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MINISTER OF ECONOMY

REPORT
ON ANALYSIS OF IMPLEMENTATION OF QUANTITATIVE TARGETS AND RESULTS REACHED WITHIN THE SCOPE OF ELECTRICITY GENERATION FROM RENEWABLE ENERGY SOURCES

Warsaw, November 2009

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1. Legal grounds

The Report implements Article 9f item 4 of the Act of 10 April 1997 – Energy Law (Journal of Laws Dz. U. 2006 No 89, Item 625, as amended), as well as the obligations ensuing from Article 3 Item 3 of Directive No 2001/77/EC of the European Parliament and the Council of 27 September 2001 *on the promotion of electricity produced from renewable energy sources in the internal electricity market* (Official Journal L 283 of 27 October 2001, page 33; Official Journal, Polish Special Issue, Chapter 12, vol. 2, page 121), hereinafter referred to as Directive 2001/77/EC". Pursuant to Article 3 of the Directive, not later than 27 October 2002 and every two years thereafter, the Member States shall adopt and publish a report, presenting an analysis of implementation of national indicative targets for future production of electricity from renewable energy sources.

The report shall cover the years 2007–2008, taking into consideration the data for the years 2005–2008 in order to present a broader time perspective, enabling an analysis of implementation of quantitative targets and results obtained within the scope of electricity generation from renewable energy sources.

2. Report objectives

The objective of this report is to provide an analysis and evaluation of the effectiveness of measures to promote generation of electricity from renewable energy sources (RES), taking into consideration the actions taken as a result of commitments accepted in the context of climate change.

The most important tasks of Poland's energy policy is to ensure the reliability of supply of fuels and energy, increase the competitiveness of the economy and minimise the negative impact of the energy sector upon the environment. One of the elements conducive to the implementation of the aforementioned priorities is to increase the utilisation of renewable energy sources, thereby reducing the dependence of national economy upon imported energy carriers, and reducing air pollution by avoiding the emission of pollutants generated from the use of conventional energy carriers.

The strategic objective of Poland's energy policy is to increase the utilisation of renewable energy sources, achieve a 7.5% share of electricity generated from renewable energy sources in the gross domestic consumption of electricity in 2010, and to further increase it by 2020. Moreover, one must stress here that the climatic and energy package implemented further to the conclusions of the European Council of March 2007 is of utmost importance to the development of utilisation of renewable energy sources. One of the main elements of the package referred to above is the Directive of the European Parliament and the Council No 2009/28/EC of 23 April 2009 *on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC* (CE Official Journal L 140 of 5 June 2009, page 16). The Directive assumed an increase of the share of energy generated from renewable sources in final energy consumption of the European Union to 20% in 2020, whereas for Poland this share is to stand at 15%. Simultaneously, all Member States should increase the share of energy from renewable sources in transportation to 10% in 2020.

The assumed share of electricity generated from renewable energy sources remains in compliance with the indicative quantitative target adopted for Poland in Directive 2001/77/EC

of the European Parliament and the Council of 27 September 2001 *on the promotion of electricity produced from renewable energy sources in the internal electricity market* (CE Official Journal L 283 of 27 October 2001, page 33; CE Official Journal, Polish Special Issue, Chapter 12, vol. 2, page 121).

Pursuant to provisions under Article 9f Item 4 of the Act – the Energy Law (as well as for the purpose of uniformisation of the statistical data presented), the subject-matter report has been drawn basing upon the information provided by the Polish Energy Regulatory Office (Urz•d Regulacji Energetyki, URE) and the Ministry of Environment (Ministerstwo • rodowiska, M•).

3. Values of indicative targets

Table 1 presents the percentage share of electricity, generated from renewable energy sources in Poland, in terms of total gross domestic electricity consumption, leading to the fulfilment of the indicative target in 2010 in keeping with Directive 2001/77/WE.

Table 1 — Percentage share of electricity generated from renewable energy sources in the total gross domestic electricity consumption, according to the targets assumed

Year	Share of electricity from RES [%]
2001	1.9
2002	2.0
2003	2.2
2004	2.3
2005	2.5
2006	3.0
2007	3.9
2008	5.0
2009	6.2
2010	7.5

4. Electricity generated from renewable sources

In the opinion of experts, sources utilising the energy of biomass (power crops, forest biomass, agricultural and industrial waste), biogas, wind and running waters may indicate a higher capacity for utilisation in Poland within the scope of existing support mechanisms. At present, due to low economic efficiency compared against electricity generation, technologies using solar energy may play an important role mainly in the generation of heating energy and in insular systems, operating independently of the national power grid. Over a longer time perspective, the utilisation of geothermal sources for electricity generation is also being envisaged.

