







ISSN 1392–6195 (print) ISSN 2029–2058 (online) JURISPRUDENCIJA JURISPRUDENCE 2012, 19(4), p. 1495–1513.

# LEGAL REGULATION OF RENEWABLE ENERGY MARKET

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Received on 25 September, 2012; accepted on 7 December, 2012

**Abstract**. The aim of this article is to address the regulatory framework as one of the key factors determining the success of creation of single market for renewable energy. No one could possibly argue that non-discriminative and consistent legal regulation plays a big role in the creation of a single market. Therefore, the question of legal capability to create the single market for renewable energy and the overall quality of present regulatory framework is at the centre of this article. Our objective is to analyse whether the single market for energy produced from renewable sources can be created under current legal regulation of the European Union

Therefore, the first part of the article analyses the competence of the European Union to regulate the renewable energy sector and division of legislative powers between the Member States and the European Union. The goal of the first part is to answer the question whether the European Union has the competence to regulate renewable energy market. The second part

Jurisprudencija/Jurisprudence © Mykolo Romerio universitetas, 2012 of the article analyses the legal framework of measures for the promotion of renewable energy production used in each Member State. The goal of the second part of this article is to answer the question – whether all renewable energy producers are in equal competitive position, notwithstanding different legal frameworks of the Member States.

**Keywords**: renewable energy sources, the European Union, competence, support measure, single market.

### Introduction

The creation of the single market has been one of the primary goals of the establishment of the European Community. This goal has been achieved in almost all sectors, however energy market remains nationally isolated. One of the main goals declared in the European Energy Strategy (2010)<sup>1</sup> is the creation of the single market for energy. Supposedly, the energy market from renewable sources has to be integrated into traditional energy market scheme. But the energy produced from renewable sources cannot participate in traditional energy market for the well-known reasons – it is more expensive and needs additional promotion measures. Therefore, in order to employ the potentials of renewable energy resources, a supplementary renewable energy market needs to be created. The single market for renewable energy would help allocating the renewable energy resources throughout Europe in the most effective way – to produce the largest amount of renewable energy in the places with the highest potential of resources (for example – sun energy in the South Member States). Despite the fact that the creation of the single market for renewable energy will leave technical issues concerning the transmission of the energy at stake, it is time to raise the question whether the legal measures employed by the European Union in this area are effective in achieving an objective of the single market.

The aim of this article is to address the regulatory framework as one of the key factors determining the success of creation of the single market for renewable energy. No one could possibly argue that non-discriminatory and consistent legal regulation plays an important role in the creation of a single market. Therefore, the question of legal capability to create the single market for renewable energy and overall quality of the existing regulatory framework is at the centre of this article. Our objective is to analyse whether the single market for energy produced from renewable sources can be created under current legal regulation of the European Union.

The main tasks of the article are to identify the scope of competence of the European Union to regulate the renewable energy sector and to determine the differences of legal

Communication from the Commission. Energy 2020. A strategy for competitive, sustainable and secure energy Brussels. COM(2010) 639 final [interactive]. [accessed on 12-09-2012]. <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0639:EN:HTML:NOT">http://eur-lex.europa.eu/LexUriServ.do?uri=CELEX:52010DC0639:EN:HTML:NOT</a>.

promotion measures for the production of energy from renewable energy sources in Member States. To achieve the above-mentioned tasks, the descriptive and comparative analysis methods are employed in the research.

The topic of renewable energy is discussed by Lithuanian as well as internationally known authors. Several articles have been published in recent years on renewable energy and its promotion measures. The up to date publications on renewable energy of Lithuanian authors are the following: the Analysis of the Usage and Perspectives of Renewable Energy Sources in Lithuania<sup>2</sup>, Renewable Energy Regulation in the European Union Law: Development and Trends<sup>3</sup>, Sustainable Development of the Lithuanian Energy Sector<sup>4</sup>; international publications: Analysis of the EU Policy Package on Climate Change and Renewables<sup>5</sup>, EU Renewable Energy Support Policy: Faith or Facts<sup>6</sup>, Renewable Energy Projections as Published in the National Renewable Energy Action Plans of the European Member States<sup>7</sup>. However, most of them had analysed the use of renewable energy from the economic point of view. The novelty of this article is the analysis of cumulative impact of the European Union competence to regulate renewable energy market and the national regulation of the Member States on the creation of a single market for renewable energy.

For an effective creation of the single European market for renewable energy, two main conditions should be met. First, the European Union should initially have legislative power to regulate the renewable energy market, second – in the Member States, legal regulation of renewable energy should be harmonised and should not cause competition disorder. Therefore, the first part of the article analyses the competence of the European Union to regulate the renewable energy sector and the division of legislative powers between the Member States and the European Union. The goal of the first part is to answer the question whether the European Union has the competence to regulate renewable energy market. The second part of the article analyses the legal framework of measures for the promotion of renewable energy production used in each Member State. The goal of the second part of this article is to answer the question – whether all renewable energy producers are in the equal competitive position notwithstanding different legal frameworks of the Member States.

<sup>2</sup> Vasarevičius, D. The Analysis of the Usage and Perspectives of Renewable Energy Sources in Lithuania. *Science – future of Lithuania*. 2011, 3(1): 73–78.

