



NARODOWA  
STRATEGIA SPÓJNOŚCI  
dla rozwoju Polski



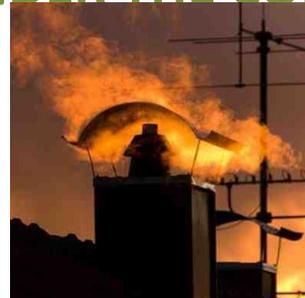
MINISTERSTWO  
ROZWOJU

Unia Europejska  
Europejski Fundusz  
Rozwoju Regionalnego



## THE IMPACT OF THE 2007-2013 COHESION POLICY ON NATURAL ENVIRONMENT

### OUTCOMES OF INVESTMENTS IN THE AREA OF ENERGY FINANCED UNDER THE COHESION POLICY 2007-2013



## MAIN OBJECTIVES:

**The assessment of the impact of the 2007-2013 Cohesion Policy on natural environment**

**The assessment of the impact of investments in the area of energy financed under the NSRF 2007-2013 on the environment, including greenhouse emissions**

## SPECIFIC OBJECTIVES:

- the assessment of interventions under the National Strategic Reference Framework 2007-2013 in the area of environment
- progress in the use of renewable energy sources
- improvement of energy efficiency



# THE CONTEXT FOR IMPLEMENTATION OF NSRF 2007-2013 INTERVENTIONS

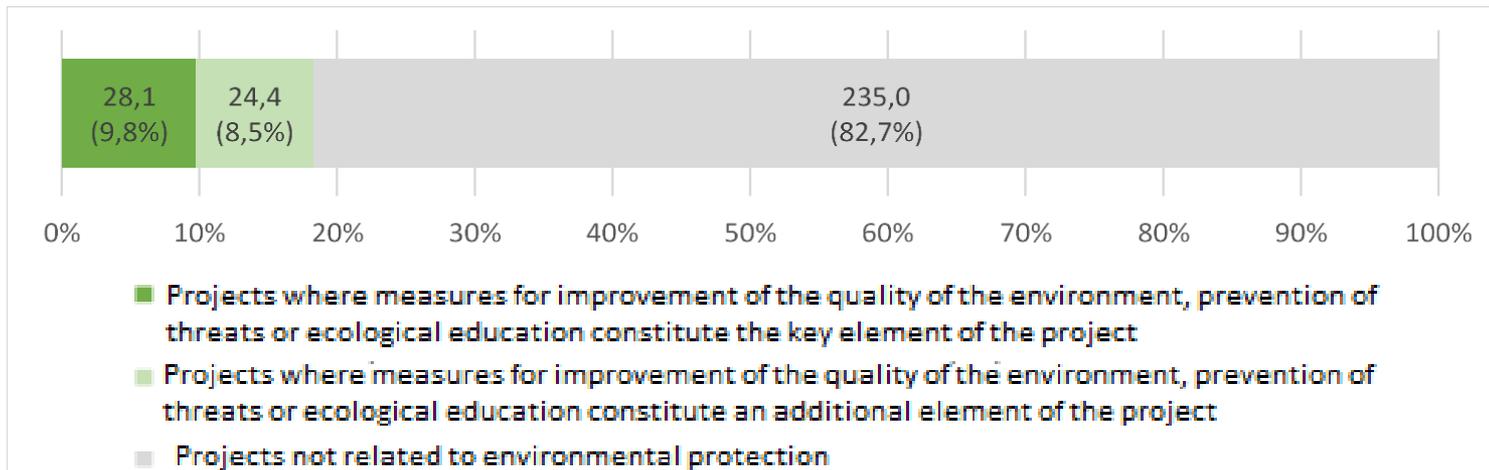
## Changes in the area of environment protection in the 2007-2013 financial perspective

Expenditure on measures for environmental protection and water management [PLN billion]



# THE FINANCIAL DIMENSION OF NSRF 2007-2013 INTERVENTIONS

*Share of the EU support for projects implemented under NSRF 2007-2013 that contribute to improving the quality of the environment, increasing the ecological safety or increasing the knowledge in the area of environmental protection*



# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

## 1. The impact of co-financed projects on achievement of assumptions of NSRF 2007-2013

- the level of achievement of objectives envisaged in NSRF operational programmes
- the degree of achievement of envisages level of indicators in NSRF programmes

Thematic area	Objectives	Indicator
water and sewage management	partial	full
waste management	full	full
rehabilitation of degraded areas and protection of earth surface	full	full
prevention of natural disasters, adaptation to climate change and environmental monitoring	full	full
air protection and reduction of greenhouse gas emissions	partial	partial
nature conservation	partial	full
ecological education and fostering competences in the area of environmental protection	full	full
clean urban transport	partial	full
environmental protection at enterprises	full	full



# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

## 2. The significance of actions implemented under NSRF 2007-2013 from the perspective of general changes taking place in 2009-2014

- commitment of NSRF funds

Thematic area	Indicator	NSRF/CSO relation
water and sewage management	significant impact	38%
waste management	key impact	78%
rehabilitation of degraded areas and protection of earth surface	key impact	50%
prevention of natural disasters, adaptation to climate change and environmental monitoring	significant impact	17%
air protection and reduction of greenhouse gas emissions	significant impact	14%
nature conservation	significant impact	15%
ecological education and fostering competences in the area of environmental protection	key impact	No data available
clean urban transport	key impact	No data available
environmental protection at enterprises	rather significant impact	No data available



# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013 WATER AND WASTE WATER MANAGEMENT

construction and modernisation of water supply systems	significant impact
construction and modernisation of municipal wastewater treatment systems	Key impact
sewage sludge treatment	insignificant impact
construction of water supply and sewage systems on investment areas	insignificant impact
preparation of technical documentation for water and sewage projects	significant impact
water and sewage management at enterprises	insignificant impact
rationalisation of water management in technological processes	insignificant impact



## Outcomes of NSRF 2007-2013 interventions:

- construction or modernisation of over **7.1 thousand km of water supply network**
- the number of persons using newly constructed or modernised water supply network: **354.1 thousand persons**

## Assessment:

- the length of the water supply network constructed under NSRF represents **20.6% of the length of new network commissioned in the territory of the country in 2009-2014** (28.5 km according to CSO)
- the contribution of NSRF represents the value of **0.7 percentage point of the increase of the share of population using water supply network**, which according to CSO amounted to 4.3 percentage points (an increase from the level of 87.3% to the level of 91.6% of the total of residents)

# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

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construction and modernisation of municipal wastewater treatment systems	Key impact
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construction of water supply and sewage systems on investment areas	insignificant impact
preparation of technical documentation for water and sewage projects	significant impact
water and sewage management at enterprises	insignificant impact
rationalisation of water management in technological processes	insignificant impact

## Outcomes of NSRF 2007-2013 interventions:

- construction or modernisation of over **24.6 thousand km of sewage system**
- construction or modernisation of **510 municipal waste water treatment plants**
- the target number of persons using newly constructed or modernised sewage system nearly **2.2 million persons**

## Assessment:

- the length of the sewage system constructed under NSRF represents **55% of the length of new network commissioned in the territory of the country in 2009-2014** (42496 km according to CSO)
- the outcomes of implementation of investments co-financed thanks to NSRF represent **97% of new municipal waste water treatment plants commissioned in 2009-2014** (413 facilities according to CSO)
- the number of new persons using the constructed sewage system as a result of implementation of undertakings under NSRF represents around **70% if the increase of the total number of persons using the sewage system in 2009-2014** (according to CSO: 3.1 million persons, the increase of the share of population using the sewage system from 61.5% to 68.7%)



# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

development of the municipal waste management system	key impact
development of medical waste management systems	insignificant impact
construction and extension of systems for recovery, disposal or recycling of industrial or post-consumer waste	significant impact
rationalisation of waste and resource management	insignificant impact
support for IT solutions assisting waste management	rather significant impact
removal of asbestos	insignificant impact



## Outcomes of NSRF 2007-2013 interventions:

- construction, extension or modernisation of **111 installations** performing the function of **municipal waste management facilities**, including **6 installations for thermal municipal waste treatment**
- development of the system for separate collection of municipal waste (including organisation of “PSZOK”) in **54 municipalities**
- construction or modernisation of **186 installations** for recovery, recycling or neutralisation of **industrial and post-consumer waste**

## Assessment:

- the number of installation co-financed under NSRF 2007-2013 represents **around 40% of the total number of installations holding RIPMW status as of the end of 2014** (268 according to resolutions of Voivodeship parliaments on implementation of Voivodeship Waste Management Plans)

# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

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## Assessment (cont'd):

- the total capacity of supported Waste Management Plants amounts to **5,362 thousand tonnes/year**, which represents around **50% of municipal waste collected in Poland over a year** (10.3 million tonnes of municipal waste in 2014 according to CSO)
- operations of installations for management of municipal waste co-financed under NSRF 2007-2013 covered **1115 municipalities, i.e. 45% of all municipalities in Poland** and **17.7 million inhabitants, i.e. 46% of the population of the country**
- support of installations for recovery, recycling or neutralisation of industrial and post-consumer waste was complementary to the above measures



