

## Distance Difficult to Overcome? Analysis of Norwegian and Polish Position on the Path to Sustainable Development

### Dystans trudny do pokonania? Analiza pozycji Norwegii i Polski na drodze do zrównoważonego rozwoju

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#### Abstract

Sustainable development is undoubtedly the key challenge of the contemporary world. On the way to this development Poland is far behind the other countries, especially Norway, which seems to be an unquestionable leader in this respect in Europe. There is a distance between Norway and Poland in all ten dimensions (themes) described in the EU Sustainable Development Strategy (socio-economic development, sustainable consumption and production, social inclusion, demographic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance). Unfortunately it is not likely that the distance could be significantly reduced in the coming years. Poland must accept that fact and simultaneously learn from the leader and take advantage of its experience, but can also benefit from financial support, which is possible to obtain from the EEA and Norway Grants – the funds provided to particular programs aimed at reducing economic and social disparities and strengthening bilateral relations between Norway and Poland.

**Key words:** sustainable development, development gap, Poland, Norway

#### Streszczenie

Zrównoważony rozwój jest niewątpliwie kluczowym wyzwaniem współczesnego świata. Na drodze do tego rozwoju Polska pozostaje w tyle za wieloma krajami, a w szczególności za Norwegią, która wydaje się być niekwestionowanym liderem w Europie. Dystans dzielący Norwegię i Polskę występuje we wszystkich dziesięciu wymiarach (obszarach tematycznych) ujętych w Strategii Zrównoważonego Rozwoju UE (rozwój społeczno-gospodarczy, zrównoważona konsumpcja i produkcja, włączenie społeczne, zmiany demograficzne, zdrowie publiczne, zmiana klimatu i energia, zrównoważony transport, zasoby naturalne, globalne partnerstwo, dobre rządzenie). Niestety jest bardzo mało prawdopodobne, aby dystans ten uległ w najbliższych latach znaczącemu zmniejszeniu. Polsce nie pozostaje nic innego jak tylko pogodzić się z tym faktem i jednocześnie uczyć się od lidera i czerpać z jego doświadczeń, a także korzystać ze wsparcia udzielanego z funduszy norweskich i funduszy EOG – w celu zmniejszania dystansu w zakresie zrównoważonego rozwoju oraz wzmacniania dwustronnych stosunków pomiędzy Norwegią a Polską.

**Słowa kluczowe:** zrównoważony rozwój, dystans rozwojowy, Polska, Norwegia

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## Introduction

The key challenge of the contemporary world is undoubtedly sustainable development. Among many definitions of this development, one seems to be the most transparent and frequently used. This is the definition elaborated in 1987 by the World Commission on Environment and Development, which says that making development sustainable means ensuring that it meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987)<sup>1</sup>. In the Polish legal system sustainable development was recognized as a constitutional principle (*Konstytucja...*, 1997) and defined as socio-economic development within which the process of integrating political, economic and social policies takes place and alongside the protection of natural environment is ensured in order to guarantee the opportunity to meet basic needs of particular communities and citizens of the contemporary generation, but also the future ones (*Ustawa...*, 2001).

The aim of this elaboration is to determine the position of two countries i.e. Norway (NO) and Poland (PL) on the path to sustainable development. Due to the fact that Norway is considered to be the leader of sustainable development in Europe, the country was chosen as a benchmark. Moreover, at the moment the authors are involved in the project concerning sustainable development, which is co-financed from Norwegian funds (Norway Grants) and in which a range of joint activities in cooperation with Norwegian socio-economic institutions was planned<sup>2</sup>. The aforementioned positions of Norway and Poland were described taking into consideration ten dimensions (themes) included in the EU Sustainable Development Strategy<sup>3</sup> such as: socio-economic development, sustainable consumption and production, social inclusion, demographic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance. Achieving this goal allowed to point out the distance between

Norway and Poland with regard to sustainable development. Moreover, in this elaboration the attempt was made to assess the opportunities of reducing that distance by Poland.

