

# Power plants in Poland





# Wind farms



# Total capacity of wind farms in 2015 are 5 GW.

Place:	Turbine:	Power:
Kisielice	43	76,5 MW (40,5 MW + 25 MW + 12 MW)
Margonin	60	120 MW
Karścino-Mołtowo	17	90 MW
Wind Farm Korsze, Korsze ( Błogoszewo,	35	70 MW
Chmielnik, Gudniki,		
Kraskowo, Łankiejmy,		
Olszynka, Podlechy,		
Trzeciaki, Wandajny,Dubliny )		
Iłża	27	54 MW



# Solar power plant

At the end of 2014, approximately 1.7 million m<sup>2</sup> of solar collectors were installed and used, which corresponds to 1.2 GWt of thermal power. The total installed capacity of solar collectors was then the second, after heating plants for biomass, a renewable source of "green heat" generation in Poland.

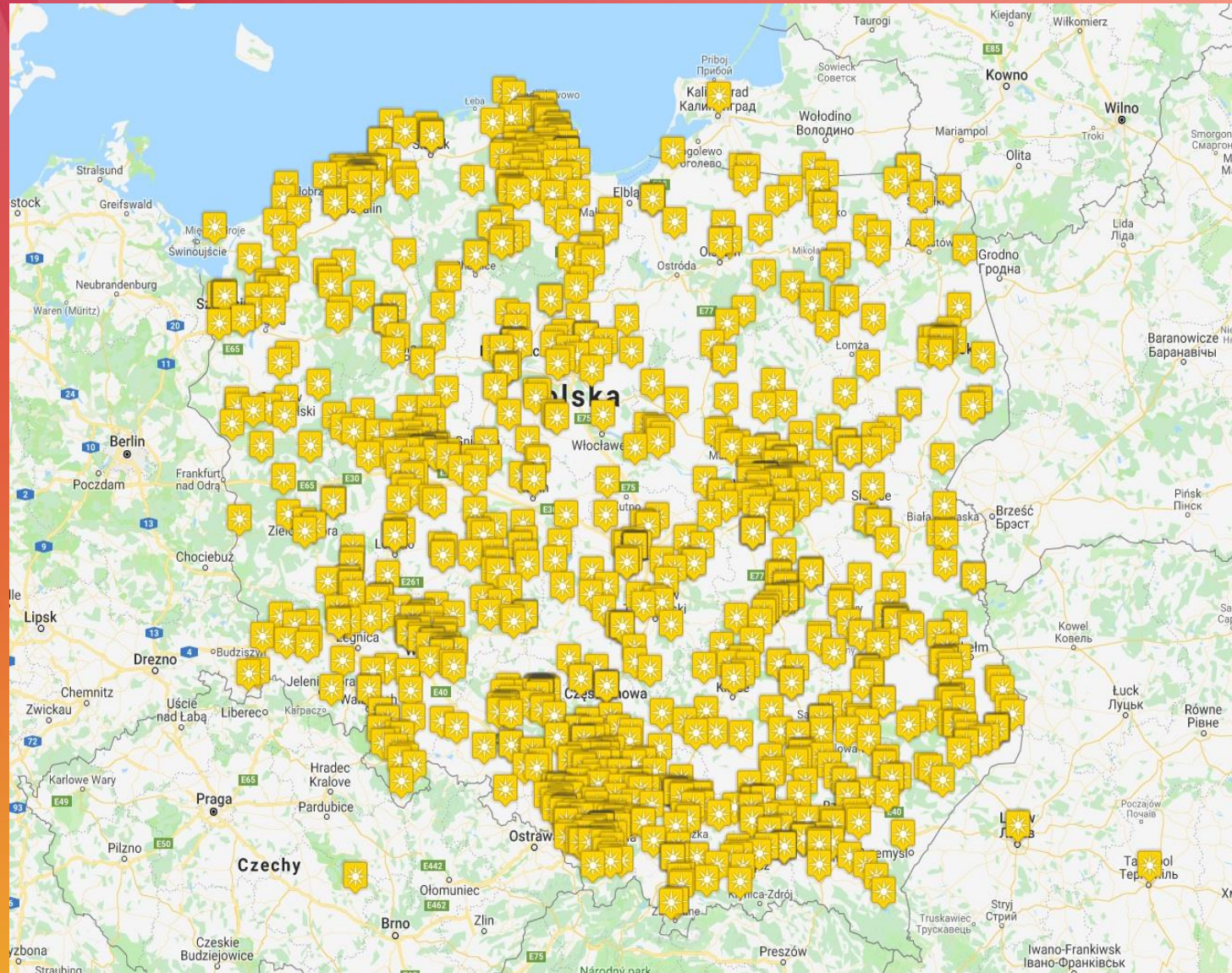
3.77 MW launched in October 2015, PV Czernikowo in the village of Wygoda in the Czernikowo commune near Toruń

