POLAND

Introduction

This report was drawn up in order to fulfill the obligation specified in article 13 Commission Implementing Regulation (EU) 2020/1001 of 9 July 2020 laying down detailed rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards the operation of the Modernisation Fund supporting investments to modernise the energy systems and to improve energy efficiency of certain Member States.

Modernization Fund in Poland – Institutional Setup

In order to finance the programme from the Modernization Fund (MF), the Polish state is obliged to present the proposed support area to the European Investment Bank (EIB) and the Investment Committee to obtain confirmation whether the project meets the conditions set out in the EU ETS Directive.

At least 70% of the funds from the Fund shall be allocated to projects included on the list of priority areas, and a maximum of 30% to projects not included in this list (70/30 rule).

If a programme is confirmed as belonging to one of the priority areas, it uses a simpler subsidy path where, if the EIB confirms that the programme belongs to the priority area, the European Commission decides to disburse funds to finance projects under that programme. If the programme is classified as a non-priority area, it is necessary to take into account the recommendations of the Investment Committee when determining the rules of financing.

Financing from FM funds in Poland takes place within selected priority programmes implemented by the National Fund for Environmental Protection and Water Management (NFEP&WM).

NFEP&WM, acting as the National Modernization Fund Operator, is obliged to submit forms for selected support areas in accordance with the adopted template and containing information in accordance with the requirements of the Commission Implementing Regulation (EU) 2020/1001 to the EIB, in order to approve their compliance with the EU ETS Directive.

Modernisation Fund Wator Ma National Operator (MFNO) Supervisory Board Ministry of Climate & Environment _____ Approval of Priority Programmes (PP) List **Consultative Council** Managing Board Programme draft related to the non priority Programme draft related to the priority area area (Submission Form) (Submission Form) Confirmation of compliance of the Investment Committee Programme / supported investments with the ETS Directive Recommendations Managing / Supervisory Board Final PP and terms and conditions approval including selection criteria MFNO Office (selected Departments) Priority Programme (scheme) implementation: Calls for proposals, projects evaluation, concluding funding agreements, fund disbursements, monitoring and reporting, information & promotion, technical assistance, cooperation with the EIB

Modernization Fund in Poland - implementation scheme

The National Fund for Environmental Protection and Water Management NFEP&WM - National Operator of the Modernization Fund

The National Fund for Environmental Protection and Water Management (NFEP&WM) which was established in 1989 as a result of the regime transformation in Poland, in cooperation with voivodeship funds for environmental protection and water management is the main pillar of the Polish system of financing environmental protection. The basis of the National Fund's operation as a State legal person is the Act on Environmental Protection Law (EPL).

NFEP&WM's mission: <u>We support environmental action effectively and efficiently</u>.

NFEP&WM's advantages:

- ability to create a variety of financial instruments that meet the needs of different types of beneficiaries,
- high competence of the NFEP&WM staff and years of experience in supporting projects financed both from foreign and domestic funds,
- active participation in solving environmental problems on legal, financial and organizational grounds,
- long-term planning of revenues and expenses, which ensures funds for beneficiaries for the full balance of projects,
- institutional capacity to implement projects funded by the EU, obtained as a result of the experience gained in the implementation of the financial perspective for 2000-2006 and perspective for 2007-2013, as well as projects funded by the "Norwegian Funds",
- openness to innovative solutions.

NFEP&WM is friendly for the environment and beneficiaries

The National Fund for Environmental Protection and Water Management is the main source of financing pro-ecological investments in Poland. For over 30 years it has been the most important element of the Polish system of financing for environmental protection and water management. Moreover it has at its disposal the largest financial potential.

Scope of activities comprising the management of the Modernization Fund by the National Fund for Environmental Protection and Water Management:

1) within the competence of the Supervisory Board of the National Fund for Environmental Protection and Water Management:

- approval of priority program lists;
- establishing criteria for selecting investments financed with accumulated resources on the FM account;
- establishing the rules for granting and redeeming loans as well as the rules for granting and accounting for subsidies granted from the funds accumulated on the FM Account;
- adopting resolutions on approving co-financing in accordance with the EPL Act.

2) within the competence of the Management Board of the National Fund for Environmental Protection and Water Management:

- preparing lists of priority programs and presenting them to the minister responsible for climate and environment for agreement;
- agreeing priority program proposals with the minister responsible for climate and FM Consulting Councilprograms;
- approval of the regulations for the call for proposals financed from the funds accumulated on the Modernization Fund Account;
- submitting priority programs to the EIB and / or the Investment Committee;

- adopting resolutions on granting co-financing;
- submitting applications to the EIB for the payment of funds from the FM for co-financing the implementation of investments.

