



**INFRASTRUCTURE
AND ENVIRONMENT**
NATIONAL COHESION STRATEGY

EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND



ACTION STRATEGY

of the National Fund for Environmental Pro-
tection and Water Management

for 2013-2016

with a view to 2020

A P P R O V E D B Y M a n a g e m e n t B o a r d
O N 2 6 S E P T E M B E R 2 0 1 2

Warsaw, September 2012

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1. Abstract of the NFEPWM Action Strategy

Considerations

Development of the *Action Strategy of the National Fund for Environmental Protection and Water Management for 2013-2016 with a view to 2020* (hereinafter referred to as the *NFEPWM Strategy*) follows directly from the provisions of the Act of 27 April 2001 – the Environmental Protection Law (hereafter EPL). Article 400k determined that the tasks of the Executive Board of the NFEPWM include development of a draft action strategy of the National Fund, and Article 400h stipulates that the tasks of the Supervisory Board of the National Fund include adoption of this strategy, once in four years, by 30 September of the year preceding the first year covered by the strategy. The duration of the current *action strategy of the National Fund for Environmental Protection and Water Management for 2009-2012* ends in 2012, therefore, the next strategy is developed for 2013-2016 and also covers the outlook for 2020.

The next financial perspective of the European Union (hereinafter referred to as the EU) begins in 2014, and shall determine the directions of actions co-financed by the EU. At the time of the approval, the *NFEPWM Strategy* lacks definitive solutions on how to finance environmental investments from EU funds in the 2014-2020 financial perspective. The institutions participating in the implementation of projects financed by the EU are not known. In addition, experience of the previous period shows that national legislation may not be ready by the beginning of 2014 and it should be taken into account that they will be formulated gradually throughout 2014. Taking into account the above considerations it is necessary to schedule the update of the *NFEPWM Strategy* at half of its duration (at the latest by the end of 2014).

The update will allow for the inclusion of changes resulting from operational programmes, the update of the *National Environmental Policy for 2009-2012 with a view to 2016* (hereinafter referred to as the *National Environmental Policy*), the provisions of the *Strategic Plan for Adaptation of sectors and areas vulnerable to climate change* and the *Framework of the National Programme for Development of Low-Carbon Economy*. In addition, the update will allow for use of a single method of determining the degree of implementation of the main environmental objectives.

Fig. 1. Location of the NFEPWM Strategy on the timeline in relation to EU programming periods

Years	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU Programming periods	2007-2013		2014-2020						2021-2027		
<i>necessary update:</i>	update										
current NFEPWM Strategy: 2013-2016 with a view to 2020:		STRATEGIC PLAN				Perspective					
next NFEPWM Strategy: 2017-2020 with a view to 2024:						STRATEGIC PLAN				Perspective	

Background

NFEPWM Strategy is to determine the role and tasks of the NFEPWM for the next four years and tasks scheduled for action by 2020. The action defined in the *NFEPWM Strategy*, along with financial support

provided by the NFEPWM, is to contribute to the improvement of the environment, with particular emphasis on projects co-financed from EU funds.

NFEPWM Strategy is the result of the analysis of the effects of implementing the *Action Strategy of the NFEPWM for 2009-2012* and takes into account directions of development set out in the programme documents, i.e. the *National Environmental Policy and Strategy for Energy Security and Environment. The 2020 perspective* (hereinafter referred to as *ESE*). It also includes arrangements for implementing environmental measures under the *Common Action Strategy of the National Fund and voivodeship funds for environmental protection and water management for 2013-2016 with a view to 2020* (hereinafter referred to as the *Common Strategy*). The main lines of action are based on the SWOT analysis, both on the institution itself and the state of the environment and the system of financing.

Summary of the *NFEPWM Strategy for 2009-2012*

Objectives of the *NFEPWM Strategy*, carried out in 2009-2012, contributed to:

- improvement of the environment and reducing emissions by providing co-financing from the national funds on pro-environmental projects and support for foreign funds, including the provision of national co-financing,
- implementation of financial management by multiannual priority programmes,
- preparation and contracting of tasks (signing contracts and promissory notes) within the priority programmes for which the amount paid by the end of 2011 amounts to almost PLN 3 billion,
- establishment of close cooperation with the voivodeship funds for environmental protection and water management and with banks in achieving the objectives of the *National Environmental Policy* through loans or providing own funds for renewable energy sources, co-financing of EU projects, removal of asbestos or regional programmes,
- application of new financial instruments, such as subsidies to interest rate on bank loans, subsidies to redemption price,
- cooperation with external partners and beneficiaries, in order to exchange experiences and knowledge and promote innovative solutions in the field of environmental technologies through the organization, *inter alia*, of the *Energy-Effect-Environment Forum* and the *Forum on best practices in waste management*,
- beginning of the process of organizing the National Fund's equity portfolio (development of Equity Strategy of the National Fund for Environmental Protection and Water Management for 2009-2012),
- more flexible forms of employment in the NFEPWM through the introduction of teleworking and a more incentive-based system of rewards and promotion based on annual employee evaluations.

The implementation of the objectives set out in the *NFEPWM Strategy* for 2009-2012 has been recognized by external institutions, this concerns in particular the activities of the NFEPWM and the use of "good practices". NFEPWM has received a prestigious award – Best Practice Certificate at the European Public Sector Award (Best Practice Certificate EPSA 2011) for a programme devoted to subsidies for the purchase and installation of solar panels. It should be noted that the proposal submitted by the NFEPWM competed with 274 proposals submitted from 34 countries and the European institutions and it was the only proposal of 21 Polish institutions that received this award. In 2012, the Ministry of Regional Development honoured the NFEPWM in the competition "Best Practices for Management of Strategic Development in Poland" for consistent attempts to integrate the tasks in the management of development policy.

SWOT analysis

The **SWOT** analysis of the **NFEPWM** shows that:

- STRENGTHS are:
 - the ability to create a variety of financial instruments that meet the needs of beneficiaries,
 - the high competence of the NFEPWM staff and years of experience in supporting projects financed both from foreign and domestic funds,
 - the active participation in solving environmental problems on legal, financial and organizational grounds,
 - the long-term planning of revenues and expenses, which ensures funds for beneficiaries for the full balance of projects,
 - the 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 Financial Mechanism,
 - openness to innovative solutions.
- WEAKNESSES are:
 - very different sizes of projects - large number of small and labour-intensive projects,
 - the distributed financial offer - too many priority programmes that generate problems in planning,
 - the underdeveloped system of quantification and registering of environmental effects,
 - the imperfect process of handling beneficiaries,
 - the limited use of the criterion of cost-effectiveness,
 - the imperfect methods of budgeting, resulting in incomplete implementation of the financial plan,
 - the need for improvement of communication with the beneficiaries of the system, including procedures for consultation and evaluation of the NFEPWM actions by the beneficiaries,
 - the fragmentary system of digital service for beneficiaries,
 - the process to ensure transparent, user-friendly and simple procedures for the beneficiary requires strengthening,
 - the poor knowledge of the full offer of the NFEPWM among potential beneficiaries,
 - the inefficient handling of internal processes,
 - the lack of an integrated IT system,
 - the need for improvement of internal communication and collaboration,
 - too little flexibility in resource management,
 - the need for improvement of the risk management system,
 - the limited competence regarding innovative financial instruments.

For the identified weaknesses, the *NFEPWM Strategy* indicates (in four perspectives: financial, beneficiaries, internal processes, innovation, challenges, development) specific actions written for specific tasks that will reduce the impact of weaknesses/eliminate weaknesses that inhibit development.

- OPPORTUNITIES are:
 - the need for funds for investments resulting from legislative requirements (implementation of EU directives, implementation of the Accession Treaty obligations and international agreements),

- the new EU financial perspective 2014-2020, the new operational programmes and innovative financial instruments (repayable),
- the demand for funds, which in connection with the implementation of legislation will be spent on improving the environment,
- the new directions of funding – e.g. eco-innovation, low carbon and resource-efficient management, prevention of climate change,
- the increasing environmental awareness, influencing investment activity in the field of the environment,
- the cooperation with other institutions, not involved directly in the protection of the environment, in order to create new initiatives for the protection and improvement of the environment, with simultaneous economies of scale in the form of actions for economic growth and positive impact on the labour market,
- building a high level of trust and satisfaction of the beneficiaries.

The most significant opportunity for the NFEPWM is the opportunity to participate in the implementation of operational programmes and innovative financial instruments in the new EU financial perspective for 2014-2020 and to prepare for the role of the Fund of the Funds¹, i.e. the financial intermediary, implementing innovative financial instruments with EU funds (repayable instruments such as loans or taking up and purchasing shares and bonds, and the use of guarantees). It will be also important, in addition to financing existing lines, to open up to new lines of business, including eco-innovation and low-carbon and resource efficient economy. It will be necessary to use modern, innovative solutions, cooperate with various institutions and strive for continuous improvement of cooperation with the beneficiaries.

• THREATS are:

- the applicable laws, creating barriers to investment, which constrain spending and result in an increase in cash in the NFEPWM account,
- the draft amendments to the law that are unfavourable for the NFEPWM, among others eliminating or limiting the independence of the NFEPWM, restricting financial inflows and the role of the NFEPWM in the implementation of policies in the new EU financial perspective,
- the economic recession, which will change the priorities of the Government,
- the impact of the crisis on reducing public revenues and investment capacity of local governments, budget units, as well as entrepreneurs,
- the financial implications of implementing environmental commitments to the European Commission and the penalties that may be applied in this area,
- the competition with the EU funds available under other programmes for environmental protection and water management.

¹ Within the meaning of Article 32 of the of the draft Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1083/2006.

To mitigate the negative effects of the identified and potential risks (i.e. factors affecting the activities of the NFEPWM, that cannot be shaped actively by the NFEPWM) there will be activities aimed at communicating and presenting the relevant public bodies with existing and potential barriers that prevent the effective implementation of the *NFEPWM Strategy* and the proposals of solutions.

SWOT analysis of the **environment** indicates that the strengths include valuable natural resources and the significant progress in reducing emissions into the environment. Improvements are required in surface water quality, air quality, waste management and integration of environmental considerations in spatial planning, and a big threat is the accelerating climate change and the resulting extraordinary threats.

SWOT analysis of the **financing system**, indicates the involvement of funds from sources other than the NFEPWM for the environment and the inclusion of external partners (e.g. banks) in pro-environmental projects as a positive aspect. The negative side of the financing system is the need to improve cooperation in the funding of supraregional tasks, the high indebtedness of local governments and the deteriorating situation of economic operators, which will cause a reduction in the willingness to invest in environmental projects. The crisis on the market of performers of environmental investments can significantly affect the pace and implementation level of the investment. A significant negative trait can be the lack of the uniform system for recording the environmental effects, enabling their proper reporting and accounting.

Directions of change

Given the changing reality and the environment, the *NFEPWM Strategy* took particular account of the need for changes in the current business model of the institution. In the future, the NFEPWM will strengthen the leadership role of the system of financing environmental protection and water management in Poland, through flexible adaptation to changes in the environment, particularly in the following areas:

- **the supported areas** - consolidation of supported objectives, their clear identification and **reduction of the number of priorities**. Changing the allocation of resources and directing the largest funding stream for activities related to the widely understood low-carbon and resource-efficient economy, climate protection and the prevention of its changes (including water management), eco-innovation developments in improving the competitiveness of businesses operating in Poland and reducing the use of natural resources, as well as creating green jobs;
- **the supported sectors** - funding will be directed primarily to **local self-government units, businesses and households**. With this directional change, the main determinant will be to maximize the environmental effect induced by funding from the NFEPWM;
- **the financial instruments and financial structure** - an important action is the creation of instruments, so that, for example, through the involvement of a third party (ESCO², public-private partnerships, including concessions), the local authorities will carry out their tasks and meet the needs of residents, without increasing debt. It is envisaged to **increase significantly the share of repayable financing in relation to the non-repayable financing from own funds in 2016 to the ratio of 65/35. The target, recommended share level in 2020 is 80/20 (conversion into a revolving fund)**. At the same time, it is assumed that the non-repayable aid will be granted, in principle, as a targeted support to attract external funding sources (e.g. **subsidies to interest rate on bank loans and issuance of municipal bonds or bond redemption**) or as part of the incentives for environmental investments (depreciation). The forecasted level of repayable financing may vary in case of adverse conditions in the public finance sector that limit the possibilities of its indebtedness;

² Energy Saving Company or Energy Service Company is an indication of companies offering expert services in the areas of energy by way of financing energy projects by the so-called third party (*TPF - Third Party Funding*).

- **the organizational structure and mode of action** - to increase organizational efficiency due to the development of cooperation with external partners. Apart from continuing the existing operations and direct co-financing to the beneficiaries, including the function of the Implementing Authority, also in the new EU financial perspective, the objective of the NFEPWM in the new perspective of the European Union will be also to operate as a Fund of Funds, i.e. the financial intermediary, implementing innovative financial instruments from EU funds (repayable instruments such as loans, taking up or purchasing shares, bonds and the use of guarantees). In terms of national resources, the NFEPWM, in consultation with the Minister of the Environment will set out and define the principles of support and direct this support to the beneficiaries through the institutions cooperating with the NFEPWM (mainly VFEPWM and banks);
- **the quantification of objectives - precise quantification of objectives both ecological and organizational.** Monitoring the achievement of anticipated levels of indicators, and in the event of a risk of failure to achieve them, quickly taking steps to eliminate it.

The changes indicated in the recommendations will be implemented following the review and the detailed analysis of both the priority programmes and the current macroeconomic situation (analysis of public debt, etc.). NFEPWM will apply analytical tools that will allow for a flexible response to the challenges associated with current needs and abilities of potential beneficiaries. The recommendations should be considered as challenging directions of changes that will be verified and updated to important national circumstances.

Vision, mission, general purpose

NFEPWM in the 2020 perspective will seek to achieve the following **vision**:

National Fund for Environmental Protection and Water Management
Leader of the system of financing environmental protection and water management in Poland intending to obtain EFFECTS

This means that the NFEPWM will seek to become:

E - ecological (respecting and promoting the principles of sustainable development),
FF- funding (effectively providing financial support to activities in the environment and water management)
E - elastic (adaptable to the needs of customers),
C - competent (filling the duties of a public body in a competent and reliable manner),
T - transparent (executing duties in an ethical, open and transparent manner).

Target for 2020 is **3 x 20** (with respect to the base value for 2016):

20% - faster support for beneficiaries from 90 days in 2016 to 72 days in 2020,

20% - lower own costs, as a percentage of aid paid from own funds and from EU funds from 1.6% in 2016 to 1.3% in 2020,

20% - higher average payout from about PLN 5 billion to about PLN 6 billion.

Achieving this goal will be possible by converting the existing institution into a dynamic, creative organization capable of flexible operation, which achieves results and supports actions for the environment in response to the identified needs of local governments, businesses and citizens.

It is assumed that during the implementation of the *NFEPWM Strategy*, the priority will be financing of projects which are innovative solutions for environmental protection and water management. The strategy will continue to support the widely understood low-carbon economy³ carried out by:

- development of low carbon energy sources,
- improving energy efficiency,
- improving the efficiency of materials management,
- development and use of low carbon technologies,
- preventing creation of waste and improving the efficiency of waste management,
- promoting new patterns of consumption

and preventing climate change.

There should also be new developments in the fields such as: noise reduction, reducing emissions and use of methane, comprehensive solving of environment-related problems in protected areas and in the cities, spa towns, green rings around cities.

The mission of the NFEPWM is:

We efficiently and effectively support environmental activities

It will be important in both the 2013-2016 perspective and in 2020 perspective, to maintain:

- ⇒ effective use of **renewable financing instruments** of environmental protection and water management; in 2009-2011 all environmental fees and fines received by the NFEPWM amounted to PLN 5.8 billion, while the payment of NFEPWM own resources to finance the environmental protection and water management amounted to PLN 6.8 billion. The difference in the amount of PLN 1.0 billion enabled additional funding for investments in the environment and water management,
- ⇒ **NFEPWM self-financing mechanism**, i.e. the ability to cover the cost of maintenance of bodies and agencies from the proceeds from interest on loans. These costs do not exceed 50% of the proceeds of this account, and other interest income further contribute to financing in the area of environmental protection and water management,
- ⇒ **low operating cost** of payments to the beneficiary; in the 2009-2011, payment of PLN 1 of own resources and resources supported by the NFEPWM cost less than PLN 0.02.

The assessment of the effectiveness of the institutional activities of the NFEPWM will continue (in relation to the *NFEPWM Strategy* 2009-2012) to measure the following indicators:

- ⇒ **own expenses**, as a percentage of aid paid from own funds and from EU funds - planned value to be achieved in 2016 is **1.6%** (plan for 2009-2012 - 1.8%),

³ According to the Guidelines adopted on 16 August 2011 by the Council of Ministers for the National Programme for the Development of Low Carbon Economy, the main objective was defined as: *Development of low-carbon economy while ensuring sustainable development of the country.*

- ⇒ **average processing time of proposals**, from submission to signing the contract - planned volume to be achieved in 2016 is **90 days** (plan for 2009-2012 - 150 days).

Reaching the above levels will be conditional on full implementation of IT tools, which is included in particular in measures 2B and 3A of the *NFEPWM Strategy*. Speeding up the process of handling the beneficiary will be carried out simultaneously with ensuring a high quality of operations.

The diagnosis of the current situation and effects of the *NFEPWM Strategy for 2009-2012*, and the obligations imposed on the NFEPWM by strategic documents, helped to define the **general objective of the NFEPWM Strategy**:

Improving the environment and the sustainable management of natural resources through sound, effective and efficient support for projects and initiatives for the environment

This general objective of the *NFEPWM Strategy* is a response to environmental obligations set out in the Accession Treaty and other legislation and is designed to meet the objectives set out in the *National Environmental Policy*.

Priorities

The general objective will be implemented under four environmental priorities, i.e.:

PRIORITY 1: protection and sustainable management of water resources – the measures related to water protection will include programmes covering in particular the construction and modernization of sewage systems (wastewater treatment plants, sewage networks) and investments in management of municipal sewage sludge. In addition, the programmes will continue to support the construction of individual sewage treatment systems in areas not covered by urban complexes designated for the national programme of urban waste water treatment. At the same time measures will be conducted in the field of water management, aimed mainly at the rationalization of resource management of surface and groundwater, in order to avoid water deficit and protect against flooding. It is also important to carry out investment in flood protection, using objects for energy purposes and to support non-technical measures to, *inter alia*, increase the natural retention, build early warning and flood forecasting and flood risk management systems, as well as conducting education campaigns.

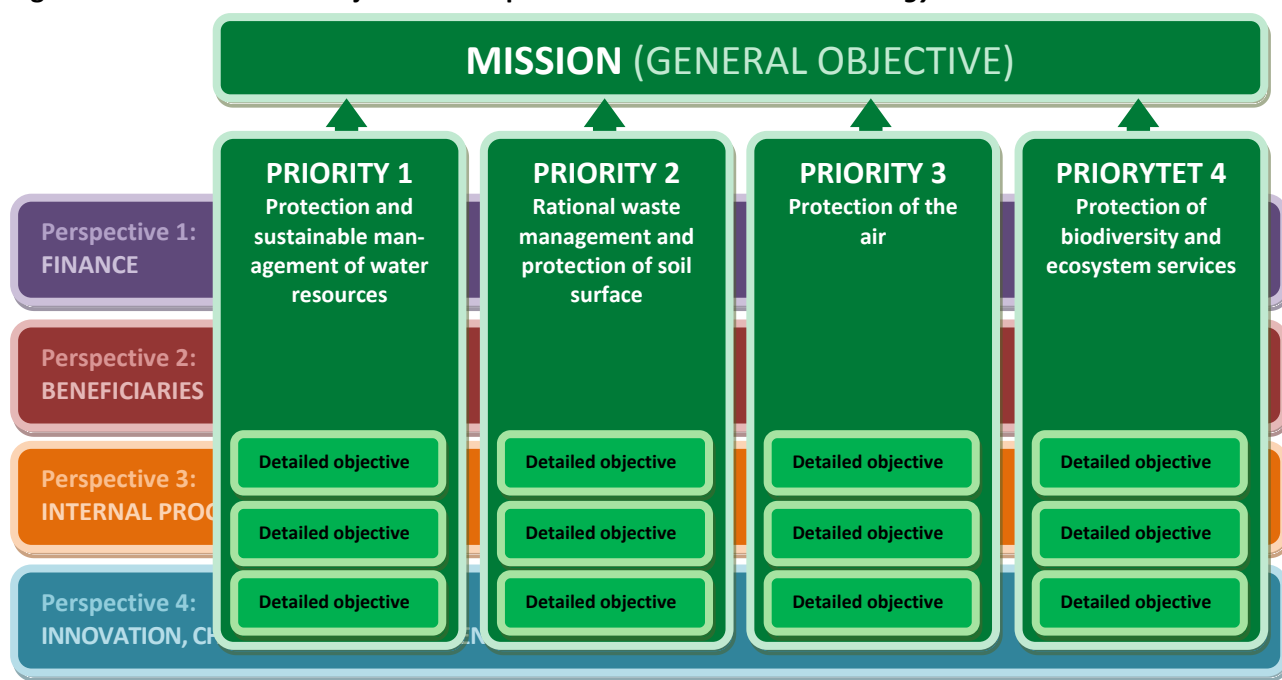
PRIORITY 2: rational management of waste and protection of the Earth - this priority will implement projects involving gradual transition from a system of storage of waste to a system supporting processing, recovery of raw materials and their energy use. The measures for the prevention of waste generation will play a significant role. It will be important to support and implement low-waste technologies of production. Furthermore, it will be important to strengthen the possibilities of the energy use of waste through thermal treatment of waste, particularly biodegradable waste, including sewage sludge. There will also be measures for the rehabilitation and/or revitalization of areas degraded by industrial, commercial and military activity and as a result of natural phenomena. At the same time measures will be implemented aimed at rational and effective management of minerals and other raw materials and materials derived from them. They require conducting reconnaissance and research and identifying strategic reserves. The measures will be aimed at development of technology and at increasing the availability of renewable energy technology in a variety of natural resources, as well as development of other low-carbon technologies (e.g. clean coal technologies). There will also be educational campaigns on the rational management of raw materials, materials and waste.

PRIORITY 3: protection of the atmosphere - this thematic area will support primarily tasks related to climate change, including the reduction of greenhouse gas emissions and improving air quality. Reducing

emissions of harmful substances into the atmosphere will be carried out through a comprehensive elimination of the existing, inefficient heating devices and through collective heating systems. In addition, the priority will include task of increasing energy efficiency and use of renewable energy sources. Improving energy efficiency must relate to the generation, transmission and use at end-users. It will be very important to develop cogeneration, including high-efficiency cogeneration, modernization and expansion of district heating, thermal modernization of public buildings and energy efficient construction. In order to strengthen the role of end-users in the management of energy consumption, it will be important to modernize the energy sector in the field of smart measuring and smart energy networks (SEN). In terms of the use of renewable energy sources, the measures will be aimed at increasing energy production from renewable energy resources.

PRIORITY 4: protection of biodiversity and ecosystem services - the primary objective of the priority is halting the decline in biodiversity and ensuring a favourable conservation status for the greatest possible number of species and habitats. This priority will include measures related to the comprehensive assessment of the state of the environment, valuation of ecosystem services, development of protection tasks and plans and programmes/strategies for the protection of the species most valuable from the point of view of the protection of wildlife. Due to the economic development and increased tourist traffic, it will be important to also reduce human impact on the most valuable protected areas and to eliminate direct pressure on natural areas by reducing low emissions. In addition, measures will be implemented to maintain and restore natural ecosystems of water retention (especially in mountainous areas) and to slow water runoff, mitigate the impact of climate change on the environment by absorbing CO₂, improve thermal balance and counteract disaster phenomena relating to habitats and species and resulting from climate change and human impact, and eliminate their effects.