<sup>3</sup> Juškys, A. Atsinaujinančių išteklių energijos reguliavimas Europos Sąjungos teisėje: raida ir tendencijos. Verslo ir teisės aktualijos. *Current Issues of Business and Law.* 2012, 7(1): 183–200.

<sup>4</sup> Baublys, J.; Miškinis, V.; Morkvėnas, A. Sustainable Development of the Lithuanian Energy Sector. *Power Engineering*. 2011, 57(2): 85–94.

<sup>5</sup> Capros, P.; Mantzos, L.; Parousos, L., Tasios, N.; Klaassen, G.; Van Ierland, T. Analysis of the EU policy package on climate change and renewables. *Energy Policy*. 2011, 39(3): 1476–1485.

<sup>6</sup> Jacobsson, S.; Bergek, A.; Finon, D.; Lauber, V.; Mitchell, C.; Toke, D.; Verbruggen, A. EU renewable energy support policy: faith or facts? *Energy Policy*. 2009, 37(6): 2143–2146.

<sup>7</sup> Beurskens, L. W. M.; Hekkenberg, M. *Renewable Energy Projections as Published in the National Renewable Energy Action Plans of the European Member States. Covering all 27 EU Member States.* European environmental agency, 2011.

## 1. The Division of Competence between the European Union and Member States

As the Member States have delegated their legislative powers to the European Union in certain branches of legislation, it is very important to delineate the competencies of the Member States and of the European Union in the regulation of renewable energy sources. Before the entry into force of the *Lisbon Treaty*<sup>8</sup> the regulation of all energy sectors has been based on general norms of the *Treaty Establishing the European Community*<sup>9</sup>.

In determining the powers of the Member States and the European Union to act in the field of regulation of renewable energy sources in the *Treaty on the Functioning of the European Union*<sup>10</sup>, two main aspects should be considered: (i) the sort of competence (exclusive; shared; supporting, coordinating, supplementary action) attributed to renewable energy; and (ii) the wording of the articles of the *Treaty*<sup>11</sup> designated to regulate renewable energy, because the exact limits between the competencies of the *European* Union and of the Member States can be found only in the provisions of the *Treaty*<sup>12</sup>.

Article 4 of *the Treaty on the Functioning of the European Union* determines that the European Union and the Member States have shared competence in internal market, trans-European networks, energy and environment. All these fields are closely related to the development of renewable energy. Therefore, it can be concluded that the area of renewable energy is conferred to shared competence.

According to Article 2 of *the Treaty on the Functioning of the European Union*, in the area of shared competence the European Union and the Member States may both adopt certain legal acts. The Member States have the right to act in two cases: (i) if the European Union does not exercise its competence, or (ii) according the principle of subsidiarity, the right to exercise a competence is attributed to the Member States. Thus, who is entitled to act: the Member State or the European Union, is determined according to the principle of subsidiarity. As Article 5 of the *Treaty on European Union* states that "Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level".

<sup>8</sup> Lisbon Treaty [2007] OJ, C 306.

<sup>9</sup> Treaty Establishing the European Community [2006] OJ, C 321E.

<sup>10</sup> Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union [2004] OJ, C 83/01.

<sup>11</sup> *Ibid*.

<sup>12</sup> Paul, C. The Lisbon Treaty. Law, Politics and Treaty Reform. Oxford University Press, 2010, p. 169–173.

As the regulation of renewable energy falls within the area of shared competence, the division of powers between the European Union and the Members States in the area of regulation of renewable energy can be described as follows:

- The European Union can act if objectives of the proposed action can be better achieved by the European Union than by Member Sates.
- In all other cases, Member States retain the power to act. This means that Members States have the power to act, if (i) the European Union fails to execute its competence or (ii) if under the principle of subsidiarity the objective of the actions can be achieved by the Member Sates.

However, shared competence is only "an umbrella term"<sup>13</sup>, as the exact limits of competence in separate fields are defined in the other provisions of the Treaty.

There are two general provisions that define the power of the European Union to act. Article 26 of *the Treaty on the Functioning of the European Union* defines the European Union competence in the regulation of the internal market. It states that "...Union shall adopt measures with the aim of establishing or ensuring the functioning of the internal market...". In order to use renewable energy sources effectively, the European Union seeks to adopt measures that aim to ensure the free movement of renewable energy technologies and the energy produced from renewable energy sources among Members States.

Also in case of difficulties of supply of energy products Article 122 of *the Treaty* on the Functioning of the European Union empowers the Council on the proposal of the Commission and "in a spirit of solidarity between Member States" to decide upon appropriate measures. This means that in the case of energy emergency the Council is permitted to make decisions in the area, which is not initially under the competence of the European Union under the Treaty.

To sum up, additionally to the powers attributed to the European Union by general principle of shared competence, the European Union has the power to issue legal acts necessary for the proper operation of the internal market as well as in the event of threat to secure energy supply.

The provisions defining the particular competence of the European Union in the environmental, trans- European networks and energy sectors are Articles 170, 191 and 194 of *the Treaty on the Functioning of the European Union*. These provisions are connected with the renewable energy sector for the following reasons.

Article 170 of *the Treaty on the Functioning of the European Union* states that the establishment and development of trans-European networks in the area of energy infrastructure is critical in achieving the internal market goals. Only Member States that have sufficient interconnection and interoperability among national energy networks as well as access to networks will be able to trade in renewable energy. The European Union shall adopt measures, which promotes "…*the interconnection and interoperability of national networks as well as access to such networks*"<sup>14</sup>.