3) within the competence of the NFEPWM Bureau (Department / Departments responsible for the implementation of FM):

- organizing calls for proposals and evaluation of applications for co-financing;
- undertaking activities leading to the conclusion of contracts for co-financing investments supported by FM funds;
- supervising the implementation and implementation of investments, exercising control over the use of FM funds by the beneficiaries;
- organizing technical assistance for potential beneficiaries;
- preparing a draft report and submitting it to the minister competent for climate matters from the implementation of co-financed investments and the material and environmental effects achieved;
- conducting promotional and informational activities about the National FM implementation system;
- monitoring of:
 - achieved effects related to the avoidance or reduction of greenhouse gas emissions as part of the National FM implementation system,
 - disbursement of funds obtained from the FM Account by the beneficiaries and progress in the implementation of investments co-financed from the funds accumulated on the FM Account.

Schemes (priority programs) supported by Modernisation Fund

As part of two meetings of the FM Investment Committee held by the end of 2021, the European Investment Bank accepted the following schemes under <u>priority</u> areas of support from among Polish proposals:

- 1. priority programme "Renovation with a guarantee of savings",
- 2. priority programme "Smart energy infrastructure",
- 3. priority programme "Development of the power grid for future electric car charging stations",
- 4. priority programme "*Cogeneration for Energy and Industry*",
- 5. priority program "Cogeneration for District Heating",
- 6. priority programme "Digitization of heating networks",
- 7. priority programme "The use of alternative fuels for energy purposes",
- 8. priority programme "Support for the use of storages and other devices for network stabilization *a scheme for DSOs*" priority programme.

In addition, Poland, as the only country receiving support from the Modernization Fund in the 1st FM tranche, received a positive recommendation for the implementation of project in the non-priority area:

9. support for projects related to the development of individual heating and the development of prosumer energy in the area of air, water and ground heat pumps in new single-family residential buildings, operationalization in the form of the "My heat" priority programme.

The total amount of the budget of the approved support areas is 2 268,29 million EUR. As part of this amount, the NFEP&WM received funds in the amount of 346,38 million EUR in 2021, requested for the above-mentioned programmes under the 1st and 2nd tranche of FM for the purpose of launching the first calls for proposals.

All the schemes are in line with **Article 10d**, **paragraph 1 Directive 2003/87/EC** as they will promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner, which is the main aim of the Directive. They will lead to modernization of energy systems and improvement of energy efficiency.

The schemes contribute to the implementation of commitments under **the United Nations Framework Convention on Climate Change** as well as the Kyoto Protocol and the Paris Agreement, and with the updated contribution of the EU and its Member States to the UNFCCC, which are international legal instruments obliging countries to reduce greenhouse gas emissions.

The schemes are consistent with **the Poland's Energy Policy until 2040**. The document in question assumes a reduction in primary energy consumption by 23% by 2030 (compared to the 2007 consumption forecasts) and the share of renewable energy sources in the gross final energy consumption in 2030 by at least 23%. Poland's Energy Policy until 2040 is a response to the most important challenges facing the Polish energy sector in the coming decades and sets directions for the sector's development, taking into account the tasks necessary to be implemented in the short term. The document identifies eight strategic points 1) optimal use of own energy resources, (2) development of electricity generation and grid infrastructure, (3) diversification of natural gas and crude oil supplies, and expansion of network infrastructure, (4) development of energy markets, (5) implementation of nuclear energy, (6) development of renewable energy sources, (7) development of heating and cogeneration, (8) improvement of energy efficiency. The schemes implement the tasks included in the indicated above objectives.

Attaining the reduction goals stemming from **the Paris Agreement and EU legislation**, requires taking suitable actions also in non-ETS sectors (subject to ongoing decisions at the EC level to extend the scope of ETS). The reduction target for Poland in terms of greenhouse gas emissions in sectors not covered by the ETS is set at -7% in 2030 compared with 2005. The declared target is to be achieved by, inter alia, implementation of the approved schemes.

The schemes are consistent with the assumptions of **the National Strategy for Responsible Development**, the main goal of which is to create conditions for the growth of income of Polish residents with a simultaneous increase in social, economic, environmental and territorial cohesion. The programs will contribute to the reduction of pollutant emissions (which will translate into a reduction of social and environmental costs), as well as the diversification of energy sources (increasing the share of renewable energy sources).

