



WORKING GROUP 2:

Eco-innovation and advanced coal technologies

Improvement of air quality, including energy efficiency measures and the „Green to Households“ pilot project in Slovakia



PA 3 AIR PROTECTION AND MINIMISATION OF ADVERSE EFFECTS OF CLIMATE CHANGE

Specific objective

Minimisation of basic and other polluting substances emissions, minimisation of adverse effects of climate change, including the support of renewable energy sources in line with EU and SR legislation.

Operational objective

3.2 Minimisation of adverse effects of climate change including support of RES

Supported activity

Reduction of greenhouse gas emissions together with reducing emissions of basic pollutants in the field of heat production, including a change in the fuel base of energy sources in favor of the use of renewable energy sources (RES):

- change of fuel base in favor of fuels with a lower carbon content and renewable energy sources, than biomass, biogas, sun energy, geothermal energy, in the field of heat generation in public buildings,
- construction or modernization district heating systems,
- heat pumps installations.

PA 3 AIR PROTECTION AND MINIMISATION OF ADVERSE EFFECTS OF CLIMATE CHANGE

OTHER INFORMATION

Eligible beneficiaries: central administration entities, entities of territorial self-government, legal persons authorized to do business.

Some conditions and principles of project selection:

- reduce greenhouse gas emissions by more than 10 % of the total tonnes/year,
- combustion plants with a minimum efficiency of 80 %,
- the obligation to disposal the original boiler,
- heat pumps whose refrigerant does not damage the ozone layer of the Earth,
- and others...

Operational Programme Environment 2007 – 2013

PA 3 AIR PROTECTION AND MINIMISATION OF ADVERSE EFFECTS OF CLIMATE CHANGE

Total eligible costs for the activity: **more than 64 mil. €.**

Supported projects contributed to reduce greenhouse gas emissions calculated on CO₂ (*the difference between the quantity before and after the project*): **about 35 146 t.**

EXAMPLES OF SUPPORTED PROJECTS

- solar thermal collectors
- heat pumps
- **especially biomass plants**

Note:

*More stringent conditions are applied in case of biomass boilers in the programming period 2014 – 2020; this concerns in particular the production of solid pollutants/ „particulate matter“ (PM₁₀) into the air and the way of biomass use.
Only low-emission installations can be supported, which meet the criteria for sustainable use of biomass.*

PA 1 SUSTAINABLE USE OF NATURAL RESOURCES THROUGH ENVIRONMENTAL INFRASTRUCTURE DEVELOPMENT

Projects of replacement of obsolete combustion plants in public buildings

- change of fuel base from coal to natural gas **only in areas requiring special air protection**
- priority is given to projects where energy efficiency measures have already been implemented

Under preparation

- Call for proposals: **in 2018 (opened)**
- Indicative allocation: **30 mil. € (EU funds)**
- Eligible beneficiaries: **operators of air pollution sources**
- other conditions of support will be defined in the call for proposals

- change of fuel base from coal to RES is **supported under the PA 4**
- Intermediary body for PA 4 is **Slovak Innovation and Energy Agency**

National project „Green to Households“



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National project of the **Slovak Innovation and Energy Agency**
Supported from the **Operational Programme Quality of Environment**

PO 4 ENERGY EFFICIENT LOW-CARBON ECONOMY IN ALL SECTORS

Specific objective 4. 1. 1 Construction of small-scale plants for use of RES

Specific objective 4. 1. 2 Increase of installed capacity of RES-based small-scale installations in the Bratislava self-governing region

Goal:

„Activity is focused on promotion of small-scale facilities for family and residential houses. A small-scale plant for electricity generation is a plant with installed capacity up to 10 kW. In the case of heat generation a small-scale plant is a plant that covers energy consumption in the given building. Authorized projects will also include small-scale plants including equipment for accumulation of produced electricity or heat and a smart system controlling energy consumption“

