment, competition and renewable energy sources (RES) according to the timetable established by the Treaty. In fact, the following is provided by the Provisions of the Treaty:

- the implementation by Contracting Parties of the *Acquis Communautaire* (the European Community legislation) on energy, environment, competition and renewables, adapted to both the institutional framework of the Energy Community and the specific situation of each of Contracting Parties (the extension of *Acquis Communautaire*);
- the setting up of a specific regulatory framework permitting the efficient operation of energy markets across the territories of Contracting Parties and part of the territory of the European Community, and the creation of a single mechanism for the cross-border transmission, and the supervision of unilateral safeguard measures;
- the creation of the energy market without internal frontiers, including the coordination of mutual assistance in case of serious disturbance to the energy networks, and which may include the achievement of a common external energy trade policy (the creation of a single energy market)

The Treaty Establishing the Energy Community also establishes the regional institutions which are necessary for functioning of pan – European energy market – the Ministerial Council on Energy (MCE), Permanent High Level Group (PHLG), the Energy Community Regulatory Board (ECRB), the Energy Community Secretariat, the Gas Exporting Countries Forum, the Social Forum and the Oil Forum. This kind of structure is a copy of

the institutions of the European Community (the Council of the European Union, the European Commission, the European Regulators Group for Electricity and Gas – ERGEG, the Florence Forum and the Madrid Forum), to which some functions of the state administration have been consigned, with respect for the principles of subsidiarity and proportionality.

## 1. THEORETICAL MODELS OF REGIONAL ENERGY POLICY

For the last two decades Europe has gone through a turbulent period of development, including numerous problems in a wide range of social and economic changes in the region. The countries of Central and Eastern Europe are adapting to the market economy and are also undergoing complex political and economic reforms. Alongside the development and modernisation of their own economies, some countries have also been gradually integrated into European structures, including the creation of closer interrelations based on these grounds. All these activities lead to increasing consumption and therefore the energy demand as well. This means that the energy sector is becoming more important as a key part of national economies. The countries which have recently joined the European Union must pay particular attention to this trend, as well as to multilateral cooperation within the European Union, which has also led to the need to conform energy policy and also to adjust the energy infrastructure of the countries which have recently joined with the existing European standards, and then to further continue to create the common strategy and infrastructure that will meet the requirements of this community. The events over the past few years have shown that there is a growing demand for energy, as well as that it is necessary to ensure the security of energy supply, which requires great attention and a coordinated approach between European countries. In addition, energy security should be ensured in accordance with the forthcoming climate change. Another limiting factor is the global financial crisis affecting the amount of funds which can be allocated for the implementation of proposed measures.

In order for European energy policy to become a real factor in promoting energy independence, the European Union must be unified with a single energy policy. The production together with energy savings constitute the main directions of improving energy security, competitiveness as well as the chance to meet the target of mitigating greenhouse gas emissions and improving environmental protection. Priority tasks would be to create a common legal framework so as to enhance free trade in Europe and create the unified and interrelated energy environment. In order to ensure this, it is necessary to make additional efforts within the European Union and facilitate greater solidarity between the Member States by finding common bases for achieving common long – term energy objectives.



Figure 1. Regional markets in Europe

Evropska energetska politika trenutno ima tri osnovna cilja:

- energija mora biti svima dostupna, odnosno isporuke energije moraju biti osigurane;
- obezbijediti konkurentne cijene za energiju i na taj način poboljšati konkurentnost evropskih privreda;
- i u isto vrijeme energetska politika treba da bude održiva (održiv razvoj), kako bi dala svoj doprinos u borbi protiv klimatskih promjena.

Pošto Evropa trenutno uvozi 54% svoje energije, energetska uvoza isplate proizvođačima energije predstavljaju značajan odliv bogatstva stvorenog u Evropskoj uniji. Iako trgovina energijom ima važnu ulogu, u energetske sistemu Evropske unije ostaje potreba da se naglasi značaj energetske efikasnosti, smanjenja emisije gasova staklene bašte i raznovrsnost energetske izvora, kao i isporuke. Nakon usvajanja „20-20-20“ paketa, EU je spremna da preduzme dalje korake na putu više održive, bezbjedne i više tehnološki raznovrsne energetske politike koja će stvoriti bogatstvo i radna mesta u Evropskoj uniji. Iako su individualne zemlje članice odgovorne za obezbeđenje sopstvenih energetske politike, jedna od osnovnih karakteristika članstva u Evropskoj uniji jeste solidarnost između država članica.