Fig. 2. Structure of the objectives and priorities of the *NFEPWM Strategy*



The above four horizontal priorities will also implement measures related to **environmental education, expertise, innovation, low carbon and resource efficient economy, environmental monitoring and risk prevention, as well as support for environmental management systems, mainly the Eco-Management and Audit System (EMAS).**

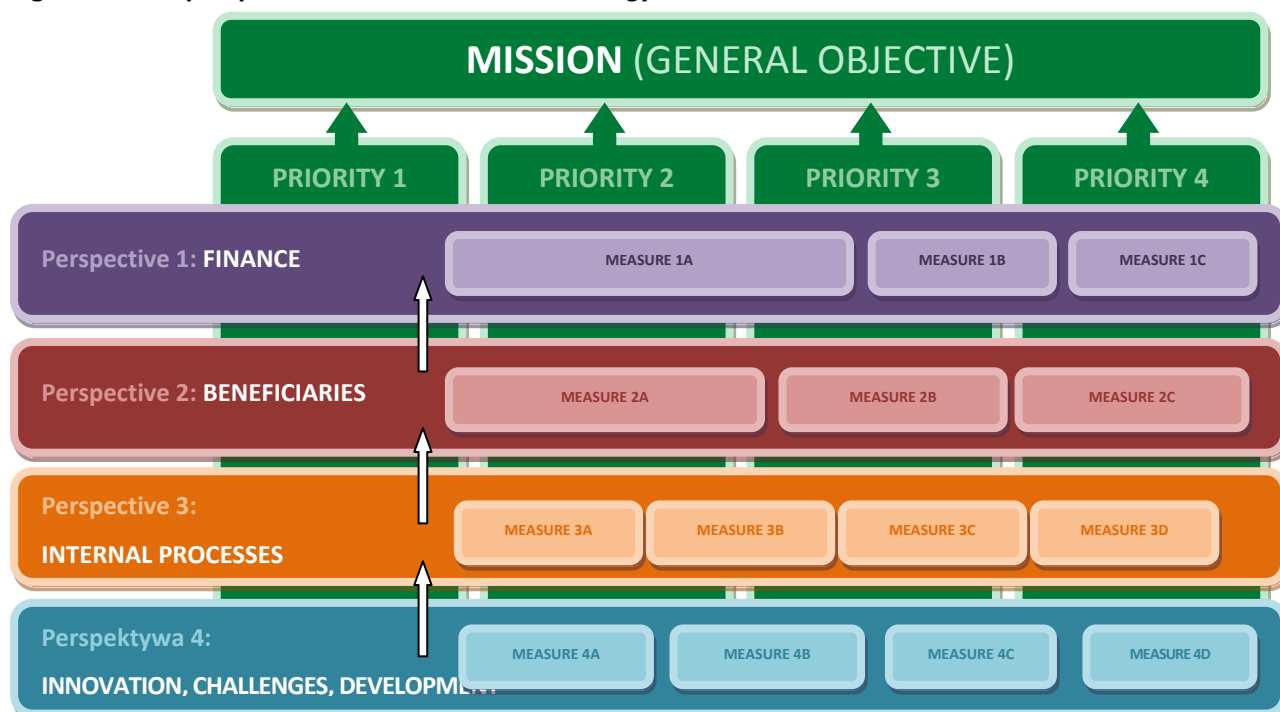
Perspectives

Implementation of the general objective and environmental priorities of the *NFEPWM Strategy* will occur as a result of measures grouped under four perspectives that are complementary to each other and interact with each other. To ensure systemic care for improvement of all aspects of the NFEPWM operations, the *NFEPWM Strategy* adopted four **perspectives** (i.e. four points of view), in which the NFEPWM system will be analyzed with the intention of continuously improving it. The four perspectives are:

- Finance,
- Beneficiaries,
- Internal processes,
- Innovation, challenges, development.

The most important for the future of the NFEPWM is perspective No. 4: **Innovation, challenges, development**, as this area will build new instruments, expertise and innovative solutions resulting in transformation of the NFEPWM in a more efficient, modern, creative and dynamic institution. According to the balanced score card method⁴, the effective implementation of the strategy consists in building a sequence of cause and effect: starting from the **perspective of development**, which builds the new expertise affecting improved **internal processes**, resulting in increased satisfaction of **beneficiaries** and followed by an improvement in **finance**. This approach is the starting point for the implementation of the NFEPWM balanced score card. The different perspectives will implement measures with the indicated tasks and tools to achieve them. Perspectives, measures and tasks of the *NFEPWM Strategy* have defined indicators of achieving each of them, allowing monitoring of implementation. Internal strategies and policies of institutions should be drawn from the *NFEPWM Strategy* and be consistent with the tasks specified therein.

Fig. 3. Four perspectives of the *NFEPWM Strategy*



Perspectives for achieving the objectives are:

PERSPECTIVE 1: FINANCE

⁴ Balanced Score Card is a tool for strategic management of the organisation, by Robert S. Kaplan and David P. Norton.

Maximizing the effectiveness and efficiency of use of available financial resources

Measure 1A: Orientation and flexible adjustment of NFEPWM programming, given the NFEPWM strategic objectives and the needs, conditions and abilities of recipients of co-financing.

Measure 1B: Streamlining processes of granting co-financing and settlement of payments with particular emphasis on security.

Measure 1C: The constant increase in efficiency and effectiveness of financing of environmental protection, taking into account the benefits arising from the use of external resources available.

The Finance perspective refers to the financing of measures in environmental protection and water management, and its goal is to maximize effectiveness and efficiency of use of available financial resources and full implementation of the financial plan. Implementing measures in the Finance perspective, the NFEPWM is guided not only by the profitability of tasks, but also by public and environmental interest, which contributes to achieving the objectives of public policies relating to the environment. It is also important to use flexible financing arrangements that are responsive to the real needs of consumers, financial capabilities and external conditions.

PERSPECTIVE 2: BENEFICIARIES

Continuous improvement of relations with the beneficiaries

Measure 2A: Improving relations with the beneficiaries.

Measure 2B: Development of digital servicing of beneficiaries.

Measure 2C: Development of information and promotion activities.

The Beneficiaries perspective concerns the improvement of cooperation with the beneficiaries and the socio-economic partners (in particular non-governmental organizations), attention to transparent rules, criteria and decision-making process, which will improve the image of the NFEPWM as a reliable public partner. Measures proposed by NFEPWM will be based on the following principles: consultation, collaboration, accountability, and ensuring high quality of service of the beneficiary. These activities will be carried out in accordance with the model of Good Governance, whose key values are *inter alia*: participation of citizens in public decisions and the transparency of public procedures. There will be projects related to the servicing of beneficiaries and applicants, support for the digitization of beneficiary servicing, education for beneficiaries, including in the preparation of proposals and their settlement.

PERSPECTIVE 3: INTERNAL PROCESSES

Increasing organizational efficiency

Measure 3A: Computerization of processes.

Measure 3B: Development of internal communication and collaboration (team building).

Measure 3C: Proper allocation of resources.

Measure 3D: Full implementation of management control, business continuity, risk analysis and anti-corruption system.

Internal processes perspective relates to improvements, standardization and flexible adaptation of internal procedures for optimized processes while meeting the condition of improved organizational effectiveness of the NFEPWM. This perspective is to ensure that the NFEPWM, as a public institution, carries out its task effectively, and that its activities are aimed at reducing administrative barriers and improving the process of disbursement of funds for environmental purposes. At the same time the NFEPWM must ensure that the measures will be carried out in a transparent manner, so as to eliminate or prevent the occurrence of corruption and that in the case of external disturbances, the NFEPWM has a solution that will ensure the maintenance of designated and acceptable level of implementation of measures.

PERSPECTIVE 4: INNOVATION, CHALLENGES, DEVELOPMENT

Active creation of the future

Measure 4A: Adaptation of the NFEPWM for the implementation of new policies and financial instruments of the EU and participation in the implementation.

Measure 4B: Promoting eco-innovation.

Measure 4C: Active creating of systemic solutions corresponding to the identified opportunities and threats.

Measure 4D: Human resource management - support for modern public institution and a friendly employer.

The innovation, challenges, development perspective concerns the implementation of initiatives aimed at creating new activities and lines of actions of the NFEPWM and responding to new challenges. This perspective will also implement measures aimed at continuous improvement of the institution and implementing an innovative approach to its future, as well as measures focused on innovative approaches to financing environmental protection and development of the organization.

The most important for the future of the NFEPWM is perspective No. 4: Innovation, challenges, development, as this area will build new instruments, expertise and innovative solutions resulting in transformation of the NFEPWM in a more efficient, modern, creative and dynamic institution.

Financial framework

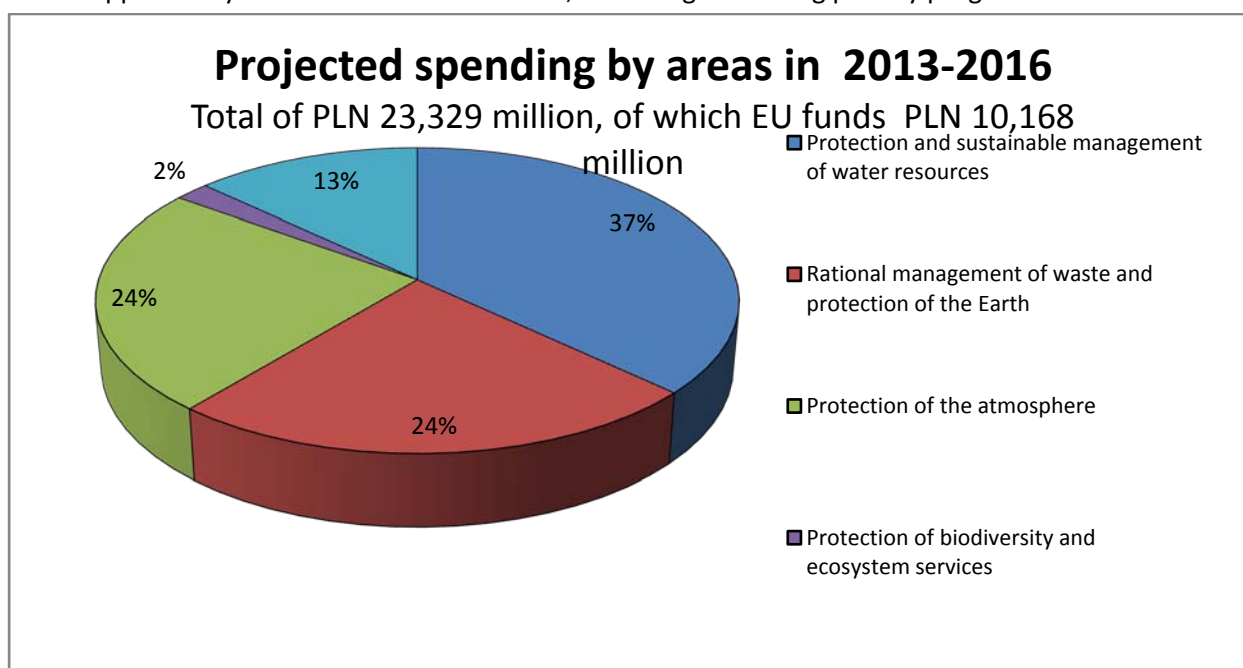
The implementation of the *NFEPWM Strategy for 2013-2016* will be allocated a total of over PLN 23 billion, of which about PLN 13 billion comes from own funds of the NFEPWM. EU funds spending plan is more than PLN 10 billion. These values only apply to measures carried out in the framework of the Operational Programme Infrastructure and the Environment (hereinafter referred to as OP I&E).

Projected changes

There are envisaged significant increases in the share of repayable financing in relation to non-repayable financing (in 2016 in a ration of 65/35). The target, recommended level of share in 2020 - 80/20 (conversion into a revolving fund). At the same time, it is assumed that the non-repayable aid will be granted, in principle, as a targeted support to attract external funding sources (e.g. **subsidies to interest rate on bank loans and issuance of municipal bonds or bond redemption**) or as **part of the incentives for environmental investments** (depreciation).

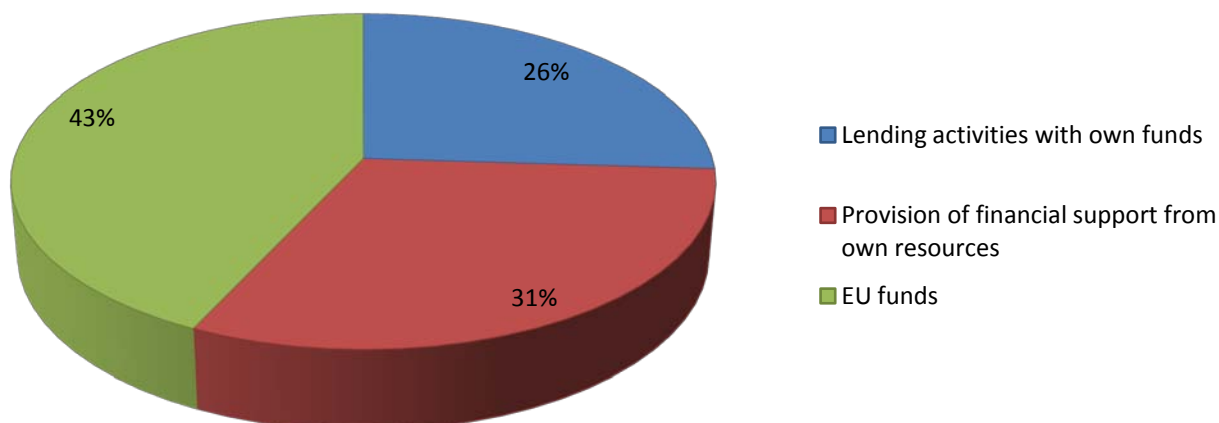
The forecasted level of repayable financing may vary in case of adverse conditions in the public finance sector that limit the possibilities of its indebtedness.

Fig. 4 The amount and structure of financing environmental domains from NFEPWM own funds and funds supported by the NFEPWM in 2013-2016, according to existing priority programmes



Projected spending by forms in 2013-2016

Total of PLN 23,329 million, of which EU funds PLN 10,168 million



Monitoring the implementation of the NFEPWM Strategy

Monitoring of the implementation of the *NFEPWM Strategy* will be held in three sections: a) environmental, based on the metrics defined for each environmental priority b) financial, based on specific financial frameworks defined in the budgets of priority programmes, c) institutional performance.

Monitoring the implementation of the perspectives will be carried out through weights and measures specified for individual measures.

Environmental effects expected to be achieved during the implementation of the NFEPWM Strategy 2013-2016

Tab. 1. Planned environmental effects from NFEPWM funds

Priority/indicator	unit	Projected performance in
		2013-2016*
PRIORITY 1: Protection and sustainable management of water resources		
Reduction of wastewater load, treated in accordance with the requirements of Directive 91/271/EEC	PE thousand	130
Population covered by anti-flood protection	thousand persons	212
PRIORITY 2: Rational management of waste and protection of the Earth		
Limiting the mass of land-filled waste (Mg/year)	thousand Mg/year	2,100
Surface recultivated/revitalised	ha	540
PRIORITY 3: Protection of the atmosphere		
Degree of reduction or avoidance of carbon dioxide emissions	thousand Mg/year	1,600
PRIORITY 4: Protection of biodiversity and ecosystem services		

Total area with reinstated or guaranteed appropriate protection of ecosystems	thousand ha	2,200
Number of species of the Red Book of endangered species, protected as a result of the NFEPWM measures	pcs	50

* values planned to be achieved, resulting from contracts signed or to be signed during the period

Tab. 2. Planned environmental effects from funds of the OP I&E axis I-IV and IX

OP I&E Priority Axis/indicator	unit	Projected value of indicator	Signed contracts*	Contracts to be signed
I Priority Axis of Operational Programme Infrastructure and the Environment				
Number of people connected to the sewer system built	person	750,258	684,423	65,835
Number of people connected to the water supply system built	person	61,524	60,504	1,020
II Priority Axis of Operational Programme Infrastructure and the Environment				
Processing capacity of the new supra-regional waste management plants	Mg/year	1,561,500	1,561,500	
Processing capacity of rebuilt/refurbished waste treatment plants	Mg/year	395,200	395,200	
Number of persons covered by the municipal waste management	person	5,432,213	5,432,213	
Share of waste disposed in relation to waste accepted to new WMP	%	28	28	
Change in the proportion of waste disposed in relation to those accepted to the modernized WMP	from % to %	65	65	
III Priority Axis of Operational Programme Infrastructure and the Environment				
Volume of retained water under low and high retention	mln m3	32	32	
Time of recognition of and response to the threat at the national level	hour	3	3	
Number of people covered by flood protection	person	670,529	670,529	52,000
IV Priority Axis of Operational Programme Infrastructure and the Environment				
Change in the amount of recovered waste generated by supported businesses	Mg/year	1,090,025	1,090,025	
Change in the amount of waste generated by supported businesses	Mg/year	315,279	315,279	
Change in water consumption in supported enterprises	m3/year	1,711,958	1,711,958	
Change in the amount of treated industrial wastewater	m3/year	1,000	1,000	
Change in the energy consumption in supported enterprises	MWh/year	39,645	39,645	
Change in the amount of waste generated by supported businesses	Mg/year	32,295	32,295	
Change in water consumption in supported enterprises	m3/year	1,514	1,514	

Reducing the amount of industrial wastewater requiring treatment	m3/year	200,750	200,750	
Change in the emission of major air pollutants:				
<i>sulphur dioxide</i>		197,166	97,166	100,000
<i>nitrogen oxides</i>	Mg/year	39,853	19,853	20,000
<i>dust</i>		10,025	5,025	5,000
<i>carbon dioxide</i>		19,825,094	9,825,094	10,000,000
IX Priority Axis of Operational Programme Infrastructure and the Environment				
Quantity of electricity generated in cogeneration	MWh/year	631,044	631,044	
Amount of heat produced in cogeneration	MWh/year	1,462,274	1,462,274	
Quantity of electricity generated in cogeneration from renewable sources	MWh/year	109,754	109,754	
Amount of heat generated in cogeneration from renewable sources	MWh/year	213,384	213,384	
Amount of energy savings from projects	MWh/year	610,674	610,674	
Avoided CO ₂ emissions from energy savings as a result of the projects	Mg/year	1,529,000	1,529,000	
Amount of energy savings from projects (MWh/year)	MWh/year	467,024	337,251	129,773
Avoided CO ₂ emissions from energy savings as a result of the projects	Mg/year	438,990	394,300	44,690
Amount of energy savings due to the implementation of thermal modernisation projects	MWh/year	277,887	272,426	5,461
Avoided CO ₂ emissions from energy savings as a result of the projects	Mg/year	646,282	643,860	2,422

An important element of the impact of the NFEPWM on environmental improvement is the ability to provide financing in various forms: loans, grants, subsidized loans, etc. An important line of action of the NFEPWM in the strategic perspective is the further development of co-operation with banks, including the Bank for Environmental Protection, whose main shareholder is the NFEPWM. This cooperation makes it possible to use a network of bank branches to distribute NFEPWM products, providing beneficiaries with direct, easy access to them. This solution also provides an opportunity to improve organizational efficiency of the NFEPWM through the inclusion of banks in the process of providing funding, thereby reducing the time and effort for servicing the beneficiaries in the NFEPWM. Moreover, the shares in the Polish National Energy Conservation Agency (KAPE) give the possibility of NFEPWM participation in the activities to support energy efficiency. Capital investments contribute to financing more projects that implement the *National Environmental Policy*.

NFEPWM has extensive experience in the financing and implementation of the tasks related to environmental protection and water management, it has a competent and dedicated staff and the ability to respond to changes in the environment. **Renewable financial resources, ability to independently carry out financial management (including self-financing) and the development of instruments and funding rules, as well as highly competent personnel and adequate resource allocations of the NFEPWM, guarantee the realization of the vision, mission and the objectives of this NFEPWM Strategy.**

2. Introduction

2.1. Background and determinants of adoption of the *NFEPWM Strategy*

NFEPWM Strategy is a document that determines the role and tasks of the NFEPWM for the next four years and tasks scheduled for action by 2020. The action defined in the *NFEPWM Strategy* with financial support provided by the NFEPWM is to contribute to the improvement of the environment, with particular emphasis on projects co-financed from EU funds.

The *NFEPWM Strategy* sets out the main areas of action in environmental protection and water management, the main objective and detailed objectives and the manner of monitoring the achievement of objectives. The *NFEPWM Strategy* is consistent with the provisions of the *Common Strategy*, adopted by the Supervisory Board of the NFEPWM on 26 June 2012. The *NFEPWM Strategy* also includes recommendations arising from the activities undertaken in the framework of the *Action Strategy of the National Fund for Environmental Protection and Water Management for 2009-2012*.

2.1.1. Legal basis

The National Fund for Environmental Protection and Water Management, which is a state legal person, operates on the basis of the Act of 27 April 2001 – the Environmental Protection Law (Dz.U. of 2008, No. 25, item 150, as amended) (hereinafter referred to as EPL), according to the statute adopted by the ordinance of the Minister of the Environment of 7 December 2010 on the Statute of the National Fund for Environmental Protection and Water Management (Dz.U. No. 240, item 1609).

Development of the *NFEPWM Strategy* stems directly from the provisions of the Environmental Protection Law. Article 400k determined that the tasks of the Executive Board of the NFEPWM include development of a draft action strategy of the National Fund, and Article 400h stipulates that the tasks of the Supervisory Board of the National Fund include adoption of this strategy, once in four years, by 30 September of the year preceding the first year covered by the strategy. The duration of the current action strategy of the National Fund for Environmental Protection and Water Management for 2009-2012 ends in 2012, therefore, the next strategy is developed for 2013-2016 and also covers the outlook for 2020.

2.1.2. General considerations

Recent years have been a period of sustained economic growth for Poland, and after the Polish accession to the EU there has been an increase in spending on basic infrastructure, e.g. on infrastructure of the environment and water management.

According to the report by the Chief Inspectorate of Environmental Protection, *the State of the environment in Poland, Signals 2011*, "the macroeconomic situation of Poland has improved steadily. In 2004, with the accession to the European Union, started a period of strong economic growth, covering all the main sectors. Increased economic activity continued in the following years, reaching a maximum in 2007, when GDP growth for the year was 6.8%. Positive economic trends observed in the last decade resulted in the improved quality of life. This level can be illustrated by the indicator used in the United Nations Development Programme (UNDP⁵) – the human development index, which takes into account

⁵ United Nations Development Programme

aspects such as income, health, education and poverty. A recent report by the UNDP, "Human Development Report 2010", ranks Poland on 41 place, closing the group of most highly developed countries".

In recent years, the environment in Europe was subject to continuous improvement, air and water pollution was reduced, as were greenhouse gas emissions, and the share of renewable energy in total energy consumption increased, the progress was also made in waste management⁶.

Against the background of Europe, it can be seen that also in Poland over the last twenty years there has been a significant progress in reducing human impact on the environment, resulting in part from the economic transformation of the nineties, the accession to the European Union and the implementation of sustainable development concept⁷. Despite many positive changes in the environmental protection, there are still environmental problems that become increasingly more difficult to solve (e.g. low emissions, waste management backwardness, flood protection or combating climate change). However, one should consider the fact that Poland has valuable natural resources compared to Europe, which on the one hand have a positive impact on public health, on the other hand can be a factor in stimulating economic development.

The general objective of the *NFEPWM Strategy* was established taking into account the challenges facing Poland in meeting environmental obligations under the Accession Treaty and the gradual transition of the economy to a low carbon economy, as well as the efficient use of resources.

On the basis of the analysis of the environment and taking account of its continuous improvement, the choice was made of the main environmental priorities, which will be implemented as part of the *NFEPWM Strategy*. It was assumed that the actions are intended to both help improve the environment, reduce human impact on the environment and use of available natural resources as a factor stimulating economic development.

In order to effectively implement the priorities one should identify specific actions to be undertaken along with the implementation schedule and financial needs, ensuring the achievement of results. For NFEPWM, this knowledge is the basis for the development of financial instruments tailored to the needs of recipients. In addition, it is necessary to analyze the current needs of customers, taking into account, among others, the changing regulatory environment and the economic situation and rapid response to changing demand and the search for new financial instruments that allow taking action, even in crisis situations.

2.2. Consistency of the *NFEPWM Strategy* with other strategic and programming documents

2.2.1. Consistency with the strategic documents

The guiding strategy for the *NFEPWM Strategy* is the *Common Strategy* and the *National Environmental Policy* and the *Strategy for Energy Security and Environment. The 2020 perspective* (hereinafter referred to as *ESE*), which indicates the NFEPWM as an institution involved in the implementation of measures. At the same time, the *NFEPWM Strategy* refers to the strategic documents and legal acts listed in the *Common Strategy*.

⁶ The European environment. State and outlook 2010, European Environment Agency

⁷ REPORT POLAND2011, Economy–Society–Regions, MRD Report, http://www.mrr.gov.pl/rozwoj_regionalny/Ewaluacja_i_analizy/Raporty_o_rozwoju/Raporty_krajowe/Documents/Polska_2011_Gospodarka_Spoleczenstwo_Regiony.pdf

2.2.2. Consistency with the programming documents

The *NFEPWM Strategy* is consistent with the objectives of the National Programme for the Development of Low-Carbon Economy (NPDLCE). According to the *Guidelines of the National Programme for the Development of Low-Carbon Economy* (adopted by the Council of Ministers on 16 August 2011), the main objective of the Programme is to **develop a low-carbon economy while ensuring sustainable development of the country**.

2.3. Summary of the current implementation of the Action Strategy of the NFEPWM for 2009-2012

The *Action Strategy of the National Fund for Environmental Protection and Water Management for 2009-2012* was approved by Resolution No. 127/08 of the Supervisory Board of the National Fund for Environmental Protection and Water Management of 23 September 2008.