# THE ASSESSMENT OF OUTCOMES OF INTERVENTIONS UNDER NSRF 2007-2013

protection of species and habitats and of biodiversity

significant impact

plans and programmes for the protection of species and habitats

Key impact

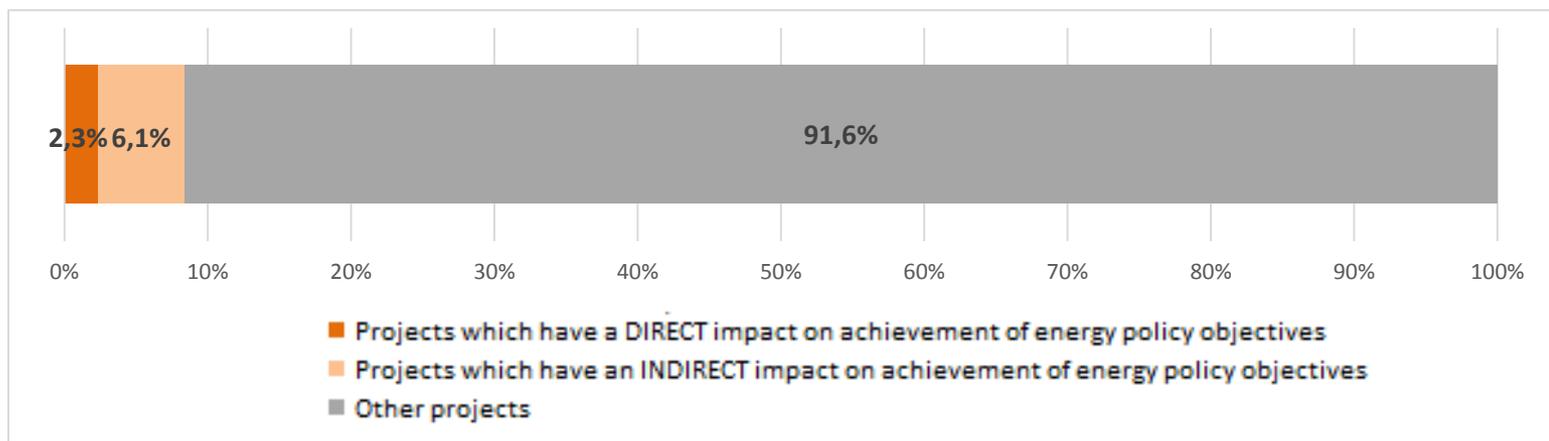


## Outcomes of NSRF 2007-2013 interventions:

- implementation of **202 projects facilitating protection of habitats, plant communities or species**, including **138 projects** related to protection of Natura 2000 areas
- implementation of measures related to in-situ protection of species and habitats at risk of extinction in around **3% of the area covered by protection under Natura 2000 network**, and related to reduction of pressure from tourism in around **12%** of the area covered by protection under Natura 2000 network
- drafting of planning documents for **512 protected areas**, including elaboration of plans of protection tasks and plans of nature protection for 475 Natura 200 areas (**49% of Natura 2000 areas established in Poland**)
- the total area of Natura 2000 areas covered with planning documents thanks to NSRF funds (6,757 thousand hectares) represents **over 74% of the area of all Natura 2000 areas established in Poland**

# THE FINANCIAL DIMENSION OF NSRF 2007-2013 INTERVENTIONS IN THE ENERGY SECTOR

THE SHARE (%) OF PROJECTS WITH AN IMPACT ON ACHIEVEMENT OF THE ASSUMPTIONS OF THE ENERGY POLICY IN THE TOTAL VALUE OF EU FUNDS TRANSFERRED UNDER NSRF 2007-2013



**PLN 24.1 billion** in **3642 of projects** (**8.4%** of the total value of EU funds transferred under NSRF 2007-2013), including:

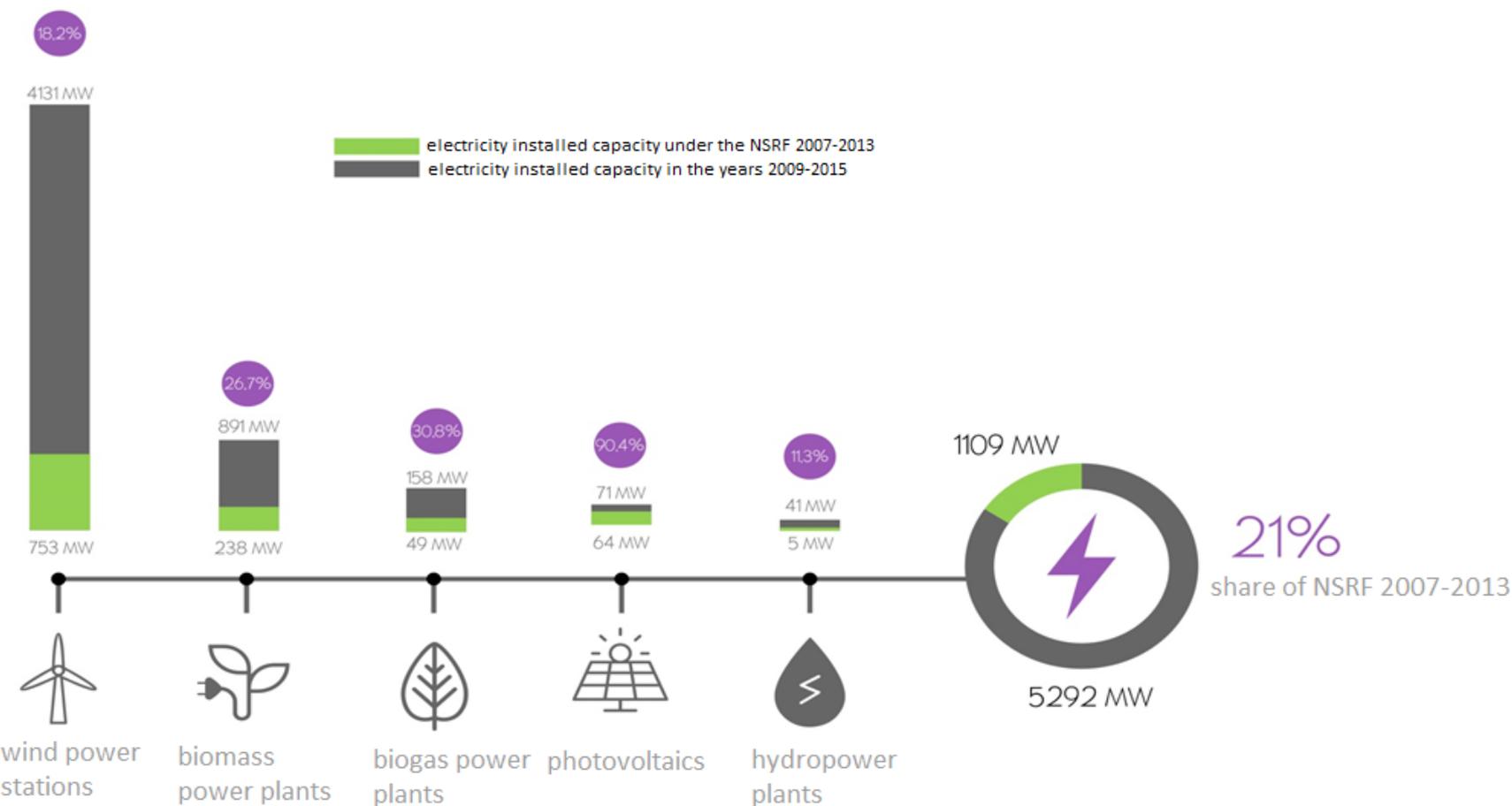
- **PLN 6.6 billion (2.3%)** projects, which had **direct impact** on achievement of energy policy objectives mentioned above
- **PLN 17.4 billion (6.1%)** projects, which had **indirect impact** on achievement of energy policy objectives mentioned above



# PROGRESS IN THE USE OF RES

## - CONTRIBUTION OF NSRF 2007-2013

Share of NSRF in the increase of electricity installed capacity of RES installations in Poland in the years 2009-2015



