



Ministry of Climate and Environment
Republic of Poland

Prosumers

Key sector of photovoltaics development in Poland

14th Renewable Energy Coordination Group – Energy
Community

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Who is a prosumer?

Defined by the Act on Renewable Energy Sources.

Entities that produce electricity exclusively from renewable energy sources for their own needs in a micro-installation of a renewable energy source with a size of up to 50 kW can become a prosumer. This catalogue includes:

- households;
- enterprises if energy generation is not the vast majority of economic activity.



Renewable energy targets by 2030

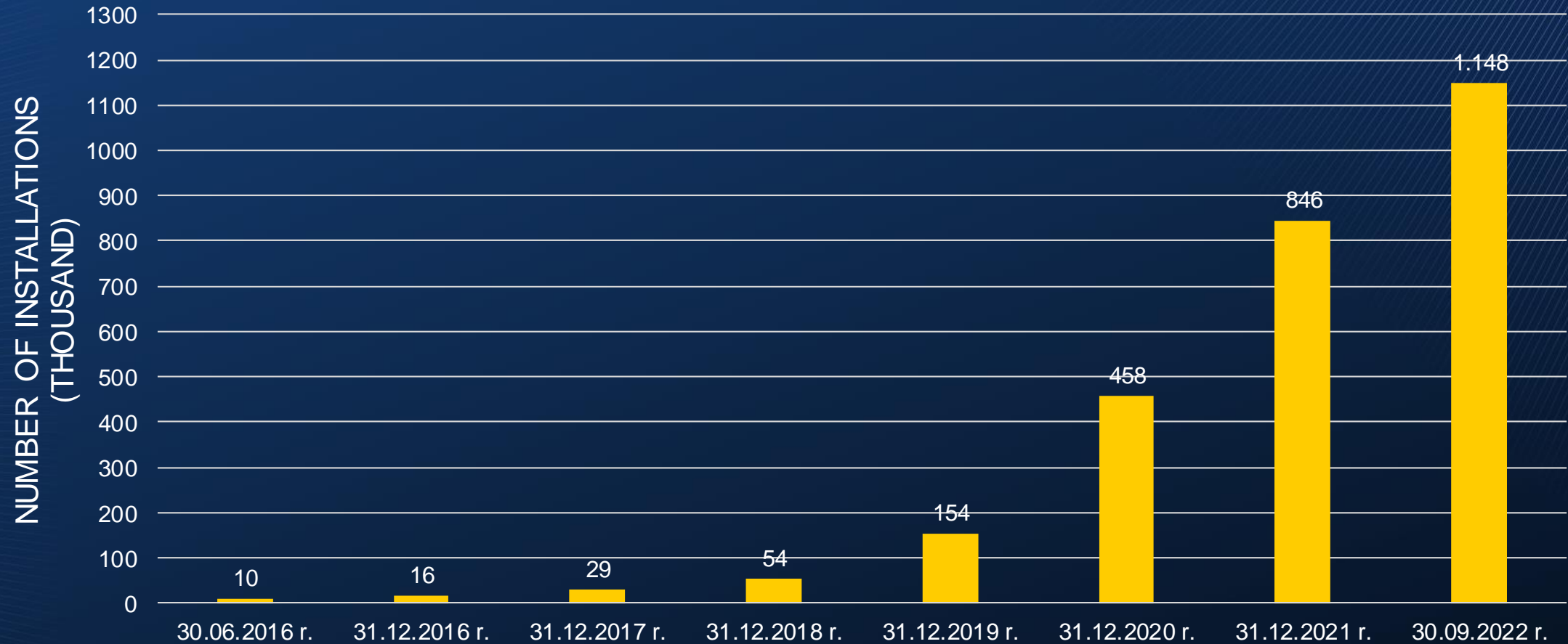
The Energy Policy of Poland Until 2040 (PEP2040), released by the government in 2021 is a crucial document, estimating the Polish photovoltaics target as 7GW of installed capacity until 2030.