The mission of the NFEPWM adopted for 2009-2012 is to provide financial support for projects aimed at protecting the environment and respecting its values, based on the constitutional principle of sustainable development. In order to accomplish the mission the NFEPWM set out strategic objectives for:

- financial support for projects designed to meet the obligations arising from the Accession Treaty and EU directives,
- co-financing of projects contributing to the implementation of the *National Environmental Policy*,
- adapting the organization to fulfil the functions entrusted by combining the management of own funds and the absorption of EU funds, with an emphasis on the coordination of activities with other, important actors supporting investments in environmental protection and water management,
- supporting the efforts of the Minister of the Environment in fulfilling the obligations of the Republic of Poland arising from the Convention on Climate Change, the Convention on Biological Diversity, the implementation of the LIFE+, the implementation of Natura 2000 and the *National Environmental Policy* on environmental education.

The objectives set out in the *NFEPWM Strategy for 2009-2012* were carried out through priority programmes, in accordance with the principles set out in the *Concept of NFEPWM Financial Management by priority programmes*⁸. The introduction of such a solution provides the justification of the objective and brings together planned environmental effects with the budget for this purpose. Priority programmes implement the objective consistent with the above *NFEPWM Strategy* and are a registering plane for their planning and implementation.

Objectives of the *NFEPWM Strategy* carried out in 2009-2012 contributed to:

- improvement of the environment and reducing emissions by providing co-financing from the national funds on pro-environmental projects and support for foreign funds, including the provision of national co-financing,
- implementation of financial management by multiannual priority programmes,

⁸ The concept of managing finance of the NFEPWM by priority programmes was adopted by the Board of the NFEPWM on 21 July 2010 (Resolution No. A/36/1/2010), and the update has been approved by the Board of the NFEPWM on 12 May 2011 (Resolution No. A / 21.02.2011)

- preparation and contracting of tasks (signing contracts and promissory notes) within the priority programmes for which the amount paid by the end of 2011 amounts to almost PLN 3 billion,
- establishment of close cooperation with the voivodeship funds for environmental protection and water management and with banks in achieving the objectives of the National Environmental Policy through loans or providing own funds for renewable energy sources, co-financing of EU projects, removal of asbestos or regional programmes
- application of new financial instruments, such as subsidies to interest rate on bank loans, subsidies to redemption price,
- cooperation with external partners and beneficiaries, in order to exchange experiences and knowledge and promote innovative solutions in the field of environmental technologies through the organization, inter alia, of the *Energy-Effect-Environment Forum* and the *Forum on best practices in waste management*,
- beginning of the process of organizing the National Fund's equity portfolio (development of Equity Strategy of the National Fund for Environmental Protection and Water Management for 2009-2012),
- more flexible forms of employment in the NFEPWM through the introduction of teleworking and a more incentive-based system of rewards and promotion based on annual employee evaluations.

2.3.1. Degree of achievement of the objectives of the *NFEPWM Strategy for 2009-2012*

Quantitative indicators and institutional were defined in order to monitor the implementation of the *NFEPWM Strategy for 2009-2012*. Quantitative indicators determine the environmental effects achieved during its term, and institutional indicators reflect the effectiveness of the operation of the NFEPWM.

2.3.1.1. Indicators of institutional effectiveness

The degree of implementation of the various indicators describing institutional effectiveness is presented in the table below.

Tab. 3. Degree of implementation of indicators of institutional effectiveness in 2009-2012

Description	Indicators	Units	Value planned in the <i>NFEPWM Strategy</i>	Projected actual value	% performed
A. Institutional effectiveness	(1) own costs as percentage of aid paid from own funds and from EU funds	%	1.8%	1.8%	100%
	(2) Average time of processing a proposal from submission to signing the contract	Calendar days	150	<150	100%
B. Financial leverage	(1) Amount of PLN from other sources per PLN 1 from NFEPWM funds	PLN	5	2.1	42%

Analyzing the level assumed in 2008 of achievement of indicators of institutional effectiveness it can be stated that the NFEPWM completed its objectives in this area. However, there are still possible changes that need to be taken in the *NFEPWM Strategy* for the next period.

- **Own costs⁹** – the indicator will be achieved at the same level as assumed in the *NFEPWM Strategy for 2009-2012*, i.e. at the end of 2012, the plan is to achieve the value of 1.8%. It should be noted that with the relatively stable own costs, the value of indicator is determined by the volume of payments in a given year.
- **Time of processing proposals** – the time of processing proposals is significantly shorter, in 2007 it was 230 days, in 2011 already 137 days calendar, and the forecast for 2012 assumes the threshold of less than 150 days. The achievement of such indicator was possible, *inter alia*, with internal analysis of the structure of the NFEPWM and the involvement of external experts in some of the processes, which was also inevitable given the growing number of proposals supported by the NFEPWM and permanent employment.

The indicator that has not been achieved at the level scheduled in 2008 is the **leverage ratio** defined as the *amount of PLN from other sources per PLN 1 from NFEPWM funds*. It was planned that in 2012, PLN 1 spent from the NFEPWM would mobilize additional PLN 5 from other sources. The forecast of 2008 assumed, on the basis of data on projects implemented at that time by companies under the *Sectoral Operational Programme Improvement of the Competitiveness of Enterprises*, that the low contribution of the NFEPWM will mobilize other resources for the implementation of these projects. This assumption proved to be wrong in the implementation of projects in the area of e.g. water and wastewater management and waste management. In addition, analysing the trends of the past few years, one can say that the leverage is becoming weaker, and the NFEPWM finances essential public activities that do not have such leverage as expected in 2008.

2.3.1.2. Quantitative indicators

Quantitative indicators are set out in the *NFEPWM Strategy for 2009-2012* only for some key areas funded by the NFEPWM. Their values and the expected level of implementation are presented in the table below.

Tab. 4. Degree of implementation of quantitative indicators in 2009-2012*

Description	Indicators	Units	Value planned in the <i>NFEPWM Strategy</i>	Projected ¹⁰ actual value	% per-formed
C. Waste water - sewerage	(1) Population	thousand persons	950	873	92%
	(2) Sewerage	thousand km	4.8	7.3	152%
D. Waste water - treatment plants	(1) Treatment plants	thousand m ³ /d	110	868	789%
E. Waste	(1) Installations	thousand t/year	550	2,413	439%
F. Conservation of energy (thermal modernization)	(1) Energy	GWh/year	480	479	100%
G. Renewable energy	(1) Production	GWh/yea	4,000	1,882	47%

⁹ Own cost - the indicator showing the share of costs of the NFEPWM bodies and the office in total payment made with own funds and EU funds.

¹⁰ Due to the fact that the *NFEPWM Strategy* is developed before end of 2012, Tables 1 and 2 show the predicted values for 2012, and the values obtained for 2009-2011

sources		r			
	(2) Installed capacity	MW	800	251	31%

* - effect contracted in contracts signed in 2009-2012

Analysis of the performance of quantitative indicators shows that certain indicators have been attained, and even in some areas significantly exceeded.

Exceedances of indicators assumed in 2008 in item C, D and E of Table 4 at the end of the *NFEPWM Strategy for 2009-2012* resulted from the fact that at the beginning of the implementation of the *NFEPWM Strategy*, the OP I&E implementation system was under construction and the actual implementation of projects co-financed from EU funds had not yet started. Conservative estimates on target values of indicators in 2012 were due to uncertainties, including on the final results of the first calls for proposals financed by the EU funds.

Failure to achieve assumed levels of indicators in item G in Table 4 was mainly due to the lack of readiness of applicants to start implementation, which was manifested in particular by the problems with obtaining formal documents - legal and concessions/promises of concessions, appropriate to the specific project and by the difficulties with balancing the investment by the applicant, related to the provision of at least 25% of the cost of the project. In addition, the lack of ability to achieve the assumed indicators was also influenced by external factors, i.e. instability of the law - no law on RES, Energy Law, lengthy procedure of arrangements and the associated unstable system of support, the concerns of beneficiaries and banks on changes in the law, and particularly the system of support, which caused and continues to cause retention of investments, long-term administrative procedure associated with obtaining documents of implementation readiness of investments, as specified in the contract, uncertainty of supply of raw material, collapse of the market for biomass (co-firing), delays of the beneficiaries in the implementation of investments (protested procurements, changes in the material scope, changes in the organizational structure of the beneficiary), EU grant funds competing with the loans from the NFEPWM leading to transfers of good projects for funding in the area of RES even after completing and co-financing of the investment.

The implementation of the objectives set out in the *NFEPWM Strategy for 2009-2012* has been recognized by external institutions. This concerns in particular the activities of the NFEPWM and the use of "good practices" NFEPWM has received a prestigious award – Best Practice Certificate at the European Public Sector Award (Best Practice Certificate EPSA 2011) for a programme devoted to subsidies for the purchase and installation of solar panels. It should be noted that the proposal submitted by the NFEPWM competed with 274 proposals submitted from 34 countries and the European institutions and it was the only proposal of 21 Polish institutions that received this award. In 2012, the Ministry of Regional Development honoured the NFEPWM in the competition "Best Practices for Management of Strategic Development in Poland" for consistent attempts to integrate the tasks in the management of development policy.

2.3.2. Recommendations arising from the implementation of the *NFEPWM Strategy for 2009-2012* for the next *NFEPWM Strategy for 2013-2016*

Given the changing reality and environment, the *NFEPWM Strategy* took particular account of the need for changes in the current business model of the NFEPWM. In the future, the NFEPWM will strengthen the leadership role of the system of financing environmental protection and water management in Poland, through flexible adaptation to changes in the environment, particularly in the following areas:

- **the supported areas** - consolidation of supported objectives, their clear identification and reduction of the number of priorities. Changing the allocation of resources and directing the largest funding stream for activities related to the widely understood low-carbon and resource-efficient economy, climate protection and the prevention of its changes (including water management), eco-innovation

developments in improving the competitiveness of businesses operating in Poland and reducing the use of natural resources, as well as creating green jobs;

- **the supported sectors** - funding will be directed primarily to local self-government units, businesses and households. With this directional change, the main determinant will be to maximize the environmental effect induced by funding from the NFEPWM;
- **the financial instruments and financial structure** - an important action is the creation of instruments, so that, for example, through the involvement of a third party (ESCO, public-private partnerships, including concessions), the local authorities will carry out their tasks and meet the needs of residents, without increasing debt. There are envisaged **significant increases in the share of repayable financing in relation to non-repayable financing from own sources in 2016 in a ratio of 65/35. The target, recommended level of share in 2020 - 80/20 (conversion into a revolving fund)**. At the same time, it is assumed that the non-repayable aid will be granted, in principle, as a targeted support to attract external funding sources (e.g. **subsidies to interest rate on bank loans and issuance of municipal bonds or bond redemption**) or as part of the incentives for environmental investments (depreciation). The forecasted level of repayable financing may vary in case of adverse conditions in the public finance sector that limit the possibilities of its indebtedness.
- **the organizational structure and mode of action** - to increase organizational efficiency due to the development of cooperation with external partners. Apart from continuing the existing operations and direct co-financing to the beneficiaries, including the function of the Implementing Authority, also in the new EU financial perspective, the objective of the NFEPWM in the new perspective of the European Union will be also to operate as a Fund of funds, i.e. the financial intermediary, implementing innovative financial instruments from EU funds (repayable instruments such as loans, taking up or purchasing shares, bonds and the use of guarantees). In terms of national resources, the NFEPWM, in consultation with the Minister of the Environment will set out and define the principles of support and direct this support to the beneficiaries through the institutions cooperating with the NFEPWM (mainly VFEPWM and banks);
- **the quantification of objectives - precise quantification of objectives both ecological and organizational.** Monitoring the achievement of anticipated levels of meters, and in the event of a risk of failure to achieve them, quickly taking steps to eliminate it.

The changes indicated in the recommendations will be implemented following the review and the detailed analysis of both the priority programmes and the current macroeconomic situation (analysis of public debt, etc.). NFEPWM will apply analytical tools that will allow for a flexible response to the challenges associated with current needs and abilities of potential beneficiaries. The recommendations should be considered as challenging directions of changes that will be verified and updated to important national circumstances.

The above tasks will require changes in the existing priority programmes for the period of the *NFEPWM Strategy*. These changes will take place after the review and detailed analysis of the programmes and their implementation is one of the most important tasks performed in the framework of the *Strategy* (Measure 1A, task 1). Given the above and the provisions of the *Common Strategy*, the *NFEPWM Strategy for 2013-2016 with a view to 2020* differs significantly from the *NFEPWM Strategy for 2009-2012*. It identifies precisely the planned directions of change, tools and responsibilities and the method of monitoring, in order to enable an evaluation of its implementation in terms of efficiency and effectiveness.

3. Synthesis of strategic diagnosis

3.1. The role of the NFEPWM in the financing of environmental protection and water management in Poland

The main tasks of the NFEPWM include effective and efficient support of the use of EU funds for the expansion and modernization of infrastructure of environmental protection in Poland. The implementation of environmental projects that benefit from financial support from the European Commission and co-financing of these projects by the NFEPWM will contribute to the achievement of Poland's environmental effects and the standards derived from international commitments.

The NFEPWM is a unit with the greatest financial potential¹¹ in the Polish system of financing environmental protection and water management. This is evidenced by the capital resources, personnel, and current achievements of NFEPWM and the developed forms of cooperation with the beneficiaries, which are an important tool for the implementation of the National Environmental Policy, in particular to support environmental investments resulting from the commitments of the Accession Treaty and other international agreements.

During the implementation of the current *NFEPWM Strategy*, i.e. in 2009-2011, the NFEPWM paid from its own funds nearly PLN 6.8 billion to finance environmental protection and water management, of which PLN 3.8 billion in the repayable form (lending) and PLN 3.0 billion in the non-repayable form (subsidy). Equity investments in the indicated period were of minor importance - they amounted to PLN 1.4 million. In connection with the performance of the role of institution involved in the implementation of projects co-financed from EU funds, the NFEPWM redistributed PLN 8.1 billion of these funds. On average over the year, the NFEPWM spent PLN 5.0 billion for environmental investments, of which PLN 3.7 billion (74%) in the form of subsidies, and PLN 1.3 billion (26%) in the form of loans. Analyzing the trends observed in spending, one can specify that during this period 73% of the expenditure (average of PLN 3.6 billion per year) was earmarked for co-financing of projects in the field of water protection and management of water resources, 8% was spent on the protection of the atmosphere (PLN 0.4 billion per year) and 7% (about PLN 0.4 billion per year) to pay for projects aimed at rational waste management and protection of the Earth's surface. Other areas had on average 12% of the total amounts paid, i.e. PLN 0.6 billion.

Tab. 5. Financing of environmental protection and water management in main areas of intervention (PLN million)

Item	Specification	Performance			Total 2009-2011
		2009	2010	2011	
1	NFEPWM - lending from own resources together	2,109.4	1,269.0	403.0	3,781.4
2	NFEPWM – subsidies from own resources together	766.1	998.1	1,248.5	3,012.7
3	NFEPWM - lending and subsidies from own resources together (1+2)	2,875.5	2,267.1	1,651.5	6,794.1
4	NFEPWM - European funds at the disposal of and supported by the NFEPWM (OP I&E, CF - without taking into account the special reserve)	2,603.0	3,262.9	2,225.7	8,091.6
5	NFEPWM - lending and subsidies from own resources together and European funds together (3+4)	5,478.5	5,530.0	3,877.2	14,885.7
6	NFEPWM - Equity activity	1.4	0.0	0.0	1.4

¹¹ Financial potential means the total state and structure of the net assets held by the NFEPWM and developed principles of financial management.

7	NFEPWM - lending and subsidies from own resources together and equity activities and European funds at the disposal of and supported by the NFEPWM together	5,479.9	5,530.0	3,877.2	14,887.1
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3.2. NFEPWM financial capability

The value of assets, including, in particular, the net assets, is one of the indicators of the financial health of the institution, including indicating the ability to cover current and future liabilities. In the period 2009-2011, there was an increase of the net assets of the NFEPWM from approximately PLN 8.3 billion to approximately PLN 10.7 billion, i.e. by PLN 2.4 billion. The dominant item in its structure are receivables from loans granted – PLN 5.5 billion (52%), and cash and government securities – PLN 4.3 billion (40%).

A considerable share of cash and government securities in the structure of the net assets of the NFEPWM is due to the accumulation of fees and fines registered on long-term liabilities (former "sub-funds"). The amount of PLN 3.4 billion was collected by NFEPWM on long-term liabilities at the end of 2011, and could eventually be used to finance the tasks specified in the EPL. Amendments to the Act of November 2009 provided an opportunity to grant co-financing from the long-term liabilities for purposes other than those provided for in the EPL. Co-financing is provided in the form of loans or grants with the consent of the Minister of the Environment. At the end of 2011, the NFEPWM handled 9 multi-annual commitments, of which the largest "RES and energy efficiency" comprised 67% of cash and government securities in total long-term liabilities, i.e. PLN 2.3 billion. The account of long-term liability "Waste Management" recorded about PLN 0.7 billion, which accounted for 22% of cash and government securities in all long-term commitments. Total other long-term liabilities amounted to PLN 0.4 billion, which accounted for approximately 11% of the cash and government securities in total long-term liabilities. Furthermore, the National Fund at the end of 2011 had PLN 0.4 billion proceeds from the sale of AAUs of greenhouse gases and other substances.

It should be noted, however, that the balance of cash at the end of 2011, is, among others, to secure liabilities under signed agreements for which payments are scheduled after 2011. The balance of contingent liabilities is PLN 3.0 billion.

Moreover, taking into account the experience of the previous financial perspective of the EU, when the implementation of projects started with a delay with respect to the eligibility period (in a new perspective it is 01 January 2014), the NFEPWM from its own resources will be able to actively support the beneficiaries by providing them with funds they need to make commitments with the contractors and to start projects (mainly investments) from the beginning of the eligibility period. It is assumed that this measure will actually accelerate the investment process and will positively affect the use of available EU funds. The projected balance of cash is around PLN 2 billion.

The following deserve attention in the developed principles of NFEPWM financial management:

- **effective use of renewable financing instruments** of environmental protection and water management; in 2009-2011 all environmental fees and fines received by the NFEPWM amounted to PLN 5.8 billion, while the payment of NFEPWM own resources to finance the environmental protection and water management amounted to PLN 6.8 billion. The difference in the amount of PLN 1.0 billion enabled additional funding for investments in the environment and water management,
- **NFEPWM self-financing mechanism**, i.e. the ability to cover the cost of maintenance of bodies and agencies from the proceeds from interest on loans. These costs do not exceed 50% of the proceeds of this account, and other interest income further contribute to financing in the area of environmental protection and water management,

- **low operating cost of payments** to the beneficiary; in 2009-2011, payment of PLN 1 of own resources and resources supported by the NFEPWM cost less than PLN 0.02.

3.3. NFEPWM organizational potential and expertise

3.3.1. SWOT Analysis of the NFEPWM

Strengths	Weaknesses
(All facts that have a positive impact on its operation, which NFEPWM can actively shape, i.e. that it can manage)	(All facts that have a negative impact on NFEPWM operation, which NFEPWM can actively shape, i.e. that it can manage)
<ul style="list-style-type: none"> • credibility and financial stability of the NFEPWM financial capacity, ensuring co-financing of substantial range of projects, • experience in the financing of projects in environmental protection and water management, including the use of various financial instruments, • long-term management of the NFEPWM finances by priority programmes, ensuring transparent, objectified, impartial process of awarding co-financing, • elaboration of assumptions for selected priority programmes and documents of the NFEPWM, as well as monitoring their implementation by: NFEPWM Club, the Forum "Energy-Effect-Environment" and the Forum on "Best practices in waste management", • close cooperation with local government units, environmental protection institutions, voivodeship funds for environmental protection and water management, banks and businesses and socio-economic partners (in particular non-governmental organizations), • ability to implement environmental policies and programmes, resulting from legally empowered independence of the NFEPWM, • knowledge of the environmental aspects of national development and regional development, the needs and problems of the beneficiaries, allowing flexibility and rapid response to current challenges, • competent and qualified staff, with work experience, enabling proper implementation of tasks, including in the implementation and management of EU operational programmes, preparation and implementation of various support programmes. 	<ul style="list-style-type: none"> • a very different size of projects - large number of small and labour-intensive projects, • distributed financial offer - too many priority programmes that generate problems in planning, • underdeveloped system of quantification and registering of environmental effects, • the imperfect process of handling beneficiaries, • the limited use of the criterion of cost-effectiveness, • the imperfect methods of budgeting, resulting in incomplete implementation of the financial plan, • the need for improvement of communication with the beneficiaries of the system, including procedures for consultation and evaluation of the NFEPWM actions by the beneficiaries, • fragmentary system of digital service for beneficiaries, • the process to ensure transparent, user-friendly and simple procedures for the beneficiary requires strengthening, • poor knowledge of the full offer of the NFEPWM among potential beneficiaries, • inefficient handling of internal processes, • lack of an integrated IT system, • internal communication and collaboration requires improvement, • too little flexibility in resource management, • the need for improvement of the risk management system, • limited competence regarding innovative financial instruments.

Opportunities	Threats
(all facts that have a positive impact on the NFEPWM operations, which NFEPWM cannot actively shape, so it can only respond to them)	(all facts that have a negative impact on the NFEPWM operations, which NFEPWM cannot actively shape, so it can only respond to them)
<ul style="list-style-type: none"> the need for funds for investments resulting from legislative requirements (implementation of EU directives, implementation of the Accession Treaty obligations and international agreements), the new EU financial perspective 2014-2020, the new operational programmes and innovative financial instruments (repayable) the demand for funds, which in connection with the implementation of legislation will be spent on improving the environment, the new directions of funding – e.g. eco-innovation, low carbon and resource-efficient management, prevention of climate change, the increasing environmental awareness, influencing investment activity in the field of the environment, the cooperation with other institutions, not involved directly in the protection of the environment, in order to create new initiatives for the protection and improvement of the environment, with simultaneous economies of scale in the form of actions for economic growth and positive impact on the labour market, building a high level of trust and satisfaction of the beneficiaries. 	<ul style="list-style-type: none"> the applicable laws, creating barriers to investment, which constrain spending and result in an increase in cash in the NFEPWM account, draft amendments to the law unfavourable for the NFEPWM, among others eliminating or limiting the independence of the NFEPWM, restricting financial inflows and the role of the NFEPWM in the implementation of policies in the new EU financial perspective, the economic recession, which will change the priorities of the Government, the impact of the crisis on reducing public revenues and investment capacity of local governments, budget units, as well as entrepreneurs, financial implications of implementing environmental commitments to the European Commission and the penalties that may be applied in this area, the competition with the EU funds available under other programmes for environmental protection and water management.

For the identified weaknesses, the *NFEPWM Strategy* indicates (in four perspectives: financial, beneficiaries, internal processes, innovation, challenges, development) specific actions written for specific tasks that will reduce the impact of weaknesses/eliminate weaknesses that inhibit development.

The most significant opportunity for the NFEPWM is the opportunity to participate in the implementation of operational programmes and innovative financial instruments in the new EU financial perspective for 2014-2020 and to prepare for the role of the Fund of the Funds, i.e. the financial intermediary, implementing innovative financial instruments with EU funds (repayable instruments such as loans or taking up and purchasing shares and bonds, and the use of guarantees). It will be also important, in addition to financing existing lines, to open up to new lines of business, including eco-innovation and low-carbon and resource efficient economy. It will be necessary to use modern, innovative solutions, cooperate with various institutions and strive for continuous improvement of cooperation with the beneficiaries.

To mitigate the negative effects of the identified and potential risks (i.e. factors affecting the activities of the NFEPWM, that cannot be shaped actively by the NFEPWM) there will be activities aimed at communicating and presenting the relevant public bodies with existing and potential barriers that prevent the effective implementation of the *NFEPWM Strategy* and the proposals of solutions.

