



Forum
Energii

Analizy i dialog



LEWIATAN

ENERGY BOOST FOR POLAND



OVER PLN 580 BN (EUR 132.2 BN) AND 240 000 NEW JOBS
WILL LIFT POLAND FROM THE RECESSION, MODERNISE
ITS ECONOMY, AND INCREASE THE WELFARE OF POLES

HIGHLIGHTS:

In 2020, the Polish economy is expected to decline by 3.4% (MoF forecast). The strategy for exiting the recession caused by the COVID-19 pandemic includes public investment, ensuring liquidity provision for businesses, and maintaining incomes of the population. However, the economic crisis solves neither the problem of air pollution, nor climate change.

Low-emission transition will address economic, social, and environmental issues.

Forum Energii and Polish Confederation Lewiatan call for an urgent deployment of public funds in the following six areas:

- 1  energy renovation of buildings
- 2  clean and low-emission heat
- 3  distributed power generation
- 4  smart grids
- 5  low-emission transport
- 6  grid modernisation and expansion

These measures will mobilise **over PLN 580 billion (approx. EUR 132.2 billion)** in the period of 2020-2030 and contribute to creating **at least 240 000 jobs**.

NOMINAL VALUE OF ENERGY BOOST FOR POLAND COMPARED WITH SELECTED EXISTING AND PLANNED PUBLIC INVESTMENTS

| | | |
|--|-------------------|----------------------|
|  ENERGY BOOST FOR POLAND 2020-2030 | PLN 581.5 bn | approx. EUR 132.2 bn |
|  Investments in Poland 2019 | PLN 421 bn | approx. EUR 95.7 bn |
|  Cohesion Policy (expenditures) 2014-2020 | PLN 367.7 bn | approx. EUR 83.6 bn |
|  National Road Construction Programme 2014-2023 | PLN 107.1 bn | approx. EUR 24.3 bn |
|  Solidarity Transport Hub (CPK) + railway hub | approx. PLN 75 bn | approx. EUR 17.0 bn |
|  Investment pillar of the 2020 anti-crisis shield | approx. PLN 30 bn | approx. EUR 6.8 bn |

Source: Polish government documents, Statistics Poland, Polish Press Agency.

HIGHLIGHTS:

These areas will, to a large extent, be financed with national funds (public and private) and European funds available to Poland. In particular, we envisage a key role for revenues from the EU Emissions Trading Scheme, which should constitute an important instrument for financing green economic transition.

The key role of the government will be to immediately define economic objectives and develop appropriate regulations.

Six additional areas require initiating long-term actions today in order to mobilise funds in the future:

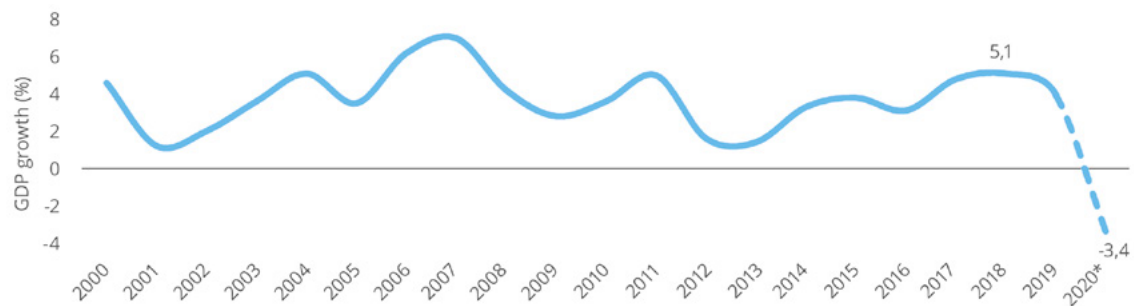
-  **1** offshore wind energy
-  **2** manufacturing capacity of RES appliances and energy-saving technologies and appliances
-  **3** low-carbon technologies of the future
-  **4** energy efficiency in industry and services
-  **5** RES support scheme
-  **6** upskilling and reskilling

These will allow Poland to take a developmental leap, thanks to, among other things, filling new market niches and moving upwards in supply chains. The role of public administration is to eliminate legal barriers and support the creation of markets.