The schemes are part of the National Reform Program by reducing greenhouse gas emissions, increasing the share of energy from renewable sources and increasing energy efficiency. Modernization, conversion and construction of new energy sources will contribute to lower energy bills and can lower the energy poverty rate, as well as can stimulate the construction sector, which is an opportunity for SME development and local job creation.

1. Projects overview (priority programmes)

1.1. Number of projects (priority programmes) financed from the Modernization Fund: 9

Tab. 1 List of projects (priority programmes) with the period of implementation in the structure
of areas

No.	Programme (priority area)	Implementation period
1.	Renovation with a guarantee of savings	2021 – 31.12.2026
2.	Smart energy infrastructure	2021-31.12.2025
3.	Development of the power grid for future electric car charging stations	2021-31.12.2026
4.	Cogeneration for Energy and Industry	2021-2030
5.	Cogeneration for District Heating	2021-2030
6.	Digitization of heating networks	2021-2026
7.	The use of alternative fuels for energy purposes	2020-2030
8.	Support for the use of storages and other devices for network stabilization - a scheme for DSOs	2021-2026
No.	Programme (non-priority area)	Implementation period
1.	My heat (Moje Ciepło)	2021-2027

1.2. Number of ongoing, completed and suspended projects (priority programmes): 9

1.2.1. Number of ongoing projects (priority programmes): 9

Tab. 2 List of ongoing projects (priority programmes) by area

No.	Programme (priority area)
1.	Renovation with a guarantee of savings
2.	Smart energy infrastructure
3.	Development of the power grid for future electric car charging stations
4.	Cogeneration for Energy and Industry
5.	Cogeneration for District Heating
6.	Digitization of heating networks
7.	The use of alternative fuels for energy purposes
8.	Support for the use of storages and other devices for network stabilization - a scheme for DSOs
No.	Programme (non-priority area)
1.	My heat (Moje Ciepło)

1.2.2. Number of completed projects (priority programmes): n/a

1.2.3. Number of suspended projects (priority programmes): n/a

Total share of financing earmarked for projects (priority programmes) in priority areas for projects (priority programmes) from non-priority areas, if any, in the beneficiary Member State.

No.	Programme (priority area)	Co-financing from FM in PLN million	Co-financing from FM in EUR million
1.	Renovation with a guarantee of savings	112.5	25
2.	Smart energy infrastructure	1,000,0	222
3.	Development of the power grid for future electric car charging stations	1,000,0	222
4.	Cogeneration for Energy and Industry	2,000.0	444
5.	Cogeneration for District Heating	3,000.0	666,66
6.	Digitization of heating networks	500.0	111,11
7.	The use of alternative fuels for energy purposes	1,000,0	222
8.	Support for the use of storages and other devices for network stabilization - a scheme for DSOs	1,000,0	222,22
No.	Programme (non-priority area)	Co-financing from FM in PLN million	Co-financing from FM in EUR million
1.	My heat (Moje Ciepło)	600.0	133,3

1.3 Total share of funding dedicated to priority projects for non-priority projects, if any, in the Member State that is the beneficiary.

The total budget of the programmes in the priority area in million EUR 2134,99

Total budget of programmes in the non-priority area in million EUR 133,3

Under priority programmes, in the non-priority support area, the maximum intensity of co-financing from the Modernization Fund is 70% of the project costs.



2. Information about each project (schemes - programme priority)

Tab. 4 List of project implementation costs (priority programmes) by area

No.	Programme name	Total investment cost of the scheme without VAT in million EUR	Total volume of the scheme – budget in million EUR	Date of payment of FM funds for NFEPWM	Amounts of payments from the Modernisation Fund to the scheme managing authority)	Amounts received from the Modernisation Fund by the beneficiary Member State <u>but</u> <u>not yet paid</u> to the scheme managing authority	Recovered amounts (in million EUR)
			priority area				
1.	Renovation with a guarantee of savings	100.0	25	05.08.2021	25	0	0
2.	Smart energy infrastructure	370	222	05.08.2021	44	0	0
3.	Development of the power grid for future electric car charging stations	304	222	05.08.2021	22	0	0
4.	Cogeneration for Energy and Industry	444	444	13.12.2021	44.44	0	0
5.	Cogeneration for District Heating	666,66	666,66	13.12.2021	66.6	0	0
6.	Digitization of heating networks	111,11	111,11	13.12.2021	33.3	0	0
7.	The use of alternative fuels for energy purposes	222	222	13.12.2021	44.4	0	0
8.	Support for the use of storages and other devices for network stabilization - a scheme for DSOs	400	222,22	13.12.2021	44.44	0	0
			non-priority are	а			
1.	My heat (Moje Ciepło)	444,4	133,3	13.12.2021	22 222 222	0	0

