Torun Business Review 16(2) 2017 5-17

SUSTAINABLE DEVELOPMENT IMPLEMENTATION IN POLAND AND IN OTHER MEMBER STATES OF THE EUROPEAN UNION

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ABSTRACT

In this paper, with the use of selected headline indicators, an attempt was made to analyse the performance of sustainable development in Poland and in other EU Member States. An analysis and assessment of headline sustainable development indicators for EU-28 in the years 2004-2015 was made and Eurostat served as a source of required data. During this period, Poland has been obliged to meet a number of the Union criteria and received financial support from the EU budget. A ranking of countries has been proposed, reflecting their progress in the implementation of sustainable development, depicting the place occupied by Poland.

ARTICLE INFO

Available online 23 May 2017

Keywords:
key indicators,
sustainable development,
EU budget

JEL: Q01, O47

Doi: 10.19197/tbr.v16i2.50

INTRODUCTION

Sustainable socio-economic development is one of the greatest challenges of the modern world. It is about achieving long-term economic growth, at the same time paying attention to the protection of the natural environment and its function, with focus on the quality of life. At present, the concept of sustainable development is treated as remedy for ecological crisis being the result of unstoppable economic growth, both in developed countries and in developing ones. In the past, politicians and economists were not concerned about environmental issues. Nowadays, however, the balance between

three key elements of the modern world, namely society, economy and environment is in the focus. This harmony is to be ensured by the proper implementation of sustainable development.

The aim of this paper is the assessment of implementation of sustainable growth in Poland and in EU Member States on the basis of statistical analysis of headline sustainable development indicators from the years 2004-2015 for EU-28 countries. Poland has been obliged to meet a number of the Union criteria and received support from the EU budget. This paper also aims to rank the countries in terms of sustainable development.

The basis for the analysis are figures of headline sustainable development indicators from the years 2004-2015 of EU-28 countries. The source of data are Eurostat materials concerning headline indicators, which are used to monitor the Strategy of Sustainable Development of the European Union.

The research's aim is answer to the question, whether Poland, in terms of sustainable development implementation, has a similar position as EU countries and which countries are the leaders in terms of sustainable development. Therefore, it was attempted to define the varying levels and ratio of sustainable development implementation in EU-28, paying particular attention to the Poland's position in this regard. The research also tries to state, if the EU financial support contributes to the pace of sustainable development implementation in Poland.

THE IDEA OF SUSTAINABLE DEVELOPMENT

The 19th century saw a rapid development of new social order – capitalism. The achievements of "age of steam and electricity" revolutionised the manner of production known so far. Manufactures were replaced by plants. The growth of the city of Łódź may be a symbol of dynamic changes which took place also on the territory of Poland, while the work by Władysław Reymont "Ziemia obiecana" may be used to reflect the social conflicts of that time.

The changes began to cover more and more social groups. These changes were described by economists, philosophers and religious leaders in their works. The classic works of economic thought are published, a century earlier, by A. Smith. D. Ricardo in his principle of comparative advantage explains mutual benefits from international exchange, thanks to which the social well-being of the agents grow. A similar idea can be found in works of German authors on economics of large areas (*Grossraumwirtschaft*) – they point to the benefit of larger scale of production, which leads to cost reduction and depreciation of the shortages in some regions and surplus in others.

The works of Karl Marx and Friedrich Engels, which were later developed by their revolutionary successors (Marxism–Leninism), try to explain the escalating social conflicts. A counterproposal to the socialistic approach is Catholic social teaching. Its beginning is marked by the publication of Pope's Leo XIII encyclical titled *Rerum Novarum*[1] in 1892.

[1] It formulates, among others, the idea of subsidiarity, which was later adapted as one of the pillars of the EU order in Maastricht Treaty (then: art. 3b). Moreover, in its essence – namely for the higher forms of organisation of social life not to unnecessarily replace lower forms – once can found references to the sustainable development philosophy.

Philosophical research on the links between agriculture and nature attempted by R. Steiner, a philosopher living at the turns of 19th and 20th century, marked the beginning of organic farming[2].