Table 2 presents installed power values for different technologies, utilising renewable energy sources in the years 2005–2008.

Table 2 — RES installed power in the years 2005–2008

No	Type of generation unit		2005 Installed power MW	2006 Installed power MW	2007 Installed power MW	2008 Installed power MW
1.	Biogas operated power plants	operated on biogas from sewage treatment plants	31.972	11.113	15.536	19.688
		agricultural biogas operated		0.741	0.741	1.366
		landfill biogas operated		24.907	29.422	33.561
2.	Biomass operated power plants	operated on biomass from forest, agricultural, garden waste	189.79	0.790	0.790	5.210
		Mixed biomass operated power plants		0.000	0.000	3.580
		operated on biomass from industrial waste, timber and paper industry waste		238.000	254.600	223.200
3.	Wind farms	land-based	83.280	152.559	287.909	451.090
4.	Offshore	river hydro plant, up to 03 MW	852.495	42.523	43.271	42.778
		river hydro plant, up to 1 MW		41.723	41.723	44.525
		river hydro plant, up to 5 MW		129.525	129.525	132.513
		river hydro plant, up to 10 MW		47.780	47.780	48.280
		river hydro plant, over 10 MW		289.800	289.800	289.800
		river hydro plant with pump unit		382.680	382.680	382.680
5.	Power plants using the technology of co-firing*	with fossil fuels and biomass	-	-	-	-
		fossil fuels and biomass				
		TOTAL	**1 157.537**	**1 362.141**	**1 523.777**	**1 678.271**

* In the case of installations based on the co-firing technology at conventional power plants, the terms and conditions of core operations are changed, resulting in an amendment of licence. Due to extensive ranges of percentage shares of biomass (in total fuel flows), no installed power figures have been quoted for such installations.

The share of electricity generated from renewable sources of energy in Poland's gross domestic consumption has grown from 2.58% in 2005 to 4.20% in 2008.

Table 3 presents the quantities of electricity generated from renewable energy sources and its share in gross electricity consumption in 2005–2008.

Table 3 — Share of electricity generated from RES in the domestic consumption of electricity, gross, 2005–2008

	2005	2006	2007	2008
Electricity generation from RES [TWh]	3.761	4.222	5.230	6.447
Electricity consumption in Poland [TWh][1]	145.7	150.8	154.0	153.4
Share of electricity generated from renewable energy sources [%]	**2,58**	**2.80**	**3.40**	**1.20**

In 2008, the share of electricity generated from renewable energy sources against Poland's total electricity consumption increased against 2005 figures, although the growth rate has not been uniform over the four years in question. Highest growth rate was noted in the past 2 years, mainly resulting from the implementation of the "green certificates" mechanism, creating conditions conducive to investments into renewable energy sources. In 2006, for the first time electricity generation from renewable energy sources passed the 4 TWh mark, rising to as much as 6 TWh in 2008. Table 4 and Fig. 1 present the quantities of electricity generated using various technologies from renewable energy sources up to 2005.

Table 4 – Electricity generated using various technologies from renewable energy sources in years 2005–2008 [GWh]

Type of RES	**2005**	**2006**	**2007**	**2008**
Hydroenergy	2176	2030	2253	2153
Biomass	1345	1818	2343	3267
Biogas	105	117	162	221
Wind farms	135	257	472	806
Total	**3761**	**4222**	**5230**	**6 447**

[1] Source — Agencja Rynku Energii SA.

Figure 1 — Electricity generated using various technologies from renewable energy sources in years 2005–2008 [GWh]

Hydro-electric Biomass Biogas Wind farms

The structure of electricity generation from renewable energy resources for 2005–2008 indicates that this sector is dominated by biomass operated power plants and heat and power plants and hydro power plants. Moreover, role of biogas operated power plants and wind farms is increasing.