Tab. 5 List of planned results of the Scheme implementation (priority programmes) by area

No	. Scheme - Programme name	Planned energy savings (GJ/year)	Expected cumulative energy savings until the end of the life of the project (GJ) *	Planned reduction of gas emissions greenhouse (MgCO2/year)	Expected cumulative reduction in CO2 emissions over the lifetime of the project (MgCO2) *	Additional installed capacity for the production of energy from renewable sources (MW)	Achieved leverage of funds (total amount invested in relation to the contribution from the Modernisation Fund)	Other
_	I				priority area	1		I
1.	Renovation with a guarantee of savings	Final energy reduction: 500,000 Energy reduction Primary: 550,000	2,750,000	45,000	225,000	n/a	0	Number of buildings covered by thermal modernization: 50 pcs Projected scenario as indicated in table. Value at the time of the report – 0
2.	Smart energy infrastructure	0	0	0	0	n/a	0	Number of meters to be installed: 3.8 million pcs The data will be updated in next report
3.	Development of the power grid for future electric car charging stations	0	0	3 443	17 215	n/a	0	Length of the electricity distribution network : 4000 km Number of transformer and distribution stations: 800 pcs. Reduction of dust emission with a diameter of less than 10 micrometres (PM10) : 0.141 Mg/year Reduction of nitrogen oxide emissions: at least 2,762 Mg/year Projected scenario as indicated in table. The data regarding planned energy savings will be updated in next report. The methodology of the presentation of the indicator is negotiated with the current applicants. Value at the time of the report – 0
4.	Cogeneration for Energy and Industry	Reduction of primary energy consumption: 10,000,000	50,000,000	4,000,000	20,000,000	Additional electricity and heat generation capacity under high-efficiency cogeneration conditions: 1000	0	Number of installations for generating energy in high-efficiency cogeneration: 20 Projected scenario as indicated in table. Value at the time of the report – 0
5.	Cogeneration for District Heating	Reduction of primary energy consumption: 15,000,000	75,000,000	6,000,000	30,000,000	Additional electricity and heat generation capacity under high-efficiency cogeneration conditions: 1500	0	Number of installations for generating energy in high-efficiency cogeneration: 15 Projected scenario as indicated in table. Value at the time of the report – 0
6.	Digitization of heating networks	Reduction of primary energy consumption: 300,000	1,500,000	37,000	185,000		0	Number of modernized heat nodes: 5,000

7.	The use of alternative fuels for energy purposes	0	0	26 601	133 005	Additional electricity and heat generation capacity under high-efficiency cogeneration conditions: 30	0	The number of installations for generating energy in high- efficiency cogeneration is at least 5 Projected scenario as indicated in table. The data regarding planned energy savings will be updated in next report. The methodology of the presentation of the indicator is negotiated with the current applicants. Value at the time of the report – 0	
8.	Support for the use of storages and other devices for network stabilization - a scheme for DSOs	0	0	0	0		0	Electricity storage capacity: 262 MWh Projected scenario as indicated in table. The data regarding ecological indicator s will be updated in next report. The methodology is under consultation. Value at the time of the report – 0	
No.					on-priority area				
1.	My heat (Moje Ciepło)	0	0	65,000	325,000	Additional power generation capacity with renewable sources: 450	0	Purchase and installation of 57,000 pcs . Projected scenario as indicated in table. The data regarding planned energy savings will be updated in next report. Value at the time of the report – 0	
* expectations cumulative saving energy and reduction emissions CO ₂ calculated taking period obtaining savings 5 years, however, this period will be updated in individual programs after obtaining the Beneficiaries' declarations under the concluded grant agreements									

2.6. When the investment aims at implementation of a territorial just transition plan, information about the expected contribution of the investment to that plan.

The objective of the Just Transition Mechanism is, inter alia, supporting and promoting investments related to the implementation of technologies and infrastructure ensuring affordable clean energy, with the reduction of greenhouse gas emissions, energy efficiency and production of energy from renewable sources. The schemes approved by EBI, EC, and Investment Committee are in line with the above objectives and will contribute to the creation of new jobs, development of companies in the construction industry, improvement of the technical condition of industrial and energy infrastructure as well as reduction of their energy consumption and emission intensity.

Currently, the arrangements for the National Just Transition Plan are still pending, but the abovedescribed fulfilment of the Just Transition Fund's objectives allows for the conclusion that the schemes will be coherent and with the National Just Transition Plan and support projects in this are in complementary way.