THE POST-COVID-19 CHALLENGES FOR POLAND

The COVID-19 pandemic caused a lockdown on global activity to a degree no one could have imagined six months ago.

It is estimated that in 2020 the Polish economy will decline by 3.4%. The return to the long-term growth path of 4% per year is possible within the 2-3 year horizon but it requires a thoughtful, realistic, and ambitious strategy.



Real GDP growth rate (%). Source: Statistics Poland, Ministry of Finance forecast

In the short term, maintaining jobs and income for the population is a priority. In the longer run, we need to adapt to a world with different structure of demand for goods and services, shorter supply chains, lower mobility of the population, and greater risk aversion - and at the same time a world that is trying to respond to climate change, water shortages, pollution, and limited natural resources, all of which are barriers to growth.

The relevance and effectiveness of the support will depend not only on how long will it take for Poland to emerge from the crisis but also on whether the economy set on a path to development and prosperity. For medium-sized countries and those still converging (such as Poland), this is undoubtedly an opportunity to improve their international competitiveness, one that will definitely be otherwise lost.

Well-designed support will reduce the severity of the recession, accelerate the rebound, and allow for a return to permanently higher growth. Such a development impulse includes investment in infrastructure (transport and digital, but also energy). It is worth remembering, however, that the strength of the impulse is determined not only by the scale of non-refundable support, but above all by the ability to mobilise capital as well as by certainty, predictability, and stability of regulations.

Investments must also be socially acceptable and desirable from the perspective of the country's long-term development. Abrupt changes must not lead to social exclusion or increase income inequality. The essence of the planned actions must be fair and justified division of costs and equal access to resources.

All these aspects are taken into account in our proposed **ENERGY BOOST FOR POLAND** package.

9 REASONS FOR INVESTMENTS IN ENERGY TRANSITION

Investment in the energy sector satisfies all of the above-mentioned objectives: facilitates emergence from the recession, builds the foundations for long-term modernisation of the Polish economy (in an innovative manner) and helps to improve the welfare of Poles. Below, we present nine reasons for their implementation:

REASON 1

CHEAP ENERGY IS NECESSARY TO REBUILD THE ECONOMY AFTER THE CRISIS

Energy is an important component of costs in many industries. By providing access to cost-competitive sources of energy, we increase the profitability of Polish companies and society. However, this requires a well-thought energy mix, with a growing share of renewable sources. Such an approach to energy prices is also important from the perspective of preventing energy poverty among the population and stimulating consumer spending.

Poland is among countries with highest dependence on a single energy resource. Sticking to the traditional coal-based energy mix will increasingly undermine the competitiveness of the economy and income growth, due to the high cost of obtaining domestic fuel and the presence of one of the oldest coal-fired power plants in the EU, which require modernisation. Investment in the modern power sector promotes domestic, distributed, and diversified sources, increasing national energy security.

REASON 2

MODERN ENERGY SECTOR INCREASES NATIONAL SECURITY

REASON 3

ENERGY TRANSITION INITIATES BROADER MODERNISATION IN THE POLISH ECONOMY

Polish production is dominated by low and medium-low technology goods. The modernisation of the energy sector is a natural incentive to engage in more profitable activities (especially in R&D) and to change the employment structure towards better remunerated jobs. The temporarily lower demand for labour due to COVID-19 is a good opportunity to facilitate the smooth reskilling of employees.

9 REASONS FOR INVESTMENTS IN ENERGY TRANSITION

REASON 4

MODERNISATION OF THE ENERGY SECTOR CONTRIBUTES TO REACHING AMBITIOUS NATIONAL INDUSTRIAL POLICY OBJECTIVES AND PROVIDES AN OPPORTUNITY TO IMPROVE THE COMPETITIVENESS OF THE POLISH ECONOMY

Energy transition, including the reduction of energy consumption, triggers demand for a wide range of goods and services. Domestic producers can also improve their position on foreign markets. A well-designed industrial policy will promote participation in new value chains and their shift towards more technologically advanced and profitable elements. The pandemic is fostering a shift in this area and missed opportunities will result in dependence on imported appliances.

