



**The Development Plan for Microgeneration for Poland
Based on Renewable Energy Sources until 2020**

A Synthesis

Institute for Renewable Energy

in collaboration with

the members and partners of

the Association of Employers of the Renewable Energy Forum

and

Heinrich Böll Foundation

A growing number of citizens in Poland keeps looking for ways to increase their independence and security of energy supply. For a long time now, such options have been provided by small-scale energy technologies. In the recent decade, about 230 thousand households and other entities have invested the total amount of 6-7 billion PLN in the purchase and installation of microgeneration based on renewable energy sources, thus establishing the foundation for a prosumer and civic energy system in Poland.

This study is the first attempt at a more precise specification of a plan for the development of a "national roadmap" for microgeneration based on renewable energy sources, including energy and heat sources, in Polish households.

The "roadmap" focuses on the presentation of the current situation of microgeneration based on renewable energy sources in households and the real path for their development until 2020. Its authors stress that such a program is the first and key pillar for constructing a prosumer energy system in Poland.

The study is based on two fundamental documents developed at the Ministry of the Economy in Poland. The first one is "The National Renewable Energy Action Plan" (NREAP) adopted by the government in 2010 that determined the technological paths of development for the renewable energy sector until 2020. The other one is the draft act on renewable energy sources (version from October 2012) that should help to implement NREAP in Poland. This draft act is a step toward including in Polish law directive 28/2009/UE on the promotion of the use of energy from renewable sources.

Press release

Following the NREAP assumptions, in 2020 modern microgeneration is to achieve at least one third of the main target in the area of renewable energy. Prosumer investment outlay will exceed 26 billion PLN according to Institute's estimates.

The key conditions for the development of microgeneration based on Renewable Energy Sources (RES) and the most indispensable development activities include: 1) the promotion of prosumer attitudes, 2) the removal of legal barriers, including access to the grid, 3) an alliance with the construction and housing sector, and 4) synergy with the activities for the development of intelligent energy networks in Poland.

Microgeneration based on RES in 2020 in Poland:

- Number of prosumers – owners of microgeneration based on RES – about 2.5 million;
- Capacity installed in microgeneration: about 25 GW;
- Energy generation: about 40 TWh/year;
- Share of microgeneration based on RES in the implementation of the national target for RES for 2020: about 40%;
- CO2 emission reduction in 2020: about 19 million tons (6% of the energy sector emissions in 2010);
- Jobs in 2013-2020: about 54 thousand, including about 15 thousand in equipment

The idea of a prosumer energy system is extremely popular. But if it is to be developed and enjoy significant support among society and politicians a broader strategy for the development of the micro-energy as an element of both the renewable energy system and the diffused power generation system must be developed. The successful adoption of microgeneration is dependent upon many different factors, such as a well-functioning, internal European energy market, the deployment of smart energy infrastructure especially on distribution level, and effective short and long-term policies to incentivize microgeneration on a European, national, and local level.

European Union leaders should take the lead in addressing energy transition, taking into account the need for involvement of all European citizens. Small-scale energy helps to boost community cohesion, combats energy poverty, leads to the creation of new jobs and economic growth, and can also provide new ways of tackling the current economic crisis.

Roadmap – “The Plan for the Development of Microgeneration for Poland Based on Renewable Energy Sources until 2020” is not an entirely new document. Nor is it a study that ignores current trends, energy technologies present on the market (across the world, in the EU and in Poland), or commonly accepted development concepts. This document was created in consultation with the Senate of the Republic of Poland and given to the representatives of the Polish Government.

The authors hope that this publication, combining the idea of a prosumer system with renewable energy, will become an impulse for effective co-ordinated actions on small scale energy generation not only in Poland, but across Europe.

Full version of report is available on website: www.ieo.pl