Rješenja na nacionalnom nivou često su neadekvatna za unutrašnja tržišta energije. Obezbeđenje sigurne isporuke energije je u interesu Evropske unije kao cjeline. Imajući u vidu globalni razvoj, Evropska unija mora da usvoji mjere da se obezbijedi energija u budućnosti i da zaštiti svoje osnovne energetske interese. Evropska unija mora povećati napore da pripremi efikasnu spoljnu energetske politiku, koja mora da bude jedinstvena, mora da odredi najvažnije energetske infrastrukturne projekte i osigura njihovu izgradnju. Takođe, mora da djeluje koherentno, tako da produbljuje svoje partnerstvo sa ključnim dobavljačima energije, tranzitnim zemljama i potrošačima.

## 2. RAZMATRANJE OBNOVLJIVIH IZVORA ENERGIJE U KONTEKSTU ENERGETSKE ZAJEDNICE JIE

Energetska zajednica je u proteklom periodu punu pažnju posvetila brojnim pitanjima vezanim za obnovljive izvore energije (OIE), a u okviru diskusije oko primjene EU paketa o klimatskim promjenama. Ova diskusija je evoluirala kako u kontekstu sastanaka na nivou PHLG, tako i na nivou Ministarskog savjeta. Imajući ovo u vidu, Sekretarijat Energetske zajednice posvetio je dužnu pažnju ovim pitanjima i prilikom izrade Programa rada Energetske zajednice za naredni period, a takođe je predvidio i odgovarajuće izvještavanje o ovoj temi.

### A. Klimatske promjene i Direktiva EU

Kada je u decembru 2008. godine Evropski parlament usvojio paket „20-20-20“ o klimatskim promjenama, cilj je bio da se postigne sljedeće: 20% smanjenja emisije gasova staklene bašte, 20% poboljšanje energetske efikasnosti, kao i 20% učešća obnovljivih izvora energije u energetske miksu EU do 2020. godine.

Direktiva o obnovljivim izvorima energije postavlja obavezne nacionalne ciljeve koje EU-27 treba da postigne kroz promovisanje korišćenja obnovljivih izvora energije u sljedećim oblastima: za električnu energiju, grijanje i hlađenje, i sektor saobraćaja, kako bi se osiguralo da obnovljiva energija sačinjava najmanje 20% od ukupne potrošnje energije u EU do 2020. godine.



Slika 2. Zemlje regiona JIE

Sporazum takođe predviđa da obnovljiva energija, kao što su biogoriva, te električna energija i vodonik proizvedeni iz obnovljivih izvora, iznosi najmanje 10% od ukupnog broja u potrošnji goriva EU u svim oblicima transporta do 2020. godine.

U pogledu postizanja obaveznih nacionalnih ciljeva za obnovljive izvore energije, Direktiva pruža mogućnost korišćenja programa podrške i mjere saradnje između različitih u EU-27 i sa trećim zemljama u skladu sa članovima 5–11. Direktive. Zemlje članice EU moraju da usvoje, objavljuju i obavještavaju Komisiju o svojim akcionim planovima. U skladu sa ciljevima Direktive, planovi moraju da obezbijede autorizaciju, certifikaciju i proceduru licenciranja tako da budu pojednostavljeni u cilju uklanjanja barijera u razvoju tržišta obnovljivih izvora energije.

Ovo je prvi put da se u EU dio zakona odnosi na povezivanje sa Ugovorom o Energetskoj zajednici i predviđa olakšice za međusobnu saradnju između EU-27 i ugovornih strana. U navodima Direktive, član 35, navodi se: „Pomno prateći odredbe ove direktive, zemlje članice treba da se podstaknu da slijede sve adekvatne oblike saradnje u vezi sa zadacima koji su dati u ovoj direktivi. Takva saradnja može da se uspostavi na svim nivoima, bilateralno ili multilateralno. Sem mehanizma sa učinkom na računanje cilja i poštovanje cilja, koji su isključivo dati u ovoj direktivi, odnosno statistički transferi među zemljama članicama, zajednički projekti i zajedničke šeme podrške, saradnja može takođe dobiti oblik, na primjer, razmjene informacija i najboljih praksi, kao što je dato naročito u platformi transparentnosti koju je uspostavila ova direktiva, i druge oblike dobrovoljne saradnje među svim vrstama šeme podrške“. U članu 9. Ugovora dodatno se ističu zajednički projekti saradnje između Energetske zajednice i EU-27.