Fast development of industry, rapidly overcoming other countries and continents, with time uncovers its more threatening aspect – the growing threat to the environment. Great rivers, flowing through several countries (lack of coordination intensifies the threats!) such as Rhine or Danube start to resemble waste water, and penguins living in Antipodes are starting to lay soft-shell eggs (accumulation of pollution in food chain, the use of Dichlorodiphenyltrichloroethane – DDT – on a massive scale).

The problem became a well-known issue with the publication of *Scalped planet Earth* book and U Thant's report on the state of the natural environment. A manifestation of systemic approach to the environment protection which is not limited to the concern for endangered species, as it was common for the previous generations (for example Polish kings made attempts to protect aurochs; in 19th century passenger pigeons, once very common, became extinct) is the publication of specialist magazines, dealing with the protection of natural environment and having a wide target audience. A good example of such a magazine is "Aura" in Poland. As early as several decades ago – a distinct change of the approach to industry development – the cover of one of issues of "Aura" depicted an enlarged copy of one hundred polish zlotys' bank note depicting a forest of smoking plant chimneys. This image was crossed out with a diagonal statement: "It's time to install some filters!".

Another factor worthy of attention is the disintegration of colonialism after the World War II. New emerging countries, in Latin America, Africa and Asia, having confidence in their powers, tried to copy the already present development patterns, usually the ones of the capitalistic world, as well as those coming from socialist countries[3].

It turned out, however, that the sole technology transfer from developed to developing countries is not enough. It can be best defined by the term: *appropriate/intermediate* technology [Gaziński 1983]. What is more, the expansion of capitalism does not necessarily ensure harmonic growth and reduction the civilisation differences between developed and developing countries. It was noted by Celso Furtado in *Myths of economic growth* [1982].

Mahatma Gandhi, a charismatic leader of India, died in an assassination during the first years of independence. His concept of development is worth mentioning, as his successor, Jawaharlal Nehru, adopted an extremely different strategy of fast industrialisation and significant presence of the state in the economy – it defined an economic development strategy which lasted till 1990s, when Narasimha Rao initiated market reforms [Gaziński 1995]. Gandhi believed that the basis of development should be self-sufficient villages, manufacturing on the basis of local natural resources and the work of local societies and exchanging surplus with the neighbouring towns. Even though these ideas never were put into practice, Gandhi can be seen as one of the precursors of sustainable development [Gaziński 2004].

[2] In Polish this concept is taken from German language – *rolnictwo ekologiczne* – in English it would be ecological farming.

[3] A country which took from the Soviet experience was for example India – the provision on socialism was removed from constitution only after the dissolution of the Soviet Union and only after reforms were undertaken in Central and Eastern Europe.

Support for the sustainable development came also from international organisations and foundations, implementing their programmes in countries of the Third World. Also their experiences indicated, that the attempts at copying the patterns taken from rich countries do not bring expected results – on the contrary, they end with failure. It is reflected in the following terms: *grassroots development*, or *People's Participation Programmes*.

In source literature, the term *sustainable development* is commonly used. The word *sustainable* cannot be appropriately translated into Polish. It consists of two roots: *sustain,* having several related meanings – support, strengthen or extend and *able* – as in be able to do something [*Wielki słownik …* 2002]. Therefore, *sustainable development* is a development, the basics of which is the internal potential of skilfully used local resources, both natural ones, and the ones related to work, therefore "self-sustaining" and constant. It is here, where the care for natural environment and best possible use of natural resources, especially those non-renewable ones, has its roots, in a uniform manner, without unnecessary contrasts, both between regions and various social groups. It should, therefore, lead to *welfare*, with minimal level of social exclusion.

Therefore, the Polish term "rozwój zrównoważony" is not as explicit as the English equivalent[4]. Difficulties also arise when we try to classify what is difficult to measure as it is hardly quantifiable – meaning the level of sustainable growth. One of such attempts made by the UN is the HDI – Human Development Index.