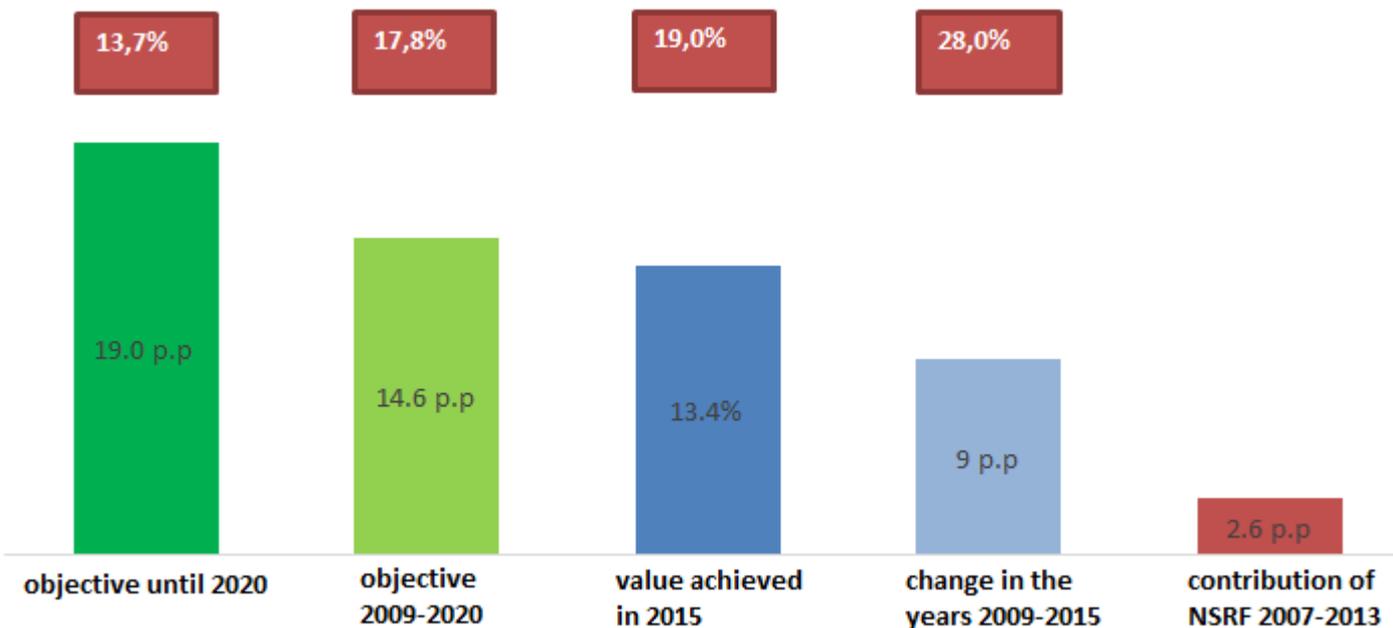
# PROGRESS IN THE USE OF RES

## - CONTRIBUTION OF NSRF 2007-2013

Potential volume of electrical energy generated annually in RES installations supported under NSRF 2007-2013:

- **3,377 Gwh/year** (without installations for co-burning of biomass)
- **19% of the total electrical energy generated from RES in Poland in 2015, according to URE**
- **2.6% of the gross final consumption of electrical energy in Poland in 2015**

THE IMPACT OF NSRF 2007-2013 ON ACHIEVEMENT OF NATIONAL OBJECTIVES RELATED TO THE SHARE OF ELECTRICAL ENERGY FROM RES IN THE GROSS FINAL ELECTRICAL ENERGY CONSUMPTION

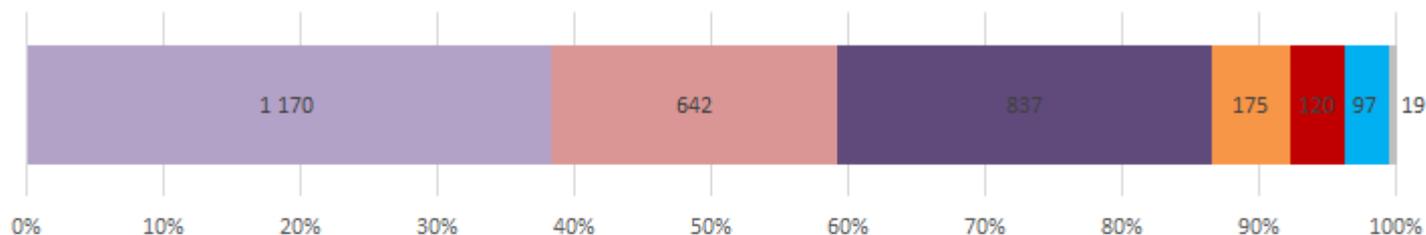


# IMPROVING THE ENERGY EFFICIENCY

## CHARACTERISTICS OF INTERVENTIONS

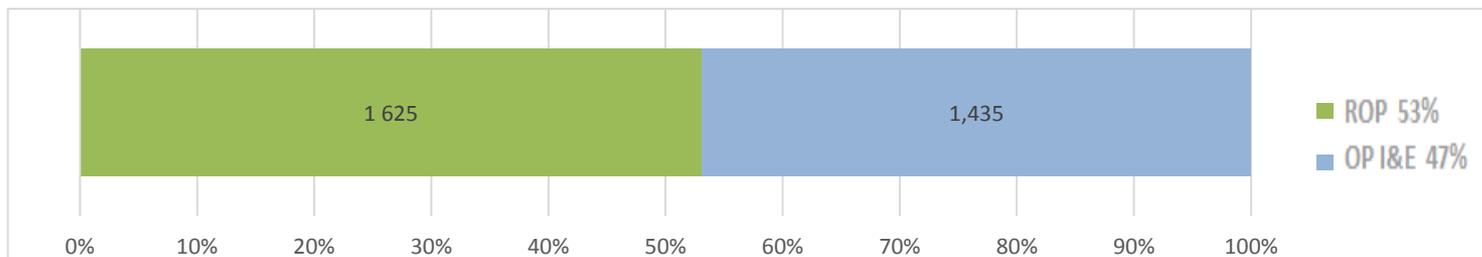
VALUE OF EU CO-FINANCING TRANSFERRED UNDER PROJECTS RELATED TO IMPROVING ENERGY EFFICIENCY IMPLEMENTED UNDER NSRF 2007-2013 (PLN MILLION) (TOTAL: PLN 3,060 MILLION)