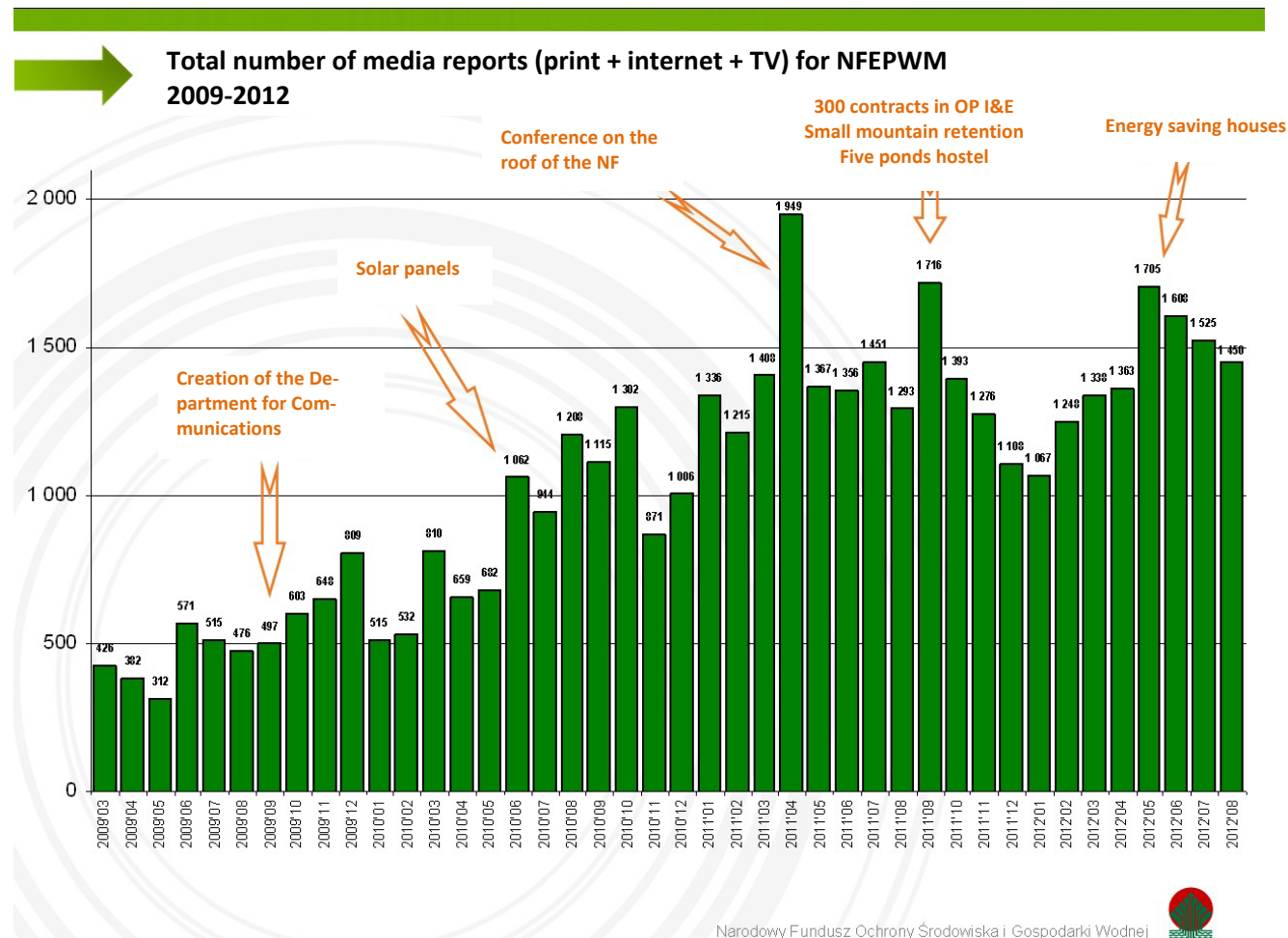
NFEPWM has extensive experience in the financing and implementation of the tasks related to environmental protection and water management, it has a competent and dedicated staff and the ability to respond to changes in the environment. **Renewable financial resources, ability to independently carry out financial management (including self-financing) and the development of instruments and funding rules, as well as highly competent personnel and adequate resource allocations of the NFEPWM, guarantee the realization of the vision, mission and the objectives of this *NFEPWM Strategy*.**

3.3.2. NFEPWM communication policy

NFEPWM communication policy is conducted on the basis of the *NFEPWM communication policy for promotional activities, information and image* adopted in September 2010. The document, after the adoption of the *NFEPWM Strategy* for 2013-2016 with a view to 2020, will be updated by the introduction of the measures and tasks under the *NFEPWM Strategy*.

The new quality of NFEPWM communication activities includes market research and wide social and expert consultation prior to the introduction of new financial instruments (e.g. conducted under: NFEPWM Club, the Energy-Effect-Environment Forum, the Forum on best practices in waste management). Regular opinion polls are also assessing the functioning of the institution. The implementation new programmes developed with this method is supported by information and promotion campaigns, implemented, among others in cooperation with local governments and the social and economic partners, especially NGOs. The integration of communication measures led to the following changes in the area of media relations:

- threefold increase in the number of media reports on the activities of the NFEPWM,
- significant reduction in criticism of the actions carried out by the NFEPWM,
- change in the target group from pro-environment sectoral media, to general media and media tailored to meet the needs of priority programmes,
- building a consistent image of the NFEPWM (in accordance with the strategic objectives) and providing information to wide audience in publications,
- constant promotion of OP I&E in the media.

Fig. 4. Total number of media reports on the NFEPWM in 2009-2012

3.4. Main conclusions of the forecast on development trends within the scope of the *NFEPWM Strategy*

Analysis of development trends in the duration of the *NFEPWM Strategy* for 2013-2016 with a view to 2020, indicates that:

- there is still a need to meet environmental obligations, in particular under the Accession Treaty and the relevant directives, resulting in a reduction of penalties that Poland will have to pay to the EU budget for failure to comply with the requirements of the Treaty and this is the condition for obtaining funds under the new EU financial perspective (ex-ante conditionalities), which is consistent with the Objective 3 of *ESE Strategy, Improving the environment*,
- by 2020 it will be necessary to make a transition to a low carbon and resource efficient economy, as set out in Objective 2 of the *ESE Strategy Providing domestic economy with secure and competitive energy supply*,
- one should strive for rational and efficient use of resources, according to Objective 1 of the *ESE Strategy Sustainable management of environmental resources*,
- the new EU financial perspective 2014-2020 allocates the most funds to help combat climate change through supporting energy efficiency and renewable energy and the implementation of innovative projects,

- the territorial approach to policy development and integrated actions for regional development will be dominant, including through the implementation of development tasks arising from the national development policy,
- one must move away from sectoral thinking (water, air, waste) and strive for activities aimed at implementing complex projects on functional areas (e.g. cities, basins, mountain areas),
- it will be necessary to apply a more horizontal approach to aspects of the climate change,
- a major role of the NFEPWM in the financing of environmental protection and water management will include taking account of environmental needs when creating public support programmes for entrepreneurs in order to maintain the competitiveness of businesses operating in Poland,
- NFEPWM experience in merging funds and selecting financial instruments (ESCO, PPP) should be used for the implementation of projects under the new EU financial perspective,
- financial planning of expenditures for environmental protection and water management should aim to introduce a wider range of innovative financial instruments,
- cooperation in using the European Emissions Trading Scheme (EU ETS) will be essential,
- it will be of major importance in the selection of projects to follow the principles of sustainable spatial development.

For NFEPWM, an important activity will be to create the conditions and opportunities for beneficiaries to take advantage of available, external sources of financing environmental protection and water management (mainly in the OP I&E and the Norwegian Financial Mechanism), as well as to prepare and achieve full operational capability for the adoption of the new tasks arising from EU financial perspective 2014-2020.

3.5. SWOT Analysis of the Environment

Strengths	Weaknesses
(All facts that have a positive impact on its operation, which NFEPWM can actively shape, i.e. that it can manage)	(All facts that have a negative impact on NFEPWM operation, which NFEPWM can actively shape, i.e. that it can manage)
<p>STATE OF THE ENVIRONMENT</p> <ul style="list-style-type: none"> • possession of valuable natural resources, high biodiversity, • significant mineral resources and other resources of raw materials. <p>FUNDING SYSTEM</p> <ul style="list-style-type: none"> • stable system of long-term financing of tasks, • raising funds for the environment from other sources (leverage effect) through collaboration with banks, commitment of commercial capital, • developed of financial management principles and procedures for financing environmental protection and water management, allowing for the payment of amounts higher than those derived from environmental fees and fines, • guiding by the public and environmental interest, not only profitability of projects (non-commercial approach) • diversity of rules and forms of funding meeting specific goals and needs of the beneficiaries of the region, or sector of the economy. 	<p>STATE OF THE ENVIRONMENT</p> <ul style="list-style-type: none"> • high CO₂ emissions, • inadequate quality of air, causing respiratory and circulatory ailments, • one of the lowest water resources per one inhabitant in Europe, • the overall ecological and chemical status of surface water bodies within the range of ranks "moderate - poor", • physical degradation of soil associated with erosion and allocating agricultural and forest land for other purposes, • chemical degradation of soils associated with acidification and salinisation, • high energy consumption and material consumption of the economy, • uneven distribution of electricity generating units, • exploitation of energy production, transmission and distribution facilities, • inadequate arrangements for the rational management of natural resources and protection of undeveloped reserves, • improper practices of urban waste management, e.g. burning them in home furnaces, putting on unregulated landfills, • illegal exploitation of minerals, • lack of identification and analysis of conflicts between places with residual natural resources and protected areas, • lack of methodology for assessing the value of individual components of the environment, • lack of hazard maps and flood risk maps, and full monitoring of risks and ensuring proper information in this regard, • insufficient area of forests and other green urban areas, • Insufficient consideration to environmental as-

	<p>pects in planning (such as protection landscape, flood risk maps),</p> <ul style="list-style-type: none"> • lack of a uniform system of registering environmental effects, enabling reporting and settlement. <p>FUNDING SYSTEM</p> <ul style="list-style-type: none"> • lack of consistency in the implementation of adopted plans (short-term changes in priorities, ad hoc tasks) • imperfect system of cooperation in the financing of supra-regional tasks, • lengthy process of project accounting, • lack of public assistance programmes in certain areas, • management control and risk analysis requiring full implementation.
Opportunities	Threats
(all facts that have a positive impact on the NFEPWM operations, which NFEPWM cannot actively shape, so it can only respond to them)	(all facts that have a negative impact on the NFEPWM operations, which NFEPWM cannot actively shape, so it can only respond to them)
<p>STATE OF THE ENVIRONMENT</p> <ul style="list-style-type: none"> • environmental issues are of high priority in EU policy,<0} • restoring good status of aquatic ecosystems, water quality improvement and great potential in the treatment of water,<0} • improvement of the spatial management system and avoiding collision of natural areas with anthropogenic areas,<0} • reducing the impact of natural disasters through effective water management, including the improvement of flood risk management,<0} • implementation of a new waste management system,<0} • the possibility of waste management for energy purposes,<0} • high potential for improving energy efficiency,<0} • introduction of smart energy networks,<0} • diversification of the "energy mix" through the development of nuclear energy and renewable energy sources,<0} • development of environmental and energy innovation (to support and promotion new Polish energy and en- 	<p>STATE OF THE ENVIRONMENT</p> <ul style="list-style-type: none"> • environmental consequences resulting from the increase in consumption, • climate change and extraordinary threat arising therefrom (including droughts and floods), • failure to implement a new system of waste management, • threat of disruption in the supply of raw materials, and thus the possibility of blocking the development of the country, • excessive impact of the energy sector on the environment, • inefficient system of spatial planning, • lack of proper water management, • lack of environmental awareness, • long investment cycle in power generation, • the effects of urbanization, especially devoid of planning control, • lack of well-established long-term experience in the rational waste management, • change in land use due to development of urban space, including peripheral housing estates and industrial and trade areas, often occupying most fer-

<p>vironmental technologies),<0}</p> <ul style="list-style-type: none"> • development of distributed generation in rural areas,<0} • increasing the country's forest area (increased ability to bind CO₂, improving retention), • Improving environmental awareness combined with the change in consumption patterns, • opportunity to create new jobs, mostly green jobs, • improving the quality of life. <p>FUNDING SYSTEM</p> <ul style="list-style-type: none"> • significant flow of EU funds from the new perspective for tasks in environmental protection and water management and the resulting opportunity for the NFEPWM to participate in the implementation of policies and national and regional strategies, • increased flow of structural funds for innovative financial instruments of EU in financial perspective for 2014-2020, • new areas of sustainable development: innovations and new technologies, • building a coherent system with voivodeship funds for environmental protection and water management in the framework of the <i>Common Strategy</i>. 	<p>tile soil in the surrounding towns,</p> <ul style="list-style-type: none"> • mining operations, carried out both in opencast mines and underground, • negative impact on the environment of new generation units. <p>FUNDING SYSTEM</p> <ul style="list-style-type: none"> • lack of a complete update and a large diversity of environmental needs, both nationally and in the regions, • the impact of the crisis on reducing public revenues and investment capacity of local governments, budget units, as well as entrepreneurs, • high indebtedness of local government units, reducing the propensity to invest, both from the domestic funds as well as from co-financing from the EU, • the impact of the downturn on the lower propensity of beneficiaries and entrepreneurs to take investment risk, reducing the capacity of financial commitment by local governments in connection with the debt and the difficulties with contractors, • changes in laws impeding financial decision-making of the beneficiaries and financial institutions.
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4. Strategic Plan - introduction

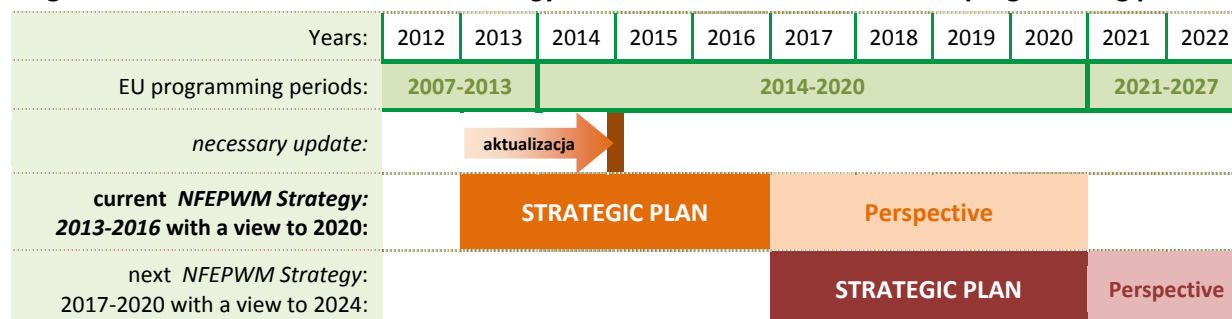
NFEPWM Strategy stems from the *Common Strategy* and sectoral strategies that determine the directions of development in the field of environmental protection and water management. *NFEPWM Strategy* is a tool to achieve the objectives set out in the strategies of higher level and is designed to link objectives relevant to environmental protection and water management with appropriate funding sources, which are at the disposal of the NFEPWM and with the beneficiaries obtaining financial support with a view to own objectives of the institutions.

4.1. Time frame of the *NFEPWM Strategy*

NFEPWM Strategy is adopted for four years. This strategy covers the period 2013-2016 with a view to 2020.

From 2014 starts another EU financial perspective, which determines the directions of actions co-financed by the EU. At the time of the approval, the *NFEPWM Strategy* lacks definitive solutions on how to finance environmental investments from EU funds in the 2014-2020 financial perspective. The institutions participating in the implementation of projects financed by the EU are not known. In addition, experience of the previous period shows that national legislation may not be ready by the beginning of 2014 and it should be taken into account that they will be formulated gradually throughout 2014. Taking into account the above considerations it is necessary to schedule the update of the *NFEPWM Strategy* at half of its duration (at the latest by the end of 2014).

Fig. 5. Location of the *NFEPWM Strategy* on the timeline in relation to EU programming periods



The update will allow for the inclusion of changes resulting from operational programmes, the update of the *National Environmental Policy*, the provisions of the *Strategic Plan for Adaptation of sectors and areas vulnerable to climate change* and the *Framework of the National Programme for Development of Low-Carbon Economy*. In addition, the update will allow for use of a single method of determining the degree of implementation of the main environmental objectives.

4.2. Structure of the *NFEPWM Strategy*

4.2.1. Structure of the objectives and priorities of the *NFEPWM Strategy*

The *NFEPWM Strategy* presents a structure of objectives and priorities that the NFEPWM intends to pursue during the period of the *NFEPWM Strategy*. The vision of the NFEPWM by 2020, the mission for the implemen-

tation of which the NFEPWM was established and the general objective will be achieved through the implementation of the four priorities within which specific objectives have been identified. The four environmental priorities set out in the substantive area of NFEPWM operations refer to their respective strategic documents and may be modified as a result of the implementation and updating of relevant strategies, policies and environmental programmes at the national level. The priorities were assigned indicators that will be monitored on an annual basis, and the levels of achieved indicators will indicate the appropriate course of action for the next term of the *NFEPWM Strategy*.

In addition, the *NFEPWM Strategy* indicates horizontal measures implemented comprehensively in each of the priorities.

Fig. 6. Structure of the objectives and priorities of the *NFEPWM Strategy*



Acting on the basis of the concept of managing NFEPWM finances by priority programmes (PPs), in relation to the priorities, the indicators and their target levels of achievement will be determined on the basis of the current PPs, whose implementation period coincides with the *NFEPWM Strategy* (2013-2016). In addition to the indicators within each priority, the *NFEPWM Strategy* will provide an estimate of the financial dimension also based on budgets of priority programmes.

Given the fact that the NFEPWM and voivodeship funds for environmental protection and water management are to act as a coherent system of financing environmental protection and water management, one should make clear the division of responsibilities and roles between the NFEPWM and the voivodeship funds. It means striving for uniform standards, including in grant funding, and conducting complementary actions to satisfy the most important environmental needs. This is why the NFEPWM will also carry out projects of key importance for the whole country, e.g. in the field of water management and waste management, and the voivodeship funds, due to their regional character, are to deliver projects having the impact within a region. This approach will facilitate the management of projects and enable the functioning of the environmental protection, enabling the implementation of complementary activities under each priority area. At the same time taking into account the financial capacity of individual voivodeship funds, the NFEPWM has the ability to support projects of great importance for the environment and of significant economic potential, whose implementation at the level of voivodeship funds may not be realistic due to the lack of financial resources.

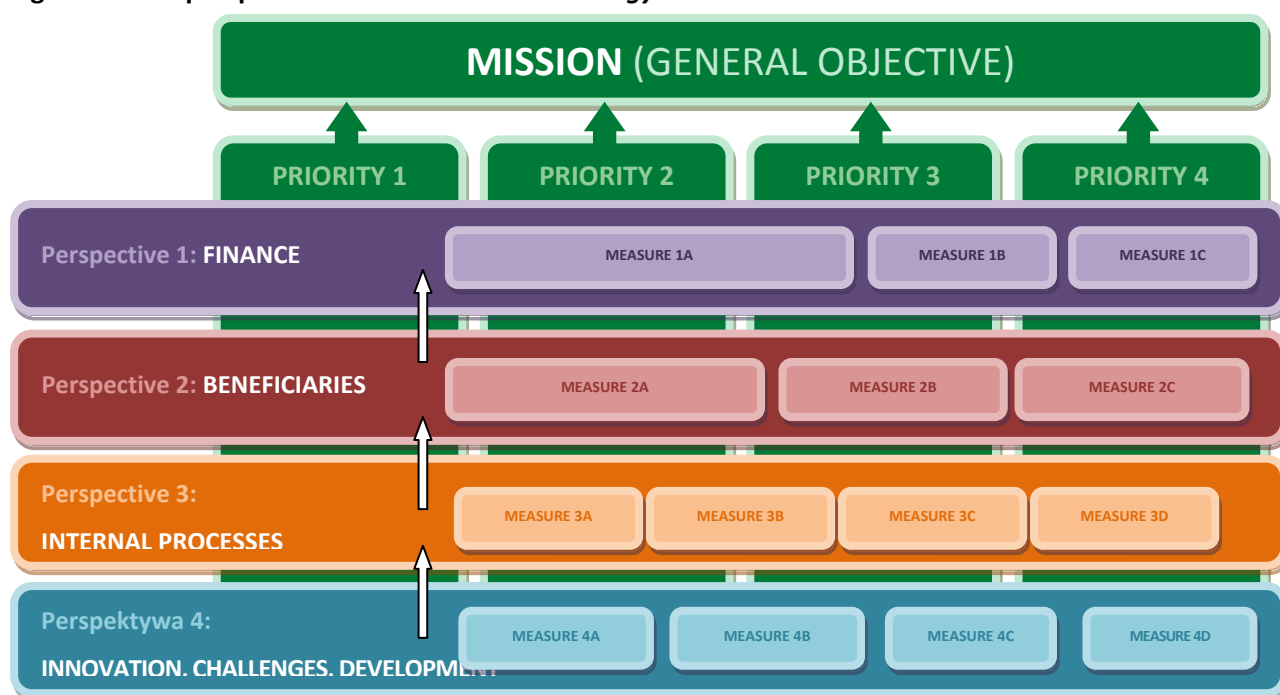
4.2.2. Four perspectives - attention to the overall improvement of the system

To ensure systemic care for improvement of all aspects of the NFEPWM operations, the *NFEPWM Strategy* adopted four perspectives (i.e. four points of view), in which the NFEPWM system will be analyzed with the intention of continuously improving it. The four perspectives are:

- Finance,
- Beneficiaries,
- Internal processes,
- Innovation, challenges, growth.

This approach is the starting point for the implementation of the NFEPWM balanced score card. The different perspectives will implement measures with the indicated tasks and tools to achieve them. Perspectives, measures and tasks of the *NFEPWM Strategy* have defined indicators of achieving each of them, allowing monitoring of implementation. Internal strategies and policies of institutions should be drawn from the *NFEPWM Strategy* and be consistent with the tasks specified therein.

Fig. 7. Four perspectives of the *NFEPWM Strategy*



The most important for the future of the NFEPWM is perspective No. 4: **Innovation, challenges, development**, as this area will build new instruments, expertise and innovative solutions resulting in transformation of the NFEPWM in a more efficient, modern, creative and dynamic institution. According to the balanced score card method, the effective implementation of the strategy consists in building a sequence of cause and effect: starting from the **perspective of development**, which builds the new expertise affecting improved **internal processes**, resulting in increased satisfaction of **beneficiaries** and followed by an improvement in **finance**.

Building and implementation of the *NFEPWM Strategy* is a continuous action. Therefore, the current document is not limited to the tasks identified and listed today. Monitoring of the degree of implementation on the one hand will allow for keeping track of progress in the implementation, on the other hand will require making periodic assessments of the feasibility of the targets, taking corrective action in a situation when there are risks not projected at the stage of development, or other events. Thus, it is assumed the *NFEPWM Strategy* be updated by the end of 2014.

Progress in implementation of the *NFEPWM Strategy* will be monitored at the level of individual tasks, and then annually aggregated at the level of each of the four perspectives. It is assumed that after two years of implementation and at the end of the four-year period there will be an assessment of the degree of implementation of the general objective. The indicator of the degree of approximation to the achievement of the general objective will be the accumulated level of implementation of the tasks set for the four-year period in all measures in different perspectives.

Full implementation of the strategy will be fostered by the implementation of specific, partial strategies, such as:

- Strategy for environmental education,
- Strategy for communication,
- Strategy for digitalisation of the NFEPWM,
- Strategy for human resources management.

These strategies will serve the implementation of specific measures within individual perspectives. Clarification of their place in the structure of the implementation of this *Strategy* is provided in chapter 8.

4.3. Vision, mission, general objective of the *NFEPWM Strategy*

NFEPWM in the 2020 perspective will seek to achieve the following **vision**:

National Fund for Environmental Protection and Water Management
Leader of the system of financing environmental protection and water management in Poland intending to obtain EFFECTS

This means that the NFEPWM will seek to become:

E - ecological (respecting and promoting the principles of sustainable development),
FF - funding (effectively providing financial support to activities in the environment and water management)
E - elastic (adaptable to the needs of customers),
C - competent (filling the duties of a public body in a competent and reliable manner),
T - transparent (executing duties in an ethical, open and transparent manner).

Target for 2020 is **3 x 20** (with respect to the base value for 2016):

- ✓ **20%** - faster support for beneficiaries from 90 days in 2016 to 72 days in 2020,
- ✓ **20% - lower own costs**, as a percentage of aid paid from own funds and from EU funds from 1.6% in 2016 to 1.3% in 2020,
- ✓ **20% - higher average payout** from about PLN 5 billion to about PLN 6 billion.

Achieving this goal will be possible by converting the existing institution into a dynamic, creative organization capable of flexible operation, which achieves results and supports actions for the environment in response to the identified needs of local governments, businesses and citizens. It is assumed that during the implementation of the *NFEPWM Strategy*, the priority will be financing of projects which are innovative solutions for environmental protection and water management. The strategy will continue to support the widely understood low-carbon economy carried out by:

- development of low carbon energy sources,
- improving energy efficiency,
- improving the efficiency of materials management,
- development and use of low carbon technologies,
- preventing creation of waste and improving the efficiency of waste management,
- promoting new patterns of consumption

and preventing climate change.

There should also be new developments in the fields such as: noise reduction, reducing emissions and use of methane, comprehensive solving of environment-related problems in protected areas and in the cities, spa towns, green rings around cities.