The most important publication in the EU concerning sustainable development is the strategy from 2002 [*A European Union strategy ...* 2002]. For years now, the analytical tools are being developed to compare the implementation of the sustainable development in particular countries. The European Commission prepares annual reports in this matter. A summary for the last twenty years of sustainable development implementation in particular countries was also published [*Figures for the future …* 2012].

The transformation of the environment is accompanied by human economic activity. At first, these changes were insignificant. Yet, with the development of technology and demographic "boom", the scale of pollution started to threaten the ecological balance. At the same time, it is a threat to the opportunity of the environment to carry out its function, both for humans and for their economic activity. Therefore, it necessitates the international cooperation in terms of environmental protection. A manifestation of this approach is the concept of sustainable development as a path of subsequent socio-economic development. It means running business activity in such a way to maintain balance between economy, human capital and environment.

The term sustainable development, even after years of discussion, still does not have a uniform definition. It was first used during Conference in Stockholm in 1972, when the aims and tasks of global environmental protection were discussed. The concept of human right to the environment, as the right to freedom, equality and such environment conditions which ensure a life in dignity and prosperity, was defined. It is therefore a human who is responsible for protection and improvement of the environ-

[4] It is the same in the case of Polish language – there are words, the meaning of which cannot be conveyed in translation. One of such words can be "rola" the English equivalent of which can hardly be *ground*, *soil* or *land*. It is related to the word "rolnik" (Eng. farmer) – land cultivation is not only a profession, it is a certain type of *ethos* and cultural legacy (which, in fact, has been deteriorating for several generations). [Gaziński 1993].

ment for future generations (Bukowski 2005, 24). The attempt to define this concept appeared as late as in 1987 in the Bruntland Commission report: "Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs"[5]. The definition was then refined and transferred to the international documents during Second United Nations Conference "Environment and Development" in Rio de Janeiro in 1992.

The proposed definitions, even when interpreted differently when it comes to the sustainable development term, point to the need to combine economic, ecological and social goals.

The main tool for defining particular aims and activities to reach sustainable development, and assisting in establishment of proper patterns, is the European Union strategy for sustainable development [*A European Union strategy …,* 2002]. The priorities and development goals of EU are also contained in numerous other strategic documents of the EU. This issue was one of the leading areas of Lisbon Strategy, and its elements can be found in the next document – "Europe 2020" Strategy.

The main aims of the Sustainable Development Strategy of EU are the protection of the natural, environment, justice and social cohesion, economic welfare and implementation of international obligations.

The monitoring of the implementation of "Europe 2020" Strategy includes annual European Commission reports. Eurostat provides necessary data, which it regularly collects from Member States and publishes them on its website in the tab *Selected statistics – Sustainable development indicators*. Database in the scope of sustainable development is enriched by the data transfer from Member States. It often happens, that in order to provide methodological consistency and comparativeness between countries, the calculations for indicators on the basis of source data from national statistics are done by Eurostat. It can lead to occasional differences between indicators calculated and published by these countries and those available in the Eurostat database.

The coordination of Sustainable Development Strategy of EU implementation is the responsibility of Eurostat's working group on sustainable development. One of its main tasks is the development and updating the set of sustainable development indicators, which will facilitate the monitoring of progress in given areas.

SYSTEM OF EU SUSTAINABLE DEVELOPMENT INDICATORS

A current set of EU sustainable development indicators is composed of ten themes (reflecting, among others, seven challenges of Sustainable Development Strategy). These themes cover economic issues, social and environmental ones, as well and institutional level and global partnership. They are composed of socio-economic development, sustainable production and consumption, social inclusion, demographic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance. These themes are divided into sub themes, which

[5] *World Commission on Environment and Development (The "Bruntland Commission"), 1987 [A European Union strategy … 2002*, p. 21].

allows to present the operational goals and activities of the Strategy. They reflect the main aim – to achieve prosperous economy based on the principles of sustainable development – as well as implementation of principles related to good governance.