<sup>13</sup> Paul, C., supra note 12.

<sup>14</sup> Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. [2004] OJ, C 83/01.

Article 194 of *the Treaty on the Functioning of the European Union* spells out the main competencies of the European Union in the energy sector: (a) ensure the functioning of the energy market; (b) ensure security of energy supply in the Union; (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; (d) promote the interconnection of energy networks. All these goals should be consistent with the European Union internal market and environmental policy.

However, the second part of Article 194 of *the Treaty on the Functioning of the European Union* restricts the competence of the European Union. It states that "… measures shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply …".

Also Member States attached *Declaration No 35 to Article 194 of the Treaty on the Functioning of the European Union*, expressing the intention of the Member States to retain their right "...to take the necessary measures to ensure their energy supply..." in case of "...serious internal disturbances, ... in the event of war, serious international tension constituting a threat of war, or in order to carry out obligations it has accepted for the purpose of maintaining peace and international security"<sup>15</sup>. Although the binding effect of the declaration is not completely clear<sup>16</sup>, the meaning of Article 194 should be interpreted in the light of that declaration. This means that in the above-mentioned conditions Member States have the right to take any measures to ensure the security of energy supply; accordingly, the same rule applies to the issues related to renewable energy sources. It can be concluded from the provisions cited above that the European Union retains the powers to take measures to achieve energy policy goals spelled out in Article 194, with the following exceptions - Member States have sole competence (i) to choose energy sources and energy supply structure; and (ii) to act unilaterally in case of emergency.

The last article in the *Treaty* related to renewable energy sector is Article 191. Article 191 of *the Treaty on the Functioning of the European Union* spells the main objectives of the European Union environmental policy: (i) preserving, protecting and improving the quality of the environment, (ii) protecting human health; (iii) prudent and rational utilisation of natural resources; (iv) promoting measures at international level to deal with regional or worldwide environmental problems, and in particular, combating climate change. All measures taken by the European Union should contribute to the achievement of the above-mentioned goals. The development of renewable energy sources is a very important measure in reducing  $CO_2$  emissions and contributes to resolving of environmental problems.

The analysis of *the Treaty on the Functioning of the European Union* showed that the European Union has the competence to regulate renewable energy according to the principle of subsidiarity: (i) in the area of creation of internal market and free movement of energy of processed from renewable energy sources; (ii) in ensuring security of energy

<sup>15</sup> Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. [2004] OJ, C 83/01, Art. 347.

<sup>16</sup> Foster, N. EU law directions. Oxford University Press, 2010.

supply in the Union; (iii) in promoting energy efficiency and energy saving and the development of new and renewable forms of energy; (iv) in promoting the interconnection of energy networks; (v) in implementing the goals of environmental policy. Also in case of difficulties of supply of energy products the Council can make decisions in the area, which is not attributed to the European Union. However, in exercising its competence the European Union cannot restrain the power of Members States to set the conditions for the use of renewable energy sources or to take any appropriate measure concerning the use of renewable energy in the events of war, threats of war and other conditions spelled out in Article 347 of *the Treaty on the Functioning of the European Union*.

The European Union exercises it competence in renewable energy sector by adopting directives that regulate and promote renewable energy sources. The European Union bases its competence on the argument that the aim (to achieve certain level of renewable energy in all kinds of energy sources) of the Directive on the promotion of the use of energy from renewable sources<sup>17</sup> could be better achieved at the level of the Europe Union than Members States. Also as the legal base for the adoption of a directive, the European Union refers to Article 175 of the Treaty establishing the European Community<sup>18</sup> (Article 195 of the Treaty on the Functioning of the European Union). This article concerns the competence of the European Union in environmental matters. As the last directive on renewable energy sources had been adopted before the Lisbon Treaty came into force, environmental clause was the only possible legal basis for the promotion of renewable energy at the European Union level. After the adoption of the *Lisbon Treaty*, the main legal basis of regulation, besides environmental clause is the newly introduced energy clause (Article 194 of the Treaty on the Functioning of the European Union). As it states that "... Union policy on energy shall aim ... to ... promote ...development of new and renewable forms of energy."

#### 2. Renewable Energy Policy Implementation Strategies

The majority of renewable energy sources are carbon-free and local<sup>19</sup>, for this reason they help meet the goals of climate change and energy policy. In 2010, the Commission adopted its Communication *Energy 2020. A strategy for competitive, sustainable and secure energy*<sup>20</sup>. In the Strategy, the common objective of the European Union energy policy is formulated as follows "... to ensure the uninterrupted physical availability of energy products and services on the market, at a price which is affordable for all consumers (private and industrial), while contributing to the EU's wider social and climate goals."<sup>21</sup> Renewable energy sources are one of the key measures in achieving the

<sup>17</sup> Directive 2009/28/EC of the European Parliament and of the Council of 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. [2009] OJ, L 140/52.

<sup>18</sup> Treaty Establishing the European Community [2006] OJ, C 321E.

<sup>19</sup> Capros, P., et al., supra note 5.

<sup>20</sup> Communication from the Commission. Energy 2020, supra note 1.