The mission of the NFEPWM is:

We efficiently and effectively support environmental activities

It

will be important in both the 2013-2016 perspective and in 2020 perspective, to maintain:

- ⇒ effective use of **renewable financing instruments** of environmental protection and water management; in 2009-2011 all environmental fees and fines received by the NFEPWM amounted to PLN 5.8 billion, while the payment of NFEPWM own resources to finance the environmental protection and water management amounted to PLN 6.8 billion. The difference in the amount of PLN 1.0 billion enabled additional funding for investments in the environment and water management,
- ⇒ **NFEPWM self-financing mechanism**, i.e. the ability to cover the cost of maintenance of bodies and agencies from the proceeds from interest on loans. These costs do not exceed 50% of the proceeds of this account, and other interest income further contribute to financing in the area of environmental protection and water management,
- ⇒ **low operating cost** of payments to the beneficiary; in the 2009-2011, payment of PLN 1 of own resources and resources supported by the NFEPWM cost less than PLN 0.02.

The assessment of the effectiveness of the institutional activities of the NFEPWM will continue (in relation to the *NFEPWM Strategy* 2009-2012) to measure the following indicators:

- ⇒ **own expenses**, as a percentage of aid paid from own funds and from EU funds - planned value to be achieved in 2016 is 1.6% (plan for 2009-2012 - 1.8%),
- ⇒ **average service time of proposal**, from submission to signing the contract - planned volume to be achieved in 2016 is **90 days** (plan for 2009-2012 - 150 days).

Reaching the above levels will be conditional on full implementation of IT tools, which is included in particular in measures 2B and 3A of the *NFEPWM Strategy*. Speeding up the process of handling the beneficiary will be carried out simultaneously with ensuring a high quality of operations.

The diagnosis of the current situation and effects of the *NFEPWM Strategy* for 2009-2012, and the obligations imposed on the NFEPWM by strategic documents, helped to define the **general objective of the NFEPWM Strategy**:

Improving the environment and the sustainable management of natural resources through sound, effective and efficient support for projects and initiatives for the environment

This general objective of the *NFEPWM Strategy* is a response to environmental obligations set out in the Accession Treaty and other legislation and is designed to meet the objectives set out in the National Environmental Policy.

Moreover, such description of the general objective is to support two types of activities: projects (i.e. those activities that are the subject of the co-financing application) and initiatives (i.e. other activities, such as spreading awareness, development of law, promotion of pro-environmental attitudes, etc.). Support must be both stable (it cannot undermine in the long-term the potential to support further activities), efficient (environmental effects must be actually achieved) and efficient as possible (in any case, maintaining the condition of duration and effectiveness must be as least expensive as possible, to give the widest possible environmental effect from spent PLN). Under the general objective, the concept of "serving environment" was also clarified, both in terms of improving the environment and sustainable resource management.

Implementation of this objective can be determined by the need to provide co-financing from the NFEPWM for the implementation of high-risk ventures¹², if it is justified by the planned environmental effect of these projects.

Such a formulation of the general purpose serves as a "model" for planning at the medium-term level, creating priority programmes. Each such programme before the announcement should be subject to the ex-ante assessment: whether the activities supported within its framework improve the state of the environment or contribute to a sustainable management of its resources¹³? Do the planned forms of support provide stability, effectiveness and efficiency as high as possible?

The *NFEPWM Strategy* assumes that the implementation of the mission will be carried out in four main priorities, defining the substantive framework of action. Each of these areas will carry out four strategic perspectives and their specific activities.

¹² High-risk projects are projects for which an assessment of the potential adverse risks gives basis for the recognition of certain effects of the projects as uncertain. This uncertainty may be due to operational risks, environmental risks, and other (including those related to the financial soundness of the entity applying for co-financing, the financial feasibility of the project and the possibility of securing the return of co-financing).

¹³ This provision refers explicitly to the development objectives of the Strategy Energy Security and the Environment: "*Improving the environment*" and "*Sustainable management of environmental resources*".

5. Priorities of *NFEPWM Strategy*

Environmental priorities, areas of substantive activities by the NFEPWM in 2013-2016 perspective are:

- **protection and sustainable management of water resources,**
- **rational waste management and protection of Earth's surface,**
- **protection of atmosphere,**
- **[protection of biodiversity and ecosystem services.**

It is assumed that horizontal activities realizing the objectives of the *NFEPWM Strategy* will be the activities related to environmental education, expertise, innovation, low carbon and resource efficient economy, and environmental monitoring and risk prevention, and support for environmental management systems, mainly the EMAS system.

This determination of the main priorities stems from *ESE* and the *Common Strategy*. In addition, the final shape of the priorities is dependent on the arrangement within the *ESE* and the *National Environmental Policy* and the National Programme for the Development of Low Carbon Economy and the *Strategic Plan for Adaptation of sectors and areas vulnerable to climate change*.

Therefore, in order to maintain consistency of the *NFEPWM Strategy* with supreme strategic documents, one must continuously monitor changes in these documents and update the *NFEPWM Strategy*.

In view of the fact that nowadays many strategic documents (national and regional) essential for defining the objectives in the *NFEPWM Strategy* are in the programming phase, it is assumed that their gradual implementation can modify and influence the change in the emphasis among the objectives of each priority. Particularly relevant activities of the NFEPWM implemented in each of the priorities of the *NFEPWM Strategy* will be:

- support for the implementation of environmental obligations, in particular under the Accession Treaty,
- striving for the most efficient use of non-recoverable EU funds for the environmental protection and water management,
- stimulating "green" (environmental-friendly) economic growth in Poland, including by promoting energy efficiency, eco-innovation, low carbon and resource efficient economy and creating the right conditions for green jobs,
- promoting environmentally friendly behaviour,
- supporting activities aimed at preserving the richness of biodiversity.

It is assumed that the monitoring of the implementation of specific priorities will include:

- the size of the obtained and contracted tangible effect (tangible dimension) and the environmental effect (environmental dimension),
- the value of expenses (financial dimension).

Taking into account the external conditions affecting the size of the financial investment, such as:

- random events that can occur (natural disasters, economic crises), the circumstances arising from the risks of implemented investment projects co-financed by non-reimbursable EU funds in the context of the statutory imperative of financial management, ensuring the use of these funds,
- no final decisions concerning the shape and rules of implementing and redistributing funds of the new EU financial perspective,
- the impact of legislation on the financial capacity of the NFEPWM, in particular in the field of income and expenditures,

one should expect the occurrence of deviations in relation to the estimates here. Their review and update will be each time the subject of the update to the *NFEPWM Strategy*.

At the same time, taking into account in particular the need to provide funding to support beneficiaries in the new EU perspective (2014-2020) for the primary obligation to ensure the full use of the non-reimbursable EU funds, it may be necessary to maintain funds reaching PLN 2 billion on the accounts of the NFEPWM.

In addition, given that one of the tasks set out in the Joint Strategy is to create a uniform system for registration of key environmental effects, the sizes of environmental effects have not been scheduled quantified. However, each of the areas identified important indicators for the areas which will be monitored within the *NFEPWM Strategy*.

The values of environmental effects of the *NFEPWM Strategy* presented in the description of the specific priorities apply to domestic and foreign funds available for activities related to environmental protection and water management. For the purposes of this *NFEPWM Strategy*, the values of effects/indicators are measurable values, contracted in contracts with the beneficiaries in a given priority.

Due to the use of other indicators and different definitions of environmental effects within domestic funds of the NFEPWM, as an environmental effect (defined in priority programmes), and foreign funds, as a result indicator (defined in the OP I&E and reports in accordance with the OP I&E guidelines), we separated presentation of effects depending on the source of financing.

Due to the ongoing discussions on the shape of operational programmes for the new EU financial perspective (2014-2020) and the lack of a specific budget at the national level, as well as the main directions of support, the financial data for 2017-2020 will be entered at the time of updating the *NFEPWM Strategy* (at the latest by the end of 2014), and financial data for 2014-2016 will be reviewed. It is assumed that the trend of funding environmental protection after 2016 will be maintained, but the decisive levers are the final legal arrangements (e.g. *the National Environmental Policy*, the Water Law, etc.) and the role of the NFEPWM in the implementation of the new EU financial perspective.

5.1. Description of priorities

5.1.1. PRIORITY 1: Protection and sustainable management of water resources

This priority will be implemented in two main directions, namely the protection of water and water management, taking into account the priorities of the EU and adaptation to climate change. Ensuring the protection and sustainable use of water in basins is the main objective of the Water Framework

Directive transposed to the Water Law, and is in line with the flagship initiative of the Europe 2020 Strategy "*the resource-efficient Europe* " in terms of water resources.

This will contribute to the implementation of the measures in ESE: *1.2 Water management for protection from floods, droughts and water scarcity* and *3.1 Providing access to clean water for society and the economy*. In addition, this priority contributes to the objectives set by the EU for the period 2014-2020 in the field of climate change adaptation and risk prevention, and is in line with the specific objectives of the National Programme for the Development of Low-Carbon Economy: *Development of low-carbon energy sources* (objective 1. the use of hydroelectric resources of Poland) *Improving the efficiency of the management of resources and materials* (objective 3), *Preventing creation of waste and improving the efficiency of waste management* (objective 5) and *Promotion of new patterns of consumption* (objective 6).

Ensuring adequate financing of tasks in water management and flood protection in Poland is very important and is the result of the requirements of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. The need to mitigate the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community is a requirement of Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (so-called flood directive).

In addition to standard measures of water management, which have been carried out in Poland for many years, the measures to prevent eutrophication become increasingly important, in particular this applies to the need to protect the marine environment of the Baltic Sea. This measure is all the more important that its implementation requires cooperation of all the countries of the Baltic Sea region. Therefore it is important that actions taken under the *NFEPWM Strategy* are comprehensive and cover both the prevention of pollution, as well as the conservation of the marine environment. These actions result from the implementation of the provisions of Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (the Nitrates Directive).

Accelerating climate change may cause more frequent extreme weather events across the country, including floods and droughts. Therefore, apart from flood protection, it is important to encourage investment in the prevention of hydrological drought, including through the construction of water reservoirs, as well as activities related to the development and strategic and planning documents related to the prevention of the effects of drought.

NFEPWM supports activities of existing and planned government programmes for flood protection, such as " Odra 2006" and programmes to protect against flooding in the basin of the upper and middle Vis-tula and other strategic and planning documents.

In the area of water conservation and sustainable management of water resources, the environmental dimension of the *NFEPWM Strategy* temporarily (until the implementation of the single register of major environmental effects) will be conducted using the following indicators:

- Reduction of wastewater load, treated in accordance with the requirements of Directive 91/271/EEC (PE)
- Number of additional persons using improved wastewater treatment¹⁴,
- Population covered by anti-flood protection (persons),

¹⁴ Indicator specified in the draft Regulation of the European Parliament and of the Council on the Cohesion Fund and repealing Regulation (EC) No 1084/2006

Selection of these indicators results from the expected availability of data (they are already monitored within a number of current contracts) and their great relevance for the area.

Tab. 6. Indicators' values planned for attainment for priority 1 by 2016 in terms of national resources.

Priority/meter	unit	Projected performance in 2013-2016*
PRIORITY 1: Protection and sustainable management of water resources		
Reduction of wastewater load, treated in accordance with the requirements of Directive 91/271/EEC	PLN thousand PE	130
Population covered by anti-flood protection	thousand persons	212

* values planned to be achieved, resulting from contracts signed or to be signed during the period

Tab. 7. Indicators' values planned for attainment for priority 1 by 2016 in terms of foreign funds

OP I&E Priority Axis/name of indicator	unit	Indicator value		
		To be achieved**	Contracts signed*	Contracts to be signed
I priority axis of the Operational Programme Infrastructure and the Environment				
Number of people connected to the sewer system built	thousand persons	750	684	66
Number of people connected to the water supply system built	thousand persons	62	61	1
II priority axis of the Operational Programme Infrastructure and the Environment				
The volume of retained water under low and high retention	m ³ million	32	32	
Time of recognition of and response to the threat at the national level	hours	3	3	
Number of people covered by flood protection	thousand persons	671	619	52
IV priority axis of the Operational Programme Infrastructure and the Environment				
Change in the use of water by supported enterprises	thousand m ³ /year	1,700	1,700	
Change in the amount of treated industrial wastewater	m ³ /year	1,000	1,000	
Reducing the amount of industrial wastewater requiring treatment	thousand m ³ /year	201	201	

* - as of 30 June 2012

** - values to be achieved from the signed or to be signed co-financing agreements

Tab. 8. Summary of ongoing and planned priority programmes of the NFEPWM under priority 1.

No.	NFEPWM Priority Programme
PRIORITY 1: Protection and sustainable management of water resources	
1	Wastewater management under the National Programme for Municipal Wastewater Treatment
2	Sewage sludge management
3	Co-financing of the Priority Axis I of the Operational Programme Infrastructure and Environment - water and sewage management
4	Co-financing for household wastewater treatment facilities and connections of buildings to the collective sewerage system
5	Construction, reconstruction and restoration of hydro-mechanical structures

This priority will include the following lines of action:

5.1.1.1. Protection of water

Quality of waters, particularly those intended to supply the population with drinking water, has a significant impact on public health and the proper functioning of ecosystems. Although in recent years the state of waters significantly improved as a result of the limitation of production in many industries, technology upgrading and construction of wastewater treatment plants, the status of surface water quality is still insufficient.

Achieving and maintaining good water status and the rational management of water resources requires implementation of a number of activities in the industry, agriculture, municipal services, spatial development, formulation of hydrographic conditions and protection of the aquatic environment and the organizational, legal and educational activities¹⁵.

In this area, in particular, one should take into account the trends related to reproduction and maintenance of good water status and water-dependent ecosystems and the prevention of eutrophication. Activities related to the protection of water should be carried out in parallel with respect to surface water and groundwater, comprehensively within the basin. In order to improve quality of waters it is important to develop infrastructure for wastewater treatment. Continuation of the *National Programme for Municipal Wastewater Treatment* (hereinafter NPMWT) and the *Programme for equipping agglomerations of less than 2000 PE with waste water treatment plants and sewage systems*, will enable the implementation of accession obligations under Directive 91/271/EEC (so called sewage directive) for the reduction of pollution load, including biogenic compounds (nitrogen and phosphorus compounds). The tasks of this priority will also include the protection of waters against pollution on environmentally valuable areas. Efficient water management to meet social, industrial and agricultural needs will be possible by optimizing the use of groundwater resources (especially in rural areas) and retention of water.

The priority will include programmes covering construction and modernization of sewage (wastewater treatment plants, sewage systems) and investments in management of municipal sewage sludge. In addition, the programmes will continue to support the construction of individual sewage treatment systems in areas not covered by urban complexes designated for the national programme of urban waste water treatment.

¹⁵ State of the environment in Poland Signals 2011. Library of environmental monitoring, Warsaw 2011

5.1.1.2. Water management

Water-intensive industry and the development of demographic processes and natural geographical and hydrographic conditions cause the water deficit. In the south of the country there is also considerable variability of water flow in rivers during heavy rainfall and movement of large amounts of flood waters constituting, among others, runoff from mountain areas. All these factors make the rational management of water difficult, and a relatively small water retention capacity of artificial reservoirs does not allow for effective elimination of problems arising from the periodic excesses or deficits of surface waters.

In Poland, the expected impact of climate change can be manifested mainly through changes in the water balance, especially high outflow, increased evaporation, degradation of inland water quality and an increase in the frequency of extreme hydrological events (droughts and floods).

The main objective of the amendment of the Water Law is to rationalize resource management of surface and groundwater in such a manner as to protect the national economy from water deficit and protect against the effects of flooding with increasing degree of self-financing for water management. The chief task will be to maximize the saving of water resources for industrial and consumer purposes and increase water retention¹⁶.

NFEPWM supports existing and planned government programmes for flood protection, such as "Odra 2006" and programmes to protect against flooding in the basin of the upper and middle Vistula river.

It is also important to implement investments in flood protection and other hydro-technical structures, using, where possible, their energy potential, and to support construction of specialized equipment related to the maintenance of water and water facilities and for the purpose of flood control, as well as to support non-technical activities, concerning *inter alia*, increase of natural retention, building an early warning system of flood forecasting and flood risk management, as well as to conduct educational campaigns.

5.1.2. PRIORITY 2: Rational management of waste and protection of the Earth

The main method of disposal of municipal waste is still land filling. In 2009, 78% of all municipal waste collected went to landfills. Landfills, if they are not properly constructed and maintained, can cause soil and water pollution due to infiltration of contaminants. They also cause air pollution through emission of odours and methane. They also contribute to the loss of natural active surface and a significant reduction of the aesthetic values of the landscape.

Rational waste management in Poland requires consistent, urgent and intensive efforts to achieve better results than so far. The key challenge in waste management is the full implementation of the Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste (i.e. the Waste Framework Directive). This is due to the introduction of waste handling hierarchy set out in the directive, i.e. prevention, preparation for re-use, recycling, other recovery (e.g. energy recovery) and lastly disposal, including by land filling. The aim is to increase the level of recycling so that disposal by land filling ceases to be the dominant form of waste management. Providing adequate infrastructure for waste management is related to the operation of *inter alia*, regional waste treatment installations and installations for processing sewage sludge (including thermal installations). Selected course of action will be supported by measure 3.2. of the ESE Strategy *Rational waste management, including the use for energy purposes* and measure 1.1. *Efficient and effective management of mineral resources*. The direction of measures is to also compatible with the EU *Plan of action for resource-efficient Europe*.

¹⁶ State of the environment in Poland Signals 2011. Library of environmental monitoring, Warsaw 2011

Resources are the raw material for the economy and affect the quality of life. But both the extraction and processing, and then use of goods produced from them, including the disposal of waste, cause a multi-dimensional pressure on all parts of the environment. Therefore, it is important that the process of resource management throughout the life cycle was the least harmful and provided access to them for future generations. Efficient use of resources is a key element of long-term prosperity¹⁷. This was also highlighted in the Europe 2020 Strategy, where one of the three priorities was sustainable development: promoting a more resource efficient, greener and more competitive economy. Priority 2 is also consistent with the objectives detailed in NPDLC, i.e. *Development of low-carbon energy sources* (objective 1. here: energy use of waste) *Improving the efficiency of the management of resources and materials* (objective 3) and *Preventing creation of waste and improving the efficiency of waste management* (objective 5).

An important and universal indicator was selected for the purpose of monitoring the implementation of the priority's objective, covering all measures related to the reduction of waste, separate collection, recycling, and other methods of recovery and remediation/rehabilitation of sites.

The measure for this priority will be:

- Limiting the mass of land-filled waste (Mg/year),
- Surface recultivated/revitalised (ha).

Tab. 9. Indicators' values planned for attainment for priority 2 by 2016 in terms of national resources

Priority/meter	unit	Projected performance in 2013-2016*
PRIORITY 2: Rational management of waste and protection of the Earth		
Limiting the mass of land-filled waste (Mg/year)	PLN thousand Mg/year	2,100
Surface recultivated/revitalised	ha	540

* values planned to be achieved, resulting from contracts signed or to be signed during the period

Tab. 10. Indicators' values planned for attainment for priority 2 by 2016 in terms of foreign funds

OP I&E Priority Axis/name of indicator	unit	Indicator value		
		To be achieved**	Contracts signed*	Contracts to be signed
II priority axis of the Operational Programme Infrastructure and the Environment				
Processing capacity of the new trans-regional waste management plants (WMP)	PLN thousand Mg/year	2,000	2,000	
Number of persons covered by the waste management system	thousand persons	5,430	5,430	
Share of waste land filled in relation to those accepted to new WMP	%	28	28	

¹⁷ as above

Share of waste land filled in relation to those accepted to modernized WMP	from % to %	65	65	
IV priority axis of the Operational Programme Infrastructure and the Environment				
Change in the amount of recovered waste generated by supported businesses	PLN thousand Mg/year	1,090	1,090	
Change in the amount of waste generated by supported businesses	PLN thousand Mg/year	348	348	

* - as of 30 June 2012

** - values to be achieved from the signed or to be signed co-financing agreements

Tab. 11. Summary of ongoing and planned priority programmes of the NFEPWM under priority 2

No.	NFEPWM Priority Programme
PRIORITY 2: Rational management of waste and protection of Earth's surface	
1	Municipal waste management
2	Closure and reclamation of municipal waste landfills
3	Management of waste other than municipal waste
4	Co-financing of the recycling system of end-of-life vehicles
5	Reclamation of the degraded areas and liquidation of sources having especially negative impact on the environment
6	Co-financing of the Priority Axis II of the Operational Programme Infrastructure and Environment - waste management and the protection of Earth
7	Reducing the nuisance following from extraction of minerals
8	Preventing landslides and eliminating their effects on the environmental
9	Study the geology of the country and resource management of mineral beds and groundwater

The priority will be implemented through three main lines of action:

5.1.2.1. Rational waste management

Supported activities will include a gradual transition from a system of land filling to a system supporting waste processing, recovery of raw materials and energy use. It will be of great importance to take measures for the prevention of waste generation. It will be important to support and implement low-waste technologies of production. The requirement to reduce land filling will reduce land filling of biodegradable waste – by 16 July 2013 to the level of 50%, and by 16 July 2020 – to 35% in relation to weight of biodegradable municipal waste, produced in 1995.

Under this specific objective it will be important to strengthen the capacity of the energy use of waste through thermal treatment of waste, in particular, biodegradable waste, including sewage sludge. However, one must note that according to EU policy on waste by 2020, recycling of waste is regarded as a priority, and incineration comes second. A major challenge in the field of waste management is to meet the requirements for recovery and recycling of packaging waste, in particular by improving the system of separate collection of waste, and education and information activities.

5.1.2.2. Rational management of mineral resources

The development of the economy is always accompanied by the use of natural resources. Most of the resources are, however, limited, or renew over a long time. The issue of protection and rational use of

resources is therefore a priority in the context of ensuring their availability for future generations. Efficient use of resources is also important for economic reasons. The current patterns of production have a negative impact on the environment (especially on the cleanliness and quality of water, biodiversity, air quality), and thus on human health and life, and thus require deliberate compensation efforts and investments in new, greener technologies.

Poland's economy is largely based on conventional power. The coming years may bring a change in the structure of energy production (RES, nuclear power, shale gas), but it seems that fossil fuels will still be the primary source of energy. Efficient and effective management of minerals requires reconnaissance and research, it is necessary to identify strategic deposits and develop technology and increase the availability of technology using energy from a variety of natural resources, including e.g. geothermal energy or energy from unconventional hydrocarbons, as well as to develop of other low-carbon technologies (e.g. clean coal technologies). The ongoing priority measures should lead to a better degree of recognition and protection of national strategic mineral resources. It is also important to reduce environmental pressure exerted by the mining sector in areas with intensive mining activities.

5.1.2.3. Reclamation and revitalization of degraded areas

Due to the fact that the surface of the Earth is a limited resource, pollution and transformations reduce the size and quality of this resource. The quality of human life is largely dependent on the quality of the environment. The actions will aim in particular to restore the natural values, attractiveness of the landscape and functionality of degraded areas. The measures in this area will deal with the rehabilitation and/or revitalization of areas degraded by industrial, commercial and military activity and as a result of natural phenomena. Comprehensive rehabilitation is expected to include restoration of functional and/or natural values of landform, soil decontamination and achievement by soil of the level of substances in accordance with the required standards in cases of need.

5.1.3. PRIORITY 3: Protection of the atmosphere

Given the current state of air pollution in Poland and the need to meet the standards, in particular on air quality, as established by Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (hereinafter: CAFE Directive) and limiting emissions from large combustion plants, Poland is facing the task of implementing a number of projects aimed at improving air quality. It is important in particular to ensure the consistency of measures to protect the air with tasks aimed at combating climate change.

Despite the steady improvement of air quality in Poland, there are still major problems: in summer - too high concentrations of tropospheric ozone, in winter – excess concentrations of fine particulate matter PM10 and PM2.5 and benzopyrene. Despite the observed reduction in particulate emissions and efforts to reduce concentrations of fine particulate matter in the air, especially ultrafine fraction thereof, exceeding the standards for fine particulate matter is the most important issue of air quality in Poland. These exceedances take place both in relation to the daily and annual standard and concern mainly downtown areas of large cities and agglomerations.

This thematic area will support primarily tasks related to climate change, including the reduction of greenhouse gas emissions and improving air quality. Reducing greenhouse gas emissions is related to, *inter alia*, the implementation of tasks of increasing energy efficiency and use of renewable energy sources. Implementation of challenges in the field of protection of climate and the atmosphere will be possible thanks to the implementation of the *EU Action Plan Resource Efficient Europe*, where the European Commission promises to carry out a comprehensive review of all EU strategies on air pollution (until 2013) and the following measures in *ESE Strategy 2.1. Better use of domestic energy resources, 2.2 improvement of energy efficiency, 2.6 Growing importance of distributed and renewable energy sources (and associated Measure 2.7 Energy development of suburban and rural areas), 3.3. Air protection, in-*

cluding reducing the impact of energy sector, 3.4. Support for new and promotion of Polish energy and environmental technologies. Priority 3 is also consistent with the objectives detailed NPDLC, especially *Development of low-carbon energy sources* (Objective 1), *Improvement of energy efficiency* (objective 2) and *Development and use of low carbon technologies* (objective 4).

