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## STATE AID FOR ENVIRONMENTAL PROTECTION AND ENERGY OBJECTIVES IN POLAND AND OTHER COUNTRIES OF THE EUROPEAN UNION<sup>1</sup>

### Summary

*Purpose* – The purpose of the article is to present the development of horizontal aid for environmental protection and objectives related to green energy in Poland in comparison with other EU countries in 2009-2017. The above category of state aid in Poland has been characterised in detail, considering its sources, forms, entities providing support as well as the main beneficiaries of aid.

*Research method* – The article utilises the analysis of existing data on horizontal aid for environmental protection and energy objectives in Poland and European Union countries.

*Results* – During the period 2014-2017, as part of horizontal aid in Poland, the majority of aid was granted for environmental protection and energy objectives (in 2014 it accounted for 45% of the total horizontal aid). In the European Union, by comparison, a gradual increase in the share of the abovementioned category of assistance in the total state aid granted in the analysed period is noticeable. The largest share of the studied category in total state aid was recorded in Sweden, Austria and Germany, while the largest increase in the share of this aid in total state aid was seen in Bulgaria, the Czech Republic, Estonia and Romania.

*Originality / value / implications / recommendations* - As a result of the strategies implemented in the EU states, the aid for environmental protection and energy objectives is currently one of the most important categories of horizontal aid. This article offers a multifaceted analysis of the above assistance in Poland and a detailed comparison of the level of this support in the EU countries.

**Keywords:** state aid, horizontal aid, environmental protection

**JEL Classification:** F35, H20, H7

### 1. Introduction

State aid is defined as any type of action or undertaking that is financed by public authorities using state resources. They are intended to support the economic activity of specific enterprises, regions, economic sectors, or the production of specific products [Dowgier, 2015, p. 37]. State aid as an instrument of state interference in the economy arouses some controversy because its granting may violate the

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fundamental principle of market economy, which is a value of equal opportunities. Therefore, there is a provision in the Treaty establishing the European Community [TWE, 2006, art. 87, paragraph 1] prohibiting the awarding of it. However, the above Treaty also includes some exceptions to the sanction on state aid, which indicates that it is often used in the economic practices of the Member States, as its benefits usually outweigh its costs [*Pomoc publiczna. ...*, 2017, p. 9].

State aid, which is the result of the stimulating activity of the state, has a strict impact on the existing competition rules by giving preference to those receiving financial support over those enterprises which have not received such aid. Granting state aid to entities in the EU Member States is a fundamental component of state interventionism into the economy. This interventionism manifests itself in the policy of active state influence on the economy, which can be either direct and indirect [Rutkiewicz, 2008, p. 162].

As mentioned earlier, the use by the state of tools for the implementation of the economic support function is closely related to the use of state resources. Instruments supporting the economy in such forms as subsidies, grants, tax reliefs and exemptions are connected with the transfer of state resources to entities [Stoczkiewicz, 2011, p. 95]. The support can be performed both via direct transfers as well as through decisions causing a reduction of income to the budget (tax reliefs and preferences).

The Treaty on the Functioning of the European Union [TFUE, 2012, art. 107(3)(c)] indicates that the state aid is compatible with the internal market if it is intended to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest. It may be granted in various regulatory forms and may be classified according to different criteria. One of the most frequently used classifications of state aid, taking into consideration the structure of its granting, is its division into regional, sectoral, and horizontal aid. The article focuses in a unique way on the horizontal aid, which aims to resolve economic problems of a general nature. One of the categories of horizontal aid, namely aid for environmental protection and energy objectives, has been analysed thoroughly.

The article presents the issues of admissibility and the general principles of granting aid for environmental protection and energy objectives in the EU countries. Attention is drawn to measures within the scope of the above aid, in case of which the state aid may be compatible with the internal market, and also the essence of the incentive effect. In addition, environmental aid and energy objectives in Poland have been characterised with a specific focus on the entities granting such aid and its beneficiaries, as well as on the forms of providing such support.