It should be emphasized here that although the concept of sustainable development disseminated nowadays is a consequence of historical experiences of mankind and the best way to ensure optimal conditions for development of both – human species and the natural environment, nevertheless the concept is differently perceived by people living in Western Europe and Eastern Europe. The citizens of Western Europe to a higher extent agree with the assumption that there should be a balance between three pillars of sustainable development (social, economic and ecological). On the other hand, the residents of Eastern Europe underestimate the environmental pillar and they pay less attention to the social one (Rydzewski, 2015).

## EU Sustainable Development Strategy – objectives, challenges, indicators

*Sustainable development is one of the priorities of the European Union. In the light of the 'Treaty on European Union' its institutions are to promote and work for permanent, durable and sustainable development of Europe. The basis of this development is balanced economic growth and price stability, a highly competitive social market economy aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment (EU Treaty, 2008). The fundamental document stating objectives and actions of EU aiming at achieving sustainable development, but also helping to come up with appropriate policies, establishing standards and offering solutions, is the 'EU Sustainable Development Strategy (A Sustainable Europe for a Better World)', which was approved in May 2001 by the European Council (European Council, 2001), and then renewed in June 2006 (European Council, 2006)<sup>4</sup>.*

*The paramount aim of the Strategy is to determine and develop such activities, thanks to which the EU would be able to ensure and guarantee the present and future generations the constant growth of the quality of life through establishing communities based on principles of sustainable development, i.e. communities managing and using their resources efficiently and effectively, gaining from economic potential in the area of ecological and social innovations and therefore bringing prosperity, assuring environmental protection and social cohesion. The priority goals included in the 'EU Sustainable Development Strategy' were: environmental protection, justice and social cohesion, economic prosper-*

<sup>1</sup> It should be emphasized here that sustainable development is not a stable state of balance, but a process of changes, within which exploiting resources, the direction of investments, technological development and institutional changes are in line with both the future and present needs.

<sup>2</sup> Project *SUSTMAN* – Entrepreneurship, sustainable development and manufacturing for students of PWSZ in Konin<sup>3</sup> covers a range of subjects (*Eco-Entrepreneurship, Soft Skills and Communication, Sustainable Development, Sustainable Production and Service*), but also study visits and workshops in Poland and Norway. Further information concerning the Project is available on the website: <http://www.sustman.konin.edu.pl>

<sup>3</sup> Norway does not belong to the EU, but most of indices highlighted in the aforementioned Strategy are made available by the Eurostat for both the EU Member States and a few other European countries, including Norway.

<sup>4</sup> It should be signaled here that the concept of sustainable development was included in many other European strategic documents, namely the *Lisbon Strategy, Europe 2020 Strategy, White and Green Papers*, etc.

ity and fulfilling commitments of the EU on the international scale. Moreover, the major challenges covered in the Strategy concerned the following areas: climate change and clean energy; sustainable transport; sustainable consumption and production; conservation and management of natural resources; public health; social inclusion, demography and migration; global poverty and sustainable development challenges. For each challenge (threat) the objectives and targets were set and actions were determined, which are to help accomplish the aforementioned purposes.

Achieving the targets of the 'EU Sustainable Development Strategy' is monitored by making use of a range of indicators that concern ten dimensions (themes): socio-economic development; sustainable consumption and production; social inclusion; demographic changes; public health; climate change and energy; sustainable transport; natural resources; global partnership; good governance (GUS, 2011). The indicators of sustainable development can be presented in a pyramid divided into three levels reflecting their hierarchy (figure 1). At the top of the pyramid there are eleven headline indicators which monitor the overall objectives connected with key challenges of the Strategy. In the middle of the pyramid there are 31 indicators concerning operational objectives and targets, then at the bottom there are 84 indicators depicting the actions therefore making the headline indicators more specific. The set of indicators is supplemented by so called contextual indicators, which are not used for monitoring the Strategy directly, but they provide additional and valuable information in particular topics and phenomena connected with sustainable development and can be useful for analytical purposes.