The target until 2040 is to **increase solar energy capacities up to 16 GW.**

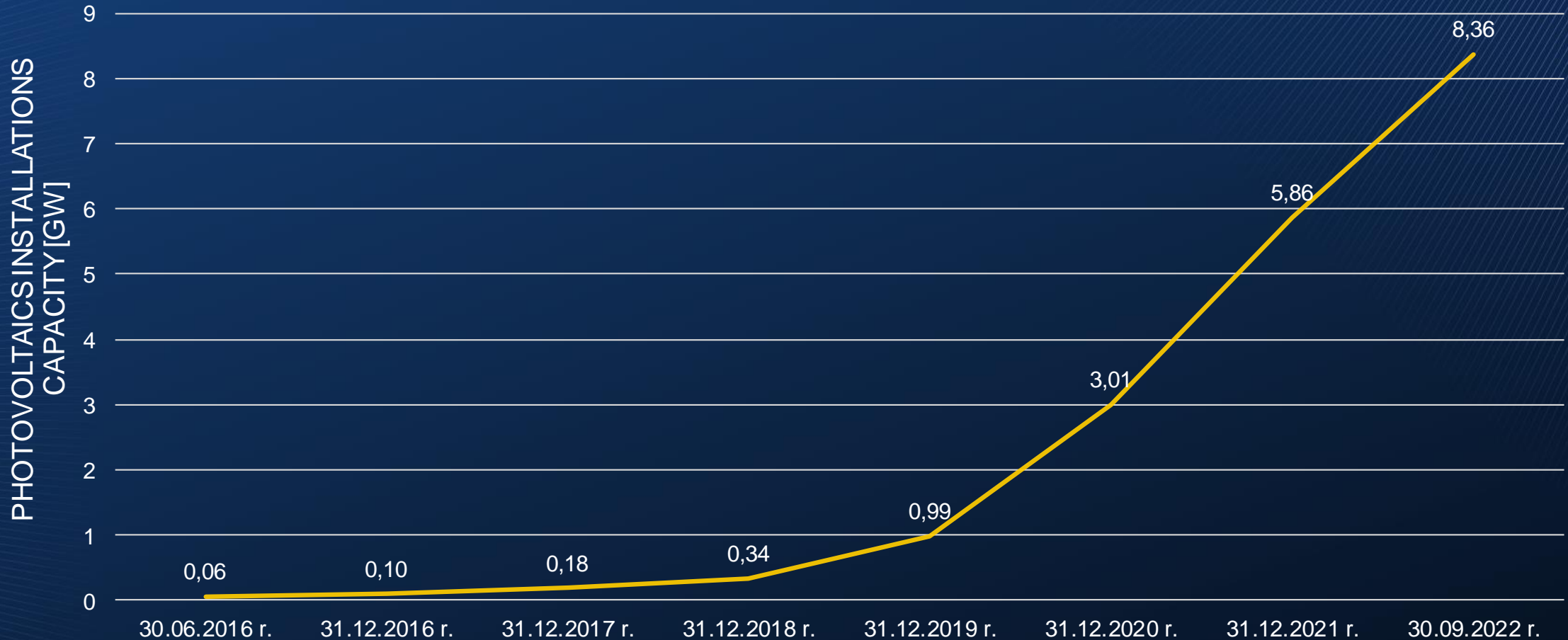
However, **solar capacity has increased to 11GW in 2022 (data from September).**



Number of prosumers 2016-2022



Installed capacity of prosumers 2016-2022



Net-billing - Next phase in the Polish photovoltaics market development

From 2016 until the first months of 2022, prosumers in Poland were settled in a **net-metering scheme**;

Net-metering was the first phase in developing dispersed renewable energy sources in Poland. **Based on the discount system**, prosumers were guaranteed the purchase of energy generated in their installations;

The net-billing scheme was implemented in Poland since April 1st, 2022 **adjusting Polish legislation in that area to that of the EU**;

Net-billing schemes are used in e.g. Italy, Indonesia, USA, Portugal and Mexico.



Net-billing - How does it work?

Net-billing **increases system flexibility**. It engages prosumers by incentivizing them to self-consumption and injecting electricity into the grid when prices are high and withdrawing electricity from the grid when prices are low;