Direktiva 2009/28/EK Evropskog parlamenta i Savjeta donesena je 23. aprila 2009. godine i govori o promovisanju upotrebe energije iz obnovljivih izvora i izmjeni i dopuni i potom poništenju direktiva 2001/77/EK i 2003/30/EK sa dejstvom je od 1. januara 2012. godine (EC, 2003).

### B. Radna grupa za OIE u Energetskoj zajednici JIE

Na sastanku Ministarskog savjeta još u decembru 2008. godine, Evropska komisija obavijestila je ministre o dogovoru vezanom za Direktivu o obnovljivim izvorima energije i odgovarajućim mogućnostima za investicije u Energetskoj zajednici. Tada je u zaključcima na Ministarskom savjetu pozdravljen prijedlog Evropske komisije da se pokrene Studija o uticaju i mogućim modalitetima uključivanja ove direktive u budućnost Energetske zajednice, kao i da se us-

European energy policy currently has three main objectives:

- energy must be available to everyone, that is, energy supplies must be secured;
- to provide competitive energy prices and thereby improve the competitiveness of European economies;
- at the same time energy policy should be sustainable (sustainable development) in order to contribute to the fight against climate change.

Since Europe currently imports 54% of its energy, energy import and payments to energy producers account for a substantial outflow of the wealth created in the European Union. Even though energy trade has an important role, in the energy system of the European Union there is a need to emphasize the importance of energy efficiency, mitigation of greenhouse gas emissions and diversification of energy sources as well as the supply. After the adoption of the 20-20-20 package, the EU is ready to take further steps in the direction of a more sustainable, secure and more technologically diverse energy policy, which will create wealth and employment positions in the European Union. Although individual Member States are responsible for securing their own energy policies, one of the basic characteristics of membership in the European Union is the solidarity between Member States.

Solutions at the national level are often inadequate for internal energy markets. Providing secure energy supply is in the interest of the European Union as a whole. Having regard to global development, the European Union must adopt measures to provide energy in the future and to protect its primary energy interests. The European Union must increase its efforts to prepare an efficient external energy policy, which must be unified, it must define the most important energy infrastructural projects, ensure their construction. It also has to act coherently, so as to deepen its partnership with key energy suppliers, transit countries and consumers.

## 2. CONSIDERING RENEWABLE ENERGY SOURCES IN THE CONTEXT OF ENERGY COMMUNITY OF SEE

In the previous period, the Energy Community has paid its full attention to numerous issues related to renewable energy resources (RES), and in the frame of discussion on the implementation of the EU package on climate change. This discussion has evolved both in the context of meetings of at PHLG level and at the level of the Ministerial Council on Energy. Keeping this in mind, the Energy Community Secretariat has also given due consideration to these issues while drawing up the Energy Community Work Programme for the forthcoming period, and it provided for adequate reporting on this topic as well.

### A. Climate change and the EU Directive

When in December 2008, the European Parliament adopted the 20-20-20 package on climate change, the aim was to achieve the following: 20% mitigation in greenhouse gas emissions, 20% improvement in energy efficiency, as well as 20% participation of renewable energy sources in the EU energy mix by 2020.

The Renewable Energy Directive sets mandatory national targets to be met by the EU-27 through promoting the use of renewable energy in the following areas: for electricity, heating and cooling and the transport sector, in order to ensure that renewable energy accounts for at least 20% of total energy consumption in the EU by 2020.



Figure 2. Countries of the SEE region

The agreement also stipulates that the renewable energy such as biofuels as well as electricity and hydrogen produced from renewable sources, account for at least 10% of the total fuel consumption in the EU in all forms of transport by 2020.

With regard to meeting the mandatory national targets for renewable energy sources, the Directive provides the possibility to use support programs and measures of cooperation between the different ones in the EU-27 and with third countries in accordance with Articles 5-11 of this Directive. Member states of the EU must adopt, publish and notify the Commission of their Action Plans. In accordance with the targets of this Directive, the plans must provide authorisation, certification and licensing procedure so that they are simplified in order to remove barriers in the development of renewables energy market.