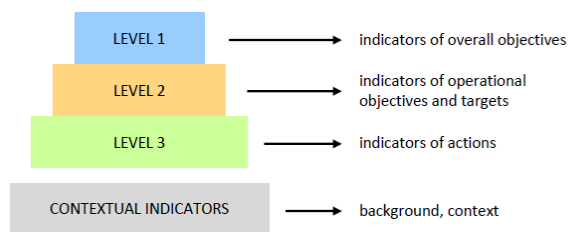


Figure 1. The indicators of sustainable development, source: Central Statistical Office of Poland, <http://stat.gov.pl> (06.02.2015).

The EU set of sustainable development indicators is regularly developed and updated by Eurostat, which prepares the monitoring reports (Eurostat, 2013)<sup>5</sup>, on the basis of which the European Commission elaborates reports monitoring the implementation of the EU Sustainable Development Strategy (European Commission, 2005, 2007, 2009).

<sup>5</sup> The latest monitoring report was published in 2013.

### Methodological notes and source of information

Achieving the aim of this elaboration thus determining the position of Norway and Poland on the path to sustainable development and consequently determining the distance between these two countries in this respect, is possible by making use of numerous statistical measures – less or more advanced. However, taking into consideration the fact that the analysis concerns only two states, there is no point in using complex measures, for example, multidimensional comparative analysis. That is why the simplest measures such as: intensity ratios and dynamics ratios were used in this elaboration.

The starting point for conducting a comparative analysis was to find the values of indicators describing the situation of Norway and Poland with regard to sustainable development. Undoubtedly the best solution would be to use the aforementioned 11 headline indicators, which monitor overall objectives connected with key challenges of EU Sustainable Development Strategy. Unfortunately at that stage some constraints appeared. The values of two indicators, namely primary energy consumption and occurrence of common bird species (common bird index) so the indicators concerning the themes, respectively, climate change and energy and natural resources, are not available for Norway. Moreover, for the area good governance Eurostat did not propose a headline indicator. Bearing in mind these constraints with regard to the data availability and simultaneously taking into account the need to determine a position of Norway and Poland within all ten themes covered in the described Strategy, one headline indicator was used for the area of climate change and energy (chosen from three available) and operational indicators for themes: natural resources and good governance. Ultimately the values of the following sustainable development indicators were used<sup>6</sup>:

- X<sub>1</sub> – real GDP *per capita* (in EUR),
- X<sub>2</sub> – resource productivity (EUR per kilogram),
- X<sub>3</sub> – risk of poverty or social exclusion (in %),
- X<sub>4</sub> – employment rate of older workers (in %),
- X<sub>5</sub> – life expectancy of women at birth (in years),
- X<sub>6</sub> – renewable energy consumption (in %),
- X<sub>7</sub> – energy consumption of transport relative to GDP (compared to 2000, in %),

<sup>6</sup> Among the indicators there are both stimulants (S), which means that their higher values translate into a better situation with regard to sustainable development (X<sub>1</sub>, X<sub>2</sub>, X<sub>4</sub>, X<sub>5</sub>, X<sub>6</sub>, X<sub>9</sub>, X<sub>10</sub>), and the indicators being destimulants (D) whose lower values mean better situation in this respect (X<sub>3</sub>, X<sub>7</sub>, X<sub>8</sub>).

- $X_8$  – water abstraction as a share of available renewable resources (in %),
- $X_9$  – official development assistance as a share of gross national income (in %),
- $X_{10}$  – voter turnout in national parliamentary elections (in %).

The values of most indicators were obtained from the Eurostat website and only a few of them – not available in the database of Eurostat – from the OECD database. It should be emphasized here that the values of particular indicators were presented for years 2004 (in some cases 2005) and 2013 (in some cases 2012), which therefore allowed to show the position changes of Norway and Poland on their path to sustainable development in the last decade.

### The position of Norway and Poland on the path to sustainable development

In this part of the elaboration the situation of Norway and Poland was characterized with regard to ten themes of sustainable development, which are as follows: socio-economic development, sustainable consumption and production, social inclusion, demographic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance. Each of the mentioned above themes was described by a headline indicator ( $X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_9$ ) or operational one ( $X_8, X_{10}$ ). Determining the position of both countries was preceded by the presentation of objectives associated to particular themes in the *EU Sustainable Development Strategy*.