In the years 2005–2008, a considerable growth was noted in the generation of electricity by biomass operated power plants and wind farms.

5. Actions undertaken to meet the obligations ensuing from international agreements on climate protection.

Poland has been reducing greenhouse gas emissions for a number of years now. The main factor limiting these emissions was the reduction by 30% of primary energy consumption in national economy against the base year of 1988. Simultaneously, the fuel structure changed towards reducing coal consumption and increasing the use of renewable energy sources. Nevertheless one must note here that in the years 1988–2007 periods have been noted when intensive economic development caused the emissions of greenhouse gases to rise.

Table 5 presents the national inventory of emissions of greenhouse gases in the years 1988–2007.

Table 5 — National inventory of emissions of greenhouse gases in 1988–2007 in terms of IPCC categories [Gg equiv. CO_2][2]

Category	1988	2002	2003	2004	2005	2006	2007
	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2
1. Energy	469 594.85	309 212.02	319 324.67	319 252.94	315 453.29	324 617.45	321 704.33
2. Industrial processes	33 495.82	19 598.14	22 665.71	23 546.81	29 423.30	31 539.69	33 299.29
3. Use of solvents and other products	1 006.46	664.25	647.39	704.67	705.75	705.75	733.04
4. Agriculture	51 225.04	33 710.48	32 978.42	32 376.32	32 947.60	34 504.18	35 039.64
5. Land use Changes in land use and forestry	-32 926.48	-29 777.64	-30 847.42	-34 101.15	-35 373.61	-40504.79	-40 497.08
6 Waste	14 188.25	8 307.67	8 187.11	8 111.10	8 078.10	7 924.90	8 105.11
Sum total — net with category 5	536 583.96	341 714.91	352 955.88	349 890.69	351 234.43	358 787.18	358 384.32

Net emissions of carbon dioxide are calculated by subtracting the balance of emissions and absorption of such gas for category 5 specified in the above Table — Utilisation of land, changes in land utilisation and forestry from the sum total of emissions in all remaining categories. In keeping with recommendations from UNFCCC Convention, CO_2 emissions have been presented both inclusive and exclusive of the values for category 5 (Tables 5 and 6). Moreover, in keeping with IPCC (Intergovernmental Panel on Climate Change) methodology, the inventory did not take into consideration the domestic emissions of CO_2 from biomass. For gases other than CO_2, the inventory results may be presented — for the sake of comparison — in CO_2 equivalent units, using the relevant values of the Global Warming Potential (GWP), which amounts to 21 for methane and 310 for nitrogen monoxide. As presented in Table 6, in 2007 domestic emissions have been dominated by carbon dioxide (net of category 5) which accounted for a 82.3% share, with the shares of methane and nitrogen monoxide (net of category 5) at much lower levels of 9.1% and 7.7%, respectively. The shares of all industrial gases account for a small share in the domestic emissions of greenhouse gases (totalling approx. 0.9%).

Table 6 presents the national inventory of emissions of greenhouse gases in the years 1988–2007, broken down by individual gases, whereas Figure 2 presents emissions of greenhouse gases (net of category 5 presented in Table 5) in the years 1988–2007.

[2] Source — KASHUE — *National inventory of emissions and absorption of greenhouse gases for 2007, Report prepared for the needs of the UN Framework Convention in the matter of climate changes and Kyoto Protocol*

Table 6 — National inventory of emissions of greenhouse gases in 1988–2007 broken down by individual gases [Gg equiv. CO_2][3]

Pollution	1988	2002	2003	2004	2005	2006	2007
	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2	Gg equiv. CO_2
CO_2 – net with category 5	436 669.74	273 628.21	283 828.79	280 860.94	280 490.89	286 716.67	285 389.93
CO_2 – net of category 5	469 604.46	305 692.58	317 000.42	317 296.81	318 215.84	329 599.11	328 274.74
CH_4 – net with category 5	58 950.17	38 169.98	38 655.78	38 274.31	38 537.37	38 768.08	38 610.59
CH_4 – net of category 5	58 942.68	35 885.93	36 336.04	35 942.13	36 188.82	36 393.24	36225.29
N_2O – net with category 5	40665.57	28 119.67	28 259.18	28 300.26	28 899.81	30 158.44	30 748.22
N_2O – net of category 5	40 664.81	28 116.99	28 254.70	28 297.72	28 897.02	30 155.62	30 745.30
HFCs	15.72	1 486.04	1 912.03	2 146.66	3 018.32	2 844.22	3 327.01
PFCs	252.24	286.59	27839	285.08	259.95	269.75	276.65
SF_6	30.53	24.42	21.72	23.43	28.09	*30.02*	31.92
Sum – net with category 5	536 583.96	341 714.91	352 955.88	349 890.69	351 234.33	358 787.18	358 384.32
Sum – net of category 5	569 510.43	371 491.55	383 803.31	383 991.84	386 608.04	399 291.97	398 881.41