The research problem of this article focuses on the answer to the question concerning the noticeable trends in the value of state aid awarded for environmental protection and energy objectives in Poland during the period 2009-2017 and whether such trends are consistent with the implemented EU policy. To illustrate the existing trends in greater depth, aid for environmental protection and energy objectives in Poland were compared to other categories of horizontal aid. This

category of horizontal aid in Poland was also compared to other EU countries, taking into account its share in total state aid granted. On this basis, it can be observed whether there is an increase in the significance of support for environmental protection and energy objectives in the Member States, which should be expected considering the policy implemented by the European Union.

## **2. General principles and admissibility of state aid for environmental protection and energy objectives in EU countries**

Pursuant to the regulations in force within the European Union, the requirements of environmental protection must be respected when defining and implementing strategies and activities, especially those related to support for constant development. According to the Guidelines on State aid for environmental protection and objectives related to energy in the years 2014-2020 [2014, sec. 1.3, point 1], environmental protection means any action designed to remedy or prevent damage to physical surroundings or natural resources by a beneficiary's own activities, to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy-saving measures and the use of renewable sources of energy. Member States may implement state aid in order to encourage businesses to undertake activities of a non-obligatory nature respecting the principles of environmental protection and energy solutions which are beneficial to the environment.

State aid is a transfer of resources comprising primarily funds, tangible assets and property rights. It may take the form of an active aid, which means a transfer of funds to entities in cash or in kind, or a passive aid, which means abandoning the collection of certain public levies or reducing their burden [Woźniak, 2012, pp. 112-113]. According to the definition contained in the Treaty on the Functioning of the European Union [TFUE, 2012, art. 107, sec. 1], state aid means any aid granted by a Member State or through state resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods in the scope which adversely affects trade between Member States.

The main categories of state aid are: regional aid, sectoral aid and horizontal aid. Regional aid may be received only by entities operating in those areas which are characterised by a low level of economic development in relation to the situation occurring in the European Union countries. Sectoral aid is determined on the basis of the entity's belonging to the sector to which the above aid is addressed. On the contrary, horizontal aid, which is of a cross-sectoral character is addressed to all entrepreneurs who will contribute to the achievement of strictly defined objectives by receiving the above mentioned category of aid [Jankowska, 2005, p. 15]. At this point it should be emphasised that horizontal aid focuses on providing support in various branches or regions; therefore, it is the form of state aid that is the most preferred by the European Commission.

State aid in the area of environmental protection and energy objectives is granted primarily under horizontal aid. Horizontal aid serves to implement the priority

objectives of the European Union. It should be noted that according to the provisions of the Treaty on the Functioning of the European Union [TFUE, 2012, art. 191, paragraph 2], one of the fundamental tasks of the Union, when implementing various strategies, is to ensure a high level of environmental protection. The environmental policy of the EU focuses on ensuring a high level of protection, taking into account the diversity of different regions. It is based on the principles of preventive action and precaution, as well as on the principle of “the polluter pays” and the principle that damage must be rectified at source. Apart from horizontal aid, there is also support addressed to the energy sector, falling within the scope of sectoral aid and regional aid, however, covering only those undertakings which are aimed at environmental protection (i.e., for example, undertakings related to the use of energy from renewable sources).

State aid for environmental protection and energy objectives must be based on the incentive effect. As the name suggests, this means that granting aid should encourage the beneficiary to undertake activities which should be more environmentally friendly than would be the case without public support [*Pomoc publiczna w ochronie...*, 2012, p. 45]. Podsiadło [2015, pp. 164-165] distinguishes two types of instruments that can be used for this purpose. On the one hand, it concerns individual incentives to reduce pollution and other adverse impacts on the natural environment. Therefore, the entity receiving aid will reduce pollution not because of the necessity to bear the costs of this pollution but as a result of receiving support for changing the way of conducting their business. On the other hand, the tools may also be incentives to implement national legal solutions for environmental protection, which would be more restrictive than the EU standards. In such a case, state aid may prove indispensable to reduce additional costs resulting from the introduction of stricter standards for the entities more affected by the changes, thus giving the Member States the possibility to adopt stricter regulations relating to environmental protection in the country.