Socio-economic development is a fundamental theme of the Strategy. The headline indicator within this area is real GDP *per capita*. In 2004 this value accounted for EUR 46.4 thousand in Norway and EUR 5.4 thousand in Poland. By contrast, in 2013 this value amounted to EUR 77.4 thousand and EUR 10.3 thousand respectively. It means that in the years 2004-2013 the absolute distance between Norway and Poland increased by EUR 26.1 thousand *per capita*. In relative terms the distance narrowed as in 2004 the value of Polish GDP *per capita* accounted for 11.6% of the Norwegian GDP value *per capita*, and in 2013 – 13.3%. Nevertheless, GDP *per capita* in Norway is still nearly eight times higher than in Poland<sup>7</sup>.

The objective formulated with regard to the theme sustainable consumption and production is to promote the patterns of sustainable consumption and production, which do not harm the natural environment and human well-being. The headline indicator within this area is resource productivity. In 2004 this productivity was at the level of 1.40 EUR per kilogram in Norway and 0.43 EUR per kg in

Poland, which means that using one unit of material (one kilogram) generates economic value amounting to respectively 1.40 EUR and 0.43 EUR. In 2013 resource productivity rose by EUR 0.46 and accounted for 1.86 EUR per kilogram in Norway. In case of Poland in the analyzed year the value reached the level of 0.49 EUR per kilogram. It means that in years 2004-2013 the distance between Norway and Poland in absolute terms increased by 0.40 EUR per kilogram. Assessing the distance from the relative perspective, it can be stated that the gap rose as in 2004 Polish resource productivity was 30.7% of the Norwegian one, but in 2013 – 26.3% (4.4% decline)<sup>8</sup>.

The objective formulated with regard to the next theme, which concerns social inclusion, is to reduce the number of people at risk of poverty and social exclusion, taking particularly into account poverty among children. The headline indicator within this area is risk of poverty or social exclusion. 15.8% of Norwegian citizens and 45.3% of Polish citizens were threatened with these phenomena in 2004. In 2013 the percentage of people facing the risk of poverty or social exclusion was respectively 14.% and 25.8%. It means that in years 2004-2013 the absolute distance between Norway and Poland declined by 17.8 percent points. Looking at the issue from the relative perspective – the gap also decreased as in 2004 the described percentage in Poland was almost three times higher than in Norway, but in 2013 – nearly two times<sup>9</sup>.

The objective formulated with regard to the theme demographic changes is to increase the number of women and older employees on the labor market. The headline indicator within this area is employment of older workers from the age group 55-64, the group mostly endangered by unemployment. The employment rate for this group in 2004 fluctuated around 65.8% in Norway and 26.2% in Poland. In 2013 the share changed and accounted for 71.1% and 40.6% respectively. It means that in years 2004-2013 the distance between Norway and Poland in absolute terms decreased by 9.1 percent points. We can observe the same tendency when we look at the issue in relative terms – the gap declined as in 2004 the rate was in Poland 2.5 times lower than in Norway and in 2013 1.75 times<sup>10</sup>.

The objective formulated with regard to the theme public health is to promote public health on equal terms and to improve protection against health threats. The headline indicator within this area is life expectancy at birth. In 2004 life expectancy for

<sup>8</sup> Resource productivity in Norway is similar to the EU average.

<sup>9</sup> The percentage of people at risk of poverty and social exclusion in Norway is lower by 10 percent points than the European average.

<sup>10</sup> The percentage of people (age group 55-64 years) employed in Norway is higher by over 20 percentage points than the EU average.

<sup>7</sup> The value of GDP *per capita* in Norway is nearly three times higher than the EU average.

women amounted to 82.5 years and 79.2 in Poland. The values of the indicator in 2012 reached the level of 83.5 years and 81.1 years respectively. It means that in years 2004-2012 the absolute gap between Norway and Poland declined by almost one year. Moreover, in relative terms the distance decreased, as in 2004 life expectancy for women in Poland in 2004 made up 96% of life expectancy for women in Norway, and in 2012 – 97,1%<sup>11</sup>.

