Country factsheet

Poland

Summary

For many years, the use of solar energy in active systems was rather unknown. Fortunately nowadays different applications of these systems are more common.

Solar active systems are used mostly for Domestic Hot Water systems in single family houses. There are now many examples of bigger systems (with area of solar collectors above 50 m^2) being installed in schools, public buildings and multifamily apartment buildings, hospitals, sanatoriums. The solar collector market is growing as statistics prove.

Country Overview

Population: 38.2 million inhabitants
Size: 312,683 km^2
Climate: The overall climate in Poland has a transitional - and highly variable - character between maritime and continental types. The major elements involved are oceanic air masses from the west, cold polar air from Scandinavia or Russia, and warmer, subtropical air from the south. Six seasons may be clearly distinguished: a snowy winter of one to three months; an early spring of one or two months, with alternating winter and spring like conditions; a predominantly sunny spring; a warm summer with plenty of rain and sunshine; a sunny, warm autumn; and a foggy, humid period signifying the approach of winter.

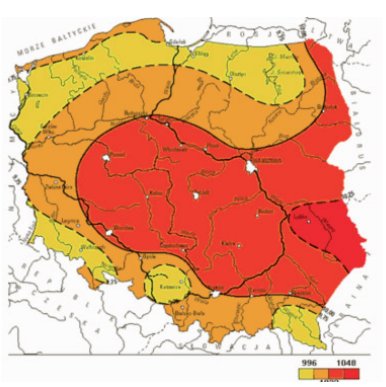
Temperature Data

Indicator	2006
The average air temperature in summer (°C)	16.5 - 20
The average air temperature in winter (°C)	-6 + 0
Annual average air temperature (°C)	7 + 8

Market potential: solar radiation and heat demand

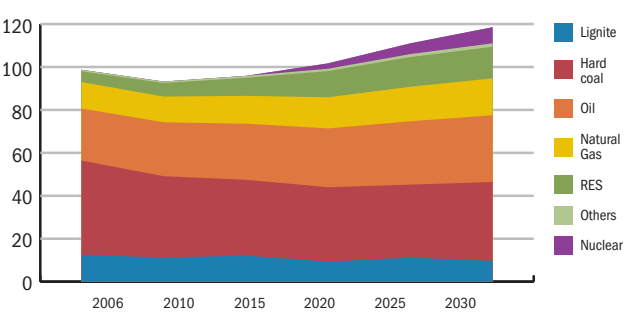
Global Radiation

An average annual insolation on horizontal plane oscillates between 950 - 1250 kWh/m^2 with 1600 hours of operation. About 80% of total annual radiation occurs from April to September with 16 hours of operation daily. In winter the sun shines for about 8 hours daily.



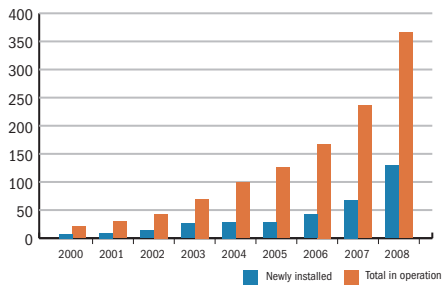
Energy Demand

The forecast concerning primary energy demand by energy carriers is presented in figure 2. (Source: “Poland Energy Policy until 2030”, Ministry of Economy 2009).

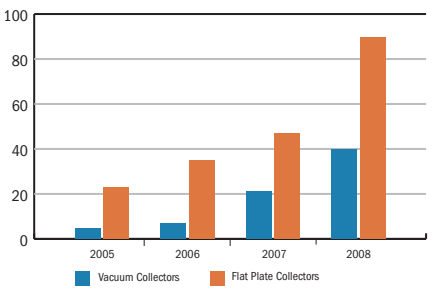


Solar Thermal Statistics

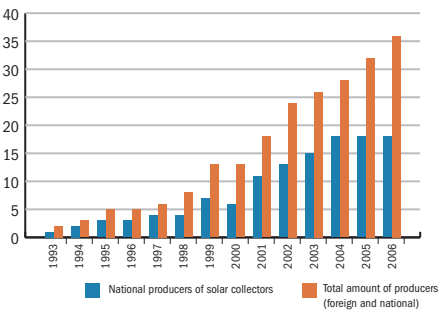
Development of solar collectors market in Poland



Solar collectors sales in 2005 – 2008



Development of Polish manufacturers and distributors of foreign companies on national market



Sources of financial support

National environmental protection funds:

National Fund for Environmental Protection and Water Management (NFOŚiGW) existing for 20 years, is the largest environmental fund in Poland. NFOŚiGW supports up to 20 % of the cost of the project, but it is limited to the commercial and public sector. So far spent PLN 12 millions (1989-2009) for solar collectors. Fund supports municipalities mostly in the form of low interest credits.

16 Regional Funds for Environmental Protection and Water Management (WFOSiGW) functioning at regional level, mostly for public beneficiaries. WFOSiGW supports e.g. Low Emission Limitation Program (PONE), being implemented already in over 20 localities in Silesia and Małopolska. The investment (e.g. purchase and assembly of solar installation) is financed by a subsidy of up to 75% to the private investors by the local authority, who receives the funds from WFOŚiGW.

EU funds:

Cohesion and Structural Funds - total amount allocated for RES sector investments in Poland reaches € 1000 million (2007-2013), and additional € 30 million for RES equipment manufacturing (first call 2nd half of 2009). The rate of the support is defined according to the EU rules for public aid, local authorities and public organizations might be funded more than private sector - up to 60 - 70% of the investment cost.

Sources of solar thermal systems financial support until 2013

Fund	Share in total support
Regional Operational Funds	48.0%
Regional Funds for Environmental Protection and Water Management	28.4%
Operational Program Infrastructure and Environment	12.1%
National Fund for Environmental Protection and Water Management	4.9%
Counties and Municipalities Environmental Protection Funds	6.7%

Further information

Further information on: www.cres.gr/trans-solar