3. Additional information on projects other than the priority programmes

Not applicable

4. Additional information on projects (priority programmes) in non-priority areas

4.1 Proof of co-financing from private sources

In accordance with the assumptions of the My heat priority programme, co-financing in the form of a subsidy is expected at the level of up to 30% or up to 45% of eligible costs, not more than PLN 21,000. PLN for one co-financed project. The amount of co-financing will depend on the type of heat pump installed.

The remaining part of the investment costs will be covered from the Beneficiary's own funds.

Description of the schemes supported by the Modernisation Fund

1. <u>Renovation with a guarantee of savings</u>

Total investment cost of the scheme – 100 million EUR (without VAT) Total budget of the scheme – 25 million EUR Support program to be implemented in the years 2021-2026.

The main objective of the program is to improve air quality and reduce greenhouse gas emissions through optimized investments in improving the energy efficiency of multi-family residential buildings and public buildings, which will be implemented on the basis of an energy efficiency improvement contract (EPC). At the same time, the program is to stimulate the development of the ESCO market in the field of energy modernisation of buildings

The beneficiaries of the Renovation with a guarantee of savings program are:

- 1) housing cooperatives,
- 2) housing communities,
- 3) local government units,

4) commercial law companies in which local government units hold 100% of shares or stocks and which are established to perform their own tasks indicated in the acts.

The program provides for comprehensive support for investments aimed at optimizing energy consumption in multi-family residential and public buildings, and in particular on the following areas:

- a. preparatory work and supervision over the proper implementation of works (preparation of project documentation, including: energy audit of the building, industry design documentation, expert opinions);
- b. thermo-modernisation works on external partitions, including replacement of windows and doors;
- c. installation work to improve the operation of the ventilation system;
- d. installation works in the field of central heating and domestic hot water, including modernisation/replacement/installation of a heat source;
- e. installation of an Energy Management System;
- f. installation works for the modernisation of lighting;
- g. purchase and installation of cooperative renewable energy sources;
- h. Additional accompanying works, such as adapting the building to the needs of disabled people, replacing/installing elevators, managing rainwater.

The launch of the program should increase the demand for employees in the construction industry, specialists in technology industries, as well as in ESCOs.

2. <u>Development of the power grid for future electric car charging stations</u>

Total investment cost of the scheme – 370 million EUR (without VAT) Total budget of the scheme – 222 million EUR Support program to be implemented in the years 2021-2026.

The support will be allocated to projects related to the expansion or modernization of the electricity distribution network resulting in increasing the capacity of the electricity infrastructure for the development of electric vehicle charging infrastructure (EV).

The development of the EV fleet towards the implementation of the climate and energy goals for 2030 set out in the strategic documents (14% share of renewable energy in transport) requires not only the need to expand the charging infrastructure for electric vehicles, but also the need to modernize the National Electricity Grid, the standards of which differ from the needs of electromobility. Its modernization should start as soon as possible in order to ensure stable operation and distribution of electricity in the near future. Additionally, it should enable easier implementation of the G2V (Grid to Vehicle) idea, which is perceived as a key element of the future power system functionality. The program will help to increase the flexibility of the power system operation, and in a broader sense, such action may enable the introduction of solutions (in the field of storage) ensuring the necessary stabilization of the system.

The program also provides for support for the development of control and supervision systems for the operation of power grids and various other systems improving the conditions for the stable operation of the grid in states characterized by high load variability resulting from the development of EV. (automatic voltage control on power lines).

The beneficiaries of the Development of the power grid for future electric car charging stations program are: Distribution System Operators (DSOs)

3. <u>Smart energy infrastructure (AMI)</u>

Total investment cost of the scheme – 304 million EUR (without VAT) Total budget of the scheme – 222 million EUR Support program to be implemented in the years 2021-2025.

The aim of the programme is to develop smart energy infrastructure by disseminating so-called smart meters (AMI - Advanced Metering Infrastructure) to final customers as well as necessary investments on the DSOs' side.

This is to improve demand management in the electricity market and reduce peak power demand in the long term, including through the introduction of dynamic tariffs. Broadly speaking, the program contributes to promoting energy efficiency and empowering end-users.