This has been for the first time that a part of the law in the EU refers to the connection with the Energy Community Treaty and facilities have been provided for mutual cooperation between the EU-27 and Contracting Parties. The Directive, Article 35 states the following "Whilst having due regard to the provisions of this Directive, Member States should be encouraged to pursue all appropriate forms of cooperation in relation to the objectives set out in this Directive. Such cooperation can take place at all levels, bilaterally or multilaterally. Apart from the mechanisms with effect on target calculation and target compliance, which are exclusively provided for in this Directive, namely statistical transfers between Member States, joint projects and joint support schemes, cooperation can also take the form of, for example, exchanges of information and best practices, as provided for, in particular, in the transparency platform established by this Directive, and other voluntary coordination between all types of support schemes." Article 9 of the Treaty further highlights the joint cooperation projects between the Energy Community and the EU-27.

The Directive 2009/28/EK of the European Parliament and of the Council was adopted on 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC coming into effect from 1 January 2012 (EC, 2003).

### B. The Renewable Energy Task Force in SEE Energy Community

At the meeting of the Ministerial Council in December 2008, the European Commission informed the ministers about the agreement related to the Renewable Energy Directive and the corresponding opportunities for investments in the Energy Community. At that

postavi Radna grupa za obnovljive izvore energije (RE TF) u 2009. godini. U januaru 2009. godine PHLG je razmotrio Radni dokument o uspostavljanju Radne grupe za obnovljive izvore energije, i dogovoreno je da ovaj dokument bude podnesen Ministarskom savjetu. Misija ove nove radne grupe je da procijeni uticaj nove Direktive o promociji korišćenja energije iz obnovljivih izvora u ugovornim stranama i kandidatima za ugovorne strane Energetske zajednice. U junu 2009. godine, na 6. sastanku Ministarskog savjeta, usvojen je mandat Radne grupe za obnovljive izvore energije, kao što je predložila PHLG.

Proceduralno, Radna grupa za obnovljive izvore energije istražuje i predlaže modalitete za moguće dalje usvajanje nove Direktive o obnovljivim izvorima u okviru Ugovora o uspostavljanju Energetske zajednice. Radna grupa svoj rad zasniva na postojećem znanju, pravnom i institucionalnom okviru za obnovljive izvore enerije, ali takođe i na područjima koje pokriva Ugovor u cilju da se olakša ponašanje Energetske zajednice u skladu sa članom 35. Ugovora, koji glasi: „Energetska zajednica može usvojiti mjere radi podsticanja razvoja u oblastima obnovljivih izvora energije i energetske efikasnosti, uzimajući u obzir njihove prednosti u pogledu sigurnosti snabdijevanja, zaštite životne sredine, društvene kohezije i regionalnog razvoja.“

Rad radne grupe za obnovljive izvore energije (RETF) organizaciono i administrativno je podržan od strane Sekretarijata Energetske zajednice. U tom svojstvu, Sekretarijat, takođe, prisustvuje sastancima Radne grupe. Što se tiče sastava Radne grupe:

1. RETF se sastoji od predstavnika na ekspertskom nivou od ugovornih strana i učesnika Ugovora o uspostavljanju Energetske zajednice iz vladinih institucija sa nadležnostima u vezi s obnovljivim izvorima energije.
2. Posmatrači će biti takođe pozvani da imenuju svoje predstavnike iz iste vrste institucija, kako bi aktivno učestvovali u radu RETF.
3. Svaka strana ima više od dva predstavnika na sastancima RETF. Učesnici i posmatrači neće imati više od jednog predstavnika.
4. Predsjedavajući može pozvati zainteresovane strane, uključujući i predstavnike zajednice donatora, da učestvuju na *ad hoc* osnovi.

RETF se sastaje onoliko često koliko je potrebno u cilju postizanja ciljeva postavljenih mandatom od strane Ministarskog savjeta. Sastanci RETF odvijaju se na poziv predsjedavajućeg. RETF ima zadatak da informiše Ministarski savjet, kao i PHLG, o napretku koji je postignut, a predsjedavajući je odgovoran za pripremu izvještaja i za njihovo blagovremeno dostavljanje.

#### C. Studija o implementaciji Direktive o promociji korišćenja energije iz obnovljivih izvora u Energetskoj zajednici

Cilj Studije o implementaciji Direktive o promociji korišćenja energije iz obnovljivih izvora u Energetskoj zajednici [4] bio je da istraži uticaj i modalitete mogućeg uključivanja nove Direktive o promociji korišćenja energije iz obnovljivih izvora u Energetskoj zajednici. Zadaci Studije su:

1. Pregled trenutnog stanja razvoja obnovljivih izvora energije u svakoj od ugovornih strana i kandidata za ugovorne strane.
2. Analiza uticaja prema zahtjevima nove Direktive OIE prema ugovornim stranama i kandidatima za ugovorne strane, imajući u vidu raspoloživi potencijal i rezerve za OIE, te imajući u vidu saradnju između EU, zemalja članica i ugovornih strana, kako je i predviđeno ovom direktivom.
3. Na osnovu metodologije koju je pripremila Evropska komisija, proračunati ciljeve koje treba postići do 2020. godine.