Figure 2 — Emissions of greenhouse gases (net of category 5 specified in Table 5) in the years 1988–2007 [Tg equiv. CO_2][4]

[3] Source — KASHUE — *National inventory of emissions and absorption of greenhouse gases for 2007, Report prepared for the needs of the UN Framework Convention in the matter of climate changes and Kyoto Protocol*
[4] Source — KASHUE — *National inventory of emissions and absorption of greenhouse gases for 2007, Report prepared for the needs of the UN Framework Convention in the matter of climate changes and Kyoto Protocol*

6. Individual types of renewable energy sources

6.1. Biomass energy

In 2008, biomass-based installations generated 3.267 TWh of electricity. Electricity generation from this RES indicated a growth by 1.922 TWh, i.e. nearly 2.5-fold against 2005. In the nearest future, further growth of electricity generation from such sources is expected, mainly due to the development of dispersed generation based on co-generation of electricity and heating energy. As the utilisation of biomass in the co-firing process shall consume growing quantities of biomass from waste and power crops, mechanisms have been introduced forcing the application in this technology of biomass other than forest biomass (Regulation by the Minister of Economy of 14 August 2008 *in the matter of specific scope of obligations to acquire and submit for write-off of certificates of origin, payment of substitute fee, purchase of electric and thermal energy generated from renewable energy sources and obligation to confirm data concerning the quantity of electricity generated from a renewable energy sources* (Journal of Laws Dz.U. 2008 No 156, Item 969). Biomass of forest origin shall in the first place be utilised by timber, paper and chipboard industry.

Table 7 and Figure 3 present the output of electricity and installed power figures in Poland's biomass operated installations.

Table 7 — Electricity generation and installed power at biomass operated installations in the years 2005–2008[5]

Biomass	**2005**	**2006**	**2007**	**2008**
Electricity generation [GWh]	1345	1818	2343	3267
including co-firing	875	1314	1797	2752
Installed power [MW]	190	239	255	232

[5] The data are limited to dedicated units only, without taking into consideration co-fired installations due to wide range of percentage share of biomass (in the total fuel flows) in such installations.

Figure 3 — Electricity generation in biomass operated installations in the years 2005–2008

Electricity generation including co-firing

6.2. Hydroenergy

Apart from biomass operated installations, hydroelectric power plants rank among the most important electricity generators using renewable energy sources. The above thesis is confirmed by an over 30% share of hydroenergy in the electricity generated from renewable energy sources in 2008. Nevertheless it must be noted here that this share is rapidly falling due to dynamic development of other types of renewable energy sources (including mainly wind farms). In 2008, the generation of electricity from hydroelectric power plants fell against the preceding year due to lower rainfalls and rainfall distribution during that year. A growth in generation is expected in the nearest future, mainly contributed by small hydroelectric power plants. In Poland, the construction of large hydroelectric power plants is very difficult due to environmental conditions and large investment outlays necessary in such projects.

Table 8 presents the values of installed power for hydroelectric power plants in the years 2005–2008. The output of electricity generated by hydroelectric power plants is presented in Table 9 and graphically on Figure 4.

Table 8 - Installed power in hydroelectric power plants in the years 2005–2008.