The beneficiaries of the Development of the power grid for future electric car charging stations program are: Distribution System Operators (DSOs)

The installation of AMI meters will contribute to (for example):

- ✓ conscious energy consumption by final consumers, including the optimization of the use of flexible tariffs (day / night), reduction of the energy used by household appliances, planning the use of appliances at the most cost-effective time the end user can reduce energy consumption by up to 15%. In the countries where AMI meters have been broadly implemented, energy savings of up to 5% have been achieved on a national scale (example: Greece, Malta);
- the possibility of obtaining more favorable conditions during the negotiations of the end consumer when changing the energy supplier, which will allow for several percent savings (new tariffs);
- invoices will be issued according to the meter readings and not in the forecasting formula, where the energy consumption is often underestimated or overestimated;
- ✓ in the forecasting formula, issued invoices will be more correctly estimated due to more detailed and projectable forecasts than in the case of standard meters.
- 4. Cogeneration for Energy and Industry

Total investment cost of the scheme – 444 million EUR (without VAT) Total budget of the scheme – 444 million EUR Support program to be implemented in the years 2021-2030.

The key objective of improving the energy efficiency of the industrial, energy and heating sectors is comprehensive support for all entities operating in it.

After the analysis of the industrial and energy sector in question, entities were identified that play a key role in the areas with the greatest potential for improving energy efficiency, whose functioning has a direct impact on air quality and at the same time do not have a dedicated financial instrument supporting the necessary energy modernization.

The Modernization Fund is a great opportunity to improve energy efficiency and reduce the emissions of large generating entities with an installed capacity of over 50 MW.

The scheme provides for support for projects related to the construction or reconstruction of generating units with an installed capacity of not less than 10 MW, operating in the conditions of high-efficiency cogeneration (excluding energy generated in a coal-fired cogeneration unit), together with their connection to the transmission network, in which energy production uses:

- ✓ waste heat (excess heat energy from the industrial processes of energy conversion)
- ✓ energy from renewable sources,
- ✓ gaseous fuels, gas mixtures, synthetic gas or hydrogen.

Installations are eligible for co-financing, of which no more than 30% of useful heat generated in the cogeneration unit will be fed into the public heating network.

The condition for granting support for energy storage (heat and/or electricity) is its integration with the energy source, which will be implemented simultaneously under the project.

The scheme is dedicated to enterprises, power plants and combined heat and power plants with an installed thermal and/or electric capacity of not less than 50 MW.

The beneficiaries of the scheme will be Entrepreneurs within the meaning of the Act of March 6, 2018, Entrepreneurs' Law, conducting economic activity.

5. <u>Cogeneration for District Heating</u>

Total investment cost of the scheme – 666,66 million EUR (without VAT)

Total budget of the scheme – 666,66 million EUR

Support program to be implemented in the years 2021-2030.

Support for the development of investments in the production of heat energy in units of renewable energy sources was taken into account, inter alia, in the National Energy and Climate Plan for 2021-2030 and Poland's Energy Policy until 2040. The above-mentioned documents define Poland's strategy in the field of energy transformation. The preparation of both documents was preceded by analytical and forecasting works, the aim of which was to determine the future state of the sector for conditions determined by economic, environmental and resource constraints, taking into account the planned policies.

Therefore, the planned scheme is a necessary support instrument for the modernization of obsolete large generation units of the heating sector in Poland, the operation of which has a direct negative impact on air quality, and thus on the quality of life.

The Program provides support for the following projects:

- 1. Projects concerning the construction or reconstruction of generating units with an installed capacity of not less than 10 MW, operating in the conditions of high-efficiency cogeneration (excluding energy generated in a coal-fired cogeneration unit), together with their connection to the transmission network, where energy is used:
- ✓ waste heat (excess heat energy from the processes of energy conversion),
- ✓ energy from renewable sources,
- ✓ gaseous fuels, gas mixtures, synthetic gas or hydrogen.

The construction or upgrade of a high efficiency cogeneration installations fired with solid fossil fuels are not eligible for support. Installations for co-firing solid fossil fuels with other fuels (e.g. biomass) in multifuel combustion and dedicated multi-fuel combustion installations are also excluded from support.

- 2. An element of the project may be a connection to the heating network belonging to the project beneficiary (energy producer)
- 3. An element of the project may be a heat storage. The condition for granting support for an heat storage is its integration with a heat source, which will be implemented simultaneously under the project.

Installations are eligible for co-financing, of which at least 70% of useful heat generated in the cogeneration unit will be fed into the public heating network.

The construction of high-efficiency cogeneration units leads to an improvement in the condition of energy infrastructure in the generation sector, and in particular to increase of its efficiency. Projects of this type show a supra-regional character, in line with the EU, national and regional strategies. In order to maintain the development prospects of the economy, along with the shrinking of resources and the growing costs of obtaining them, it is necessary to limit the consumption of natural resources per product or service unit at all stages of production and consumption. The key to achieving this goal is to change production and consumption patterns and to raise the environmental awareness of society, including producers.