### A. UNDER INDIVIDUAL CATEGORIES OF NSRF 2007-2013 PROJECTS



- Thermomodernisation of public buildings and residential (multifamily) buildings (38%)
- Thermomodernisation of public buildings combined with the use of RES (21%)
- Modernisation of heating systems (27%)
- Increasing energy efficiency of electricity distribution grids (6%)
- Cogeneration of power (conventional generation) (4%)
- Increasing energy efficiency of enterprises (project element) (3%)
- Thermomodernisation of buildings of enterprises (1%)

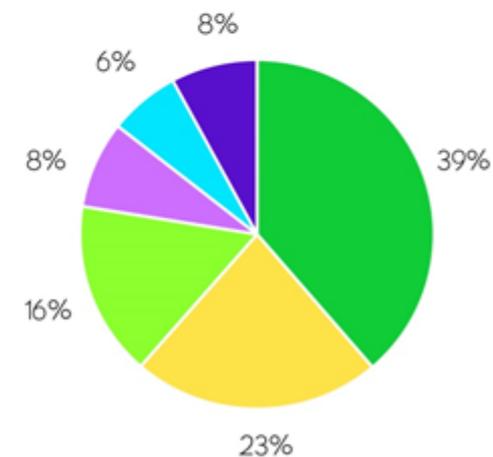
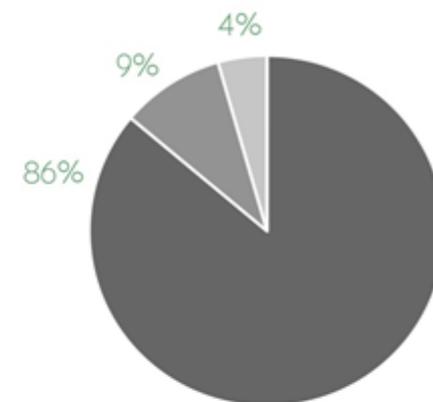
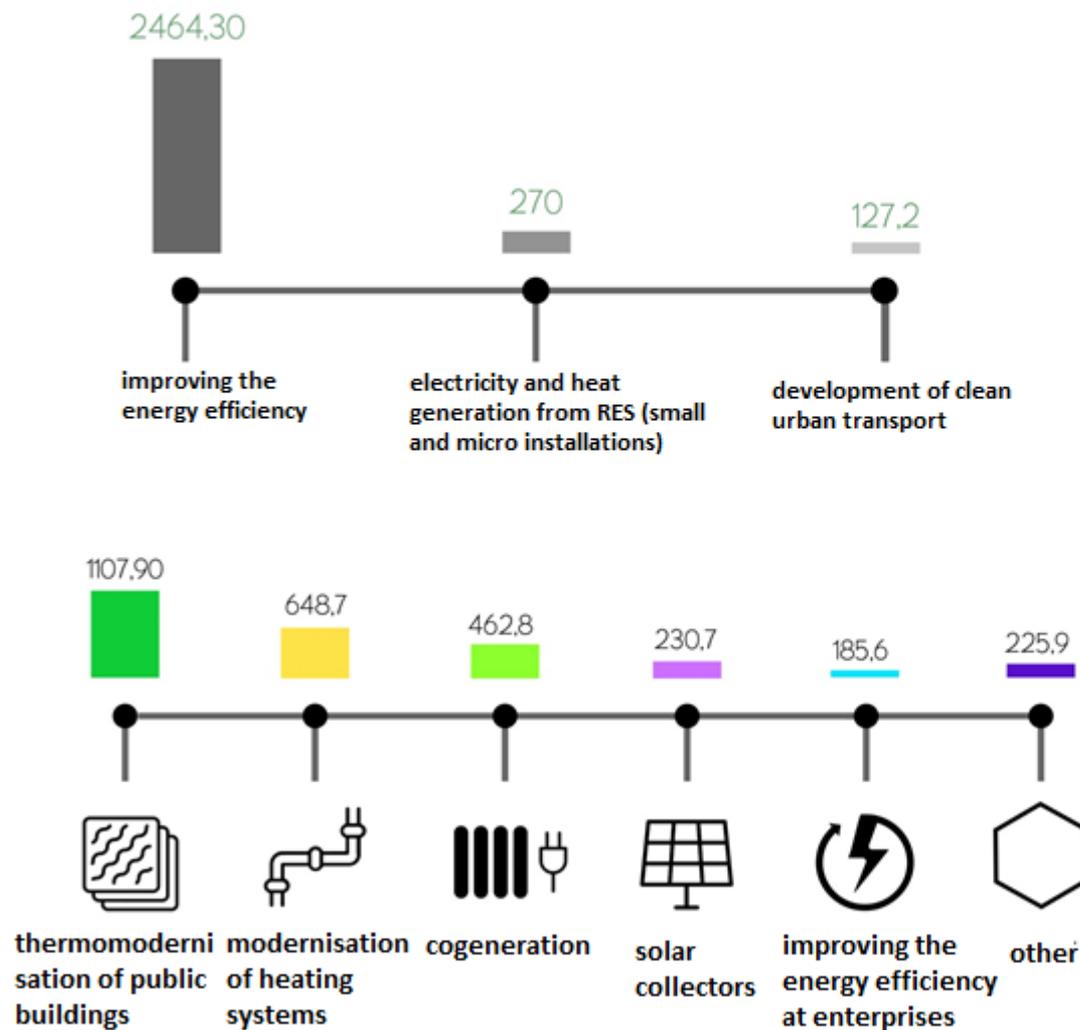
### B. UNDER NSRF 2007-2013 PROGRAMMES