Taking into account the question of the admissibility of aid for environmental protection and energy objectives, it should be emphasised that the European Commission has identified a number of key measures that may be declared compatible with the internal market pursuant to Article 107(3)(c) of the Treaty [TFEU, 2012]. The Community guidelines [*Wyttyczne...*, 2012, section 1.2.] specify these categories of aid, introducing aid intended, inter alia, for the following purposes:

- aid for going beyond Union standards or increasing the level of environmental protection in the absence of Union standards,
- aid for environmental studies,
- aid for energy from renewable sources,
- aid for energy efficiency measures,
- aid for resource efficiency,
- aid for energy infrastructure,
- aid in the form of reductions in or exemptions from environmental taxes,
- aid in the form of reductions in funding support for electricity from renewable sources.

All types of EU regulations in the field of environmental protection and energy are intended to achieve the objectives of long-term energy and climate policy, i.e. improvement of energy efficiency, reduction of CO<sub>2</sub> emissions and increase in the use of energy from renewable sources [*Rezolucja Parlamentu Europejskiego...*, 2012].

Within the framework of the aid discussed in this article, special attention should be paid to state support for the promotion of electricity from renewable sources. It is granted through a tender procedure and is characterised by its compatibility with competition rules. Beneficiaries of this type of support receive it in the form of a subsidy (i.e. a so-called bonus) to the market price in case they sell energy directly on the market. Green certificates constitute another type of aid. They enable producers of energy from renewable sources to enjoy guaranteed demand for their energy generated at a price higher than the market price of energy from traditional sources [Korbutowicz, 2018, p. 295].

### **3. Aid for environmental protection and energy objectives as one of the horizontal aid categories in Poland**

One of the categories of horizontal aid is the aid for environmental protection and energy objectives. In this section, special attention has been paid to the forms of granting this category of aid, the entities granting support, as well as the main beneficiaries of such aid in Poland. It also presents the development of this aid in comparison with other categories of horizontal aid in Poland over recent years.

As previously mentioned in the earlier section of the article, the result of providing support for environmental protection and energy objectives must involve a change in the behaviour of its beneficiary so that the level of environmental protection is higher than in the absence of such aid. Therefore, the strength of the incentive effect is estimated by means of an analysis of the alternative scenario, where a comparison is made of the degree of intensity of the desired actions in cases of such aid having been and not having been granted [Postula, Werner, 2008, p. 217].

The source of horizontal aid for environmental protection and energy objectives are state resources, which are funds and assets from central government institutions as well as regional or local authorities. These resources can be considered either from a broad or a narrow perspective. The broad approach includes any benefit granted through the state interference, including that through regulation, which meets this condition regardless of the transfer of state resources. In contrast, narrowly defined resources are those of the state budget, local government budgets or budgets of both public enterprises and private institutions established or controlled by the state [Podsiadło, 2016, p. 352].

In the analysis of the forms of horizontal aid for environmental protection and energy objectives in Poland during the years 2008-2017, it should be noted that since 2012, subsidies or other non-repayable benefits have been significantly dominant (they accounted for over 97% of the total aid referred to above). On the

other hand, in the years 2008-2011, the solutions applied to the tax burden, such as tax exemptions, tax reliefs and reductions or discounts resulting in a reduction of the tax base prevailed. The main entities awarding this category of aid include the Minister of the Environment (the entity granting the largest amount of aid since 2014), the President of the Board of the National Fund for Environmental Protection and Water Management (NFOŚiGW), and the Voivodship Marshals and the Minister of Energy. The key beneficiary of the aid has been the PGE Górnictwo i Energia Konwencyjonalna S.A. [*Raport o ...*, 2008-2017].

The analysed category of horizontal aid is granted under aid schemes. In this context, it is worth mentioning the aid granted by the Minister of the Environment in the field of emissions trading (Derogation from Article 10c of the Emissions Trading Directive 2003/87/EC - free allowances for electricity generators). The President of the Board of the National Fund for Environmental Protection and Water Management (NFOŚiGW) and the Presidents of the Boards of the Voivodship Funds for Environmental Protection and Water Management (WFOŚiGW) granted aid within the framework of such aid programmes as, for example, the following:

- Regulation of the Minister of Economy of 23 October 2015 on granting state aid for investment projects in the scope of construction or the reconstruction of heating or cooling network being a part of energy efficient heating and cooling system under the Operational Programme Infrastructure and Environment 2014-2020;
- State aid for investment projects to improve energy efficiency under the Operational Programme Infrastructure and Environment 2014-2020;
- The program of horizontal state aid for environmental protection objectives set out in the Regulation of the Minister of Environment on detailed conditions for granting horizontal state aid for environmental protection objectives [*Raport o ...*, 2019, p. 65].