<sup>21</sup> Ibid.

above-mentioned objectives. They reduce dependence on imported energy, increase the diversity of energy sources and therefore help ensuring physical availability of energy products and services. Let alone the above-mentioned facts, renewable energy sources contribute to achieving climate goals by reducing  $CO_2$  emission, as well as social goals by creating new jobs in the European Union.

#### 2.1. History of the European Union Renewable Energy Regulation

In the European Union the formation of renewable energy policy has started in 1997 with the adoption of the Communication on *Energy for the Future: Renewable Sources of Energy. White Paper for a Community Strategy and Action Plan*<sup>22</sup>. Its main goals were to de-carbonise the energy sector and address growing dependency on fossil fuel imports from politically unstable regions outside the European Union<sup>23</sup>.

Later on, in 2006 the Commission abopted its Communication *Mobilising public* and private finance towards global access to climate-friendly, affordable and secure energy services: The Global Energy Efficiency and Renewable Energy Fund<sup>24</sup>. The Commission proposed to establish the Fund, which would help mobilising private investments in energy efficiency and renewable energy projects. Whereas, as stressed in the Communication Renewable Energy Road Map; Renewable energies in the 21st century: building a more sustainable future, one of the main obstacles to develop the production of energy from renewable energy sources<sup>25</sup> has been the high cost of investments into renewable energy sources.

The first Directive on the promotion of electricity produced from renewable energy sources in the internal electricity market<sup>26</sup> was adopted in 2001. Later on, in 2003 followed the Directive on the promotion of the use of biofuels or other renewable fuels for transport<sup>27</sup>. The above-mentioned directives set national indicative targets that the European Union could reach a share of renewable energy in electricity generation of

<sup>22</sup> Communication from the Commission. Energy for the Future: Renewable Sources of Energy. White Paper for a Community Strategy and Action Plan. COM(97) 599 final [interactive]. [accessed on 12-09-2012]. <a href="http://europa.eu/documents/comm/white\_papers/pdf/com97\_599\_en.pdf">http://europa.eu/documents/comm/white\_papers/pdf/com97\_599\_en.pdf</a>>.

<sup>23</sup> Communication from the Commission. Renewable Energy: Progressing Towards the 2020 target. COM(2011) 31 final [interactive]. [accessed on 12-09-2012]. <a href="http://eur-lex.europa.eu/LexUriServ/Lex-UriServ.do">http://eur-lex.europa.eu/LexUriServ/Lex-UriServ.do</a>?uri=CELEX:52011DC0031:EN:HTML:NOT>.

<sup>24</sup> Communication from the Commission. Mobilizing public and Private Finance Towards Global Access to Climate-Friendly, Affordable and Secure Energy Services: The Global Energy Efficiency and Renewable Energy Fund. COM(2006) 583 final [interactive]. [accessed on 12-09-2012]. <a href="http://eur-lex.europa.eu/smartapi/cgi/sga\_doc?smartapi!celexplus!prod!DocNumber&lg=en&type\_doc=COMfinal&an\_doc=2006&nu\_doc=583>.">http://eur-lex.europa. doc=2006&nu\_doc=583>.</a>

<sup>25</sup> Communication from the Commission. Renewable Energy Road Map. Renewable Energies in the 21st Century: Building a More Sustainable Future. COM(2006) 848 final [interactive]. [accessed on 12-09-2012]. <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0848:FIN:EN:PDF">http://eur-lex.europa.eu/LexUriServ.do?uri=COM:2006:0848:FIN:EN:PDF</a>.

<sup>26</sup> Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market [2001] OJ, L 283/33.

<sup>27</sup> Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on the promotion of the use of biofuels or other renewable fuels for transport [2003] OJ, L 123/42.

21% by 2010 and a share of renewable energy replacing petrol and diesel in transport of 5,75% by 2010. According to the information presented in the Communication of the Commision *Renewable Energy: Progressing towards the 2020 target*, only a few Member States, namely Denmark, Germany, Hungary, Ireland, Lithuania, Poland and Portugal expect to achieve their 2010 targets for renewable energy in electricity generation; and only Austria, Finland, Germany, Malta, Netherlands, Poland, Romania, Spain and Sweden expect to achieve their targets for renewable energy in transport<sup>28</sup>.

Already in 2007, the European Council has adopted the then new and by now still valid energy and climate change targets for 2020: (i) to reduce greenhouse gas emissions by 20%, (ii) to increase the share of renewable energy to 20% and (ii) to make a 20% improvement in energy efficiency.<sup>29</sup>

Seeking to achieve these goals, *Directive of 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market*<sup>30</sup> and *Directive* of 2003 on the promotion of the use of biofuels or other renewable fuels for transport were repealed by *Directive of 2009 on the promotion of the use of energy from renewable sources*<sup>31</sup>. *Directive of 2009 is a part of the package of energy and climate legislation which provides a framework for the European Union targets for greenhouse gas emission savings*<sup>32</sup>. The aim of Directive 2009/28/EC is to limit greenhouse gas emission and to promote cleaner transport. It establishes a common framework for the use of energy from renewable sources, defines national action plans and procedures for the use of biofuels. The Directive sets for the common targets for the EU by 2020: to reach a 20% share of energy from renewable sources and a 10% share of renewable energy exclusively in the transport sector.