The principles of sustainable development are a test if the declaration to implement the development concept included in the policies' aims (strategies, programmes etc.) is consistent with the essence of this concept. Of key importance is intergenerational equity (all future generations have the right to live and use all environmental aspects known to them, to the same extent as you have or to an even greater extent)[6]. A particular importance to the proper use of this indicator selection criteria should be attributed to a set of principles adopted in "The Rio Declaration" (the so-called Earth Charter – 27 principles) by the European Union (7 main principles), in the Polish ecological policy of the state (12 principles) and Johannesburg Declaration.

HEADLINE SUSTAINABLE DEVELOPMENT INDICATORS AND RESEARCH METHOD

The institutionalisation of the sustainable development principles by the legislation and world politics did not result in efficient implementation mechanisms, therefore, the activities in sustainable development are characterised by a slow pace of implementation [Harding 2006, 229]. It is easier to include the idea of sustainable development in legal acts or international documents, than it is to monitor or implement it. Indicators of sustainable development are helpful tools when it comes to monitoring the process of sustainable development implementation. Researchers are not in agreement, when it comes to proposing one definition of sustainable development indicator, yet its important feature is the comparability of its value. For that purpose, a list of indicators was developed, which correspond to the level of implementation on the national, regional or local level. Due to this fact, indicator list is diverse, which is the result of availability of data at different levels. Research subjects which are in possession of complex indicators lists, are countries, which facilitate their comparison within the context of the level of sustainable development.

Sustainable development indicators defined by Eurostat are used to monitor the Sustainable Development Strategy of EU. They were divided into three groups that is headline indicators, indicators monitoring the operational goals and indicators illustrating actions. Due to their number, the subject of the following analyses is headline indicators (Table 1). They allow to have a general look at the changes within sustainable development which took place since the day Poland joined the European Union. Other indicators used are the indicators published by the Statistical Office in Katowice in 2015 [Wskaźniki …].

[6] World Commission on Environment and Development Report *Our Common Future*, [United Nations, New York 1987, 47].

Table 1. Selected headline indicators of sustainable development adopted by Eurostat

Theme	Headline indicators	Unit	Designation
Socio-economic development	Real GDP per capita	EUR per capita	SDI 1
Sustainable consumption and production	Resource productivity	EUR/kg	SDI 2
Social inclusion	Persons at-risk-of-poverty or social exclusion	%	SDI 3
Demographic changes	Employment rate of older workers	%	SDI 4
Public health	Healthy life years (of women)	Years	SDI 5
Climate change and energy	Greenhouse gas emissions	%	SDI 6
	Participation of energy from renewable sources in gross final consumption of energy	%	SDI 7
	Primary energy consumption	TOE million	SDI 8
Sustainable transport	Energy consumption of transport relative to GDP	%	SDI 9
Global partnership	Official development assistance	%	SDI 10

Source: based on Eurostat data, http://ec.europa.eu/eurostat/web/sdi/indicators (access 5/06/2015).

ANALYSIS AND DISCUSSION CONCERNING THE RESULTS

Table 2 shows headline sustainable development indicators values. By comparing the real value of GDP per capita between the average for EU-28 and Poland, in both cases we can observe the increasing trend, manifested in the size of values change dynamics – increase in the years 2004 - 2014 by 94% in Poland and in EU-28 by 18%. It is a positive trend indicating economic development, but even though the value of SDI1 doubled, Poland is still far behind the European average (2.5 size larger). Poland, among EU-28, was 24th in terms of actual GDP per capita in 2013, while the highest value of this indicator can be observed in Luxembourg – 78,200 Euro/capita (see Tab. 2).

Positive tendencies in the years 2004-2014 can be observed in the area of resources productivity (SDI2), which are used for the analysis of sustainable consumption and production. For Poland, in the analysed period it increased by 44%, and for EU-28 – by 41%. The highest resource productivity in 2014 was recorded in Luxembourg, the Netherlands, and in Great Britain and the lowest – in Romania, Bulgaria and Estonia. Poland ranked 25th.