Table 1 presents the development of aid for environmental protection and energy objectives in comparison with other categories of horizontal aid in Poland in 2008-2017.

According to the data presented in the table above, the value of total horizontal aid in Poland has significantly increased (in 2017 it reached almost three times the value of 2009). Aid for environmental protection and energy objectives is one of the most important horizontal aid categories in the analysed period. Between 2014-2017, it constituted the largest part of total horizontal aid (in 2014 it constituted nearly 44% of horizontal aid). In earlier years covered by the analysis, horizontal aid for employment prevailed. A significant increase in the share of aid for R&D and innovation purposes is also worth noting (in 2017 it amounted to over 32% of total horizontal aid).

TABLE 1

**Aid for environmental protection and energy objectives in comparison  
with other categories of horizontal aid in Poland in the years 2009-2017  
(in PLN million and in % as a share in total horizontal aid)**

Specification	2009	2010	2011	2012	2013	2014	2015	2016	2017
Horizontal aid in total	5365.7	6215.1	5643.4	5808.4	4997.9	9014.5	7929.0	8899.2	15630.1
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
R&D and innovation	335.4	517.7	571.8	1273.1	927.8	1000.9	784.8	1789.2	5017.5
	(6.25)	(8.33)	(10.13)	(21.92)	(18.56)	(11.10)	(9.9)	(20.11)	(32.1)
<b>Environmental protection and energy objectives</b>	<b>1373.3</b>	<b>1475.8</b>	<b>1070.1</b>	<b>280.9</b>	<b>43.6</b>	<b>3952.7</b>	<b>3244.9</b>	<b>3645.6</b>	<b>5074.7</b>
	<b>(25.59)</b>	<b>(23.75)</b>	<b>(18.96)</b>	<b>(4.84)</b>	<b>(0.87)</b>	<b>(43.85)</b>	<b>(40.92)</b>	<b>(40.97)</b>	<b>(32.47)</b>
SMEs development	28.5	106.4	47.9	51.9	46.7	19.9	0.0004	11.8	52.0
	(0.53)	(1.71)	(0.85)	(0.89)	(0.93)	(0.22)	(0)	(0.13)	(0.33)
Employment	2789.1	2975.2	2800.1	3068.2	3372.6	3063.7	2943.8	3018.2	3260.1
	(51.98)	(47.87)	(49.62)	(52.82)	(67.48)	(33.99)	(37.13)	(33.92)	(20.86)
Training	671.6	446.7	703.9	437.3	396.9	79.8	0.07	0.3	0.7
	(12.52)	(7.19)	(12.47)	(7.53)	(7.94)	(0.89)	(0.001)	(0.003)	(0.004)
Support for culture and cultural heritage conservation	0.0	223.2	109.5	135.5	137.8	227.8	180.4	380.7	1421.3
	(0)	(3.59)	(1.94)	(2.33)	(2.76)	(2.53)	(2.28)	(4.28)	(9.093)
Aid having a social character granted to individual consumers	0.0	0.0	0.4	0.5	0.4	0.5	0.5	0.5	0.6
	(0)	(0)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)
Venture capital	0.0	206.8	240.7	134.8	48.4	0.0	0.0	0.0	51.4
	(0)	(3.33)	(4.27)	(2.32)	(0.97)	(0)	(0)	(0.0)	(0.33)
SMEs' access to financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	332.9
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0.17)	(2.13)
Local infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	373.5
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0.29)	(2.39)
Sports and recreational activities	0.0	0.0	0.0	0.0	0.0	0.0	0.9	11.6	45.3
	(0)	(0)	(0)	(0)	(0)	(0)	(0.01)	(0.13)	(0.29)

Source: author's own elaboration according to: [Raporty o ..., 2008-2017].