4. Obezbijediti procjenu troškova u vezi sa ispunjenjem obaveznih ciljeva datih pod zadatkom 3. ove studije. Procijeniti mogućnosti za investiranje u vezi sa mogućnostima za zapošljavanje, a prema zahtjevima za smanjenje emisija gasova staklene bašte i smanjenja potrošnje fosilnih goriva (Energy&water economics and EPA-NTUA, 2010).

Na otvorenoj tenderskoj proceduri, uslijedilo je vrednovanje (evaluacija) ponuda, a nakon toga, 29. aprila 2009. godine, Sekretarijat Energetske zajednice potpisao je ugovor sa IPA ENERGY&WATER ECONOMICS and EPA-NTUA.

Sekretarijat Energetske zajednice objavio je završni izvještaj Studije o implementaciji nove EU Direktive o promociji korišćenja energije iz obnovljivih izvora u Energetskoj zajednici. U ovom izvještaju je navedeno da je cilj Studije bio da procijeni stanje i da analizira predušlove za razvoj obnovljivih izvora energije pod pretpostavkom novih EU direktiva OIE. Studija ukazuje na veliki potencijal obnovljivih izvora energije u Energetskoj zajednici, te ukazuje na potrebu tačnijih podataka koji se odnose na biomasu, a potrebni su za uspostavljanje obaveznih ciljeva za OIE do 2020. Drvo se intenzivno koristi kao izvor goriva za grijanje širom Energetske zajednice i „potrošnja biomase u 2005. je, dakle, ključni element cilja proračuna obnovljivih izvora energije“. Dostupnost podataka, nedosljednosti prikupljanja podataka i mjernih metoda u cijelom regionu predstavljaju ozbiljan problem da se uspostavi pouzdana polazna tačka na kojoj treba da budu zasnovani ciljevi. Na osnovu ekvivalentnog nivoa planova od zemalja članica Evropske unije, Studija izračunava udio od 24% OIE u 2020. u Energetskoj zajednici. Nivo nacionalnih udjela razlikuje se između ugovornih strana (od 19% Crna Gora do 36% Albanija), uglavnom u zavisnosti od njihovog trenutnog udjela u obnovljivim izvorima energije. Što se tiče Studije, „ukupan [prijedlog] cilj za ovih sedam strana je veći od prvobitnih 20% u EU, prije svega zbog mnogo većeg udjela obnovljivih izvora energije u 2005. (17% u odnosu na 8,5%), a djelimično izjednačavanje (protivteža) je mnogo manji napor koji se ulaže na osnovu nižeg GDP po glavi stanovnika (1,3 odsto u odnosu na 6 odsto za EU)“. Prema studiji, 24% udjela obnovljivih izvora energije može da se postigne povećanjem od novih 2,5 GW vjetroelektrana i 1 GW novih hidrokapaciteta, a ako se obnovljivi izvori energije koriste za grijanje, cilj može biti u potpunosti zadovoljen iz biomase – što će ukupno koštati do 5,4 milijardi evra. Alternativni scenario ispituje uticaj niže potražnje do 2020, zbog efikasne politike energetske efikasnosti. Ako ovo bude slučaj, da se postigne cilj, troškovi bi se mogli svesti na 3,1 milijardu evra. U zavisnosti od posmatranog scenarija, Studija takođe procenjuje između 10.000 i 167.000 radnih mesta ekvivalent punog vremena, prije svega u sektoru električne energije.

Dalje, prema zaključcima sa sastanka PHLG, navedeno je da „nedostatak adekvatnih podataka o biomasu od ugovornih strana predstavlja činjeničnu prepreku za praktičnu primjenu nove EU Direktive OIE, i samim tim sprečava Ministarski savjet u donošenju obavezujućih odluka o primjeni Direktive 2009/28/EK u ovoj fazi“. Imajući, ovo u vidu, PHLG je odlučio da podnese preporuku Ministarskom savjetu, tako da identifikuje konkretna pitanja u vezi sa primjenom Direktive OIE i postavljanja relevantnih rokova.