No	Type of hydroelectric power plant	Installed power [MW]			
		2005	2006	2007	2008
1	River hydro plant, up to 0.3 MW		42.5	43.3	42.8
2	River hydro plant from 0.3 MW to 1 MW		41.7	41.7	44.5
3	River hydro plant from 1 MW to 5 MW		129.5	129.5	132.5
4	River hydro plant from 5 MW to 10 MW		47.8	47.8	48.3
5	River hydro plant, over 10 MW		289.8	289.8	289.8
6	River hydro plant with pump unit		382.7	382.7	382.7
	Total	**852.5**	**934.0**	**934.8**	**940.6**

Table 9 — Electricity generation by hydroelectric power plants in the years 2005–2008 in Poland

No	Type of hydroelectric power plant	Electricity output (GWh)			
		2005	2006	2007	2008
1	River hydro plant, up to 0.3 MW	124.7	116.9	146.2	139.8
2	River hydro plant from 0.3 MW to 1 MW	150.2	137.2	162.1	158.9
3	River hydro plant from 1 MW to 5 MW	413.9	396.1	479.0	427.7
4	River hydro plant from 5 MW to 10 MW	157.1	152.3	176.3	168.6
5	River hydro plant, over 10 MW	1 063.7	977.4	1 120.5	1 010.5
6	River hydro plant with pump unit	266.0	249.92	168.6	247.3
	Total	**2 175,.6**	**2 029.8**	**2 252.7**	**2 152.8**

Figure 4 — Electricity generation by hydroelectric power plants in the years 2005–2008 in Poland

River hydro-plant up to 0.3 MW	River hydro-plant from 0.3 MW to 1 MW
River hydro-plant up from 1 MW to 5 MW	River hydro-plant from 5 MW to 10 MW
River hydro-plant over 10 MW	River hydro-plant with pump unit

6.3 Wind farms

In the years 2005–2008, the output from wind farms in Poland has grown from 135 GWh to nearly 806 GWh, with the installed power of wind farms growing nearly 5-fold (from 83.3 MW to 451.1 MW). The level of 806 GWh reached in 2008 accounted for 12.6% of electricity generated from renewable energy sources, and 0.52% of the gross domestic electricity consumption; however, according to the forecasts, in 2010 the share of wind farms in the generation of electricity from renewable sources of energy is expected to reach approx. 24%[6]. One must stress here that the development of wind power sector is planned, both on land and offshore. According to the provisional data, covering the first half of 2009, pertaining to both the installed power and the generation of electricity from wind sources, this sector continues to indicate high growth rates.

Figures representing the output of electricity and installed power at Poland's wind farms are presented in Table 10 and Figure 5.

[6] Source — *Prognoza zapotrzebowania na paliwa i energi• do 2030 roku (Forecast Demand for Fuels and Energy until 2030).* Annex No 2 to the draft *Poland's Energy Policy until 2030*

Table 10 — Installed power and electricity output from wind farms in Poland in the years 2005–2008.

Wind farms	2005	2006	2007	2008
Installed power [MW]	83.31	152.6	287.9	451.1
Electricity generation [GWh]	135.3	257.0	472.1	805.9

Figure 5 — Electricity generation by wind farms in Poland in the years 2005–2008

Electricity generation [GWh]

6.4. Biogas energy

In 2008, electricity generation from biogas has grown more than twofold against 2008, i.e. from 105 GWh to 221 GWh. The generation of electricity from biogas is based on landfill biogas, biogas from fermentation of liquid waste at waste treatment plants and from agricultural biogas. Apart from generation of electricity and heating energy (mainly in co-generation), the future of biogas lies in its utilisation as transport fuel. As at 31 December 2008, 103 biogas power plants have been installed (including: 35 power plants generating electricity operated on biogas from waste treatment plants, 66 power plants generating electricity from landfill biogas, and 2 power plants generating electricity from agricultural biogas)[7].

[7] Source — Polish Energy Regulatory Office (URE)

Largest quantities of biogas are derived from landfill substrate and sewage treatment plants. In recent years, the output of electricity and heating energy from agricultural biogas power plants was also noted to grow. Future development of such sources is expected, based not only on animal excrements, but also on agricultural raw materials (biomass from power crops), agricultural by-products, agricultural and food processing industry waste or forest biomass from methane fermentation process. Due to highest power capacity (production of biogas with quality parameters matching those of high-methane natural gas), agricultural biogas power plants may over a longer time perspective dominate the development of this energy source.

Table 11 presents the installed power of biogas operated installations and the output of electricity, generated from such sources; the figures are represented graphically on Fig. 6 and 7.