#### 4. Volume of horizontal aid for environmental protection and energy objectives in Poland compared to other EU countries

The European Union has introduced some of the world's most restrictive environmental protection standards. The EU and the governments of the individual Member States have set clearly defined objectives for shaping the European environmental policy until 2020 and beyond, i.e. until 2050. These objectives are to protect and improve the EU's natural capital, to transform the current EU economy

into a green, resource-efficient and competitive low-carbon economy, and to ensure that Europeans are protected from environmental threats and pressures on health and well-being. Support for this policy is guaranteed by specific research programmes and appropriate legislation and funding [www 1].

Table 2 illustrates how the environmental aid and energy objectives in the EU countries were shaped in the years 2009-2017. The table uses the percentage share of the above support category in total state aid.

**TABLE 2**

**Share of aid for environmental protection and energy objectives  
in total state aid in EU countries in 2009-2017 (%)**

Country	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	14	20	19	19	27	7	3	3	4
Bulgaria	0	3	5	80	72	53	50	71	70
Czech Republic	1	4	4	5	16	17	17	62	60
Denmark	22	15	15	23	22	27	49	62	66
Germany	31	35	27	31	34	78	83	84	84
Estonia	2	13	7	12	49	50	69	76	64
Ireland	5	5	6	7	6	11	15	33	48
Greece	1	0	0	0	2	1	1	2	4
Spain	15	15	18	24	2	5	2	14	3
France	4	3	4	5	6	6	14	23	26
Croatia	.	.	.	.	1	5	38	39	8
Italy	2	2	1	2	2	3	1	1	15
Cyprus	3	0	3	3	32	36	50	55	47
Latvia	8	31	14	1	2	2	5	7	8
Lithuania	19	2	3	3	2	6	35	32	30
Luxembourg	7	13	29	12	3	44	60	66	55
Hungary	3	1	1	3	3	2	4	1	7
Malta	0	0	0	0	0	0	0	0	1
The Netherlands	49	39	41	45	45	45	47	47	48
Austria	39	52	56	62	61	53	71	70	72
<b>Poland</b>	<b>11</b>	<b>10</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>26</b>	<b>22</b>	<b>19</b>
Portugal	0	0	0	1	0	0	0	0	0
Romania	0	0	36	56	69	53	55	77	81
Slovenia	8	13	15	20	27	34	39	53	48
Slovakia	24	29	13	10	16	8	7	7	24
Finland	27	19	41	31	34	42	52	59	61
Sweden	74	78	81	81	82	79	82	84	73
European Union	20	19	20	21	23	43	46	54	53

(.) – no data

Source: author's own elaboration according to: [www 2].



As can be seen from the data presented in table 2, the European Union has experienced a gradual increase in the share of aid for environmental protection and energy objectives in total state aid granted throughout the analysed period. The largest share of this category in total state aid was recorded in Sweden, Austria and Germany. It is also worth noting a huge increase in the share of such aid during the analysed period in such countries as Bulgaria (from 0% to 70% in total state aid), the Czech Republic (from 1% to 60% in total state aid), Estonia (from 2% to 64% in total state aid) and Romania (from 0% to 81% in total state aid). In Poland, this share was lower than the EU average in the period under analysis. A worryingly low share of such aid was demonstrated in countries such as Greece, Malta, Portugal, and Italy. In some countries, a decrease in the share of this type of support in total state aid is also noticeable. Such countries are Belgium and Spain.

## 5. Conclusions

Aid for environmental protection and energy objectives is currently the most important category of horizontal aid in Poland. This undoubtedly results, inter alia, from the regulations in force in the European Union, according to which the requirements of natural environment protection should be respected when defining and implementing strategies and activities, connected, in particular, with the support of constant development. This aid may be provided in various forms. Since 2012, the majority of it has been granted in the form subsidies or other non-refundable benefits, while in the earlier years of the analysed period, it included tax preferences in the form of tax reliefs and exemptions from taxes and other fiscal burdens. In recent years, the Minister of Environment was the main entity granting this category of aid, while the key beneficiary of the aid was PGE Górnictwo i Energia Konwencjonalna S.A.

When analysing aid for environmental protection and energy objectives in the EU countries, it should be noted that the largest share of this category in total state aid was recorded in Sweden, Austria and Germany. In Poland, this share was lower than the EU average in the years in question. However, there are countries in which the share of the above support category is disturbingly low (Greece, Malta, Portugal, Italy) or has noticeably decreased in total state aid (Belgium, Spain).

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