Table 2. Values of headline sustainable development indicators in Poland and European Union in the years 2004-2015

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
SDI 1	EU	22,3	23,2	24,4	25,8	25,9	24,3	25,3	26	26,5	26,6	25,9	26,3
	PL	5,4	6,4	7,2	8,2	9,5	8,2	9,3	9,8	10	10,3	10,5	10,9
SDI 2	EU	1.4*	1.41*	1.42*	1.44*	1.47*	1.59*	1.66*	1.62*	1.73*	1.76*	1.98	(.)
	PL	0.43	0.44	0.46	0.44	0.45	0.48	0.48	0.4	0.47	0.49	0.62	(.)
SDI 3	EU	no data	25.7*	25.3*	24.4*	23.8*	23.3*	23.7	24.3	24.7	24.5	24.4	(.)
	PL	no data	45.3	39.5	34.4	30.5	27.8	27.8	27.2	26.7	25.8	24.7	(.)
SDI 4	EU	40.6	42.2	43.4	44.5	45.5	45.9	46.3	47.3	48.7	50.2	51.9	(.)
	PL	26.2	27.2	28.1	29.7	31.6	32.3	34.1	36.9	38.7	40.6	42.5	(.)
SDI 5	EU	no data	62.5*	62.5*	62.6*	62.2*	62*	62.7	62.2	62.1	61.5	61.8	(.)
	PL	no data	66.9	62.9	61.5	63	62.5	62.3	63.3	62.9	62.7	62.7	(.)
SDI 6	EU	93.8	93.23	93.25	92.36	90.41	83.83	85.73	83.21	82.14	80.2	(.)	(.)
	PL	85.41	85.6	88.95	89.24	87.29	83.32	87.57	87.19	85.85	83.54	(.)	(.)
SDI 7	EU	8.3	8.7	9.3	10	10.5	11.9	12.5	12.9	14.1	15.0	16.0	(.)
	PL	7	7	7	7	7.8	8.8	9.3	10.4	11	11.3	11.4	(.)
SDI 8	EU	1,706	1,709	1,718.2	1,687.3	1,686.6	1,593.1	1,652.4	1,593	1,583.9	1,566.5	1,507.1	(.)
	PL	86.9	87.7	91.7	91.6	92.8	89.9	95.8	96	92.9	93.2	89.1	(.)
SDI 9	EU	98.7	97.4	96.2	94.7	93.1	94.3	92.2	90.2	87.9	86.9	94.1	(.)
	PL	104.7	108.6	113.4	116.6	118.5	119.1	121.9	118	111.2	103.4	82.9	(.)
SDI 10	EU	0.34	0.42	0.41	0.37	0.4	0.42	0.44	0.42	0.39	0.41	0.41	(.)
	PL	0.05	0.07	0.09	0.1	0.08	0.09	0.08	0.08	0.09	0.1	0.08	(.)

*data for EU-27 Explanations: EU – average for 28 Member States, PL – Poland

Source: work based on the Eurostat data.

Favourable changes were also noted in the area of social exclusion (SDI3) – the percentage of people at-risk-of-poverty in Poland decreased by 43% and in EU-28 – by 5%. On the basis of this indicator it can be seen how difficult it was in Poland, as 45% of people in 2005 could be defined as at-risk-of-poverty. The value of this indicator decreased rapidly on a year-to-year basis, which can be linked to the financial resources coming from the EU to fight social exclusion. In 2014, the percentage of people at-risk-of-poverty was from 14.8% in Czech Republic to 40.1% in Bulgaria. Poland ranked 15th in 28 countries.

The aspect of demographic changes is analysed with the use of employment rate of older workers (SDI4). Its interpretation has two stages, as – from the one hand – positive changes indicate growth of employment of older workers which translates into greater activity of this working group. On the other hand, these changes are dictated by the constant tendency of ageing society. In Poland, in the years 2004-2014, the value of SDI4 increased by 62% and in EU-28 – by 28%. In 2014, the lowest rate was recorded in Slovenia, and the highest one in Sweden.