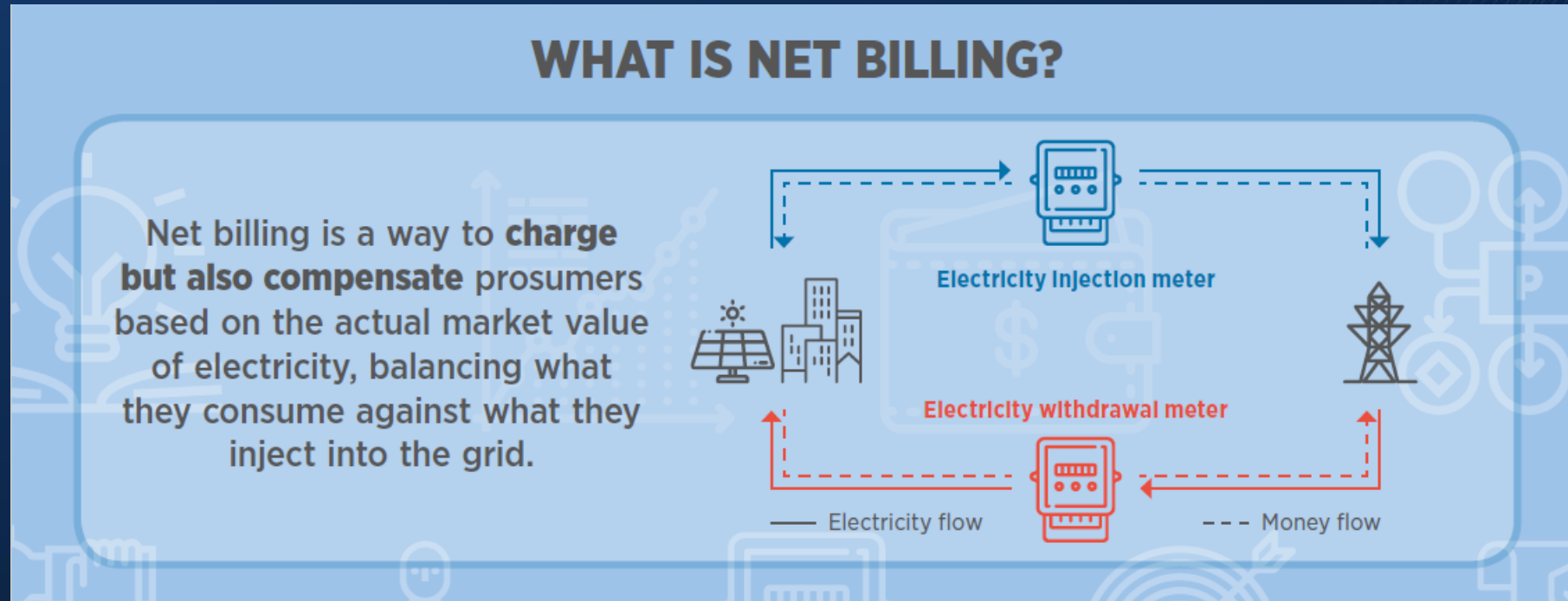
Separate settlement of the value (and not the quantity) of energy fed into the grid and energy taken from the grid based on the value of energy determined according to **prices from the Day-Ahead Market (DAM)**;

The settlements are made by energy sellers and based on the **individual prosumer account**.



Net-billing - How does it work?

International Renewable Energy Agency (IRENA) graphic explains the principles of operation of the new settlement scheme already implemented in Poland:



Source: IRENA Net billing schemes



Net-billing - Emergence of aggregates and new business models on the energy market

Development of new business models that takes into account the **storage of energy produced in prosumer micro-installations** and the development of the home energy storage market;

The government supports the new model of prosumer settlements and **the creation of energy storage in the government program - „My Electricity”**;

A new entity in the future - an aggregator (an intermediary in the sale of electricity or the provision of other services offered by consumers, producers or holders of electricity storage).



Net-billing-opportunities offered by the new system

Reduction of bills and possibility of checking of the energy costs easily;

Self-consumption increase and lowering of photovoltaics installation price tailored to the buyers' needs;

No additional taxes – the energy sold will not be subject to additional taxes;

The net-billing scheme provides **stability to the power grid;**

The net-billing scheme will provide further development of dispersed energy sources and increase **prosumers' awareness about energy consumption.**



Key activities supporting the implementation of the new prosumer system

- Preparation of a **financial support system** for prosumer investments;
- **Protection of acquired rights** of existing prosumers;
- **Adaptation of technical facilities;**
- Development of a prosumer **friendly regulatory environment;**
- **Sectoral Agreement;**
- Popularization of photovoltaic solutions through an information campaign preparing public opinion for the planned changes - creating a special tab, on the ministry's website, with information for prosumers on the ministry's website <https://www.gov.pl/web/klimat/prosument>



„Mój Prąd” – My electricity”. Key assumptions:

Until 2022, Poland implemented four editions of the „My electricity” program, first one started in 2019.

The program is **based on subsidies** for the purchase for home photovoltaic installations;

The financial support comes from EU funds;

The 4th edition of the program is currently underway – the program supports also purchases of **energy storage, heat pumps and energy management system;**

The „My electricity” program was a key acceleration measure to increase investments in dispersed photovoltaic capacities.



The future of the prosumer sector

Opening the system to people and entities that cannot use classic prosumer solutions. **Development in urban areas;**

From April 1st, 2022, the amendment to the law introduces a new entity on the energy market – **the collective prosumer**. The collective prosumer model is a model designed for electricity consumers in multi-unit buildings;

From 2nd, 2024, another new entity in the energy market is introduced - **virtual prosumer**. Purchase of rights to a specific part of energy production from RES, which is remote from the place of energy consumption.



| Thank you for your attention

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