Table 11 — Electricity generation and installed power at biogas operated installations in Poland in the years 2005–2008

Biogas	**2005**	**2006**	**2007**	**2008**
Electricity generation [GWh]	**105**	**117**	**162**	**221**
Landfill gas	74	80	111	139
Biogas from municipal waste treatment plants	30	35	48	74
Agricultural biogas	1	2	3	8
Installed power [MW]	**32**	**37**	**46**	**55**
Landfill gas	24	25	29	34
Biogas from municipal waste treatment plants	7	11	16	20
Agricultural biogas	1	1	1	1

Figure 6 — Electricity generation in biogas operated installations in Poland in the years 2005–2008

Landfill gas Biogas from municipal waste treatment plants Agricultural biogas

Figure 7 — Installed power in biogas operated installations in Poland in the years 2005–2008

Landfill gas Biogas from municipal waste treatment plants Agricultural biogas

6.5. Photovoltaic energy

The installed power of photovoltaic cells operating in Poland is less than 1 MW, and most of such energy sources are operating independently of the power grid. Presently, due to extremely high investment expenditures, the share of photovoltaic energy in the total output of electricity from renewable energy sources is diminutive, and the use of photovoltaic technology is limited to special purpose installations. Latest achievements in the field of photovoltaic technology i.e. within the scope of cost effective production of thin-layer cells may increase the role of energy from such sources in the output structure of electricity from renewable energy sources.

7. Promotion of electricity generated from renewable energy sources

Since 1 October 2005, Poland has a support system for generation of electricity from renewable energy sources. According to the Act – the Energy Law, power companies specialising in the generation of or trading in electricity and selling such energy to final customers are obligated to acquire the certificates of origin of electricity generated from renewable energy sources for submission to the Chairperson of the Polish Energy Regulatory Office (URE) for write-off, or to remit a substitute fee. The support system established in Poland in the form of the so-called "green certificates" is a market-based mechanism, conducive to optimum development and competition. This separation of certificates of origin of electricity generated from renewable sources from physical energy rendered it possible to trade in property rights vested in such certificates on stock exchange floor.

In consequence to the separation of physical transmission of electricity and certificates of origin, this mechanism is supplemented with the obligation of power companies which play the role of sellers to buy the entire energy generated from renewable energy sources and interconnected to the grid, which are located within the area of operations of such official seller, at the average sale price of electricity in the preceding calendar year.

Another important element supporting the generation of energy from renewable sources is the exemption from excise tax of energy generated from RES.

Similar role is vested in regulations which facilitate the access to subsidies and preferential credit facilities, extended by the National Fund for Environmental Protection and Water Management (Narodowy Fundusz Ochrony •rodowiska i Gospodarki Wodnej, NFO• iGW) and its Voivodship-level counterparts. By virtue of the Act of 27 April 2001 – the Environmental Protection Law (Journal of Laws Dz.U. 2008 No 25, Item 150, as amended), assets from the funds referred to above are allocated, *inter alia*, to activities supporting the utilisation of local renewable energy sources and to assistance in the introduction of more environmental-friendly energy sources.

Additional support to RES is offered by EU funds, and mainly the "Infrastructure and Environment" Operational Programme, particularly within the scope of Priority IX "Environment-friendly power industry infrastructure and power efficiency". The Programme is aimed at reducing the environmental impact of the power sector, while simultaneously increasing the efficiency of power generation, transmission and distribution, improving power efficiency in the energy consumption process and increasing the consumption of energy generated from renewable sources. Within Priority IX, the most important measure in terms of development of renewable energy sources is Measure 9.4 "Energy generation from renewable sources" and Measure 9.6 "Grids facilitating the offtake of energy from renewable sources".

Moreover, basing upon Priority IX, and in particular upon Measure 10.3 "Development of support industry for renewable energy sources", support is envisaged for the industry manufacturing the machinery and appliances for energy generation from renewable sources. The support referred to above shall be addressed to the construction of sophisticated technological lines, manufacturing machinery used in the generation of electricity and heating energy from renewable sources.

Apart from the above, EU funding may be provided via Regional Operational Programmes RPO, operating under Voivodship-level management. Additional funding may be provided to projects associated with the construction of units utilising all known renewable energy sources. Regions apply competition-based procedure for selecting projects eligible for financing. Applications may be submitted exclusively within the deadlines indicated in the announcement on the receipt of applications, published on the website of the implementing RPO.