A worrying phenomenon, which can be observed both in the EU and in Poland is the decrease of healthy life years (SDI5), which indicates the decreasing quality of health of citizens and the necessity to increase the funding for health care. Poland in the years 2005 and 2014 noted the decrease of SDI5 value by 7% while EU-28 only by 1%. In the whole European Union, a huge differentiation of this indicator can be seen, as the best situation could be noted for Malta, where the average healthy life in years is 74, while the worst situation is in Slovakia and Lithuania – as little as 55.

When it comes to climate change and energy it must be noted, that while in the EU-28 the greenhouse gas emissions (SDI6) decreased by 12% when comparing the data from 2004 with the data from 2014, in Poland in the years 2004-2007 this value increased, and later started to slowly decrease. Participation of energy from renewable sources in gross final consumption of energy (SDI7) increases both in EU-28 and in Poland, 92% and 63% respectively in the years 2004-2014. The value of this indicator in 2014 was the highest in Sweden and the lowest in Malta. In Poland market of renewable energy sources is currently in its development phase, which can be seen thanks to its 20th position among EU-28 when it comes to the SDI7 value. When it comes to primary energy consumption in Poland, a still unfavourable tendency in demand for an energy can be observed, which is linked to the economic development ratio. In EU-28 in the previous years, till 2006 primary energy consumption was almost constantly increasing, but in 2011 it fell to the level from 1990. However, this tendency was not constant, and only from further perspective it will be possible to assess, if it will continue, should EU accelerate the economic development ratio. In 2014, the lowest level of primary energy consumption could be observed in Malta, and the highest one in Germany (see Tab. 3).

Sustainable transport is analysed with the use of energy consumption of transport relative to GDP indicator (2,000=100). In EU-28 the SDI9 value declined, in Poland, on the contrary, the value was positive. It is important to be able to separate the energy consumption of transport from economic growth, as only then the energy consumption of transport limitation during economic growth can be observed. In EU this is the situation since 2010, but it is not enough to consider this tendency as a constant one.

Table 3. Values of headline sustainable development indicators in EU in 2014

Country	SDI 1[1]	SDI 2	SDI 3	SDI 4	SDI 5	SDI 6[2]	SDI 7	SDI 8	SDI 9	SDI 10
Belgium	25,9	2.44	21.2	42.7	63.7	82.15	8.0	45.0	99.2	0.46
Bulgaria	5,5	0.3	40.1	50.0	66.1	51.18	18.0	17.2	103.7	0.08
Czech Rep.	15,2	1.1	14.8	54.0	65.0	66.02	13.4	38.6	97.5	0.11
Denmark	43,7	2.17	17.9	63.2	61.4	80.39	29.2	16.7	93.0	0.85
Germany	33,8	2.1	20.6	65.6	56.5	77.5	13.8	291.8	97.9	0.41
Estonia	13,2	1.8	26.0	64.0	57.1	54.39	26.5	6.6	84.0	0.15
Ireland	39,5	1.8	27.6	53.0	67.5	104.89	8.6	13.4	86.6	0.38
Greece	17	1.38	36.0	34.0	64.8	100.12	15.3	23.7	95.4	0.11
Spain	22,4	2.68	29.2	44.3	65.0	113.14	16.2	112.6	89.5	0.14
France	31,4	2.6	18.5	46.9	64.2	90.73	14.3	234.5	96.7	0.36
Croatia	10,2	1.1	29.3	36.3	60.0	69.89	27.9	7.7	101.3	0.11
Italy	25,3	3.05	28.3	46.2	62.3	85.02	17.1	143.8	100.4	0.16
Cyprus	20,1	1.63	27.4	46.9	66.3	143.77	9.0	2.2	89.4	0.1
Latvia	10,4	0.51	32.7	56.4	55.3	42.77	38.7	4.4	78.2	0.08
Lithuania	11,2	0.76	27.3	56.3	61.7	41.81	23.9	5.6	95.8	0.09
Luxembourg	78,2	3.81	19.0	42.6	63.5	92.5	4.5	4.2	86.6	1.07
Hungary	10,5	0.89	31.8	41.8	60.8	61.16	9.5	20.7	88.9	0.12
Malta	17,5	1.42	23.8	37.8	74.3	141.29	4.7	0.9	92.7	0.2
Netherlands	37,9	3.68	16.5	59.9	59.0	92.09	5.5	62.7	91.1	0.64
Austria	36	1.7	19.2	45.1	57.8	102.53	33.1	30.6	96.2	0.26
Poland	10,5	0.62	24.7	42.5	62.7	83.54	11.4	89.1	82.9	0.08
Portugal	16,3	1.14	27.5	47.8	55.4	109.67	27.0	20.7	94.3	0.19
Romania	6,9	0.3	39.5	43.1	59.0	43.85	24.9	30.8	98.5	0.1
Slovenia	17,6	1.34	20.4	35.4	59.6	98.0	21.9	6.5	101.1	0.13
Slovakia	13,5	1.07	18.4	44.8	54.6	57.89	11.6	15.3	77.4	0.08
Finland	34,1	1.1	17.3	59.1	57.5	90.11	38.7	33.4	98.4	0.06
Sweden	40,3	1.75	16.9	74.0	73.6	79.3	52.6	46.2	93.6	1.1
Great Britain	30,4	3.49	24.1	61.0	64.2	73.76	7.0	182.4	91.6	0.71