Each Member State has to set a share of energy from renewable energy sources that will be provided for final consumption of energy in 2020. The national target should contribute to the European Union targets. Lithuania set the national target at 23% share of energy from renewable sources, the same as France. Compared to the other Member States, this is an average share. Five Members States have set their national targets higher than 30% share of energy from renewable sources. They are: Austria – 34%, Finland – 38%, Latvia – 40%, Portugal – 31%, Sweden – 49%. Malta and Luxembourg have set the lowest national targets for energy produced from renewable sources – 10% and 11% accordingly.<sup>33</sup>

- 28 Communication from the Commission. Renewable Energy: Progressing Towards the 2020 target. COM(2011) 31 final [interactive]. [accessed on 12-09-2012]. <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=CELEX:52011DC0031:EN:HTML:NOT">http://eur-lex.europa.eu/LexUriServ/
- 29 Communication from the Commission. Energy 2020, supra note 1.
- 30 Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market [2001] OJ, L 283/33.
- 31 Directive 2009/28/EC of the European Parliament and of the Council of 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 [2009] OJ, L 140/52.
- 32 Communication from the Commission. Energy 2020, *supra* note 1.
- 33 Renewable energy [interactive]. [accessed on 12-09-2012]. <a href="http://ec.europa.eu/energy/renewables/targets\_en.htm">http://ec.europa.eu/energy/renewables/targets\_en.htm</a>>.

As indicated in the above-mentioned analysis, it can be summed up that the production of energy from renewable sources is an inherent part of the European energy policy. The Member States have set their national targets of energy share from renewable energy sources and the European Union directives introduce various binding and non-binding measures for the promotion of energy production from renewable energy sources.

#### 2.2. Promotion Measures in Renewable Energy Sector

The Directive of 2009 on the promotion of the use of energy from renewable sources sets mandatory and optional measures that contribute to the increase of the share of renewable energy. It aims to create the internal market for energy produced from renewable energy sources and seeks to encourage the cooperation among Member States. The main proposed measures are:

1. Statistical transfers. According to the system of statistical transfers, Member States may agree on the statistical transfer of a specified amount of energy from renewable sources from one Member State to another.

2. Participation in common projects. Member States may cooperate with each other or with the third states in all types of joint projects related to the production of electricity, heating or cooling from renewable energy sources. That cooperation may involve private operators.

3. Joint support schemes. Member States may decide to join or partly coordinate their national support schemes. In such cases, certain amount of energy from renewable sources produced in the territory of one participating Member State may count towards the national overall target of another participating Member State.

4. Proportionate and necessary administrative procedures. Member States shall ensure that any national rules concerning the authorisation, certification and licensing procedures that are applied to plants and associated transmission and distribution network infrastructures for the production of electricity, heating or cooling from renewable energy sources, and to the process of transformation of biomass into biofuels or other energy products, are proportionate and necessary.

5. Information and training. Member States have to ensure that information on support measures and on net benefits, costs and energy efficiency of equipment and systems is made available to all relevant actors, they shall also develop suitable information, awareness-raising, guidance or training programmes in order to inform the citizens of the benefits of developing and using energy from renewable sources.

6. Guarantees of origin. Member States shall ensure that the origin of electricity produced from renewable energy sources can be guaranteed in accordance with objective, transparent and non-discriminatory criteria. Guarantees of origin are mandatory for electricity produced from renewable energy sources and optional for heating.

7. Access to operation of the grids. Member States have to guarantee the transport and distribution of electricity from renewable sources and provide for priority access for this type of energy. Historically, the first legal measure (Utilities Regulatory Policy Act) that promotes the development of renewable energy was adopted in the United States of America in 1978<sup>34</sup>.

Energy produced from renewable energy sources is more expensive than that produced from conventional energy sources. Without state intervention, renewable energy source will not be able to compete with a conventional one<sup>35</sup>. In order to achieve public goals, Member States use different state aid schemes to promote the use of renewable energy sources. Previously, when energy markets of the Member States were restrained and the trade of renewable energy among Member States was very insignificant, different promotion schemes did not distort the market.

However, now, when one of the aims of the European Union energy policy is to create the internal market for renewable energy, the asymmetric measures for the promotion of production from renewable energy sources put market players of different Members States in unequal competitive position and distorts the market. For this reason, the goal of the European Union legal regulation is not only to set a legal framework that would encourage the Members States to produce energy from renewable energy sources, but also to create the uniform competition environment among the producers of different Member States.

As one of the preconditions for the smooth operation of the free market is uniform competitive environment, the European Union generally forbids State aid for local producers. State aid is allowed only under certain strict condition if it does not distort internal market. However, energy produced from renewable energy sources has to compete not only with green energy, but also with energy produced from conventional energy sources. For this reason, some kind of aid is essential for the development of renewable energy.

The Court of Justice of the European Union has expressly stated in its ruling that *a* provision of a Member State which, first, requires private electricity supply undertakings to purchase electricity produced in their area of supply from renewable energy sources at minimum prices higher than the real economic value of that type of electricity, and, second, distributes the financial burden resulting from that obligation between those electricity supply undertakings and upstream private electricity network operators, does not constitute State aid,<sup>36</sup> and therefore does not infringe EU law. However, the aid distributed directly or indirectly from state fund actually constitutes some kind of State aid.