Implementation of sustainable economic development will be possible through the support of the shift towards a low-carbon, resource-efficient economy using environment resources and the desire to eliminate dependence of economic growth on environmental degradation. Considerations to be taken into account when formulating areas of support are: energy resource constraints, including dependence on coal, climate and geographical conditions for the development of renewable energy sources, energy networks condition, stronger regulations on climate and air quality.

It should be noted protection of the air requires synergy of actions within of a number of policies and sectors, both locally and globally. In particular, it is important to ensure the consistency of measures to protect the air with tasks aimed at combating climate change.

The measure of this priority will be:

- Degree of reducing or avoiding emissions of carbon dioxide, sulphur oxides, nitrogen oxides and dusts (Mg/year).

Tab. 12. Indicators' values planned for attainment for priority 3 by 2016 in terms of national resources

Priority/meter	unit	Projected performance in 2013-2016*
PRIORITY 3: Protection of the atmosphere		
Degree of reduction or avoidance of carbon dioxide emissions	PLN thousand Mg/year	1,600

* values planned to be achieved, resulting from contracts signed or to be signed during the period

Tab. 13. Indicators' values planned for attainment for priority 3 by 2016 in terms of foreign funds

OP I&E Priority Axis/name of indicator	unit	Indicator value		
		To be achieved**	Contracts signed*	Contracts to be signed
IX priority axis of the Operational Programme Infrastructure and the Environment				
Quantity of electricity generated in cogeneration	thousand MWh/year	631	631	
Amount of heat produced in cogeneration	thousand MWh/year	1,462	1,462	
Quantity of electricity generated in cogeneration from renewable sources	thousand MWh/year	323	323	
Amount of energy savings from projects	PLN thousand MWh/year	948	948	
Avoided CO ₂ emissions from energy savings as a result of the projects	thousand Mg/year	2,567	2,567	

Amount of energy savings due to the implementation of thermal modernisation projects	thousand MWh/year	277	272	5
IV priority axis of the Operational Programme Infrastructure and the Environment				
Change in the energy consumption in supported enterprises	thousand MWh/year	40	40	,
Change in the emission of major air pollutants:		,	,	,
<i>sulphur dioxide</i>	thousand	197,166	97,166	100,000
<i>nitrogen oxides</i>	Mg/year	39,853	19,853	20,000
<i>dust</i>		10,025	5,025	5,000
<i>carbon dioxide</i>		19,825,094	9,825,094	10,000,000

* - as of 30 June 2012

** - values to be achieved from the signed or to be signed co-financing agreements

Tab. 14. Summary of ongoing and planned priority programmes of the NFEPWM under priority 3

No.	NFEPWM Priority Programme
PRIORITY 3: Protection of the atmosphere	
1	Programme for projects in the field of renewable energy sources and highly efficient cogeneration facilities
2	Co-financing of development of air protection programmes and action plans:
3	Green Investment Scheme (GIS)
4	Efficient use of energy
5	Co-financing of the Priority Axis IX of the Operational Programme Infrastructure and Environment – environment-friendly energy infrastructure and energy efficiency
6	Intelligent energy networks
7	Liquidation of low emission supporting an increase in the energy efficiency and development of dispersed renewable energy sources
8	Energy use of geothermal resources

Furthermore, there will be NFEPWM activities related to increasing the energy efficiency of the Financial Mechanism of the European Economic Area (programme area: Energy efficiency and renewable energy sources).

The priority will be implemented through measures:

5.1.3.1. Improving air quality

The most important problem in Poland is exceeding the limit values for fine particulate matter PM₁₀ and PM_{2.5} as defined in CAFE Directive. Adherence to standards is essential, because long-term exposure to particulate matter results in the shortening of life expectancy. The elimination of the so-called low emissions can contribute to meeting the requirements of CAFE Directive. Low emissions include communication emissions, emissions of dust and harmful gases from local coal boilers and domestic stoves in which coal combustion takes place in an inefficient manner, mostly with cheap carbon with low heating parameters. There are also often practices of burning waste in household boilers. Reducing emissions of harmful substances into the atmosphere can take place through a comprehensive elimination of the existing, inefficient heating systems, use of renewable energy sources, and collective heating systems. It is important to support the implementation of investments listed programmes for the protection of air in order to achieve target levels of fine particulate matter (PM₁₀, PM_{2.5}), ozone and benzo(a)pyrene. It is very important to stimulate and activate the formation of municipal supply plans for heat,

electricity and gas fuels, taking into account the requirements resulting from the energy needs and environmental requirements.

5.1.3.2. improving energy efficiency

Improving energy efficiency relates to efficiency in generation, transmission and in the end users. It will be very important to develop cogeneration, including high-efficiency cogeneration, modernization and expansion of district heating, thermal modernization of public buildings and energy efficient construction. In order to strengthen the role of end-users in the management of energy consumption (consumer-oriented system), it will be important to modernize the energy sector in the field of smart metering and smart energy networks (SEN). In the context of environmental improvement and modernization of the energy sector, the priority will be also to introduce innovative technologies, including support of new and promotion of Polish energy and environmental technologies and environmental education focused on energy efficiency.

5.1.3.3. Supporting dispersed energy sources, including renewable energy sources

The objective set out in the "Europe 2020" is to increase the share of RESPONSIBLE in total energy consumption to 20% in the European Union. Targets for individual countries are listed in the Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. In the case of Poland, the share of RES in total energy consumption in 2010 was 7.9%, while the established target for 2020 is 15%. In the new EU financial perspective for 2014-2020 it will also be necessary to allocate in Poland at least 6% of the funds from the European Regional Development Fund for activities related to renewable energy sources.

Development of renewable energy sources comprises a set of activities aimed at increasing the production of electricity and heat from renewable energy resources.

Supporting the development of renewable energy sources, especially in the form of distributed generation and the desire to constantly improve energy efficiency will contribute to the efficient use of natural resources and reduce CO₂ emissions. One must take into account the implementation of all types of RES, considering dependence on geographic and climate conditions and local energy resources.

5.1.4. PRIORITY 4: Protection of biodiversity and ecosystem services

Biodiversity is essential for the well-being and quality of life not only for the citizens of our country, but also the European Union. So far, very often this has not been seen, though, in Europe we had to deal with the loss of both diversity and reduction of "natural" habitats area (the cause of this phenomenon were the historical patterns of non-environment-friendly use of soil and water resources, and other factors mainly due to the increase in population density).

Preservation and restoration of biodiversity, including multifunctional forest management have found their place (they are one of the objectives of development and lines of intervention) in the new, long-term ESE Strategy. In addition to prevention of extinction of plant and animal species and the conservation of natural resources, they contribute to climate change mitigation.

Poland has a diverse natural environment and no barrier divides the country from the rest of the continent. Our nature combines the features of nature all over Europe, but it is relatively well preserved compared to the nature of Europe, with the result that a large part of the territory of our country (over 32%) is covered by "national" forms of protection, including the most valuable - 23 national parks covering 1% of the country (eight of them are World Biosphere Reserves, seven belong to the Ramsar Convention).

The value of our nature, as compared to other EU countries, is also shown through the conservation, within the European form of conservation - Natura 2000 (system of sites with protected elements of nature that are endangered in Europe), of 144 special conservation areas for birds and 823 conservation areas for habitats, with a total area of more than 20% of our country. These areas often overlap in whole or in part with the "national" forms of conservation.

The evaluations show that conservation status of most species and habitats endangered in Europe is described as unsatisfactory. The existence in the country of many rare species of fauna and flora, imposes special responsibility on Poland for the protection of natural heritage, especially when the conservation status is bad or rapidly deteriorating. Integral parts of the natural environment are forests, which in Poland occupy 9.1 million hectares (about 29% of Poland). Forests are the natural environment for large numbers of species of plants and animals. They determine their survival and development, affect the Earth's atmosphere and climate, regulate the flow of water in the environment, protect the soil from erosion while providing such an important raw material like wood. Forests also provide opportunities for recreation and hiking for large section of society staying in areas with significant environmental contamination.

Therefore, the primary objective of this priority is halting the decline in biodiversity and ensuring a favourable conservation status for the greatest possible number of species and habitats in accordance with the National Environmental Policy. To achieve this it is essential to make an inventory, and create a coherent system of information on species and natural habitats with the valuation of the environment. In addition, prevention of negative phenomena will be ensured by: strengthening protected area management instruments, implementation of conservation plans through *in-situ* and *ex-situ* conservation, reducing human impact on protected areas (including the sharing of protected areas), nature compensation (including the valuation of ecosystem services) taking into account the principles of nature conservation (biodiversity conservation) in the planning of actions to adapt to climate change and their implementation, as well as green infrastructure in urban and rural areas.

With regard to support for multifunctional, sustainable forest development, it is proposed to take the following courses of action: adaptation of forest ecosystems to climate change, maintaining and restoring natural ecosystems for water retention (especially in mountainous areas) and slowing water runoff, mitigating the impact of climate change on the environment through CO₂ absorption, better heat balance and counteracting disasters in relation to habitats and species resulting from climate change and human impact, and eliminating their effects.

The primary determinant of project financing trends in the protection of nature and landscape is the implementation of obligations under the *Convention on Biological Diversity* adopted at the so-called Earth Summit in Rio de Janeiro on 5 June 1992, in particular achieving the European target in 2020 - "Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020 and restoring them as far as possible". The selected course of action will be supported by measure 1.3 of ESE Strategy: *Maintaining biological diversity, including multifunctional forest management*.

Implementation of this action, in addition to a financial contribution from the NFEPWM, will be supported by funds used for biodiversity available through, among others, LIFE+ financial instrument and its successor, the Norwegian Financial Mechanism and the European Economic Area Financial Mechanism. NFEPWM co-financing will contribute to the use of these funds by Poland.

The environmental dimension of biodiversity and ecosystem services will be presented by the indicator:

- Total area with reinstated or guaranteed appropriate protection of ecosystems (ha),
- Number of species of the Red Book of endangered species, protected as a result of the NFEPWM measures (pcs).

Tab. 15. Indicators' values planned for attainment for priority 4 by 2016 in terms of national resources

Priority/meter	unit	Projected performance in 2013-2016*
PRIORITY 4: Protection of biodiversity and ecosystem services		
Total area with reinstated or guaranteed appropriate protection of ecosystems	thousand ha	2,200
Number of species of the Red Book of endangered species, protected as a result of the NFEPWM measures	pcs	50

* values planned to be achieved, resulting from contracts signed or to be signed during the period

Tab. 16. Summary of ongoing and planned priority programmes of the NFEPWM under priority 4

No.	NFEPWM Priority Programme
PRIORITY 4: Protection of biodiversity and ecosystem services	
1	Nature and landscape protection
2	Protection and sustainable development of forests
3	Protection of areas of high nature value
4	Co-financing of the Priority Axis V of the Operational Programme Infrastructure and Environment – environment protection and promotion of ecological habits

Furthermore, the NFEPWM will implement activities related to biodiversity conservation:

- from the funds of the European Economic Area Financial Mechanism (programming area: Biodiversity and ecosystems)
- in the framework of LIFE+ financial instrument – component I *Nature and Biodiversity*.

The objectives pursued under this priority will be:

5.1.4.1. *Nature and landscape protection*

Measures in the field of nature and landscape conservation will complement the measures taken in NFEPWM programmes designed to directly eliminate environmental risks resulting from the emission of pollutants to air, water and soil and from urbanization, as well as the exploitation of natural resources. Co-financing will cover, *inter alia*: comprehensive assessment of the state of the environment supported by the efforts to estimate its ecosystem services, enhancing tools for management of protected areas by developing plans for protection tasks, conservation plans and programmes/strategies for the protection of the most valuable species (and other planning documents for the protection of nature), protection of *in-situ* and *ex-situ* protected habitats and species and endangered species, reducing and eliminating the spread of invasive alien species, management of conflict species, prevention of landscape fragmentation and development of green infrastructure, implementation of monitoring and evaluation of the effects of previously completed work, compensation for lost profits arising from the management constraints in valuable natural areas, supporting adaptation to climate change in the field of nature protection, support for measures to combat the effects of climate change in the environment and removing the impacts of disasters.

Due to the economic development and increased tourist traffic, it is important to also reduce human impact on the most valuable protected areas and to eliminate direct pressure on natural areas by reducing low emissions.

5.1.4.2. Protection and sustainable development of forests

Sustainable multifunctional forest management will contribute to the prevention of climate change and mitigate its effects, extinction of species and conservation of natural resources. It is important both to increase forest cover through afforestation of agricultural lands and forest regeneration through the reconstruction of disaster areas. In addition, measures will be implemented to protect forest ecosystems from damage caused by biotic and abiotic factors and preventing the degradation of humid and wetland forest habitats.

5.1.5. Horizontal actions

It is expected that within these four priorities, Measure 3.4 of ESE Strategy *Support for new and promotion of Polish energy and environmental technologies* and 3.5 *Promoting environmental behaviour and creating conditions for the creation of green jobs* will be treated horizontally. In addition, the horizontal measures will apply to environmental education, expertise, innovation and low-carbon and resource-efficient economy and supporting environmental monitoring and risk prevention (including flood and drought prevention), as well as supporting environmental management systems, mainly EMAS scheme.

It is important to also reduce the negative impact on the environment of industrial emissions originating from industries such as power generation, metallurgy, chemical industry, as defined in the ordinance of the Minister of the Environment of 26 July 2002 on the types of installations which may cause significant damage to individual components or the environment as a whole (Dz.U. of 2002, No. 122, item 1055). Therefore, horizontal activities will focus on technological change in the direction of a radical reduction of emissions and promotion of cogeneration by providing assistance in upgrading and purchasing abatement devices. Measures implemented by the NFEPWM will implement the provisions of the Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions - IED (integrated pollution prevention and control).

Achieving long-term goals identified in the *NFEPWM Strategy* will not be possible without close cooperation with public administration and local government and social partners. An important role is played by the business partners and the research community, active in the field of environmental protection, which are creating new solutions, through which the NFEPWM has the ability to extend its activities. Part of the long-term actions will be the involvement of as many environmental beneficiaries and organizations as possible in implementing the common objectives for the environment.

All activities will be carried out in order to maximize the environmental benefits at the lowest cost. This is about maximizing the environmental benefits. This action combines greater benefits for users of the environment, which are more cost effective, and provides greater environmental benefits.

Tab. 17. Summary of existing priority programmes of the NFEPWM implementing horizontal measures now and in a strategic horizon

No.	NFEPWM Priority Programme
Horizontal actions	
1	Ecological education
2	Support of Minister of the Environment to the implementation of the National Environmental Policy
3	Supporting the activity of the environmental monitoring
4	Supporting the activity of the hydrological and meteorological service
5	Preventing environmental risks and eliminating their effects on the environment

By the end of 2012, the NFEPWM, in collaboration with the National Centre for Research and Development, will launch a priority programme to support the implementation of innovative technologies to protect the environment (e.g. Generator of Ecological Concepts - GECKO)

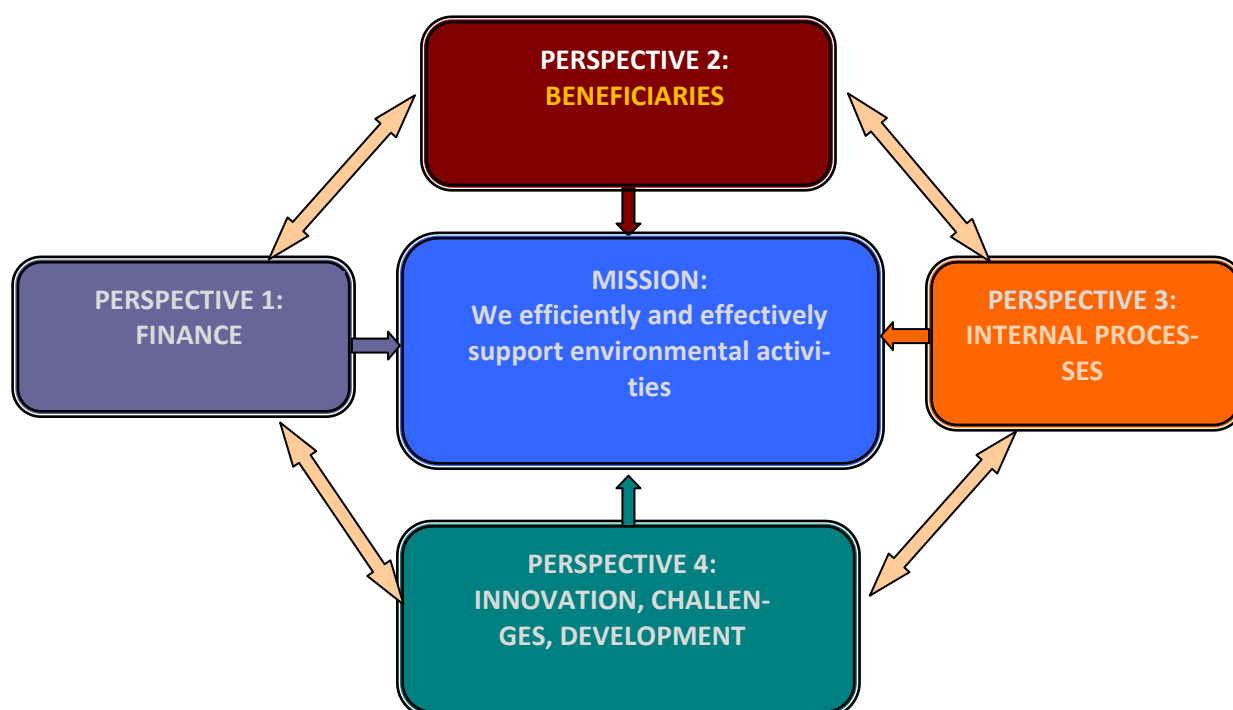
Furthermore, the NFEPWM will implement horizontal measures:

- from the funds of the European Economic Area Financial Mechanism (programming area: Environmental monitoring and integrated planning and control).
- As part of LIFE+:
 - component II *Environmental policy and governance*,
 - component III *Information and communication*,
 - component IV *Innovation for the environment*.

6. Prospects for achieving the objective and effective implementation of the mission and priorities of the *NFEPWM Strategy*

The implementation of the mission and priorities of the *NFEPWM Strategy* will occur as a result of measures grouped under the four perspectives. For this mission (general objective) to be successfully implemented, there must be a progress in each of these perspectives, from the perspective of the beneficiaries, finance, internal processes and innovation. In addition, the various measures in the perspectives are not isolated from each other, there are significant interactions between them.

Fig. 8. System of four strategic perspectives in the context of the mission



Achieving the objectives should result from the projected timetable, where the final date for achieving the general objective is the end of the strategic perspective. It is important in the course of achieving the objectives and meeting the specific priorities to pay attention to the implementation of specific measures from any perspective, so they are not implemented at the expense of another perspective.

Monitoring of implementation progress will be possible thanks to the indicators set for the tasks assigned to different perspectives. A detailed list of indicators, along with the tasks, tools, and task performers is given in Chapter 8, "Tasks and tools to support the implementation of measures".

The assessment of the effectiveness of the institutional activities of the NFEPWM will continue (in relation to the *NFEPWM Strategy* 2009-2012) to measure the following indicators:

- **own expenses**, as a percentage of aid paid from own funds and from EU funds - planned value to be achieved in 2016 is 1.6% (plan for 2009-2012 - 1.8%),
- **average service time of proposal**, from submission to signing the contract - planned volume to be achieved in 2016 is 90 days (plan for 2009-2012 - 150 days).

6.1. PERSPECTIVE 1: FINANCE

6.1.1. Description of perspective

The Finance perspective pertains to the main area dealt with by the NFEPWM, i.e. the financing of environmental protection and water management. The determinants of this area are the main directions and results in this scope, the indication of proposed environmental indicators for the identified areas of the NFEPWM operations. This perspective emphasizes the priority nature of external resources, mainly of the EU, with improved effectiveness of the implementation of financial plans from the NFEPWM own funds.

The aim is to maximize the efficiency and effectiveness of use of available financial resources, and its achievement depends mainly on the implementation of the identified measures, as described below.

Implementing measures in the Finance perspective, the NFEPWM is guided not only by the profitability of tasks, but also by public and environmental interest, which contributes to achieving the objectives of public policies relating to the environment. It is also important to use flexible financing arrangements that are responsive to the real needs of consumers, financial capabilities and external conditions. Opening up to greater cooperation with other institutions, the NFEPWM will undertake jointly with them the initiatives for environment protection and water management, contributing to the economic growth of the country.

PERSPECTIVE 1: FINANCE

Maximizing the effectiveness and efficiency of use of available financial resources

Measure 1A:

Orientation and flexible adjustment of NFEPWM programming, given the NFEPWM strategic objectives and the needs, conditions and abilities of recipients of co-financing.

Measure 1B:

Streamlining processes of granting co-financing and settlement of payments with particular emphasis on security.

Measure 1C:

The constant increase in efficiency and effectiveness of financing of environmental protection, taking into account the benefits arising from the use of external resources available.

6.1.2. Measure 1A: Orientation and flexible adjustment of NFEPWM programming, given the NFEPWM strategic objectives and the needs, conditions and abilities of recipients of co-financing.

6.1.2.1. Description of the measure

Measure:

- directing activities of the NFEPWM to priorities described in the *NFEPWM Strategy*, taking into account international obligations of Poland, strategic documents and legal acts,
- striving to achieve the desired level of participation of repayable funding in relation to non-repayable funding, taking into account the need for continuous improvement of the system, so as to choose the best forms, principles and directions of funding for various needs of the beneficiaries in the context of different environmental objectives, making best use of financial resources of the NFEPWM and improving the efficiency of the implementation of the financial plan. Selecting the forms and rules of financing shall also take into account external factors that determine, in particular in the field of EU funds, the process of project implementation.

The focus is to maximize the use of available resources, in particular from the EU budget for projects in the field of environmental protection and water management. It is above all about the full disbursement of the financial allocation available under the OP I&E and the Norwegian Financial Mechanism, through ongoing, detailed monitoring of activities undertaken by the beneficiaries, eliminating potential risks in projects, in both the beneficiaries and the NFEPWM. This measure requires close cooperation with partners at all levels of implementation, i.e. with government institutions involved in the implementation of programmes, as well as beneficiaries of assistance under the programme.

6.1.3. Measure 1B: Streamlining processes of granting co-financing and settlement of payments with particular emphasis on security.

6.1.3.1. Description of the measure

There is a need for a review of internal processes in the NFEPWM, with particular emphasis on the processes that directly affect the efficiency and effectiveness of the use of funds. The measure will be implemented continuously. The first review should take place during the initial implementation of the *NFEPWM Strategy*, and then, there will be recurring reviews at least once a year. At the same time, recognizing that the people directly involved in the process are best acquainted with the specifics and are most aware of the disadvantages of the processes, there should be incentives for employees to report observations on necessary changes and gaps. Promoting "the bottom-up initiative" will bring additional advantages resulting from greater identification of employees with the institution.

The rationale for placing Measure 1B in the "Finance" perspective is the direct dependence of the achievement of the objective on properly planned and implemented processes in the provision of funding and settlement of payments.

6.1.4. Measure 1C: The constant increase in efficiency and effectiveness of financing of environmental protection, taking into account the benefits arising from the use of external resources available.

6.1.4.1. Description of the measure

The Measure 1C involves financing in the form and according to the rules so chosen according to the direction and specifics of the beneficiary and the environmental objective as to ensure maximum effectiveness of financing (largest possible environmental effect) with the largest financial effectiveness (measured in terms of the environmental effect of a single PLN invested in the project¹⁸). "Best use of the opportunities of the NFEPWM" means the strategic balance of requirement of stable funding (and thus preserving possibly undepleted capital) with the principle of non-commercial criteria (and therefore consent to subsidize important environmental needs that cannot be financed by commercial means, including hydrogeologi-

¹⁸ Also including funds from other sources outside the NFEPWM to take account of the leverage effect.

cal services, weather services, etc.) and the requirement for flexibility in funding (which in turn justifies the maintenance of a particular resource of available funds). It is important to conduct more detailed analysis of the projects before granting co-financing in terms of their cost-effectiveness.