[1] data in thousands

[2] data for 2013

Source: work based on the Eurostat data.

Table 4. Standardised values of headline sustainable development indicators in EU countries in 2014

Country	SDI 1	SDI 2	SDI 3	SDI 4	SDI 5	SDI 6[1]	SDI 7	SDI 8	SDI 9	SDI 10
Belgium	1.00	1.23	0.87	0.82	1.03	1.02	0.50	0.30	1.05	1.12
Bulgaria	0.21	0.15	1.64	0.96	1.07	0.64	1.13	0.11	1.10	0.20
Czech Rep.	0.59	0.56	0.61	1.04	1.05	0.82	0.84	0.26	1.04	0.27
Denmark	1.69	1.10	0.73	1.22	0.99	1.00	1.83	0.11	0.99	2.07
Germany	1.31	1.06	0.84	1.26	0.91	0.97	0.86	1.94	1.04	1.00
Estonia	0.51	0.91	1.07	1.23	0.92	0.68	1.66	0.04	0.89	0.37
Ireland	1.53	0.91	1.13	1.02	1.09	1.31	0.54	0.09	0.92	0.93
Greece	0.66	0.70	1.48	0.66	1.05	1.25	0.96	0.16	1.01	0.27
Spain	0.86	1.35	1.20	0.85	1.05	1.41	1.01	0.75	0.95	0.34
France	1.21	1.31	0.76	0.90	1.04	1.13	0.89	1.56	1.03	0.88
Croatia	0.39	0.56	1.20	0.70	0.97	0.87	1.74	0.05	1.08	0.27
Italy	0.98	1.54	1.16	0.89	1.01	1.06	1.07	0.95	1.07	0.39
Cyprus	0.78	0.82	1.12	0.90	1.07	1.79	0.56	0.01	0.95	0.24
Latvia	0.40	0.26	1.34	1.09	0.89	0.53	2.42	0.03	0.83	0.20
Lithuania	0.43	0.38	1.12	1.08	1.00	0.52	1.49	0.04	1.02	0.22
Luxembourg	3.02	1.92	0.78	0.82	1.03	1.15	0.28	0.03	0.92	2.61
Hungary	0.41	0.45	1.30	0.81	0.98	0.76	0.59	0.14	0.94	0.29
Malta	0.68	0.72	0.98	0.73	1.20	1.76	0.29	0.01	0.99	0.49
Netherlands	1.46	1.86	0.68	1.15	0.95	1.15	0.34	0.42	0.97	1.56
Austria	1.39	0.86	0.79	0.87	0.94	1.28	2.07	0.20	1.02	0.63
Poland	0.41	0.31	1.01	0.82	1.01	1.04	0.71	0.59	0.88	0.20
Portugal	0.63	0.58	1.13	0.92	0.90	1.37	1.69	0.14	1.00	0.46
Romania	0.27	0.15	1.62	0.83	0.95	0.55	1.56	0.20	1.05	0.24
Slovenia	0.68	0.68	0.84	0.68	0.96	1.22	1.37	0.04	1.07	0.32
Slovakia	0.52	0.54	0.75	0.86	0.88	0.72	0.73	0.10	0.82	0.20
Finland	1.32	0.56	0.71	1.14	0.93	1.12	2.42	0.22	1.05	0.15
Sweden	1.56	0.88	0.69	1.43	1.19	0.99	3.29	0.31	0.99	2.68
Great Britain	1.17	1.76	0.99	1.18	1.04	0.92	0.44	1.21	0.97	1.73