As the directive sets the general scheme for the promotion of renewable energy, the Member States can choose individual measures that are in line with the European Union requirements for the promotion of renewable energy. The European Union seeks

<sup>34</sup> Haas, R.; Panzer, Ch.; Resch, G.; Ragwitz, M.; Reece, G.; Held, A. A historical review of promotion strategies for electricity from renewable energy sources in EU countries. *Renewable and Sustainable Energy Reviews*. 2011, 15(2): 1003–1034.

<sup>35</sup> Marques, A. C.; Fuinhas, J. A. Drivers promoting renewable energy: A dynamic panel approach. *Renewable and Sustainable Energy Reviews*. 2011, 15(3): 1601–1608.

<sup>36</sup> Case C-379/98, PreussenElektra AG v. Schleswag AG, [2001] ECR I-02099.

to harmonise the measures for the promotion of renewable energy in order to ensure fair competition in the trade of renewable energy among Member States.

The basic measures used for the promotion of renewable energy in the Members States are classified according to the sort of energy produced from renewable energy sources, which are as follows (1) electricity, (2) heating and cooling, (3) transportation. The Member States use basic promotion instruments (see Table)<sup>37</sup>: (i) feed-in tariff, (ii) premium, (iii) quota obligation, (iv) investment grants, (v) tax exemptions, (vi) fiscal incentives.

	Renewable electricity support incentives	Renewable heating and cooling support incentives	Renewable transport support incentives
Feed in tariff	X		
Premium	X		
Quota obligation	X		Х
Investments grants	X	Х	
Tax exemptions	X	Х	Х
Fiscal incentives	X	Х	

Table. Promotion measures mostly used in the European Union. 38

**Feed-in tariff.** This measure is widely used in the European Union. France, Germany, Spain, Greece, Ireland, Luxembourg, Austria, Hungary, Portugal, Bulgaria, Cyprus, Estonia, Malta, Slovakia<sup>39</sup> have implemented the systems of feed-in tariff for the promotion of renewable energy. Feed-in tariff is the promotion instrument employed solely for electricity produced from renewable energy (in heating and cooling sector or transportation sector this measure is not used). Feed-in tariff guarantees fixed prices of electricity for the producer, for the energy produced from renewable sources and fed to the grids.

The most advanced technologies are used for the production of renewable energy sources. For this reason investments in these technologies are very large and have a high degree of risk. Therefore, a feed-in tariff system helps promote the investments to the production technologies of renewable energy sources. The producers of electricity from renewable energy sources have long-term guarantees for: (i) electricity purchasing contracts, (ii) fixed price of electricity, (iii) priority to feed electricity to the girds against non-renewable energy producers in the cases of congestion. In addition, feed-in tariff allows easily diversify the price of electricity according to the technologies and

38 Ibid.

<sup>37</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, European Commission, DG Energy [interactive]. [accessed on 12-09-2012]. <a href="http://ec.europa.eu/energy/renewables/studies/doc/renewables/2011\_financing\_renewable.pdf">http://ec.europa.eu/energy/renewables/studies/doc/renewables/2011\_financing\_renewable.pdf</a>>.

<sup>39</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, *supra* note 37.

renewable energy sources used. These measures allow the investors count incomes for a long period and thus lower the risk of investments.

However, the main disadvantage of the *feed-in tariff* is the risk to have too low or too high prices. If the tariff is too low – nobody will invest in the new technologies, if the price is too high – the investors will get unreasonable profit from their investments. Furthermore, the cost of investments in new technologies are changing very quickly, so the *feed-in tariff* should be lower for the investors that installed renewable energy technologies at a later date. Furthermore, according to the *feed-in tariff* system, the methodology of calculating tariffs is based on investment cost, for this reason the investors are not encouraged to improve technologies and to make them cheaper. Sometimes the tariff is gradually reduced in order to encourage the investors to look for cheaper technologies.

Despite all of those disadvantages, the *feed-in tariff* system is widely used because it is easy and cheap to manage. It is also attractive to the investor due to its simplicity and clarity.

**Feed-in** *premium* system is used to promote the production of electricity from renewable energy sources. This system is not used in transportation or heating-cooling sectors. This promotion measure is mainly used in Denmark and the Netherlands<sup>40</sup>. Renewable energy producers are trading in energy on the market and get fixed premiums in addition to the price paid on the market<sup>41</sup>. The main idea of the *feed-in premium system* is that in future, when renewable technologies will become competitive, the premium of price will be removed and the producer will easily integrate into the energy market. The size of the premium is calculated on the basis of the expectations of the future energy price and production costs. This promotion scheme is less attractive to the investors, as they are not secure from the losses in case the energy price falls significantly in the market. However, they can get excess profit, if the energy price rises unexpectedly. Usually, in order to avoid these kinds of risk, the governments set the lower and upper limits of the energy prices. In addition, under this promotion scheme the producers of electricity from renewable energy sources have priority access to networks over the producers from conventional fuels in the case of congestion.

The main advantage of the feed-in *premium* system is that producers are encouraged to improve technologies in order to reduce production costs. Lower electricity production price enables producers to get higher profit because the calculation of the energy price is not based purely on production costs, but is mainly influenced by electricity market price.

**Renewable or quota obligations.** This promotion measure is basically used in electricity and transportation sector for promoting renewable energy sources, and is less popular in heating and cooling sectors<sup>42</sup>. Renewable or quota obligations system is used in Belgium, Italy, Sweden, Poland and Romania.<sup>43</sup> This measure obligates the

<sup>40</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, *supra* note 37.