At the same time, taking into account past experience in running programmes and projects financed by EU funds (perspective 2000-2006, 2007-2013), the framework of this activity assumes commitment of financial support for projects that in the final settlement will be funded by the EU. This will be done by ensuring NFEPWM funds enabling the beneficiaries to undertake obligations with contractors and initiate projects. This measure will actually speed up the investment process and will positively affect the use of available EU funds.

The implementation of environmental objectives will involve external institutions to a greater extent than before. In this regard, it is planned to:

- continue to cooperate with the institutions involved in environmental protection and water management (e.g. VFEPWM, banks),
- networking with institutions whose primary activity is not related to the environment, to develop joint initiatives, aimed on the one hand at implementation of environmental objectives, on the other hand at positively influencing the economic growth and the labour market (e.g. National Research and Development Centre, the Polish Agency for Enterprise Development).

The aim is to develop a framework for cooperation in a direction that will help to achieve economies of scale.

6.1.5. Supported directions of changes in the financial perspective

The actions in the field of financing environmental protection and water management will be targeted to support financial implementation of environmental policies and strategies by:

- aiming to make use of the available funds to finance environmental protection (own national measures, funds from the budgets of other countries, banks, own potential of beneficiaries),
- ensuring complementarity of implemented directions of co-financing for projects,
- increasing the efficiency of the NFEPWM,
- aggregation of priority programmes (reducing their number) within the areas of financing environmental protection and water management (*inter alia* through unification and standardization),
- increasing the share of expenditure to finance environmental protection and water management provided by the NFEPWM partners (including banks, voivodeship funds for environmental protection and water management),
- providing for the possibility of derogation from the above principles in the name of preserving the effectiveness of support for priority projects in environmental protection and water management,
- optimization of the processes related to the provision of funding and settlement of payments,
- continuity of cooperation and establishment of new cooperation with other institutions,
- continuation of activities to adapt the offer to the real needs of the beneficiaries (the studies of demand)
- adjustment of the NFEPWM financial offer to the needs of the beneficiaries including other products offered in the financial market.

6.2. PERSPECTIVE 2: BENEFICIARIES

6.2.1. Description of perspective

The "beneficiaries" perspective refers to the improvement of cooperation with the beneficiaries, attention to transparent rules, criteria and decision-making process, which will improve the image of the NFEPWM as a reliable public partner. Measures proposed by NFEPWM will be based on the following principles: consultation, collaboration, accountability, and ensuring high quality of service of the beneficiary. Consultations are to be understood as involving partners in the work on identifying new needs for financing the environment, so that each of the potential beneficiaries has the opportunity to submit their proposals and needs. Cooperation means not only sharing information but also active cooperation with the beneficiaries in order to maximize the use of available funds to improve the environment. Shared responsibility means that the environmental effects are common to the whole society. These activities will be conducted in accordance with Good Governance model whose core values include: participation of citizens in public decisions and the transparency of public procedures. There will be projects related to the servicing of beneficiaries and applicants, support for the digitization of beneficiary servicing, education for beneficiaries, including in the preparation of proposals and their settlement. From the point of view of the beneficiaries, the important issues are: effective information, communication and promotion, so the perspective provides for the development of these measures.

PERSPECTIVE 2: BENEFICIARIES

Continuous improvement of relations with the beneficiaries

Measure 2A:

Improving relations with the beneficiaries.

Measure 2B:

Development of digital servicing of beneficiaries.

Measure 2C:

Development of information and promotion activities.

6.2.2. Measure 2A: Improving relations with the beneficiaries.

6.2.2.1. Description of the measure

Measure 2A includes beneficiaries to a greater extent in the development of the NFEPWM measures, and its essence is to establish partnerships with beneficiaries and consult with them important NFEPWM initiatives that target beneficiaries, in particular – the priority programmes. Improving relations with the beneficiaries will also involve NFEPWM offering a comprehensive programme of conferences and workshops, preparing beneficiaries to make more effective use of the NFEPWM support and support for extensive education of the beneficiaries in the new environmental challenges and new policies. Good practices should also include research in areas that require organization of seminars, conferences and meetings. NFEPWM will continue the initiatives already taken, that is conducting *Energy-Effect-Environment Forum* and *Forum on best waste management practices* which provide a platform for consultation and exchange of views and experiences, and discussion on best methods to improve the environment. It is also planned to introduce a new platform for the exchange of knowledge, the *Educational Forum* with the objective to exchange ideas and views on environmental education and broad public consultations

on the effective use of funds for activities related to environmental education. At the same time there will be activities aimed at enhancing the participation of citizens in decisions and increasing the transparency of procedures for the award of the co-financing.

Close collaboration with the beneficiaries will have a positive impact on the efficiency and effectiveness of the NFEPWM, which will also allow for the continuous improvement of service quality. Exchange of experience, good knowledge and proper understanding of the expectations of the beneficiaries will allow for developing an offer tailored to their needs.

Improving relations with the beneficiaries will be monitored, including by regularly examining the level of satisfaction of the beneficiaries in order to get feedback and revise any action taken.

6.2.3. Measure 2B: Development of digital servicing of beneficiaries.

6.2.3.1. Description of the measure

Measure 2B consists in the implementation of the systemic as possible digitization of servicing the beneficiaries by the NFEPWM. Measures planned under the *NFEPWM Strategy* concern the pursuit of digitization of the process of applying for co-financing and applying for payment and the maintenance of the electronic monitoring of project implementation with electronic support for applicants (intelligent error correction, lists of frequently asked questions with answers, instructions, procedures). The important issue will also be the extension of a platform for exchange of information and experiences and best practices within the projects on websites. This will facilitate communication between the NFEPWM and the beneficiaries, but also between the beneficiaries implementing similar projects.

6.2.4. Measure 2C: Development of information and promotion activities.

6.2.4.1. Description of the measure

Measure 2C is aimed at conducting integrated communication policy for the activities of the NFEPWM in a clear and consistent way and reaching the widest possible group of potential recipients. At the same time there will be activities for the enhancement of the image of the NFEPWM as a modern financial institution open to the needs of beneficiaries. The measure is also focused on the development of eco-conscious attitudes by establishing cooperation and building good relationships with different groups of beneficiaries, but also with non-governmental organizations, academia and business partners.

6.2.5. Supported directions of change in the perspective of the beneficiary

In this area, actions will be focused on the objective of:

- strengthening and expanding the relationship with the beneficiary, i.e. improving existing forms of contact and search for new ones, according to the needs of the beneficiary (and even - in anticipation of these needs),
- speeding up the process of handling the beneficiary with simultaneous assurance of high quality of operations.
- building a two-way relationship; not only training of beneficiaries is important, but also consulting them on how to improve the system and examining their satisfaction,
- development of information, communication and promotion.

6.3. PERSPECTIVE 3: INTERNAL PROCESSES

6.3.1. Description of perspective

The "internal processes" perspective will implement objectives to streamline, harmonize and flexibly adjust internal procedures to optimized processes while meeting the condition of improving organizational effectiveness of the NFEPWM. This perspective is to ensure that the NFEPWM, as a public institution, carries out its task effectively, and that its activities are aimed at reducing administrative barriers and improving the process of disbursement of funds for environmental purposes.

To achieve the objectives of this perspective, it is necessary to implement information technology for supporting processes occurring across the NFEPWM. From the point of view of the proper functioning of the NFEPWM, it is important to provide access to current information and data and to improve internal communication understood, *inter alia*, as the exchange of information and experience between the staff, promoting cooperation between the units and within organizational units, building good relationships.

PERSPECTIVE 3: INTERNAL PROCESSES

Increasing organizational efficiency

Measure 3A:

Computerization of processes

Measure 3B:

Development of internal communication and collaboration (team building)

Measure 3C:

Proper allocation of resources

Measure 3D:

Full implementation of management control, business continuity, risk analysis and anti-corruption system

6.3.2. Measure 3A: Computerization of processes.

6.3.2.1. Description of the measure

The measure will be implemented in two levels, the first will apply to electronic document exchange with beneficiaries (including generator of co-financing applications, generator of applications for payment) and the second will be linked to the computerization of internal processes taking place in the NFEPWM (the flow of documents and information, limiting documents in the organization to electronic documents instead of paper documents).

The information system must be integrated and adapted to the needs and specificities of individual measures carried out by the NFEPWM. It should be flexible enough to enable users to independently create reports based on current and accurate data.

Providing IT services for processes in the NFEPWM means development of the integrated system for the circulation of documents related to the implementation of projects financed both from the NFEPWM and external resources. This applies to the entire life cycle of a project, from the initial phase of granting

co-financing, and subsequent monitoring of project implementation, along with the settlement and closure of the project (registration of co-financing applications and agreements, a module for financial and material monitoring of projects co-financed from domestic and foreign sources, settlement of projects).

It will be also important to develop guidelines for the system for the next EU financial perspective. It will be possible to adapt existing resources to support projects of the 2007-2013 perspective or building a new system that takes into account specificity of projects.

It is assumed that a well-functioning IT system adapted to the needs will have a positive impact on efficiency and performance of the NFEPWM.

6.3.3. Measure 3B: Development of internal communication and collaboration (team building)

6.3.3.1. Description of the measure

In order to ensure institutional efficiency, taking into account the diversity of activities undertaken by the NFEPWM, the complex structure and the number of people employed, there is a need to improve internal communications understood as *inter alia*, the current exchange of information and experience among employees. Improvement of communication can be done through openness to collaboration between units and within organizational units, affecting building good relationships.

Continued activities are aimed at building task teams responsible to a greater extent for the implementation of tasks by delegating down the responsibility in the management hierarchy. This will shorten the decision-making process, improve the functioning of the institution and have a positive impact on internal cooperation.

6.3.4. Measure 3C: Proper allocation of resources

6.3.4.1. Description of the measure

The aim is to strive to ensure adequate (in terms of quality and quantity) resources, including human resources to carry out task and achieve strategic objectives of the NFEPWM. It is also important to ensure the best possible working conditions, by adjusting the number and quality of staff, allowing for performance of tasks without disruption. In order to improve institutional efficiency it is possible to apply flexible response to the requirements of human resources through the reallocation of workers with less workload to units with more workload and the introduction of flexible working arrangements (flexi-time, teleworking).

The measure will implement methods of reducing the impact of the institution on the environment through the implementation of effective solutions in terms of use of energy and natural resources, and reducing emissivity (intelligent management systems, reducing consumption of energy, water and materials such as paper, toners, etc.). According to the idea of "green office", there will be new initiatives to protect the environment and actions will be enhanced to promote eco-friendly corporate image. Promotion of ecological lifestyle among employees will continue.

6.3.5. Measure 3D: Full implementation of management control, business continuity, risk analysis and anti-corruption system

6.3.5.1. Description of the measure

Implementation of the measure will allow better and more reliable operation of the NFEPWM. Risk analysis and full implementation of management control can ensure NFEPWM bodies as to the proper functioning of the institution; it will provide audit bodies with the basis for a positive assessment of the institution in terms of performance, and will confirm that the NFEPWM is a reliable partner who meets certain standards.

At the same time the NFEPWM must ensure that the measures will be carried out in a transparent manner, so as to eliminate or prevent the occurrence of corruption and that in the case of external disturbances, the NFEPWM has a solution that will ensure the maintenance of designated and acceptable level of implementation of measures. This measure is part of the management system and is designed to ensure the impartiality of the implemented processes and lead to minimize the risk of opportunities for abuse (corruption-generating situations) and the establishment of monitoring mechanisms. On the other hand, the implementation of process management system requires, in addition to defining risks, defining the possible situations that lead to the disruption of activities and structuring necessary ones to take action. Ensuring continuity of operations is to ensure the continuity of organization's operation in most challenging and unexpected circumstances.

6.3.6. Supported directions of change in the perspective of internal processes

In this area, actions will be focused on the objective of:

- development of an integrated IT system that provides reliable and current information, which is necessary for the proper management of the institution and supporting processes,
- standardization and simplification of internal procedures,
- effective internal communication supported by collaboration, allowing for creation of teams,
- proper allocation of resources (human, material and information) and their efficient use,
- achieving the standards of organizational management,
- full implementation of management control and risk analysis.

6.4. PERSPECTIVE 4: INNOVATION, CHALLENGES, DEVELOPMENT

6.4.1. Description of perspective

The "innovation, challenges, development " perspective implements initiatives aimed at creating new activities and lines of action of the NFEPWM and responding to new challenges.

This *NFEPWM Strategy* is created in a specific time, when the basic assumptions of pro-environmental policies are being reformulated, so it is anticipated that in the coming years, the changes in NFEPWM operations may be essential and can take leaps and bounds. One can expect change in the basic rules governing the existing policies (e.g. withdrawal from the emissions trading mechanism in its current form), or change in the basic criteria (e.g. replacement of measuring the "environmental effect" by measuring the effect from the point of view of sustainable development). In this situation, the existing institutional competence of the NFEPWM will become ineffective and it will have to quickly learn new competence. To this end, the NFEPWM has to become a learning organization and switch to an innova-

tive approach to its future. The announcement by the European Commission on the transfer of larger amounts of EU funds in financial instruments in the new financial perspective 2014-2020 is also important.

In addition, one has to also take into account that the entire economy steers towards increased innovation, and therefore also the NFEPWM activities should be directed toward innovative approaches to financing environmental protection and development of the organization.

PERSPECTIVE 4: INNOVATION, CHALLENGES, DEVELOPMENT

Active creation of the future

Measure 4A:	Measure 4B:	Measure 4C:	Measure 4D:
Adaptation of the NFEPWM for the implementation of new policies and financial instruments of the EU and participation in the implementation	Promoting eco-innovation	Active creating of systemic solutions corresponding to the identified opportunities and threats	Human resource management - support for modern public institution and a friendly employer

6.4.2. Measure 4A: Adaptation of the NFEPWM for the implementation of new policies and financial instruments of the EU and participation in the implementation

6.4.2.1. Description of the measure

Measure 4A is to develop the NFEPWM for the implementation of new policies and EU financial instruments and directions for environmental funding. It is important from the point of view of the objective of the measure to actively participate in the creation of programming documents for the next financial perspective of the European Union (2014-2020), using the experience of the NFEPWM in the implementation of previous EU financial perspectives. It is assumed that NFEPWM could play such a function, as in the current perspective. It is also important to involve the NFEPWM in the creation and implementation of financial instruments, including those using EU funds. To this end, the NFEPWM should actively participate in working groups, conferences and meetings for the new programming period, present its experience and suggest the best solution. It is also important, to examine and analyze as soon as possible the needs for adaptation of the NFEPWM to the implementation of financial instruments in the new financial perspective, as required by the European Commission. Given the experience of the NFEPWM in the implementation of financial instruments from national resources and in the implementation of projects with foreign funds, the NFEPWM should play a key role in co-creating legal and procedural solutions to ensure maximum efficiency of foreign funds. It is also important to develop a coherent approach to financial aid for new projects, which will take into account the specificities of new solutions within

the EU perspective. The NFEPWM should also take action to help smooth the transition to the implementation of projects under the new EU funds.

6.4.3. Measure 4B: Promoting eco-innovation

6.4.3.1. Description of the measure

Measure 4B is to support activities related to eco-innovation, which contribute to improving the environment and result in increasing the competitiveness of enterprises. Taking into account the growing importance of an approach to build a competitive economy, based, among others, on innovation. The measure will develop a target model for supporting innovative projects, which will extend the offer of the NFEPWM for such projects, based on the already started cooperation with the National Center for Research and Development in the GECKO programme, or support in GreenEvo project¹⁹, which promotes Polish innovative technologies on foreign markets. It will be important also to promote the use of best practices and to create "green jobs".

6.4.4. Measure 4C: Active creating of systemic solutions corresponding to the identified opportunities and threats

6.4.4.1. Description of the measure

Under this measure, the NFEPWM will be actively involved in working with senior institutions on such system solutions that will provide an additional source of revenue for the NFEPWM and will ensure continuity of NFEPWM operation as the financier of environmental protection and water management. Furthermore, the NFEPWM activities will be aimed at widening the range of available forms of financing environmental protection, consistent with the needs of the beneficiaries and the environment, taking into account the new arrangements that will be implemented in the EU financial perspective 2014-2020. It is also important to establish greater cooperation with external partners and international institutions in order to maximize the potential of the NFEPWM. It is expected that the NFEPWM will open more to funding of research and innovative projects in the field of environmental protection and water management, the implementation of which can significantly improve the environment and reduce the impact of negative factors that cause degradation of the environment. In addition, it is assumed that NFEPWM will participate more in projects financed in ESCO formula.

Task (4B-1), arranged in the Common Strategy, will be an important task consisting of the creation of a uniform system for recording major environmental and material effects referred to in the Common Strategy and implementing it within two years in the whole system of funds.

6.4.5. Measure 4D: Human resource management - support for modern public institution and a friendly employer

6.4.5.1. Description of the measure

The NFEPWM is an employer who appreciates the fact that people create organizations and achieve their goals, and the quality of management is vital to the success of the company and intentions of employees. Therefore, the main objective of this measure will be the continuous improvement of knowledge of workers, permitting the development of skills of employees and adapting to the needs of employees (continuing teleworking, flexible working hours). In addition, implementation of the measure

¹⁹ GreenEvo - Green Technology Accelerator, project of the Ministry of the Environment with the aim of transferring Polish innovative environmental technologies and global spread of Polish technical thought.

will require introduction of a multi-faceted nature of work, taking into account the penetration of competence.

6.4.6. Supported directions of changes in the innovation, challenges, development perspective

In this area, actions will be focused on the objective of:

- building the highest organizational competencies of the NFEPWM for the implementation of EU policies and instruments and financial instruments in accordance with the requirements of the European Commission in the new financial perspective,
- developing a systemic concept of financial support for eco-innovation.

7. Rules for awarding co-financing and financial framework for the *NFEPWM Strategy*

7.1. Rules for granting co-financing from the NFEPWM funds

Co-financing from funds of the NFEPWM is allocated for the purposes specified in the EPL. The method of providing co-financing is determined by the *Rules for granting co-financing from the National Fund for Environmental Protection and Water Management*. According to the above rules, co-financing is done by providing:

- interest-bearing loans, including loans for preservation of financial liquidity of projects co-financed by the European Union,
- subsidies (including subsidies for interest on bank loans, partial repayment of bank loans, subsidies for interest rate or redemption price, subsidies for dismantling of end-of-life vehicles).

The NFEPWM can also provide financial resources to:

- banks for the purpose of bank lending, loans or subsidies to the indicated programmes and projects in the field of environmental protection and water management and the needs of geology, as well as interest rate subsidies or partial repayment of capital of bank loans provided for that purpose,
- voivodeship funds for environmental protection and water management for the purpose of providing loans and grants to the indicated programmes and projects in the field of environmental protection and water management and the needs of geology.

7.2. Financial framework for the *NFEPWM Strategy*

The financial framework for the implementation of the *NFEPWM Strategy* pertains to domestic and foreign resources available for activities related to environmental protection and water management. Due to the ongoing discussions on the shape of operational programmes for the new EU financial perspective (2014-2020) and the lack of a specific budget at the national level, as well as the main directions of support, the financial data for 2017-2020 will be entered at the time of updating the *NFEPWM Strategy* (at the latest by the end of 2014), and financial data for 2014-2016 will be reviewed. Financial data included in the table result from the current priority programmes, and their review envisaged in one of the tasks will have an impact on the final values projected in perspective 2013-2016. It is assumed that the trend of funding environmental protection after 2016 will be maintained, but the decisive levers are the final legal arrangements (e.g. the National Environmental Policy, the Water Law, etc.) and the role of the NFEPWM in the implementation of the new EU financial perspective.

Tab. 18. Financial framework for the implementation of the *NFEPWM Strategy*

Item	Specification	Total 2009-2012	Forecast 2013 - 2016
1	NFEPWM - lending from own resources together	4 525.2	5 983.0
	Of which:		
1.1	Protection and sustainable management of water resources	3 240.4	656.8
1.2	Rational waste management and protection of soil surface	595.9	2 739.9
1.3	Protection of atmosphere	613.0	2 515.1
1.4	Protection of biodiversity and ecosystem services	8.8	25.5
1.5	Other	67.2	45.6
2	NFEPWM – subsidies from own resources together	4 801.3	7 178.0
	Of which:		
2.1	Protection and sustainable management of water resources	1 044.2	1 686.5
2.2	Rational waste management and protection of soil surface	503.2	731.8
2.3	Protection of atmosphere	857.1	2 103.2
2.4	Protection of biodiversity and ecosystem services	205.7	425.9
2.5	Other	2 191.0	2 230.5
3	NFEPWM - lending and subsidies from own resources together (1+2)	9 326.5	13 161.1
	Of which:		
3.1	Protection and sustainable management of water resources	4 284.6	2 343.4
3.2	Rational waste management and protection of soil surface	1 099.1	3 471.8
3.3	Protection of climate and atmosphere	1 470.1	4 618.3
3.4	Protection of biodiversity and ecosystem services	214.5	451.5
3.5	Other	2 258.2	2 276.2
4	NFEPWM - European funds at the disposal of and supported by the NFEPWM (OP I&E, CF - without taking into account the special reserve)	10 426.3	10 167.7
	Of which:		
4.1	Protection and sustainable management of water resources (OP I&E+CF I and III Priority Axis)	8 807.1	6 236.6
4.2	Rational waste management and protection of soil surface	537.9	2 215.5
4.3	Protection of atmosphere	764.5	1 075.7
4.4	Protection of biodiversity and ecosystem services	0.0	0.0
4.5	Other (OP I&E IV Priority Axis)	316.8	639.8
5	NFEPWM - lending and subsidies from own resources together and European funds at the disposal of and supported by the NFEPWM together (3+4)	19 752.8	23 328.8
	Of which:		
5.1	Protection and sustainable management of water resources	13 091.7	8 580.0
5.2	Rational waste management and protection of soil surface	1 637.0	5 687.3
5.3	Protection of atmosphere	2 234.6	5 694.0
5.4	Protection of biodiversity and ecosystem services	214.5	451.5
5.5	Other	2 574.9	2 916.0
6	NFEPWM - Equity activity	1.4	0.0
7	NFEPWM - lending and subsidies from own resources together and equity activities and European funds at the disposal of and supported by the NFEPWM together (5+6)	19 754.2	23 328.8

In the case of financial forecasts, their values point to:

- an increase in the disbursement of own funds for financing environmental protection in 2013-2016 perspective, as compared to the expected performance of payments in 2009-2012,
- projected change of domain structure of financing environmental protection.