The objective formulated with regard to the theme climate change and energy is to reduce climate changes, but also to lower their costs and negative effects, which become a burden for a society and natural environment. One of the headline indicator within this area is the use of renewable energy. In 2004 this use accounted for 58.1% in Norway and 7% in Poland. Taking into consideration the year 2013 the values amounted to 64.5% and 11% respectively. It means that in years 2004-2013 the gap between Norway and Poland in absolute terms increased by 2.4 percent points. However, from the relative perspective the distance declined, as in 2004 the use of renewable energy in Poland was over eight times lower than in Norway, but in 2013 nearly six times<sup>12</sup>.

The objective formulated with regard to the theme sustainable transport is to ensure that transport systems meet society's economic, social and environmental needs alongside minimizing their undesirable impacts on the economy, society and the environment. The headline indicator within this theme is energy consumption of transport relative to GDP. The energy consumption in 2004 accounted for 96.8% of consumption in 2000 in case of Norway and 104.7% in case of Poland. In 2013 the level amounted to 98.7% and 103.4% respectively. It means that in years 2004-2013 the gap between Norway and Poland in absolute terms declined by 3.2 percentage points. In relative terms the gap also narrowed as in 2004 energy consumption of transport relative to GDP in Poland was 108.2% of Norwegian one and in 2013 – 104.8%<sup>13</sup>.

The objective formulated with regard to the theme natural resources is to improve management and avoidance of overexploitation of renewable natural resources, due to the value of ecosystem services recognition. The headline indicator within this theme is a common bird index. In this elaboration the operational indicator was used i.e. water abstraction as a share of available renewable resources. This abstraction in 2004 fluctuated around 0.73% in Norway and 18.2% in Poland. In 2013 the share accounted for 0.77% and 18.9% respectively.

It means that in years 2004-2013 the gap between Norway and Poland in this area – both in absolute and relative terms – was at similar level.

The objective formulated with regard to the theme global partnership is to actively promote sustainable development worldwide and to ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments. The headline indicator within this theme is official development assistance as a share of gross national income. In 2004 this help accounted for 0.87% in Norway and 0.05% in Poland. In 2013 this assistance amounted to 1.07% and 0.1% respectively. It means that in years 2004-2013, in absolute terms, the gap between Norway and Poland increased by 0.15 percentage point. In relative terms the gap narrowed as in 2004 the analyzed percentage in Poland was over 17 times lower than in Norway and in 2013 – nearly 11 times<sup>14</sup>.

The objective formulated with regard to the theme good governance is to promote coherence between national, regional and local actions in order to enhance their contribution to sustainable development. The headline indicator within this theme was not established. In this elaboration the operational indicator was used, i.e. voter turnout in parliamentary elections. In 2005 it accounted for 77.4% in Norway and 40.6% in Poland. The voter turnout reached the level of 78.2% in 2013 in Norway and 48.9% in 2011 in Poland. It means that the absolute gap between Norway and Poland declined by 7.5 percentage points. In relative terms the gap also narrowed as in 2005 voter turnout in parliamentary elections in Poland was almost two times lower than in Norway and a few years later a bit over 1.5 times lower<sup>15</sup>.

In the table below the values of used sustainable development indicators for Norway, Poland and the EU average were presented for the years covered in the analysis.

On the path to sustainable development Poland lags behind Norway in all aforementioned themes. Currently, i.e. taking account the situation in 2013 it can be stated that the biggest gap between these two countries is observed with regard to five following themes: socio-economic development, sustainable consumption and production, climate change and energy, natural resources and good governance. The distance is relatively the smallest within two themes: public health and sustainable transport.

In order to determine the overall gap between Norway and Poland in the area of sustainable devel-

<sup>11</sup> Life expectancy of women at birth in Norway is similar to the EU average.

<sup>12</sup> The use of renewable energy in Norway is nearly five times higher than the EU average.

<sup>13</sup> Energy consumption of transport relative to GDP for Norway is over 10 percentage points higher than the EU average.

<sup>14</sup> This percentage in Norway is over 2.5 times higher than the EU average.

<sup>15</sup> Voter turnout in national parliamentary elections in Norway is over 10 percent points higher than the EU average.