2.0 MW launched March-June 2015, Ostrzeszów in the Greater Poland Voivodeship

2.0 MW launched in 2015, investor: Association for Innovation and Technology Transfer "Horyzonty", Cieszanów

1,84 MW, investor R.Power (formerly AMB Energia), Kolno in Podlasie

1.64 MW commissioned in September 2014, the Energa Group, PV Delta Przejazdowo near Gdańsk





# Geothermal power plant



Poland has very good geothermal conditions, as 80% of the country's area is covered by three geothermal provinces: Central Europe, Carpathian and Carpathian. The water temperature for these areas ranges from 30-130°C (and locally even 200 ° C), and the depth of occurrence in sedimentary rocks from 1 to 10 km.

<u>name or location</u>	<u>year of creation</u>	<u>maximal temperature</u> [° C]	<u>installed power [MW]</u>			<u>use [TJ / year]</u>		
			<u>all</u>	<u>from geothermal</u>	<u>share of geothermal energy</u>	<u>all</u>	<u>From geothermal</u>	<u>share of geothermal energy</u>
Geotermia Podhalańska	1992/1994, 2001 <sup>[14]</sup>	86	80,8	40,7	50%	376, 398 <sup>[15]</sup>	286,5	76%
Pyrzyce	1996	61	48	14,8	31%	100	60	60%
Mszczonów	2001	41	10,2	2,7	26%	56,9	15,1	27%
Stargard	2005 <sup>[16]</sup> , 2012 <sup>[17]</sup>	78	10	10	100%	91	91	100%
Uniejów	2006	68	5	3,2	64%	17,8	8,9	50%