#### D. Osvrt na Elektroprivredu Republike Srpske

Elektroprivreda Republike Srpske (ERS) osnovana je kao Javno preduzeće 2. juna 1992. godine (preduzeće sa visokim učešćem državnog kapitala). Vlada Republike Srpske organizovala je Elektroprivredu Republike Srpske kao Mješoviti holding Elektroprivreda Republike Srpske akcionarsko društvo Trebinje (MH ERS) 30. decembra 2005. godine. MH ERS čini 11 zavisnih preduzeća i matično preduzeće koje permanentno kontroliše, odnosno prati i ocjenjuje uspješnost

time, in the conclusions of the Ministerial Council welcomed was the proposal by the European Commission to launch the Study on the impact and possible modalities of incorporating this Directive into the future of the Energy Community, as well as to set up the Renewable Energy Task Force (RE TF) in 2009. In January 2009 the PHLG reviewed the Working Document on setting up the Renewable Energy Task Force, and it was agreed for this document to be submitted to the Ministerial Council. The mission of this new task force is to assess the impact of the new Renewable Energy Directive in Contracting Parties and the candidates for the Energy Community Contracting Parties. In June 2009, at the 6<sup>th</sup> Ministerial Council meeting, the mandate of the Renewable Energy Task Force was adopted, as proposed by PHLG.

Procedurally, the Renewable Energy Task Force explores and proposes modalities for possible further adoption of the new Renewable Energy Directive under the Treaty establishing the Energy Community. The work of the Task Force is based on the existing knowledge, legal and institutional framework for renewable energy sources, but also on the areas covered by the Treaty in order to facilitate the behaviour of the Energy Community in accordance with the Article 35 of the Treaty that reads "The Energy Community may adopt Measures to foster development in the areas of renewable energy sources and energy efficiency, taking account of their advantages for security of supply, environment protection, social cohesion and regional development."

The work of the Renewable Energy Task Force (RETF) is organizationally and administratively supported by the Energy Community Secretariat. In that role the Secretariat also attends the meetings of the Task Force. As far as the composition of the Task Force is concerned:

1. RETF is consisted of representatives at the expert level of Contracting Parties and the Parties to the Treaty establishing the Energy Community from governmental institutions having competences related to renewable energy sources.
2. The observers will also be invited to appoint their representatives from the same type of institutions, in order to actively participate in the work of the RETF.
3. Each party has more than two representatives present at RETF meetings. The participants and observers will not have more than one representative.
4. The chairperson may invite the interested parties, including representatives of the donor community, to participate on an ad hoc basis.

The meetings and work of RE TF is led by the Chairperson of RETF. The RETF shall meet as often as it is necessary in order to achieve the objectives set by the mandate of the Ministerial Council. The RETF meetings are held upon the invitation of the Chairperson. The RETF is obliged to inform the Ministerial Council, as well as the PHLG, of the progress achieved, while the Chairperson is responsible for preparing the reports an for their timely submission.

### C. Study on the implementation of the Renewable Energy Directive in the Energy Community

The aim of "The Study on the implementation of the Renewable Energy Directive in the Energy Community" [4] was to investigate the impact and modalities of the possible incorporation of the new Renewable Energy Directive in the Energy Community. The tasks of the Study are as follows:

1. Review of the current state of renewable energy sources development in each of Contracting Parties and the candidates for Contracting Parties.

2. An impact analysis according to the requirements of the new RES Directive according to Contracting Parties and the candidates for Contracting Parties, taking into account the available RES potential and RES reserves, and having regard to the cooperation between the EU, Member States and Contracting Parties as provided for in this Directive.
3. To calculate the targets to be achieved by 2020, based on the methodology prepared by the European Commission.
4. To provide cost estimate related to meeting the compulsory targets stated in task 3 of this Study. To assess investment opportunities relating to employment opportunities, in accordance with the requirements for mitigating greenhouse gas emissions and reducing fossil fuels consumption. (Energy&water economics and EPA-NTUA, 2010).

In an open tender procedure, there was an assessment (evaluation) of the tenders, after which on 29 April 2009 the Energy Community Secretariat signed a contract with "IPA ENERGY&WATER ECONOMICS and EPA-NTUA".