Positive changes in this respect will gradually lead to increasing efficiency and competitiveness of industry and services, while reducing the pressure on the environment

The scheme is dedicated to enterprises, power plants and combined heat and power plants with an installed thermal and/or electric capacity of not less than 50 MW.

The beneficiaries of the scheme will be Entrepreneurs within the meaning of the Act of March 6, 2018, Entrepreneurs' Law, conducting economic activity.

6. Digitisation of heating networks

Total investment cost of the scheme – 111,11 million EUR (without VAT) Total budget of the scheme – 111,11 million EUR Support program to be implemented in the years 2021-2030.

In order to enable the transition to a climate-neutral economy, it is necessary to invest in reducing CO2 emissions from the heating sector. The Program provides support for the following projects:

- 1) Construction and reconstruction of the telemetry and telemechanics system consisting in the implementation of modern IT tools and solutions for remote supervision, control and regulation of the heating system, monitoring the quality parameters of heat / cold transmission or providing information about disruptions in the operation of networks and nodes, as well as location failures and readings of measurement and billing devices intended for remote reading, with the provision that only those tasks, the implementation of which results from an energy efficiency audit within the meaning of Art. 2 point 1 of the Act of May 20, 2016 on energy efficiency (i.e. Journal of Laws of 2021, item 468, as amended) or an energy audit within the meaning of Art. 2 point 8 of the Act of 21 November 2008 on supporting thermo-modernization and renovation and on the central register of emissivity of buildings (i.e. Journal of Laws of 2021, item 554, as amended). The required scope of the audit will be specified in the Call for Proposals Regulations;
- 2) RES installations producing energy solely for the purposes of devices related to the telemetry and telemechanics system, where an element of the RES installation may be an energy storage, provided that it is integrated with a RES source.
- 3) Projects for the use of waste heat from the control room working for the management of the heating network. Co-financing is possible provided that the installation will operate in the conditions of high-efficiency cogeneration. A connection to the transmission network may be an element of the project.

The condition for obtaining co-financing is the implementation of the scope of activities referred to in point 1 within the project. The scope indicated in points 2 and 3 is optional.

The scheme is dedicated to energy enterprises within the meaning of the Act of April 10, 1997 - Energy Law (i.e. Journal of Laws of 2021, item 716, as amended) conducting licensed business activities in the field of heat transmission and distribution.

7. <u>The use of alternative fuels for energy purposes</u>

Total investment cost of the scheme – 222 million EUR (without VAT) Total budget of the scheme – 222 million EUR Support program to be implemented in the years 2021-2030.

The use of alternative fuels is an important element of the implementation of the principle of sustainable development of the country, as it increases the share of renewable energy sources in the fuel and energy balance. Combustion of these fuels allows to achieve the goals set in the ecological policy of countries in the field of reducing emissions of pollutants influencing climate change and increases the ecological safety of the country by decentralizing energy production, diversifying energy sources, using local energy resources, as well as limiting environmental damage related to extraction and combustion of fossil fuels.

The use of alternative fuels allows to save natural resources, allows the countries of the community to comply with the provisions of EU law in the scope of limiting the amount of deposited waste and to achieve the assumed share of energy from renewable sources.

Selected industrial and municipal waste is a potential source of energy resources that can be used directly or after initial processing. The development of alternative fuels production technology allows for the production of high-quality fuels that can be co-incinerated in the existing production and heating systems.

The beneficiaries of the scheme are Entrepreneurs within the meaning of the Act of March 6, 2018, Entrepreneurs' Law, conducting economic activity.

Support for the development of investments in the field of energy production in the conditions of highefficiency cogeneration from the installation of thermal conversion of alternative fuels was taken into account, inter alia, Poland's energy policy until 2040 with regard to the development of system heat, which is an element of the second pillar of PEP, i.e. the zero-emission energy system. The preparation of both documents was preceded by analytical and forecasting works, the aim of which was to determine the future state of the sector for conditions determined by economic, environmental and resource constraints, taking into account the planned policies.

The use of processed waste as an alternative fuel reduces the consumption of natural fuels, reducing the amount of gas emissions to the atmosphere that would be emitted during the combustion of conventional fuels. With the rising prices of primary fuels, energy obtained from waste is a very attractive alternative for the heating and industrial sectors.

Therefore, the planned scheme is an indispensable support instrument stimulating the development towards increasing energy efficiency in Poland, through the creation of new energy, heating and industrial units or modernization of the existing ones, the functioning of which has a direct negative impact on air quality, and thus on the quality of life.