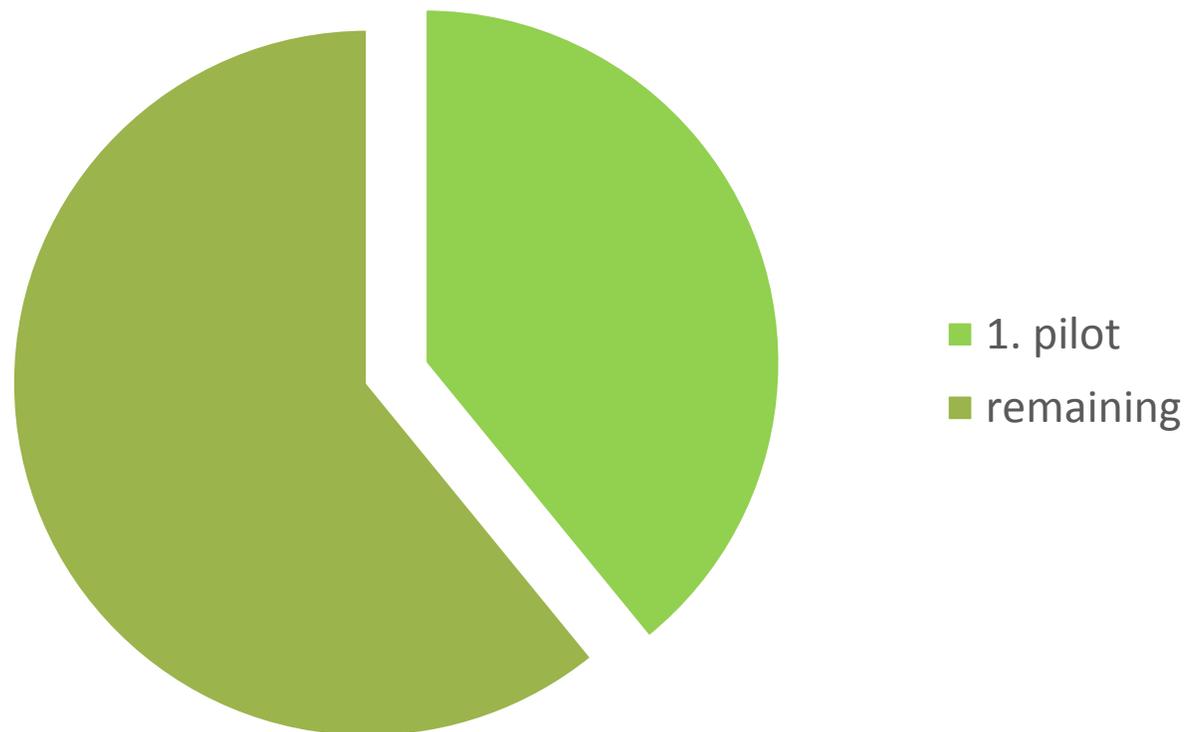
7 | National project „Green to Households“



Budget for these activities is **115 mil. € ERDF** + national funding

In first pilot project „Green to Households“ we are operating with a budget of **45 mil. €**

The pilot project started in 2015, it is set until 12/2018.





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SUBJECTS AND DEFINITION

Support is provided for small scale plants for electricity generation

- ✓ A small-scale plant for electricity generation is a plant with installed capacity up to 10 kW.
- ✓ No matter how is the plant connected (on grid, off grid, hybrid).
- ✓ Priority is given to installations with the highest use of produced electricity through accumulation of electricity.
- ✓ Surplus electricity is supplied free of charge into the distribution network.



Photovoltaic panels

In the case of installation with an accumulation, support up to 3 350,00 €



Wind turbines

Due to current legislative restrictions can not be supported



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SUBJECTS AND DEFINITION

Support is provided for small scale plant for heat generation

Small-scale plant is a plant that covers energy consumption in the given building



Heat pumps

Air to Water, Water to Water and Earth to Water
Support up to 3 700,00 €
Support is provided only for devices with higher effectiveness



Solar thermal panels

Support up to 1 750,00 €
In residential house dependant on the sum of the flats



Biomass boilers

Boiler for gassing of wood, burning wood chips and wood pellets
Only low-emission devices in compliance with Eco-design Directive
Support up to 1 500,00 €
In residential house dependant on the sum of the flats

National project „Green to Households“



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TARGET GROUPS

Owners of family houses

- ✓ The eligible applicant is the owner of a house or uncompleted building of the house;
- ✓ The limitations mainly concern the ownership and use of the building entity engaged in an economic activity;
- ✓ Priority is given to projects where implementation of the measure aimed at energy consumption decrease has been proved;
- ✓ Installation must not result in disconnecting households from DHSs or substantial deterioration of the parameters of DHS.