The Energy Community Secretariat has published the final report on "The Study on the implementation of the Renewable Energy Directive in the Energy Community". This report states that the aim of the Study was to assess the situation and to analyse the prerequisites for renewable energy sources development assuming the new EU renewable energy sources directives. The Study points out the great potential of renewable energy sources in the Energy Community and indicates the need for more accurate biomass data which are necessary to establish mandatory renewable energy targets by 2020. Wood is intensively being used as a fuel source for heating throughout the Energy Community and "the consumption of biomass in 2005 is therefore a key element of the renewable energy sources budget target". Data availability, inconsistencies in data collection and measurement methods across the whole region is a serious problem in establishing a reliable starting point on which the targets should be based. On the basis of the equivalent level of plans from the Member States of the European Union, the Study calculates a share of 24% of RES in the Energy Community in 2020. The level of national shares varies between Contracting Parties (from 19% Montenegro to 36% Albania), mainly depending on their current share in renewable energy sources. Regarding the Study "the overall [proposal] target for these seven parties is higher than the original 20% in the EU, primarily due to the much greater share of renewable energy sources in 2005 (17% by comparison with 8,5%), and partial equalisation (counter-balance) means much smaller effort being made based on lower GDP per capita (1,3 percent by comparison with 6 percent for the EU)". According to the Study, 24% of the share of renewable energy sources can be achieved by the increase of new 2,5 GW from wind power plants and 1 GW from new hydro capacities, and if renewable energy sources are used for heating, the target can be completely met with biomass – which will overall cost up to 5,4 billion Euros. An alternative scenario analyses the impact of lower demand by 2020, due to an efficient energy policy. If this is the case, the cost necessary to meet the target could be reduced to 3,1 billion Euros. Depending on the scenario being considered, the Study also estimates between 10.000 and 167.000 full time jobs, primarily in the electricity sector.

Furthermore, according to the conclusions at the PHLG meeting, it was stated that "the lack of adequate biomass data from Contracting Parties forms a factual obstacle to the practical implementation of the new EU Renewable Energy Directive, which therefore prevents the Ministerial Council from making binding decisions on implementing the Directive 2009/28/EK in this phase". Having regard to this, PHLG decided to submit a recommendation to the Ministerial Council, so as to identify specific issues related to the implementation of Renewable Energy Directive and setting relevant deadlines.

poslovanja svih zavisnih preduzeća. Elektroprivreda Republike Srpske je značajan izvoznik električne energije, i u narednom periodu predviđeni su prioritetni zadaci u skladu sa daljim unapređenjem cjelokupnog rada i poslovanja.

Prioritetni zadaci MH ERS u predstojećem periodu biće:

- obezbjeđenje sigurnog snabdijevanja kvalitetnom električnom energijom potrošača u RS;
- povećanje izvoza električne energije u regionu;
- sanacija i modernizacija objekata EES;
- investiranje u one projekte za koje se očekuje da će postići pozitivne ekonomske rezultate;
- promocija obnovljivih izvora energije;
- smanjenje gubitaka i operativnih troškova;

sve sa ciljem da MH ERS omogući dobit za potrošača, društvo i kompaniju, kroz integrisanje u energetske sistem Evrope.

Prioritetni zadaci MH ERS vezano za promociju obnovljivih izvora električne energije u skladu su i sa Strategijom razvoja energetike Republike Srpske do 2030. godine, koju je usvojila Vlada Republike Srpske.

## ZAKLJUČAK

Zemlje potpisnice Ugovora o uspostavljanju Energetske zajednice obavezne su da svoje pravne i regulatorne okvire usklade i dovedu na nivo koji bi omogućio integraciju u unutrašnje energetske tržište EU (uklanjanje administrativnih i tehničkih barijera). Energetska zajednica je u proteklom periodu punu pažnju posvetila brojnim pitanjima vezanim za obnovljive izvore energije (OIE), a u okviru diskusije oko EU paketa o klimatskim promjenama. Politička volja je neophodna kao podrška potrebnim promjenama i izradi akcionih planova za region JIE.

Važno je da otvaranje energetske tržišta kroz promociju obnovljivih izvora energije bude postepeno i da ga prati set mjera zaštite, a na

zainteresovanim stranama je da odluče o pristupu i mogućnostima za uspostavljanje regionalnog tržišta. Potrebno je izabrati optimalna rješenja, a prioritetni zadaci ERS vezano za nove investicije i promociju obnovljivih izvora električne energije u skladu su sa Strategijom razvoja energetike Republike Srpske do 2030. godine, koju je usvojila Vlada Republike Srpske.