8. <u>Support for the use of storages and other devices for network stabilization - a scheme for DSOs</u>

Total investment cost of the scheme – 400 million EUR (without VAT) Total budget of the scheme – 222,22 million EUR Support program to be implemented in the years 2021-2026.

The aim of the scheme is to support activities aimed at improving the parameters of the quality of electricity in the distribution and transmission network, inter alia, by limiting the negative impact on the network of the dynamic development of renewable energy sources and vehicle charging points. In addition, the implementation of the scheme will contribute to the optimization of investment plans related to the need to expand the modernization of distribution networks in order to stabilize the parameters of electricity supply, increase the available local connection capacities and, above all, improve the reliability of power supply and security of energy supply to consumers, e.g. in low voltage circuits or specific medium voltage lines with existing or planned RES sources where such challenges already exist or will occur.

The beneficiaries of the Development of the power grid for future electric car charging stations program are: Distribution System Operators (DSOs)

9. <u>My heating</u>

Total investment cost of the scheme – 444,4 million EUR (without VAT) Total budget of the scheme – 133,3 million EUR Support program to be implemented in the years 2021-2026.

In order to enable the transition to a climate neutral economy - significant investment for reducing CO2 emissions from single-family housing is required. Supported within the frames of the Program will be the purchase and installation of heat pumps based on RES. The key of the operation of a heat pump based on renewable energy is based on the use of natural energy resources, the source of which can be the atmospheric air, ground, surface or underground water. The heat pump takes heat energy from these sources and transfers it to the heated object. The energy supplied to the system is taken from the so-called lower source (well water, sea water, land, air - from RES).

The final recipients of the aid will be natural persons. The program is addressed to owners or co-owners (end recipients) of new single-family buildings. Program will be the purchase and installation of heat pumps based on RES. New single-family residential building will be used for non-economic activity, with the proviso that conducting an ancillary economic activity in line with point 207 of 2016 Notice on the Notion of Aid in the supported building is acceptable.

The implementation of the Program will contribute to the increase in the amount of energy from renewable energy sources in new single-family buildings.

Implementation status:

1. Renovation with a guarantee of savings EPC+

The support area positively assessed by the EIB.

The program (scheme) was agreed with the Ministry of Climate and Environment, the Consultative Board, adopted by the Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

The call for project fiches has been completed - 9 fiche for a total amount of nearly PLN 6 million (1,33 million EUR) have been submitted.

Selection of applications for co-financing in progress (ongoing call in the period 13/12/2021 - 28/02/2023).

2. Smart energy infrastructure

The support area positively assessed by the EIB.

The program (scheme) was agreed with the Ministry of Climate and Environment, The Consultative Board, adopted by the Management Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

The first call for applications for co-financing planned to be launched in June 2022.

3. Development of the power grid for future electric car charging stations

The support area positively assessed by the EIB. The program agreed with the Ministry of Climate and Environment, The Consultative Board, adopted by the Management Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

The first call for proposals has been completed. 5 applications with a total grant amount of PLN 100.4 million (22,31 million EUR) have been submitted. Applications during the negotiations on the terms of co-financing (before concluding funding agreements).

4. The use of alternative fuels for energy purposes

The support area positively assessed by the EIB.

The program (scheme) agreed with the Ministry of Climate and Environment, The Consultative Board, adopted by the Management Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

The announced call for applications for co-financing (on a continuous basis) from 06/12/2021 to 30/12/2022.

Up to date, 16 applications (8 investments) have been submitted, the amount of co-financing requested PLN 2.1 billion – projects under evaluation.

5. My heating

The support area was positively assessed by the FM Investment Committee.

The program (scheme) agreed with the Ministry of Climate and Environment, the Consultative Board, adopted by the Management Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

The ongoing call for proposals has been launched from April 29, 2022 to December 31, 2026 or until the dedicated pool of funds is exhausted.

6. Cogeneration for Energy and Industry

The support area positively assessed by the EIB.

The program (scheme) agreed with the Ministry of Climate and Environment, the Consultative Board, adopted by the Management Board of the National Fund for Environmental Protection and Water Management and the Supervisory Board of the National Fund for Environmental Protection and Water Management.

First call for proposals for co-financing planned to be launched in June 2022 (planned continuous call for applications in the period 01/06/2022 - 16/12/2022).

Schedule for the call for proposals for other approved schemes:

- 1) Cogeneration for District Heating 3rd quarter of 2022;
- 2) Digitization of heating networks 4th quarter of 2022;
- Support for the use of storages and other devices for network stabilization a scheme for DSOs 1st quarter of 2023.