Fig. 9. Amounts and domains of financing environmental protection from NFEPWM own funds and funds supported by the NFEPWM in 2009-2012 (PLN million)

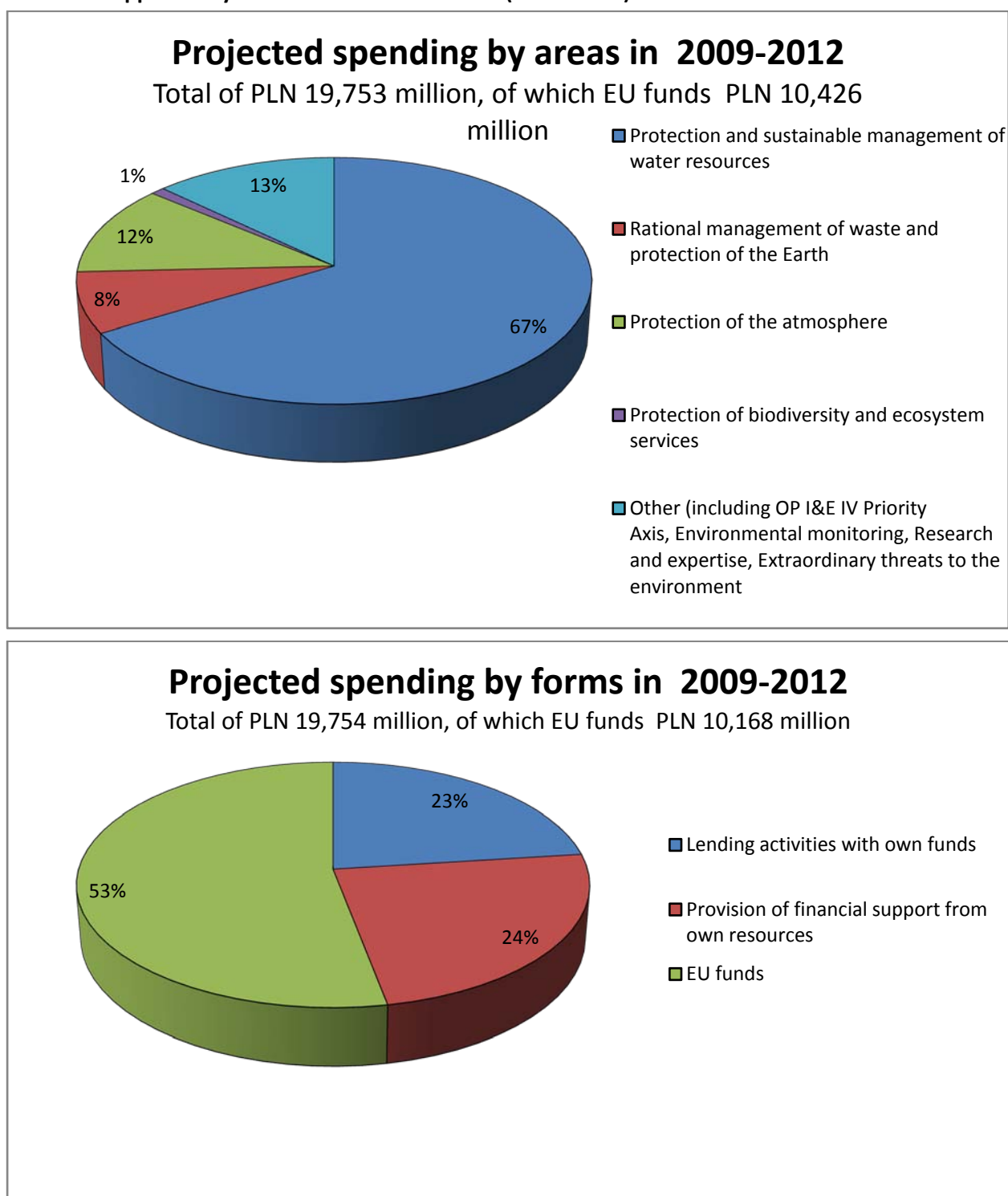
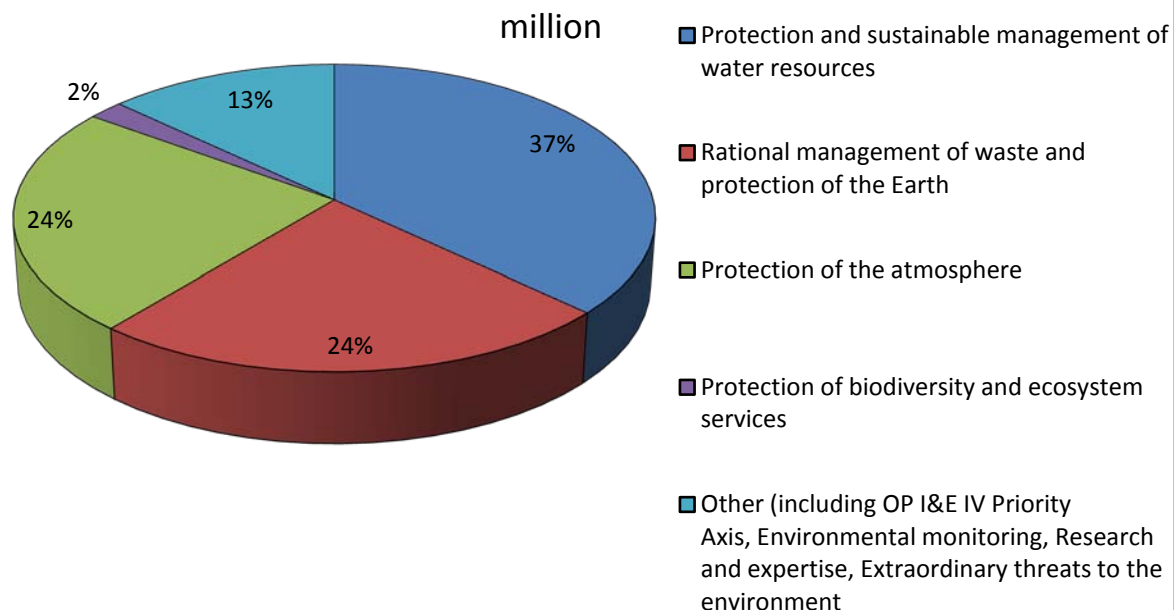


Fig. 10. Amounts and domains of financing environmental protection from NFEPWM own funds and funds supported by the NFEPWM in 2013-2016 (PLN million)

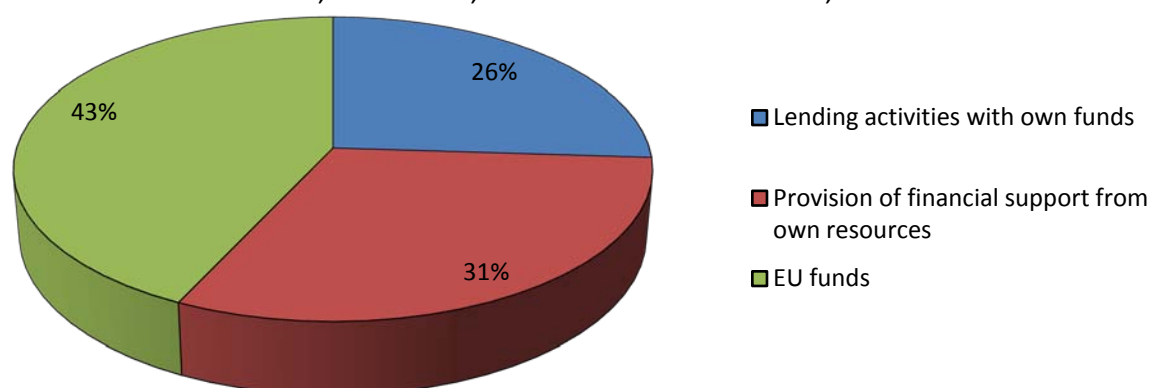
Projected spending by areas in 2013-2016

Total of PLN 23,329 million, of which EU funds PLN 10,168 million



Projected spending by forms in 2013-2016

Total of PLN 23,329 million, of which EU funds PLN 10,168 million



The expected change in 2013-2016 perspective is mainly due to the increase in total expenditure as a result of redistribution of resources from long-term liabilities (former "sub-funds") of the NFEPWM for the financing of projects in the field of energy efficiency and waste management, with reduction and change in the structure of the financing of projects in the field of water protection and water management observed in 2009-2012. Reducing payments under water protection and water management is associated with changes in the structure of co-financing of interest rate subsidies on bank loans rather than loans and the related fact of inclusion of funds from the banks in the financing of environmental protection.

Fig. 11. Comparison of changes in payments to the public finance sector and outside the sector in both perspectives (PLN million)

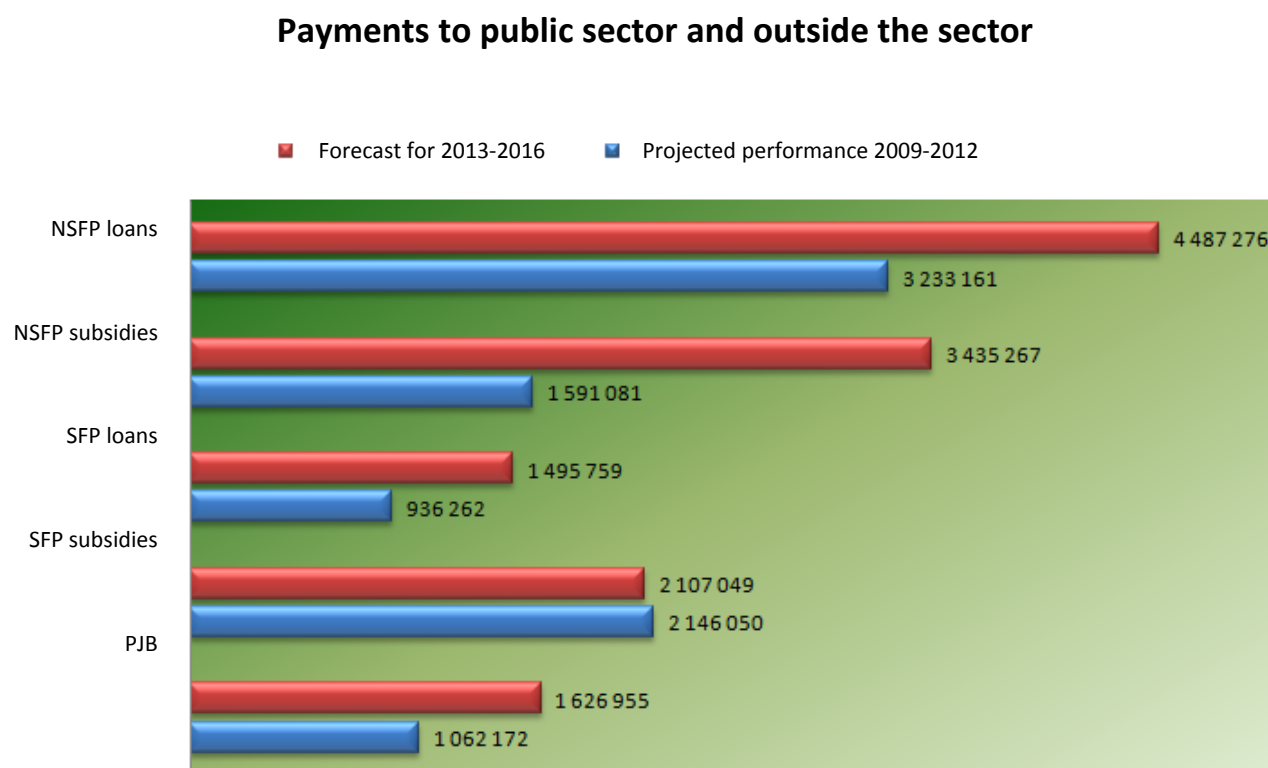
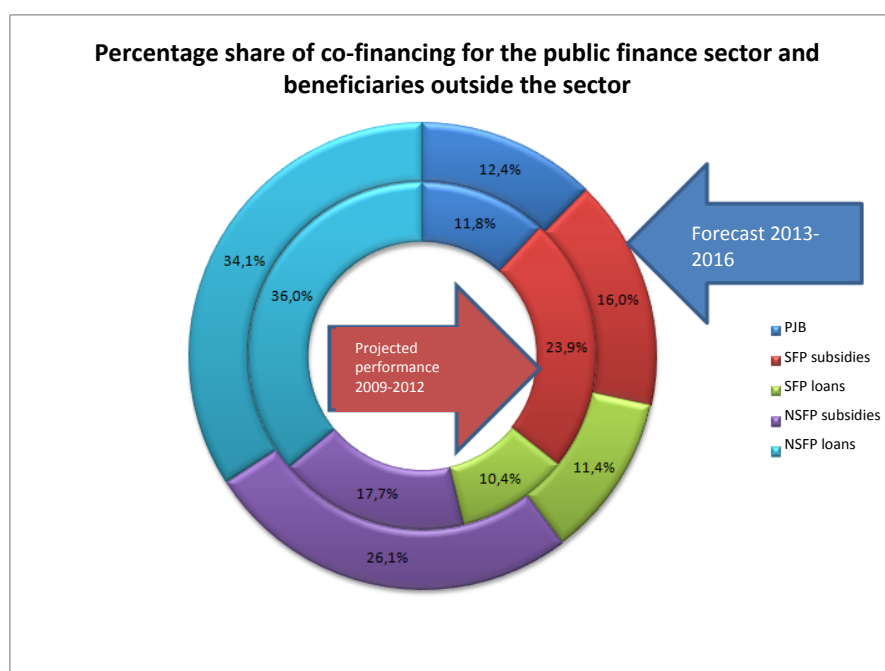


Fig. 12. Comparison of changes in payments to the public finance sector and outside the sector in both perspectives (%)



Projected changes

It is envisaged **that there will be significant increase in the share of repayable funding in relation to non-repayable funding (in 2016 in a ration of 65/35). As a target, the level of participation recommended in 2020 is 80/20 (conversion into a revolving fund)**. The forecasted level of repayable financing may vary in case of adverse conditions in the public finance sector that limit the possibilities of its indebtedness. At the same time, it is assumed that the non-repayable aid will be granted, in principle, as a targeted support to attract external funding sources (e.g. **subsidies to interest rate on bank loans or bond redemption**) or as **part of the incentives** for environmental investments (depreciation).

8. Tasks and tools to support the implementation of tasks

PER-SPEC-TIVE	MEASURE (name and impact on the assessment of perspective implementation)	TASK (description of the task and the impact on the assessment of the task)	Tools for task implementation	Task performer	MONITORING		
					Subject matter and form	Frequency	Indicator
FINANCE	Measure 1A [50%] Orientation and flexible adjustment of NFEPWM programming, given the NFEPWM strategic objectives and the needs, conditions and abilities of recipients of co-financing.	Task 1A-1 [35%] Review and verification of priority programmes, in terms of adaptation to indicated directions, objectives and matching the offer to the needs, conditions and opportunities of recipients and proposals of corrective actions and identifying new directions	Priority Programmes Review Report	Department of Planning and Reporting on the basis of conclusions of organizational units that develop priority programmes	Report on the results of the review and verification of PP, indicating corrective actions and new directions	2 times a year	YES/NO
		Task 1A-2 [20%] Verification and determining directions of support in accordance with the strategic objectives	List of Priority Programmes	Management Board and Supervisory Board	Annual revisions of directions of the NFEPWM support in terms of effectiveness and efficiency	Annually	YES/NO
		Task 1A-3 [45%] Application of indicated directions in the development of new priority programmes and adapting the offer to the needs, conditions and opportunities of recipients to improve the effectiveness of financial plans	Priority programmes, Financial plan	Organizational units developing priority programmes	Update and application to new PP	Each time the PP is developed and updated – at least two times a year	YES/NO
				Department of Planning and Reporting	Report providing information on the implementation of priority programmes in financial (PP budget) and environmental terms (PP indicators)	Quarterly	Level of budget implementation and implementation of PP indicators
	Measure 1B [25%] Streamlining processes of granting co-financing and settlement of payments with particular emphasis on security.	Task 1B-1 [50%] Review of internal processes in the NFEPWM, with particular emphasis on the processes that directly affect the efficiency and effectiveness of the use of funds	Report of an internal auditor	Internal audit	Adoption of the report of an internal auditor by the Board	Annually	YES/NO
		Task 1B-2 [50%] Proposal and implementation of optimized processes	Processes designed on the basis of the auditor's report	Director of the Office, with the help of the Organisational Department, in cooperation with the remaining units	Report on the implementation of the auditor's recommendations (for task 1B-1) The adoption of proposed modifications by the Board	Quarterly Annually	YES/NO

PER-SPEC-TIVE	MEASURE (name and impact on the assessment of perspective implementation)	TASK (description of the task and the impact on the assessment of the task)	Tools for task implementation	Task performer	MONITORING		
					Subject matter and form	Frequency	Indicator
					Report on the implementation of modified processes	2 times a year	
	Measure 1C [25%] The constant increase in efficiency and effectiveness of financing of environmental protection, taking into account the benefits arising from the use of external resources available.	Task 1C-1 [40%] Development and implementation of the rules of cost-effectiveness of projects	Rules adopted by the Board	Director of the Office, with the help of the Organizational Department, in cooperation with the remaining units	Development of cost-effectiveness rules	Development – 1st half of 2013,	YES/NO
			Report on the results of the implementation of cost-efficiency		Reports	Ongoing monitoring, summary report twice a year	Increase in cost-efficiency
		Task 1C-2 [30%] Continued cooperation with VFEPWM and banks to maximize the involvement of funds	Priority Programme with joint commitment of the NFEPWM, VFEPWM and banks	Organizational units developing PP and units for co-operation with the regions	PP monitoring	Ongoing monitoring, quarterly report	YES/NO Financial leverage
		Task 1C-3 [30%] Expanding cooperation with institutions not involved so far in environmental protection to implement environmental priorities	Initiatives of common involvement in environmental protection and water management	Director of the Office, Department of Communications	Report on initiatives	Annually	Number and financial dimension of initiatives

BENEFICIARIES	MEASURE 2A [40%] Improving relations with the beneficiaries.	Task 2A-1 [30%] Introduction of the principle of broad consultations on significant plans of the NFEPWM	Strategy for communication	Department of Communications in collaboration mainly with organizational units developing PP	Adoption of the rules	Deadline: End of 2013	YES/NO
					Report on the implementation of the rules	Annual monitoring and updating	Number of consultations
		Task 2A-2 [20%] Conferences and training for beneficiaries, e.g. dissemination of knowledge about the new environmental challenges, new policies on the environment, etc.	Communication strategy (including training and conferences for beneficiaries)	Department of Communications in collaboration mainly with organizational	Development of strategic themes of training and conferences	Deadline: end of 2013, annual updates	YES/NO
					Report on the implementation	Monitoring at the end of 2013, annual reports	Number of person-days of participation
		Task 2A-3 [50%] Proposal and implementation actions resulting from satisfaction surveys of beneficiaries, consulting and training	Strategy for communication	Department of Communications in collaboration mainly with organisational units	Report on the implementation	Monitoring and reports twice a year	YES/NO The level of satisfaction of the beneficiaries.

PER-SPEC-TIVE	MEASURE (name and impact on the assessment of perspective implementation)	TASK (description of the task and the impact on the assessment of the task)	Tools for task implementation	Task performer	MONITORING		
					Subject matter and form	Frequency	Indicator
	Measure 2B [30%] Development of digital servicing of beneficiaries.	Task 2B-1 [100%] Development of information systems of the NFEPWM (generators of co-financing applications and applications for payment)	Strategy for digitalisation of the NFEPWM	IT Department	Report on the implementation	Monitoring and reports twice a year	YES/NO
	MEASURE 2C [30%] Development of information and promotion activities.	Task 2C-1 [100%] Promoting and informing about the offer and the actions taken by the NFEPWM	Strategy for communication	Department of Communications in collaboration mainly with organisational units	Report on the implementation	Monitoring and reports twice a year	YES/NO reach indicators (GRP)
INTERNAL PROCESSES	Measure 3A [25%] Computerization of processes.	Task 3A-1 [70%] Effective IT tools for recording, monitoring and reporting on progress in the implementation and settlement of projects	Strategy for digitalisation of the NFEPWM	Director of the Office and the IT Department	Report on the implementation	Monitoring and quarterly reports	YES/NO
		Task 3A-2 [30%] Further development of system of electronic circulation of documents and self-service of employees	Strategy for digitalisation of the NFEPWM	Director of the Office and the IT Department	Report on the implementation	Monitoring and quarterly reports	YES/NO
	Measure 3B [25%] Development of internal communication and collaboration (team building)	Task 3B-1 [50%] Improvement of internal communication understood <i>inter alia</i> , as the current exchange of information and experience among staff, building relationships and mutual cooperation	Communication strategy, Human resource management strategy, integration activities	Department of Communications in collaboration mainly with organizational unit with support of the Board	Report on the study to improve communication, providing information on the results and conclusions for the implementation	Direct annual monitoring (at the level of tasks)	YES/NO (implementation of conclusions)
		Task 3B-2 [50%] Further development of the construction of work teams to perform specific tasks, resulting in strengthening internal cooperation	Working groups for specific tasks	Coordination by Director's Office with participation of all units	Report on the implementation	Implementation: First half of 2014, annual update and monitoring twice a year	YES/NO Number of teams, number of people in teams
	Measure 3C [25%] Proper allocation of resources	Task 3C-1 [100%] Adequate allocation of human, material, information in a balanced manner, while maintaining the cost-effectiveness	Flexible forms of employment and working time, while providing the necessary facilities, materials and equipment	Coordination by the Director of the Office with the participation of Personnel Management Team, Department of Administration and the IT Department	Strategy for Human Resources Management, Organizational Regulations, Employment plan	Ongoing annual monitoring, starting from 2013	YES/NO
					Plan for investments and purchases		
	Measure 3D	Task 3D-1 [100%]	Procedure	Coordination by the Director of the Office with	Report of an internal auditor	Annual	YES/NO

PER-SPEC-TIVE	MEASURE (name and impact on the assessment of perspective implementation)	TASK (description of the task and the impact on the assessment of the task)	Tools for task implementation	Task performer	MONITORING		
					Subject matter and form	Frequency	Indicator
	[25%] Full implementation of management control, business continuity, risk analysis and anti-corruption system	Implementation of management control, business continuity, risk analysis and anti-corruption system		the participation of internal control and internal audit	Reports on the implementation of the recommendations of the internal auditor	Quarterly	

INNOVATION, CHALLENGES, DEVELOPMENT	MEASURE 4A [25%] Adaptation of the NFEPWM for the implementation of new policies and financial instruments of the EU and participation in the implementation	Task 4A-1 [40%] Continued participation of the NFEPWM representatives in working groups preparing, on the initiative of the Minister of the Environment, the tools and guidelines for financing environmental protection in the new EU perspective.	Agreed way of transferring knowledge from working groups of the Ministry of Environment to the NFEPWM.	NFEPWM representatives in working groups	Transfer of knowledge from working groups at the Ministry of the Environment to the NFEPWM in a manner determined by each group	Implementation by the end of 2014, monitoring at the end of 2013 and 2014,	Number of people informed of the findings and decisions of the work of the working groups
		Task 4A-2 [60%] Expertise in the development of financial instruments and the preparation of the NFEPWM for implementation	Preparation of expertise	Director of the Office with the participation of all organisational units	Report on the implementation of the expertise	Implementation by 30.06.2013, creation of financial instruments by 31.12.2013 r. in preparation of the NFEPWM for the implementation	YES/NO
	Measure 4B: Promoting eco-innovation [25%]	Task 4B-1 [50%] Systemic concept of financial support for eco-innovation.	Preparing basis for universal principles, criteria for support for the research and implementation of eco-innovation.	Appointed internal working group	Preparing report on basis for universal principles, criteria for support for the research and implementation of eco-innovation.	Implementation and monitoring in first half of 2014	YES/NO
		Task 4B-2 [50%] Participation of the NFEPWM in the financing of research and innovation projects	Priority programmes	Appointed internal working group or indicated unit	Providing information on the implementation of solutions	Implementation and monitoring at the end of 2014, followed by annual monitoring	Number of research and innovation projects

PER-SPEC-TIVE	MEASURE (name and impact on the assessment of perspective implementation)	TASK (description of the task and the impact on the assessment of the task)	Tools for task implementation	Task performer	MONITORING		
					Subject matter and form	Frequency	Indicator
	MEASURE 4C [30%] Active creating of systemic solutions corresponding to the identified opportunities and threats	Task 4C-1 [50%] Development with other institutions of systemic solutions that provide permanent source of revenue for the NFEPWM	Legal acts	Independent position for legislation, Director of the Office	Current information	Ongoing	YES/NO Number of actions taken
		Task 4C-2 [50%] Creation of a uniform nationwide system for recording major environmental and material effects referred to in the Common Strategy	Report on the results of the implementation of a system for recording the environmental and material effects	Director of the Office, appointed internal working group with representatives of VFEPWM	Report on the implementation	Implementation and monitoring by the end of 2014	YES/NO
	MEASURE 4D [20%] Human resource management - support for modern public institution and a friendly employer	Task 4D-1 [100%] Providing training for improving professional knowledge. Continuation of the flexibility and diversity of employment, including teleworking	Strategy for human resources management	Personnel Management Team	Providing information on the implementation of solutions	Ongoing implementation, annual monitoring	Number of trained employees, number of teleworking employees YES/NO (for the introduction of flexible working)

9. Glossary

Good Governance

ESE - Strategy for Energy Security and Environment. Perspective 2020

BOŚ – Bank Ochrony Środowiska (Bank of Environmental Protection)

EMAS - Eco-Management and Audit System

ESCO - (Energy Saving Company or Energy Service Company) is an indication of companies offering expert services in the areas of energy by way of financing energy projects by the so-called third party (TPF - *Third Party Funding*)

Fund of funds - financial intermediary implementing innovative financial instruments from EU funds in 2014-2020 perspective, referred to in Art. 32 of the draft REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1083/2006.

GECKO - Generator of Environmental Concepts - a programme jointly established by the NFEPWM and the National Research and Development Centre, will focus on the financing of research and development activities, the NFEPWM will finance the implementation area of construction of demonstration plants.

GreenEvo - Green Technology Accelerator

IEN - Intelligent energy networks

NAEC - National Agency for Energy Conservation

Commission - European Commission

NPMWT - National Programme for Municipal Wastewater Treatment

NFEPWM – National Fund of Environmental Protection and Water Management

NPDLCE - National Programme for the Development of Low-Carbon Economy

RES – renewable energy sources

GDP - Gross Domestic Product

OP I&E - Operational Programme Infrastructure and Environment

National Environmental Policy - Environmental Policy for 2009-2012 with perspective to 2016

EPL - the Act of 27 April 2001 - Environmental Protection Law (Dz.U. of 2008, No. 25, item 150, as amended)

Balanced Score Card - is a tool for strategic management of the organisation, by Robert S. Kaplan and David P. Norton

EU – European Union

UNDP – the United Nations Development Programme

VFEPWM - Voivodeship funds for environmental protection and water management

Common Strategy - Common strategy of the National Fund for Environmental Protection and Water Management and voivodeship funds for environmental protection and water management for years 2013-2016 with a view to 2020.