Support is provided for:



National project „Green to Households“



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TARGET GROUPS

Owners of residential houses

- ✓ Owners of the flats or owners represented by the administrator;
- ✓ Support is provided for small-scale plants for use of RES in apartment houses based on a submitted energy audit;
- ✓ Installation must not result in disconnecting households from DHSs or substantial deterioration of the parameters of DHS;
- ✓ In the case of heat generation priority is given to projects in those areas where there are no available DHS.

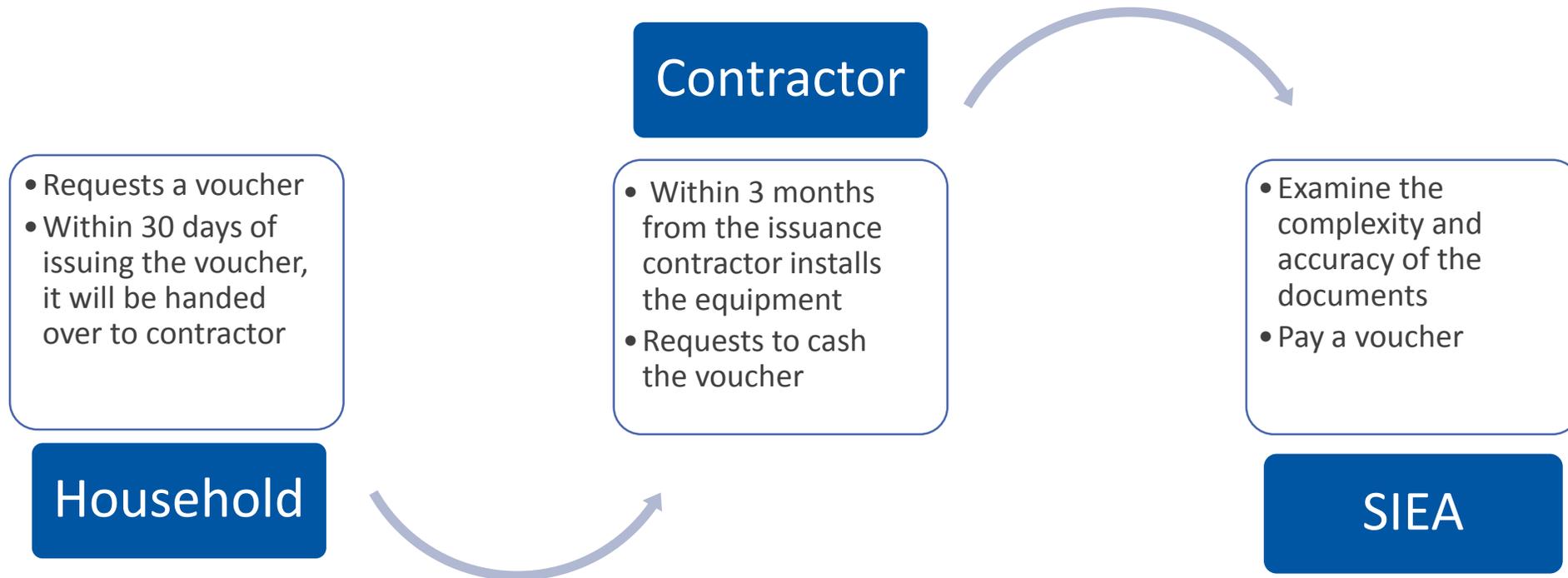
Support is provided for:





SUPPORT MECHANISM

Support = voucher issued prior to installing the device

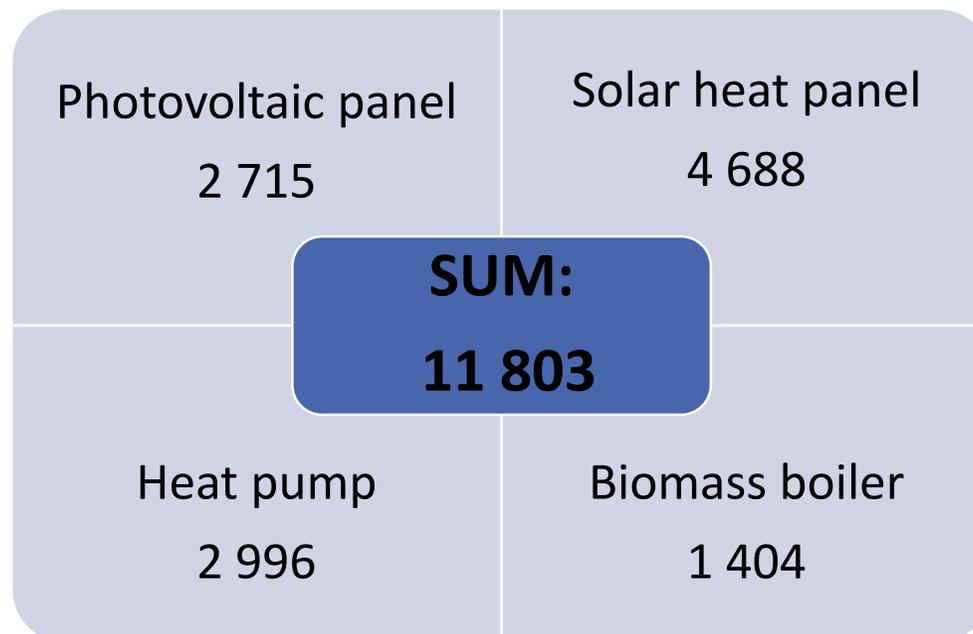




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STATISTICS

Number of paid vouchers by the device:



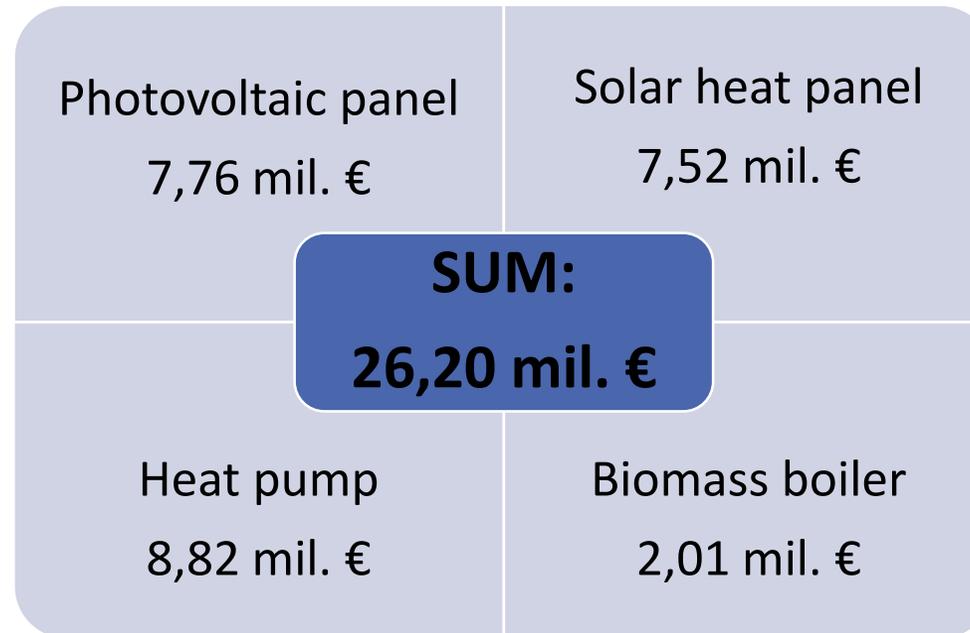
Data valid for 16.02.2018



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STATISTICS

Amount of paid vouchers by the device:



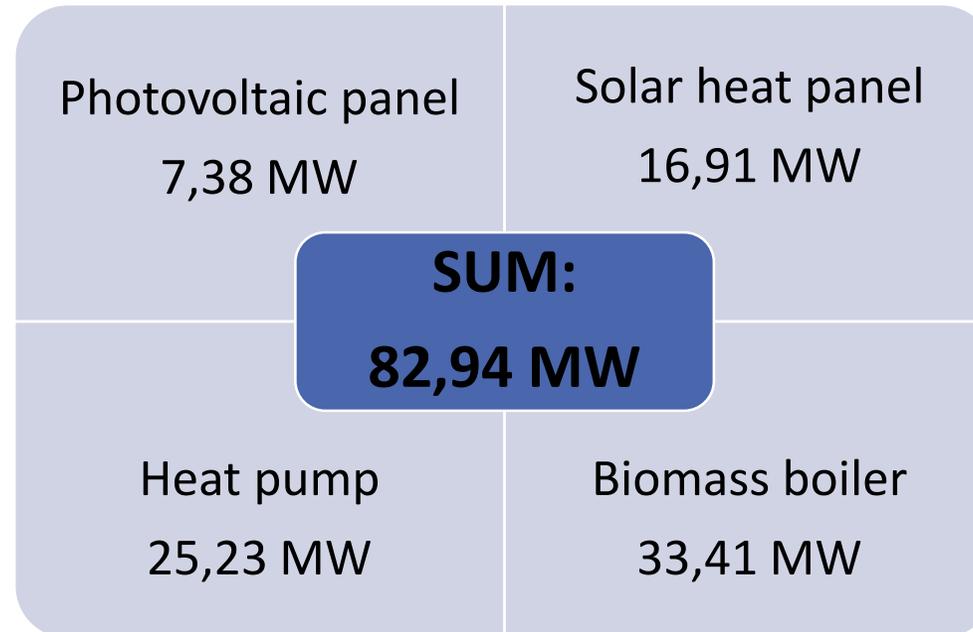
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STATISTICS

Benefits in MW of devices using RES



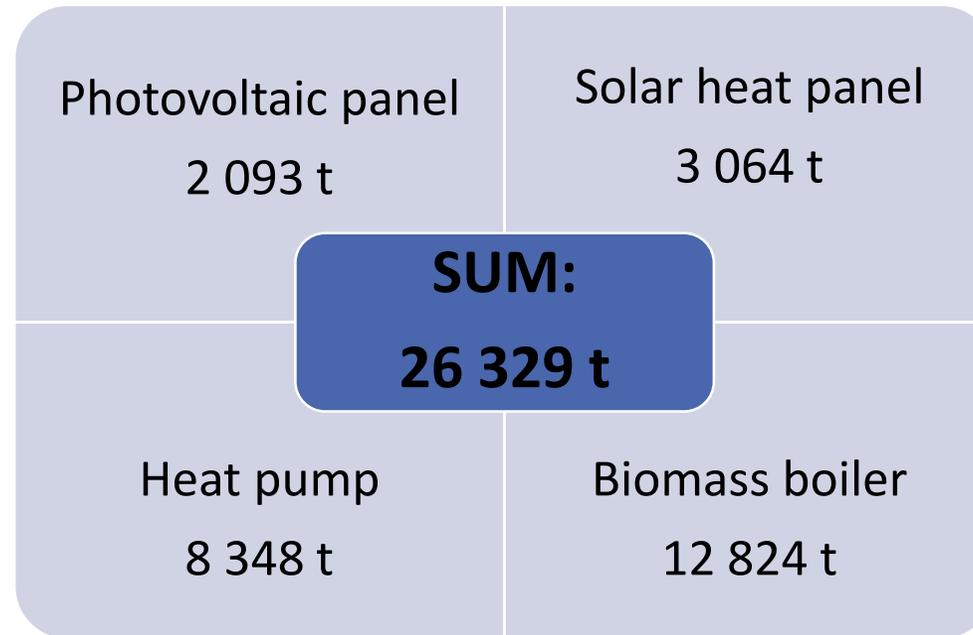
Data valid for 16.02.2018



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STATISTICS

Environmental Assessment, annual lowering of the emissions of CO₂ in tons



Data valid for 16.02.2018

THANK YOU FOR ATTENTION

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