# Biogas power plant

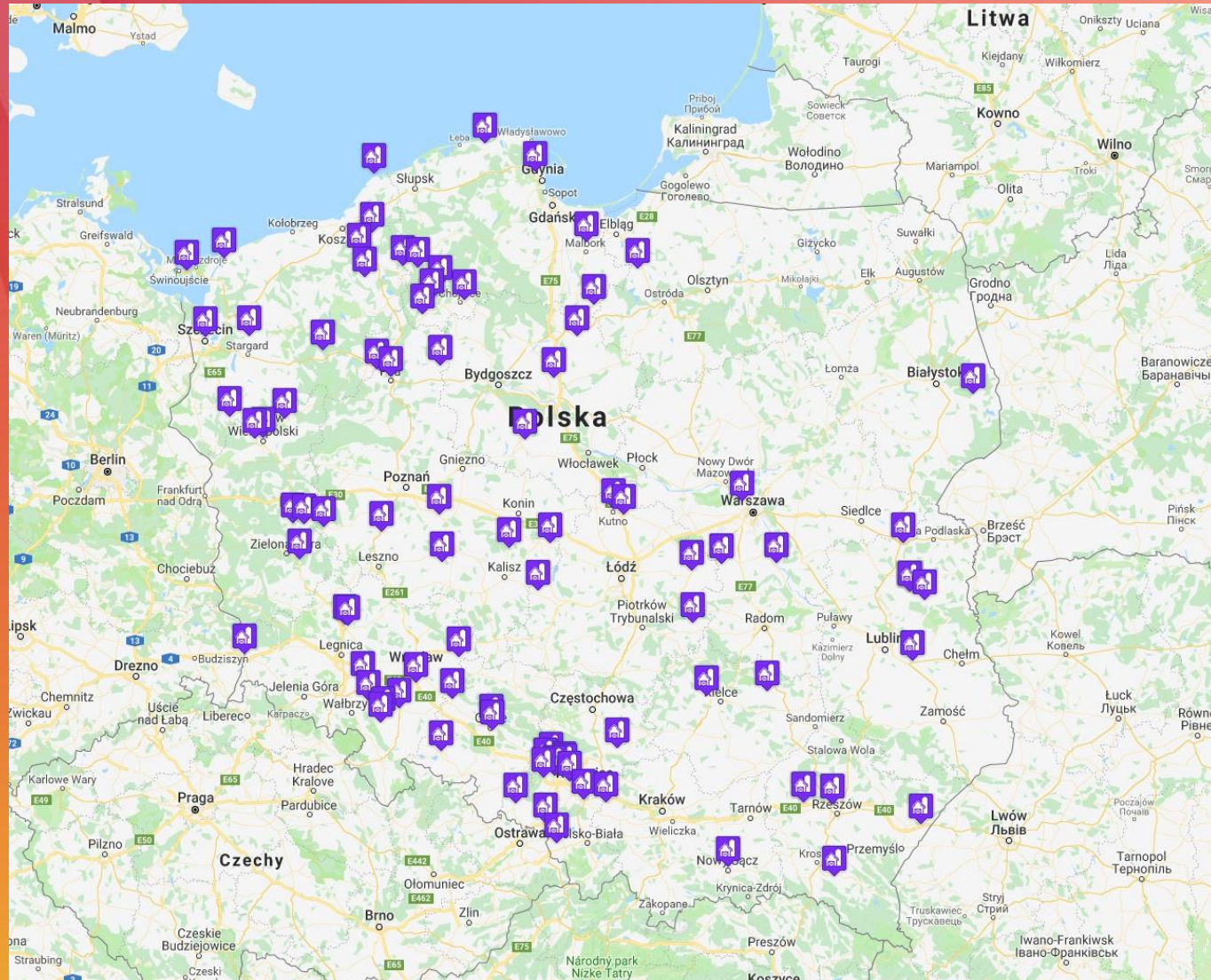
Technical potential

Wood 270 PJ per year

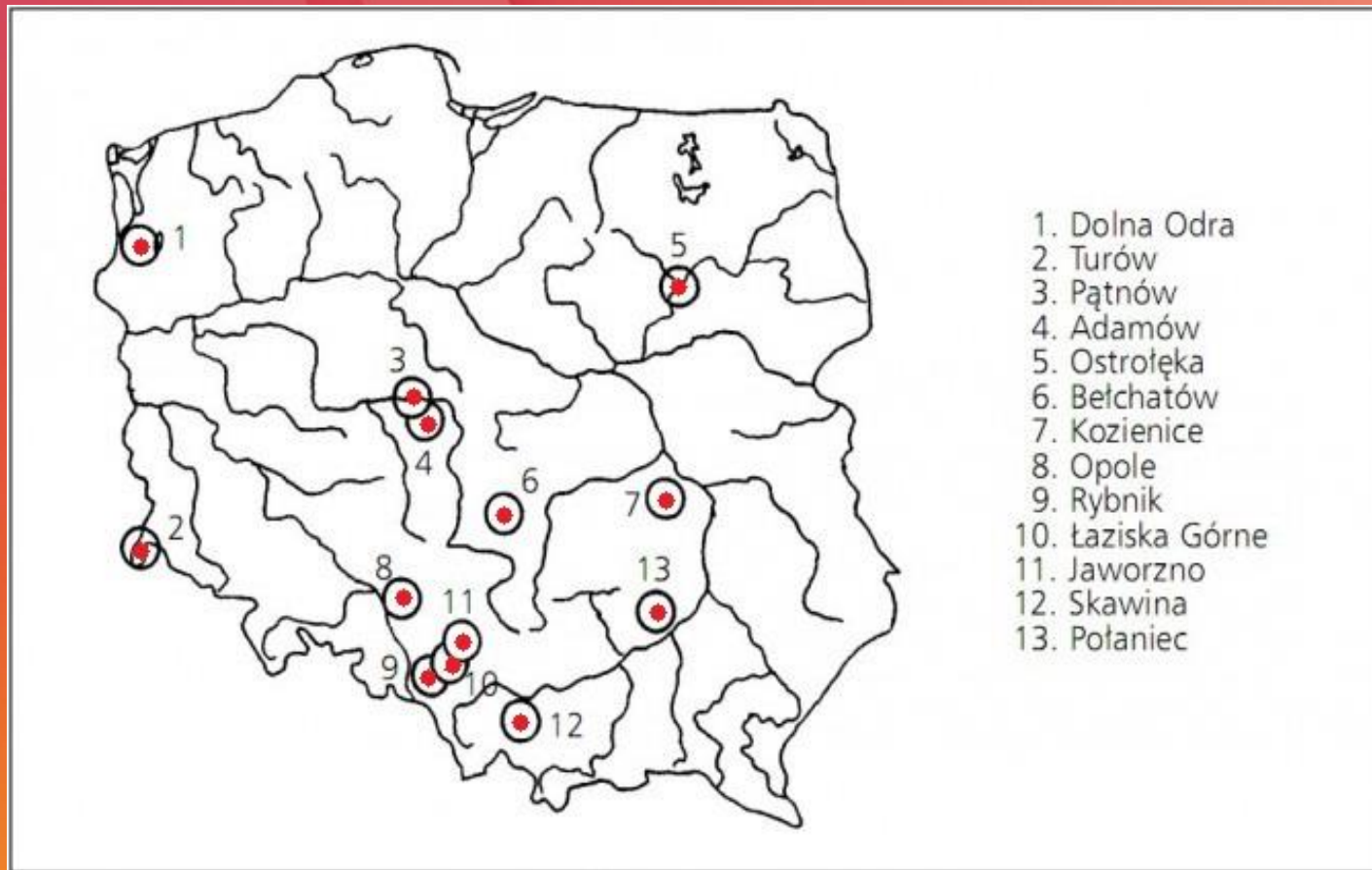
Straw 167 PJ per year

Biogas

They produce about 6.7 GWh  
of  
thermal energy and  
electricity per year



# Coal power plant





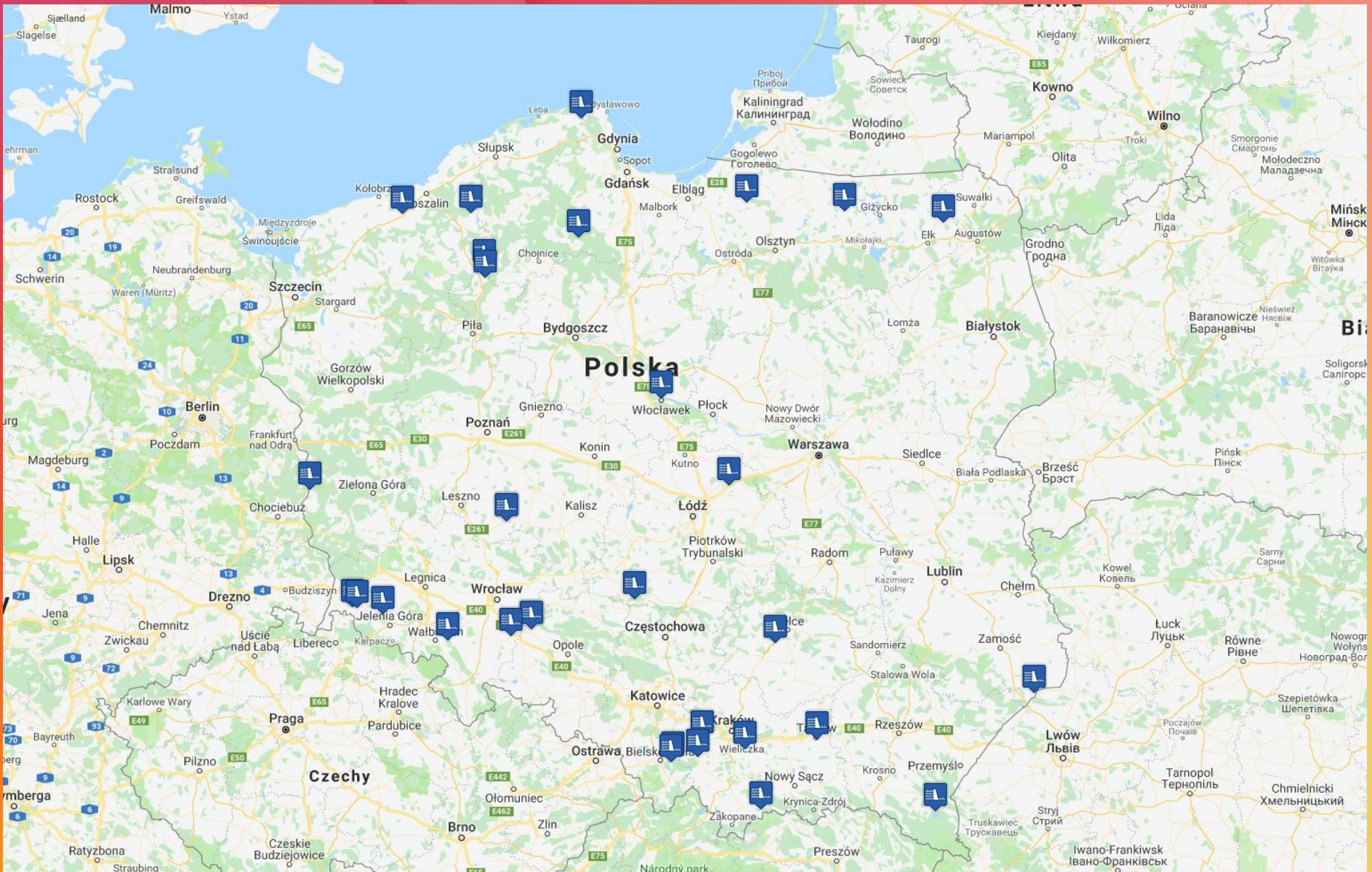
The fuel and energy industry in Poland develops on the basis of hard and brown coal. 96.3% of electricity is obtained in coal-fired power plants. Electricity production in Poland is nearly 146 terawatt hours, which gives us 18th place in the world. Power plants based on hard coal generate 56% of electricity. The biggest of them are:

- Rybnik - 1670 MW
- Opole - 1490 MW
- Jaworzno - 1245 MW
- Łaziska Górne - 1155 MW
- Łagisza - 875 MW

Brown coal-fired power plants generate 40.3% of electricity. They are concentrated near the lignite mining sites:

- Bełchatów - 4440 MW
- Turów - 1800 MW
- Pątnów - 1600 MW
- Adamów - 600 MW
- Konin - 583 MW.

# Hydroelectric power plant





In 2016, Poland produced 2.4 TWh of electricity in hydroelectric plants.

Elektrownia Wodna Żarnowiec	Jezioro Żarnowieckie	716MW
Elektrownia Wodna Porąbka-Żar 500MW	Soła	
Elektrownia Solina 200MW	Jezioro Solińskie	
Elektrownia Żydowo	Jeziora Kamienne, Kwiecko	167MW
Elektrownia Wodna Włocławek	Wisła	160,2MW