## IZVORI

1. Memorandum of Understanding on the Regional Electricity Market in South East Europe and its Integration into the European Union Internal Electricity Market, <http://www.ferk.ba>
2. The Treaty establishing the Energy Community, EC 2005, <https://www.derk.ba>
3. The Directive 2009/28/EK of the European Parliament and of the Council adopted on 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, <https://eur-lex.europa.eu>
4. The Study on the implementation of the new Renewable Energy Directive in the Energy Community, IPA ENERGY&WATER ECONOMICS and EPA-NTUA, 2010
5. K.K.Markov, B.Supic and D.Stanivukovic, "Opening of the South East Europe wholesale electricity market – review of Bosnia & Herzegovina with special emphasis on Power Utility of the Republic of Srpska (ERS)", DEMSEE Sitia, Greece, 2010
6. K.KMarkov, N.Tesanovic, "Formation regional electricity market in the South East Europe", MH ERS, vol. 6, pp. 16-19, 2010
7. M.Apostolovic, "Overview of the present situation and the vision of the future trading and investment activities in the South-East Europe", DEMSEE 2009, Belgrade September 17-18, 2009
8. Strategy for energetic development of the Republic of Srpska until 2030, <http://www.vladars.net>



#### D. Reference to power utility of the Republic of Srpska

Power Utility of the Republic of Srpska was founded as a Public Enterprise – 2 June 1992, the company with a high share of state capital. Government of the Republic of Srpska organised Power Utility of the Republic of Srpska as the Mixed Holding “Power Utility of the Republic of Srpska“ Parent Joint – stock Company Trebinje (hereinafter MH ERS) – 30 December 2005. MH ERS consists of 11 subsidiary companies and the Parent Company which permanently controls, i.e. monitors and evaluates the business performance of all subsidiaries. Power Utility of the Republic of Srpska is a significant exporter of electricity and in the forthcoming period priority tasks have been envisaged in compliance with the further improvement of the overall work and business.

Priority tasks of MH ERS in the upcoming period will be:

- providing secure supply of high quality electricity for the consumers in the Republic of Srpska,
- increasing electricity export in the region,
- restoration and modernisation of facilities in the Electricity Sector,
- investment in those projects which are expected to achieve positive economic outcomes,
- promotion of renewable energy sources,
- reduction of losses and operational costs,
- all of these with the aim for MH ERS to provide profit for consumers, society and the company through integration into the European energy system.

Priority tasks of MH ERS related to the promotion of renewable energy sources are also in accordance with the Energy Development Strategy of the Republic of Srpska by 2030, which was adopted by the Government of the Republic of Srpska.

## CONCLUSIONS

The signatories to the Treaty establishing the Energy Community are obliged to harmonise their legal and regulatory frameworks and bring them to a level which would allow integration into the Internal Energy Market (removal of administrative and technical barriers). In the previous period, the Energy Community has paid due attention to numerous issues related to renewable energy sources (RES), in

the frame of discussion about the EU package on climate change. Political will is needed in support of the necessary changes and drawing up the action plans for the SEE region.

It is important that the opening of the energy market is gradual and followed by a set of protection measures, while the stakeholders should decide on the approach and the possibilities for establishing regional market. It is necessary to choose optimal solutions, so the priority tasks of the Power Utility of the Republic of Srpska related to new investments and the promotion of renewable energy sources are also in accordance with the Energy Development Strategy of the Republic of Srpska by 2030, adopted by the Government of the Republic of Srpska.

## REFERENCES

1. Memorandum of Understanding on the Regional Electricity Market in South East Europe and its Integration into the European Union Internal Electricity Market, <http://www.ferk.ba>
2. The Treaty establishing the Energy Community, EC 2005, <https://www.derk.ba>
3. The Directive 2009/28/EK of the European Parliament and of the Council adopted on 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, <https://eur-lex.europa.eu>
4. The Study on the implementation of the new Renewable Energy Directive in the Energy Community, IPA ENERGY&WATER ECONOMICS and EPA-NTUA, 2010
5. K.K.Markov, B.Supic and D.Stanivukovic, “Opening of the South East Europe wholesale electricity market – review of Bosnia & Herzegovina with special emphasis on Power Utility of the Republic of Srpska (ERS)”, DEMSEE Sitia, Greece, 2010
6. K.KMarkov, N.Tesanovic, “Formation regional electricity market in the South East Europe”, MH ERS, vol. 6, pp. 16-19, 2010
7. M. Apostolovic, “Overview of the present situation and the vision of the future trading and investment activities in the South-East Europe”, DEMSEE 2009, Belgrade September 17-18, 2009
8. Strategy for energetic development of the Republic of Srpska until 2030, <http://www.vladars.net>