**Table 1.** The values of sustainable development indicators for Norway, Poland and the EU average in 2004 and 2013, source: Own independent elaboration on the basis of the data provided by Eurostat and OECD

Indicator	Year 2004			Year 2013		
	NO	PL	UE	NO	PL	UE
X <sub>1</sub>	46 400	5 400	22 300	77 400	10 300	26 600
X <sub>2</sub>	1,40	0,43	1,40	1,86	0,43	1,76
X <sub>3</sub>	15,80	45,30	25,70	14,10	25,80	24,40
X <sub>4</sub>	65,80	26,20	40,60	71,10	40,60	50,20
X <sub>5</sub>	82,50	79,20	81,50	83,50	81,10	83,10
X <sub>6</sub>	58,10	7,00	8,30	64,50	11,00	14,10
X <sub>7</sub>	96,80	104,70	98,70	98,70	103,40	86,90
X <sub>8</sub>	0,73	18,20	–	0,77	18,90	–
X <sub>9</sub>	0,87	0,05	0,34	1,07	0,10	0,34
X <sub>10</sub>	77,40	40,60	71,30	78,20	48,90	67,90

opment, so the distance taking into account all ten themes described with the use of indicators expressed in different units of measurements (EUR, percentage points, years). First of all, the relations between the values of particular sustainable development indicators for both countries for the period covered in the analysis were calculated<sup>16</sup>. Bearing in mind the fact that within each theme the situation of Poland was worse than in Norway, all the obtained results had the value lower than 1.0. Therefore the values of these relations were subtracted from the maximum value of 1.0 – the obtained difference showed the gap between two analyzed countries with regard to a particular theme of sustainable development. The last stage required adding up all obtained before differences (10 results altogether) – the value (sum) obtained showed the general distance between Norway and Poland on the path to sustainable development (on a scale to 10). The results of the calculations mentioned above were presented in figure 2 and figure 3.

### The assessment of opportunities to reduce the gap between Norway and Poland

In the context of the calculated results a fundamental question arises: is it possible for Poland in the coming years to diminish the distance towards Norway and therefore to reduce the gap between these two countries in the area of sustainable development? In the further part of this elaboration the attempt was made to answer this question – in particular with regard to five themes with the biggest distance and three themes with a relatively big gap. Two aforementioned themes i.e. public health and

sustainable transport, within which the analyzed disparities are relatively the smallest, were left out.

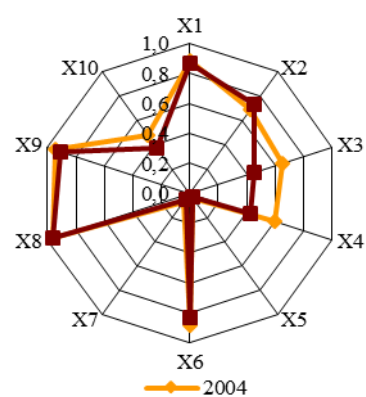


Figure 2. The gap between Norway and Poland with regard to particular themes of sustainable development in 2004 and 2013, source: Own independent elaboration on the basis of the data provided by Eurostat and OECD

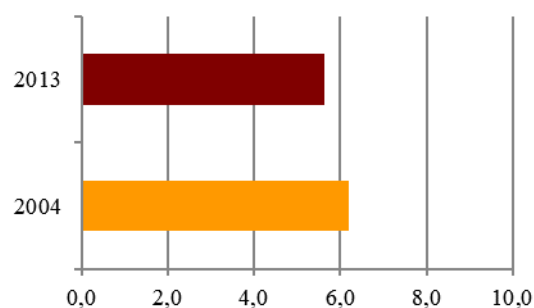


Figure 3. The general gap between Norway and Poland on the path to sustainable development in 2004 and 2013, source: Own independent elaboration on the basis of the data provided by Eurostat and OECD

<sup>16</sup> In different words, the quotients of indicators' values for Poland and Norway were computed – in case of indicators being stimulants (PL/NO), and in case of destimulants the multiplication was applied so the products of indicators' values for Norway and Poland were found (NO/PL).