<sup>41</sup> *Ibid*.

<sup>42</sup> *Ibid.* 

<sup>43</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, *supra* note 37.

producers or traders of electricity and fuels to supply a certain portion of electricity or fuels produced from renewable energy sources. Hypothetically, it can be 10% from the produced or traded electricity and 2% from fuels. Those who fail to perform, have to pay penalties.

In the European Union, the renewable and quota obligations promotion measure is directly connected to the green certificates<sup>44</sup>. It allows the producers (traders), whose supply of renewable energy (fuels) is higher than required, sell the adequate number of green certificates in the market. Consequently, two separate markets – of energy and green certificates – are formed. The producers (traders) who lack the required amount of renewable energy are required to buy corresponding numbers of green certificates. Green certificates accomplish the functions of support and proof. The renewable energy producer obtains revenues from energy and certificates sold. The producers that do not produce enough energy (fuels) from renewable energy sources have additional costs in buying green certificates and can prove that the other producer supplied the required portion of renewable energy (fuels) to the market.

The renewable or quota obligation system gives no guarantees to investors. The price of green certificates reflects the price of renewable energy at the moment. The production costs of renewable energy can decrease sharply because of sudden break through in technologies. In this case, the price of the green certificates will go down and the earlier investors in the more expensive technologies will incur losses. For this reason, the investors seek to get risk premium that determines higher price of renewable energy.

The renewable or quota obligation system promotes the investment in the cheapest technologies; therefore the risk exists that nearly all production of the renewable energy will be concentrated in the cheapest renewable energy sources. In order to avoid this result, it is recommended<sup>45</sup> to diversify green certificates according to the technology used as well as the source of renewable energy. On the other hand, such changes are likely to make the promotion scheme very complex and difficult to administrate.

**Investment grants** are mostly used in electricity, heating and cooling sectors. This promotion instrument is widely used in Finland<sup>46</sup>. Public authorities provide financial support for the advanced technologies that are not commercially feasible at the moment of financing. Usually, the investor simply obtains a part of financial resources, which he needs for the instillation of certain technology. This instrument is attractive because the support is given once, and there is no need for further administration. The main disadvantage of this measure is the unpredictability of future energy prices, which makes it hard to determine the fair amount of the grant.

The measure of **tax exemption** is often used as collateral support instrument next to other support measures. It is employed in all energy sectors in most Members

46 Ibid.

<sup>44</sup> Verbruggen, A.; Lauber, V. Assessing the performance of renewable electricity support instruments. *Energy Policy*. 2012, 45: 635–644.

<sup>45</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, *supra* note 37.

States.<sup>47</sup> Tax exemption is a very effective and flexible instrument. It can be applied to all renewable energy sources or only to a certain source or technology. Tax exemptions include investment advantages, reduction of income or indirect taxes and accelerated depreciation.

**Fiscal incentives** are mostly used in Germany, Netherlands, Bulgaria, Estonia, Malta, and Poland<sup>48</sup>. This promotion measure enables investors obtain preferential credits, which include lower interest rate, longer repayment period or possibility not to pay interest during certain period of time.

To sum up, all the measures referred above have their pros and cons, but what really matters in considering the question of the impact of promotion measures for the creation of the single European Union market for energy is the local nature of implementation – the Member States are fully entitled to define the scope and content of the measures arbitrarily, thus the end result of the measure is often inconsistent with the goal of creation of the single market.

Despite the fact that the European Union has legal competence and power to regulate renewable energy market, under current legal regulation it is unlikely that the single market for renewable energy will be created. One of the main obstacles is the differences of promotion measures for the production of renewable energy in the Member States. The promotion measures for the production of energy from renewable energy sources is a form of state aid, for this reason different promotion measures in the Member States put renewable energy producers in an unequal competitive position. Producers in some Member states are in more favourable position against other producers because of stronger promotion measures, not because of better performance or advanced technologies.

In order to create the single market for renewable energy, the sole promotion scheme has to be approved in the European Union. It would not only encourage the use of certain source of renewables in the cases where their use is the most effective, but also stop market distortion because of different promotion measures. The European Union exercises enough competence to enact the sole promotion scheme; however, it is doubtful if Member States are eager to agree on it. The main reasons for not reaching the consensus will probably be the fact that promotion schemes applied in the Member States are closely related to their national taxation system or investment security system. Furthermore, the main shortcoming of the sole promotion measure that is likely to affect entire European Union, is that in some Member States the production of energy from unprofitable types of renewable energy sources can be terminated. For example, solar energy produced in Lithuania is more expensive than in Spain. If the producers receive the same aid in Lithuania and in Spain, all production is likely to move to Spain.

48 Ibid.

<sup>47</sup> Financing Renewable Energy in the European Energy Market. Ecofys 2011, *supra* note 37.

### Conclusions

Article 4 of *the Treaty on the Functioning of the European Union* determines that the European Union and the Member States have shared competence in internal market, trans-European networks, energy and environment. All of these fields are closely related to the development of renewable energy.