[1] data for 2013

Source: calculation on the basis of Table 3.

In terms of official development assistance (SDI10), which is responsible for global partnership, there are no clear tendencies. In EU in 2010-2014, due to the budget limitations resulting from economic and financial crisis, the value of funds slightly decreased and is now within the limits of 4%. In Poland, however, during the whole analysed period it did not exceed the 0.1%. Therefore, Poland is still far behind European average. In 2014, from among all Member States the highest share in the official development assistance was marked in: Sweden, Luxembourg and Denmark (see Tab. 3).

To rank the countries in terms of sustainable development implementation, standardisation of headline indicators was made with the use of given indicator average in a given EU Member State (see Tab. 4). Standardised values of given indicators were summed up and ranked from the highest to the lowest total value, which can be seen in Table 5. On this basis, the rank of Poland in the process of sustainable development implementation among other European Union countries can be defined. It can be assumed, that Poland ranks 26th among EU countries with the tendency to improve.

Table 5. Ranked total value of standardised sustainable development indicators in EU countries in 2014

Country	Summary indicator	Country's rank in terms of development	Country	Summary indicator	Country's rank in terms of development
Sweden	14.01	1	Estonia	8.28	15
Luxembourg	12.56	2	Cyprus	8.26	16
Denmark	11.73	3	Greece	8.18	17
Great Britain	11.41	4	Latvia	7.99	18
Germany	11.19	5	Slovenia	7.86	19
France	10.71	6	Malta	7.83	20
Netherlands	10.54	7	Croatia	7.83	21
Italy	10.12	8	Romania	7.42	22
Austria	10.05	9	Lithuania	7.31	23
Spain	9.78	10	Bulgaria	7.21	24
Finland	9.61	11	Czech Rep.	7.06	25
Ireland	9.46	12	Poland	6.99	26
Belgium	8.95	13	Hungary	6.68	27
Portugal	8.81	14	Slovakia	6.13	28

Source: on the basis of Table 4.

SUMMARY

In the process of sustainable development implementation, Poland did not achieve satisfactory improvement. However, going one place higher in the ranks during the years 2004-2014 is a positive sign. From the analysis it is evident, the Poland lacks a domain,

in which it could achieve values which are comparable to the European average. In terms of sustainable development, the ecological component is implemented best, as Poland has the best results in increasing the participation of energy from renewable sources, as well as greenhouse gas emissions. It is the result of the potential Poland has in terms of renewable energy sources, industry restructuring and closure of unprofitable industry plants of significant influence on the environment.

The research also indicated, that EU financial support contributed to the increase of the rate of change within analysed indicators, yet Poland in many aspects is still behind EU Member States. It must be noted, that in terms of implementation of sustainable development, Northern European countries, such as: Sweden, Denmark, Ireland, Great Britain and Finland take the lead, while the lowest position in the ranking are taken by the countries which were the last to join the EU. Therefore, it can be assumed, that the later a country becomes a EU Member State, the longer the path towards implementation of sustainable development is, and the participation of countries in European structures is a stimulus of transformation consistent with the principles of sustainable development.

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