# IMPROVING THE ENERGY EFFICIENCY

Amount of saved electricity or heat under NSRF [MWh/year]  
total: 28615 MWh/year

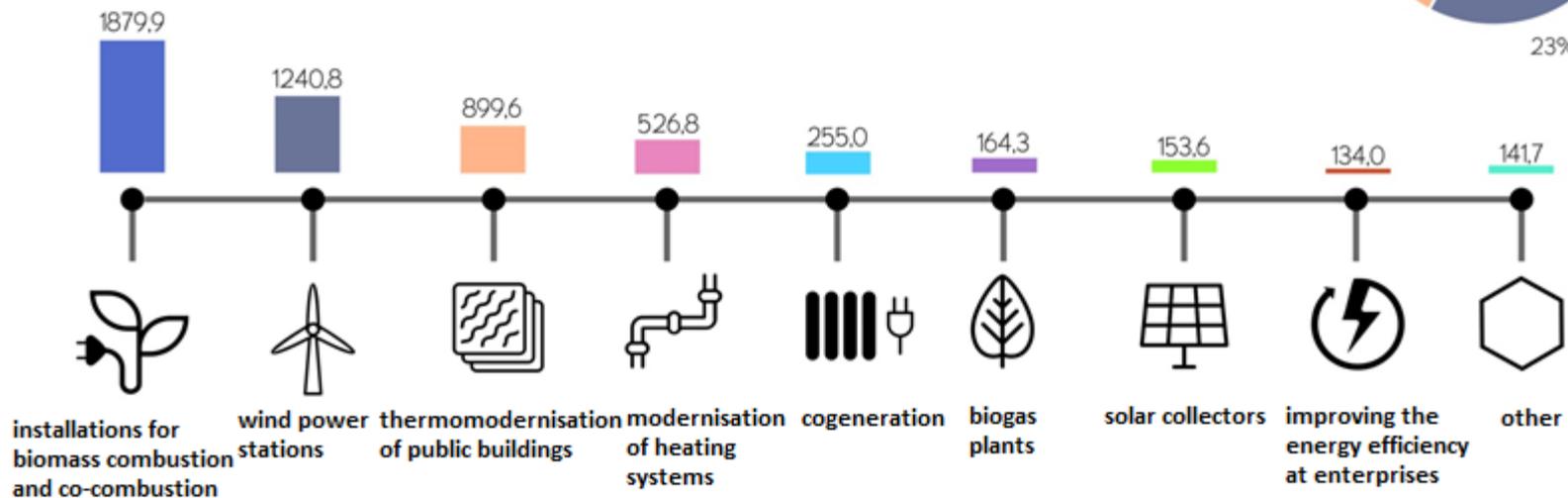
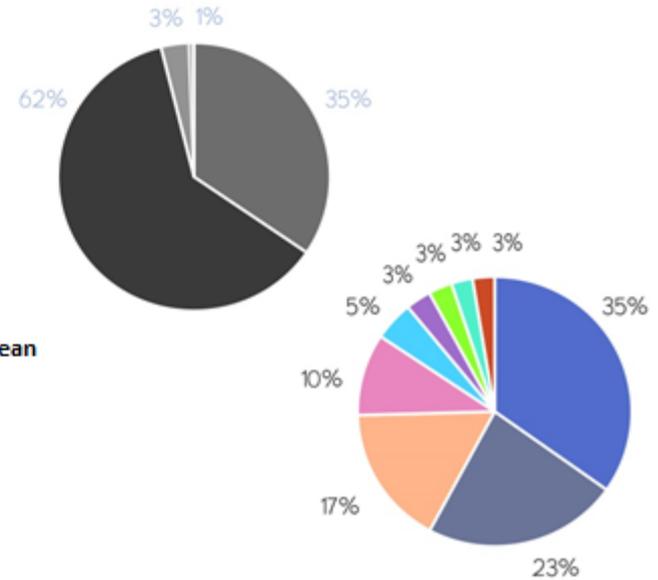
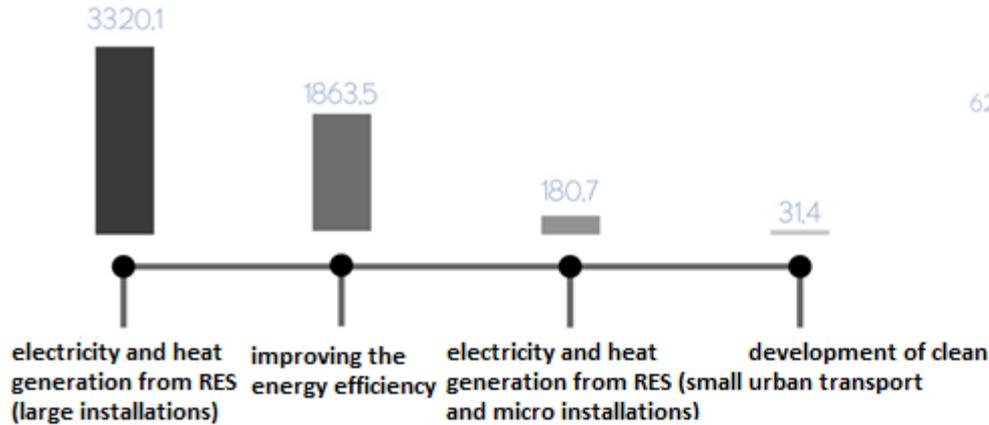
Contribution of individual types of measures to the total amount of saved energy