The analysis of *the Treaty on the Functioning of the European Union* has showed that the European Union has the competence to regulate renewable energy according the principle of subsidiarity: (i) in the area of creation of the internal market and free movement of energy processed from renewable energy sources; (ii) in ensuring the security of energy supply in the Union; (iii) in promoting energy efficiency and energy saving and the development of new and renewable forms of energy; (iv) in promoting the interconnection of energy networks; (v) in implementing the goals of environmental policy. Also in case of difficulties of supply of energy products, the Council can make decisions in the area, which is not attributed to the European Union. However, in exercising its competence, the European Union cannot restrain the power of the Members States to set the conditions for the use of renewable energy in the event of war, threat of war and other conditions spelled out in Article 347 of *the Treaty on the Functioning of the European Union*.

Directive of 2009 on the promotion of the use of energy from renewable sources sets mandatory and optional measures that contribute to the increase of the share of renewable energy. It aims to create the internal market for energy produced from renewable energy sources and seeks to encourage the cooperation among Member States.

Despite the fact that the European Union has legal competence and power to regulate the renewable energy market, under current legal regulation of *the 2009 Directive* it is unlikely that the single market for renewable energy will be created. One of the main obstacles is the different promotion measures for the production of renewable energy in the Member States. Promotion measures for the production of energy from renewable energy sources is the form of state aid, for this reason different promotion measures in the Member States put renewable energy producers in an unequal competitive position. The producers in some Member States have more favourable position against that of the other producers because of more attractive promotion measures, and not because of better performance or advanced technologies.

In order to create the single market for renewable energy, the sole promotion scheme has to be approved in the European Union. Although the European Union exercises enough competence to enact the sole promotion scheme; it is unlikely that the Member States will be able to agree on it. The hypothetical reasons for not reaching the consensus will probably be the fact that the promotion schemes applied in the Member States are closely related to their national taxation system or investment security system.

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#### ATSINAUJINANČIŲJŲ IŠTEKLIŲ ENERGIJOS RINKOS TEISINIS REGULIAVIMAS

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Santrauka. Straipsnio tikslas yra ištirti, ar galiojantis Europos Sąjungos teisinis reguliavimas sudaro prielaidas energijos, pagamintos iš atsinaujinančiųjų energijos išteklių, bendros rinkos sukūrimui. Pagrindiniai straipsnio uždaviniai yra: nustatyti Europos Sąjungos kompetencijos apimtį atsinaujinančios energijos išteklių sektoriaus reguliavime; nustatyti Europos Sąjungos kompetencijos įgyvendinimo būdus bei valstybių narių nacionalinio reguliavimo įtaką iš atsinaujinančiųjų energijos išteklių pagamintos energijos bendros rinkos sukūrimui.

Pirma šio straipsnio dalis yra skirta nustatyti Europos Sąjungos kompetencijos apimtį atsinaujinančiųjų energijos išteklių sektoriuje. Nors pirmoji Europos Sąjungos direktyva dėl elektros energijos gamybos iš atsinaujinančiųjų energijos išteklių skatinimo buvo priimta jau 2001 metais, tačiau tik Lisabonos sutartyje pirmą kartą buvo įtvirtintas specialus straipsnis, skirtas energetikos sektoriui. Iki Lisabonos sutarties atsinaujinančiųjų energijos išteklių sektorius buvo reguliuojamas remiantis straipsniais, numatančiais Europos Sąjungos kompetenciją tik aplinkos apsaugos srityje. Todėl po Lisabonos sutarties iš esmės pasikeitė teisinis pagrindas Europos Sąjungai reguliuoti atsinaujinančiųjų energijos išteklių sektorių. Antroji

straipsnio dalis yra skirta Europos Sąjungos kompetencijos įgyvendinimo būdams. Nustatyta, kad atsinaujinančiųjų energijos išteklių sektorius yra reguliuojamas direktyvomis, taip pat svarbu vaidmeni atlieka Komisijos komunikatai, kuriuose nustatomi pagrindiniai tikslai ir veiklos kryptys. Antros dalies antrasis skyrius yra skiriamas atsinaujinančiujų energijos išteklių skatinimo priemonių, naudojamų valstybėse narėse, analizei. Nustatyta, kad Europos Sąjungos direktyva nesuvienodina atsinaujinančiųjų energijos išteklių naudojimo skatinimo priemonių, todėl valstybės narės naudoja labai įvairias paramos schemas siekdamos didinti energijos gamybą iš atsinaujinančiųjų energijos išteklių. Šie skirtumai, egzistuojantys valstybėse narėse, lemia skirtingą konkurencinę aplinką energijos gamintojams, esantiems skirtingose valstybėse narėse, nes dėl skirtingų paramos schemų vienose valstybėse narėse esančių energijos iš atsinaujinančiųjų išteklių gamintojų konkurencinė padėtis yra daug palankesnė nei gamintojų kitose valstybėse narėse. Dėl šių priežasčių daroma išvada, kad bendra atsinaujinančiųjų energijos išteklių rinka Europos Šąjungoje negali veikti dėl skirtingų paramos schemų, taikomų atskirose valstybėse narėse. Nors Europos Sąjungai Sutartimi dėl Europos Sąjungos veikimo yra suteikta kompetencija nustatyti vienodas paramos schemas, tačiau valstybių narių sutarimo šiuo klausimų būtų labai sunku pasiekti dėl labai skirtingų atsinaujinančiųjų energijos išteklių potencialo ir konkurencingumo lygio valstybėse narėse.

**Reikšminiai žodžiai**: atsinaujinantys energijos ištekliai, Europos Sąjunga, kompetencija, paramos schemos, bendra rinka.

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