According to the data provided by the World Bank – for many years Norway has been among the countries in the world whose socio-economic development is at the highest level, measured by

the value of GDP *per capita*<sup>17</sup>. Bearing in mind the fact, that in Poland this value is nearly eight times lower than in Norway, it can be clearly stated that the gap between these two states in this respect is not possible to overcome. Moreover, taking into consideration some key statistical measures, namely the average annual GDP growth *per capita* in Norway, which accounts for nearly 6% and in Poland a little bit over 7% (the geometric mean from last ten years), the relation of expenditure on research to GDP is respectively around 1.7% and 0.8%, and the unemployment rate fluctuates around the level of 3.5% and 10% respectively, it is difficult to expect – assuming similar socio-economic circumstances – that the analyzed distance could be reduced significantly. Frankly speaking, the value of Norwegian GDP *per capita* will be unreachable by Poland and most of the EU Member States in the coming years. The level of sustainability of consumption and production in Poland expressed by the resource productivity indicator – in comparison with Norway – leaves much to be desired. Unfortunately in the last years the gap between the two countries in this respect increased. Taking into account the values of two indicators out of three operational indicators proposed within the analyzed theme i.e. the amount of waste generated (in kg *per capita*) and the number of organizations with Eco-Management and Audit Scheme (EMAS) it can be assumed that the distance between Norway and Poland with regard to sustainable consumption and production will be slowly, but constantly diminishing in the coming years. The amount of waste generated *per capita* in both countries is at the similar level and on the other hand, the number of organizations registered in a scheme EMAS is in Poland bigger than in Norway.

Social inclusion, perceived through the lens of the percentage of people at risk of poverty and social exclusion, is a theme of sustainable development within which Poland made the biggest progress during last 10 years. However, this percentage is still higher by over 10 percentage points than in Norway (but much lower than in 2004). Undoubtedly the education (and its development) is the area that fosters social inclusion. Although the expenditures on education in Poland in relation to GDP (around 5%) are slightly lower than in Norway (around 6-7%), nevertheless, the values of two educational indicators, namely a percentage of early leavers of education and training and a tertiary educational attainment as a percentage of population aged 30-34 allow to arrive at the conclusion that there is a huge potential to reduce the distance between the analyzed countries. The first of the indicators mentioned is in Poland at a low level (5-

6%), whereas in Norway is much higher – it accounts for a dozen or so percents. The other indicator is systematically growing in Poland and in Norway it fluctuates at the more less same level.

A significant progress was also observed in Poland with regard to demographic changes, which is expressed by the growing percentage of people employed from the age group 55-64 years. In years 2004-2013 in Poland this percentage increased by 1.6 percentage points annually whereas in Norway only 0.6 percentage point a year. Nevertheless, it is unlikely that in Poland the value of this indicator could reach the level noted in Norway. In the authors' opinion it is possible for Poland to reach the European average in this respect, which would allow to reduce the gap in this area of sustainable development by about 20 percentage points. The further progress seems to be impossible, especially in the situation when the period of being active on the labor market amounting in Poland to over 32 years, is shorter by 7 years comparing to Norway<sup>18</sup>. The use of renewable energy specified as one out of three headline indicators within the theme climate change and energy in Poland is close to the European average and it is possible that in the near future it will be close to the level of 20% determined in Europe 2020 Strategy (European Commission, 2010), although it is highly unlikely it will reach that level. As long as reducing the distance of Poland toward the EU average seems to be feasible, diminishing the gap between Norway and Poland – similarly with regard to the value of GDP *per capita* – is beyond the reach of Poland and many European countries as well (except for Scandinavian states, especially Sweden). Norway belongs to the group of states – world leaders in the area of renewable energy use – which set standards and determine trends, which are held up as good examples to follow and therefore becoming an unsurpassed ideal for other countries.