# REDUCTION OF THE IMPACT OF THE ENERGY SECTOR ON THE ENVIRONMENT - REDUCTION OF CO<sub>2</sub> EMISSIONS

Estimated reduction of CO<sub>2</sub> emissions as a result of NSRF 2007-2013 (thousand tonnes / year) total: 535.7 thousand tonnes / year

Contribution of individual types of measures to the total reduction of CO<sub>2</sub> emissions



## GUIDELINES FOR THE PROGRAMMING PROCESS OF 2020+ PERSPECTIVE IN THE AREA OF ENVIRONMENT PROTECTION AND RISK PREVENTION

- **The logic of intervention** in environment protection shall call for **fundamental remodelling**. In some areas there shall be a **reformulation of priorities**.
- The primary pillars of broadly understood environmental intervention post 2020:
  - a. **protection of air** - in particular limitation of low emission
  - b. **development of low-emission public transport in cities**
  - c. **prevention of risks and adaptation to climate change**
  - d. **protection of biological diversity and environmental education**
  - e. **waste and resource management** targeted at prevention of generation of waste and more effective use of waste and resources
- More **emphasis on aspects related to economic growth and integration of objectives related to environment protection and economic growth**
- **The need to draft guidelines and detailed programmes for implementation of key undertakings well in advance**, including - among others - identification and elimination of barriers and limitation to implementation of key undertakings



## INTERVENTION MODEL IN THE AREA OF PROTECTION OF AIR AND IN THE ENERGY SECTOR

### IN THE 2014-2020 FINANCIAL PERSPECTIVE

- Earmarking of the main stream of funds for projects related to **improving energy efficiency**
- **More emphasis on the aspect of limiting low emission** (including at the level of criteria and detailed premises for calls for proposals)
- Development of the model, which was successful in the 2007-2013 financial perspective, whereby **municipalities play the role of the operator of funds** transferred for measures related to improving energy efficiency and limitation of low emission, implemented by residents.
- Priority for measures related to **development of tramway, trolley bus transport, as well as modernisation of bus rolling stock**, ideally towards electric or hybrid vehicles



## INTERVENTION MODEL IN THE AREA OF PROTECTION OF AIR AND IN THE ENERGY SECTOR

### IN THE 2014-2020 FINANCIAL PERSPECTIVE

- **Support for non-investment measures** (including education and training)
- Creation of conditions for development of RES through **support for construction and reconstruction of grids** facilitating connection of RES based generation units, as well as the **development of smart grids**
- Support for **innovative, most prospective solutions in the area of RES** (demonstration effect)
- **Reduction of the support for large installations for biomass burning**, support for small and medium scale installations (local heat and combined heat and power plants), powered by local biomass resources (primarily from agriculture)





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