

WE ARE **VGD** Let's talk **subsidies**

PHOTOVOLTAICS AND HEAT PUMPS for farmers

Specific objective:

Activities that increase the overall performance and sustainability of the agricultural enterprise by reducing the burden on the environment, including technology, are eligible.



Eligible territory:

All regions of the Slovak Republic.



Eligible applicants:

- NATURAL or LEGAL persons engaged in agricultural primary production
- Producer organizations uniting growers of crops for specialized plant production



Eligibility of activities:

Investments in special plant production (hereafter referred to as "ŠRV") and animal production (hereafter referred to as "ŽV") (also applies to administrative buildings).

ŠRV means the cultivation of crops on arable land, permanent crops and on covered areas listed in the List of crops of SRV and sensitive crops on arable land

Eligible investments:

Photovoltaic panels with monocrystalline solar panel type with power from 1 to 99.99 kW

<u>Air-to-air heat pumps</u> <u>- Split 16kW – 100kW</u> <u>- Variable Refrigerant Flow (VRV), 16kW – 100kW</u>

<u>Air-water type heat pumps</u> - Only with the possibility of cooling - step controlled, up to 250 kW - With the possibility of heating and with the possibility of cooling - step controlled, up to 250 kW



Support amount:

Maximum amount of authorized expenses for 1 project: **EUR 200,000** (2 projects can be submitted)

Amount of support: maximum 70% of eligible expenses Basic amount of support: 50% of eligible expenses (40% Bratislava region) It can be increased: + 20% in case of:

- young farmers (up to 5 years from the start),

- organic agriculture (30% of the area),

- if the project concerns agriculture production within the framework of the commitment of the Agro-environmental and climate measures of the PRV, Integrated production consists of min. 30% of the cultivated area



Call schedule:

Closing date: until 31.3.2024



Other:

Renewable energy sources in the sense of point 2.2.1.1. and 2.2.1.2, which fall under investments in the construction, reconstruction and modernization of buildings:

2.2.1.1 Photovoltaic panels with a monocrystalline type of solar panel with a power from 1 to 99.99 kW (inclusive):

Minimum technical characteristics:

- Solar panel (only monocrystalline type of solar panel is supported)
- Solar conductors
- Optimizer (building fire safety)
- DC distributor

 Inverter (connected to the electrical grid – on grid, hybrid – connected to the electrical grid and also allows energy to be stored in the battery, off grid)

- DC switch (if not included in the inverter or DC switchboard)
- Battery storage (in case of hybrid inverter)

 AC switchboard (main disconnection point and mains protection approved by the relevant energy company)

 Regulator of the flow of produced electricity to the network (ensuring that electricity is not overrun)

- AC wiring
- Data cabling (if multiple converters are present)

- Construction system east - west or south designed for a sloping / gently sloping / flat roof (according to the decision of the structural engineer)

– Assembly work

2.2.1.1 Heat pumps

Devices that draw heat from a place with a lower temperature to a place with a higher temperature by applying external work, while the purpose of its use is to heat the place with a higher temperature. This process also applies in reverse, and as it enables the transfer of heat without its unwanted losses, it is also very ecological.

A wide range of use of heat pumps for agricultural purposes includes heating/cooling of agricultural administrative buildings, warehouses, production halls and other areas where any temperature regulation is required during the calendar year. In addition to being energy efficient, heat pumps help reduce greenhouse gas emissions and other environmental factors associated with conventional heating methods.

Minimum technical characteristics:

- Compressor
- Evaporator
- Expansion valve
- Heat exchangers (condenser)
- Control panel
- Fans (only for air-air and air-water heat pumps)

 Necessary electrical material in the sense of the electrical documentation of the device

– Necessary accessories for the operation of the heat pump located in the heat pump cabinet

Refrigerant

Refrigerant is the substance that is used to transfer heat in a heat pump. In order for any heat pump to be subject to support, it must contain a refrigerant with a GWP (Global Warming Potential) coefficient equal to or lower than 1000 for airto-air heat pumps and lower than 2100 for other types of heat pumps, as declared by the heat pump manufacturer in the technical sheet.

SCOP coefficient (Seasonal Coefficient of Performance)

A parameter expressing the efficiency of the heat pump during the entire operating season. The SCOP coefficient is the ratio between the seasonal amount of thermal energy (heat) produced by the heat pump and the amount of electrical energy that the heat pump consumes during this process, calculated according to the valid STN EN technical standard. In order to meet the support conditions, the SCOP coefficient declared by the heat pump manufacturer in the technical sheet and on the control label must be at a level higher than or equal to 3 and meet the conditions currently required by the Ecodesign standard.

SEER coefficient (Seasonal Energy Efficiency Ratio)

A parameter expressing the efficiency of the heat pump during the entire operating season. The SEER coefficient is the ratio between the seasonal amount of thermal energy (cooling) produced by the heat pump and the amount of electrical energy that the heat pump consumes during this process, calculated according to the valid STN EN technical standard. To meet the support conditions, the SEER coefficient declared by the heat pump manufacturer in the technical sheet and on the control label must be at a level higher than or equal to 3 and meet the conditions currently required by the Ecodesign standard.

Authorized types of heat pumps:

air-to-air heat pumps (split) with output from 16 kW to 100 kW (inclusive);
air-to-air heat pumps (variable refrigerant flow - VRF) with output from 16 kW to 100 kW (inclusive);

air-water type heat pumps – only with the possibility of cooling (step-by-step) with an output of up to 250 kW (inclusive);

– air-water type heat pumps – with the possibility of cooling and with the possibility of heating (stepping) with an output of up to 250 kW (inclusive).

Support your business through subsidies and grants. Let's talk



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