The gap between Norway and Poland with regard to natural resources, expressed by an indicator concerning water abstraction as a percentage of the long-term renewable available water resources, is as big as the distance concerning climate change and energy. Poland belongs to the group of the largest European countries, such as France, Spain, Germany and Italy, where this indicator is at the significantly higher level than the OECD average. On the other hand, Norway, Ireland, Iceland, Slovakia and Sweden are the countries in which the indicator concerning water abstraction as a percentage of the long-term renewable available water resources is at a very lower level comparing with

<sup>17</sup> The value of GDP *per capita* places it among such countries as Switzerland, Luxemburg, Monaco, Qatar (World Bank).

<sup>18</sup> It should be emphasized here that in the context of demographic changes there are some worrying issues in Poland. First of all, the fertility rate is one of the lowest in the EU, and on the other hand the predicted dependency ratio is one of the highest in the EU.

other OECD countries<sup>19</sup>. Taking into consideration socio-economic settings in Norway and Poland, in particular the number of citizens and enterprises, and consequently the global water use and spatial conditions of both countries, namely access to water supplies, it can be stated that the distance in this area is not possible to overcome by Poland.

Global partnership, analyzed through the lens of allocating a part of gross national income to official development assistance, is the next gulf between the countries covered by this analysis. The distance does not take anyone by surprise, especially in the context of huge differences between Norway and Poland with regard to the values of GDP *per capita*. Moreover, the attention should be paid to the fact that Poland is the biggest recipient (beneficiary) of the funds from the EU budget, receiving more financial means than the contribution to this budget (European Commission), and on the other hand Norway – not being the EU Member State – gives help in the form of non-repayable grants, therefore provides funding to the least wealthy EU countries within the Norwegian Financial Mechanism, and is one of the countries-donors alongside Iceland and Liechtenstein within the European Economic Area Financial Mechanism (Norway Grants). Therefore, it can be assumed that the distance in this respect will not be eliminated, it can only be slightly reduced.

Voter turnout in national parliamentary elections, being one of the operational indicators reflecting sustainable development theme called good governance, is at a really low level in Poland – not only compared to Norway, but also to the EU average. It happens mainly due to bad opinions expressed with regard to the activities of the Polish parliament, especially the lower house of the Parliament (Sejm) and the feeling of lack of influence on public matters. Work of the Sejm was criticized by around 2/3 of Poles (CBOS, 2014), and nearly 80% of Polish respondents claimed that there was no possibility to have an impact on public issues (CBOS, 2013). In the light of aforementioned circumstances, a significant difference between Norway and Poland with regard to voter turnout in national parliamentary elections is not possible to overcome in the coming years. Admittedly, the distance between these two countries can be reduced in the theme of good governance, but it still will be at the level of 20 percentage points.

Summing up, in the authors' opinion it is highly unlikely to reduce the general gap on the path to sustainable development between Norway and Poland, which at the moment accounts for 5.63% on a scale to 10 (figure 3). Nevertheless, some of the disparities within three themes (sustainable consumption and production, social exclusion,

demographic changes) might be reduced, but in other five analyzed themes (socio-economic development, climate change and energy, natural resources, global partnership, good governance) disproportions will not change to a high and crucial extent.

## Conclusion

The analysis of the position of Norway and Poland on the path to sustainable development gives rise to the overall reflections, which can be expressed using the language from fairy tales: *in a faraway land there was a wonderful kingdom*. As it was mentioned before Poland lags behind Norway and stays on the sidelines of sustainable development in all ten themes. A huge gap between both countries, in particular with regard to five themes, four of which – according to authors – with a little chance for improvement of the situation in the coming years (socio-economic development, climate change and energy, natural resources, global partnership) makes it difficult to compare the situation of Norway and Poland as it seems to be *comparing incomparable things*. There is no doubt that in the future Norway will be an unquestionable and unsurpassed leader for Poland and many EU Member States at implementing the concept of sustainable development, setting standards and world trends. Poland must accept that fact and simultaneously learn from the leader and take advantage of its experience, in particular with regard to integrity and involvement of government authorities at different levels, which is essential to make citizens get engaged in cooperation and work for the common good – sustainable development. Another thing of significant value is the possibility to obtain financial support from the EEA and Norway Grants – the funds provided to particular programs aimed at reducing economic and social disparities and strengthening bilateral relations between Norway and Poland.

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