As a member of the EU and the UN, Poland has committed itself to take action to reduce the environmental and climate impact of major economic sectors. Our proposed package of measures is a roadmap to reaching these objectives.

REASON 5

IMPLEMENTATION OF INTERNATIONAL COMMITMENTS

REASON 6

EUROPEAN FUNDS PROVIDE SIGNIFICANT FISCAL STIMULUS

The above-mentioned commitments are accompanied by substantial financial resources. In the multiannual financial framework 2021-2027, as much as 25% of the measures will be related to climate change mitigation. This is a window of opportunity for preferential financing of measures that will be taken up anyway. Opening of that window is a fortunate coincidence, as it provides strong fiscal stimulus during a recession.

9 REASONS FOR INVESTMENTS IN ENERGY TRANSITION

REASON 7

REGULATORY CERTAINTY FOSTERS INVESTMENT

The stability and consistency of the objectives mobilise the commitment of the business community. For this reason, appropriate regulations are just as important as financial resources for success. Energy transition is an opportunity to improve the regulatory environment and thus, to increase private investment. Legal chaos, in turn, will disperse private funds, limiting the economic benefits of the transformation.

The package promotes solutions that reduce CO₂, PM10 and PM2.5 emissions, which will result in higher quality of life. According to data from the Ministry of Development (formerly the Ministry of Entrepreneurship and Technology, 2018), the health costs of smog exceed PLN 120 billion (approx. EUR 27.3 billion) per year.

REASON 8

MODERNISING THE ENERGY SECTOR SIGNIFICANTLY REDUCES HEALTH AND ENVIRONMENTAL RISKS

REASON 9

BOTH BUSINESS AND SOCIETY WILL BENEFIT FROM THE IMPLEMENTATION OF THE PACKAGE

At the foundation of the **ENERGY BOOST FOR POLAND** package lies the idea of a just transition that improves the quality of life, increases availability of services, and creates jobs.

THE IDEA OF THE PACKAGE

Forum Energii and Polish Confederation Lewiatan call for the adoption of the **ENERGY BOOST FOR POLAND**.

ENERGY BOOST FOR POLAND is a package of measures that mobilise public funds available for Poland and aimed at energy modernisation. The key objectives of the package are:

- implementation of the most urgent, strategic actions in the area of Polish energy transition (**modernisation**);
- rapid mobilisation of a large amount of available public and private funds aimed at returning to a long-term growth path (**fiscal stimulus**).

We recommend six areas where the level of investment and support should be increased immediately and another six areas requiring long-term actions that should be initiated today to mobilise future financial resources (in part because of the time-consuming investment process and others).

URGENT ACTIONS



1. energy renovation of buildings



4. smart grids



2. clean and low-emission heat



5. low-emission transport



3. distributed power generation



6. grid modernisation and expansion

LONG-TERM ACTIONS



1. offshore wind energy



4. energy efficiency in industry and services



2. manufacturing capacity of RES appliances and energy-saving technologies and appliances



5. RES support scheme



3. low-carbon technologies of the future



6. upskilling and reskilling

BENEFITS

The implementation of the actions will constitute **an investment impulse with a total value of over PLN 580 billion (approx. EUR 132.2 billion)**, consisting of national and European public funds and private funds. The final impact on the economy will be significantly higher thanks to indirect effects. This allows to mobilise funds on a larger scale than the Polish Cohesion Policy 2014-2020 and incomparably more than planned or implemented by government investment projects, such as the Solidarity Transport Hub (CPK) or the National Road Construction Programme. It is also many times more powerful than just launching the investment pillar of the anti-crisis shield. The scale is indeed impressive.

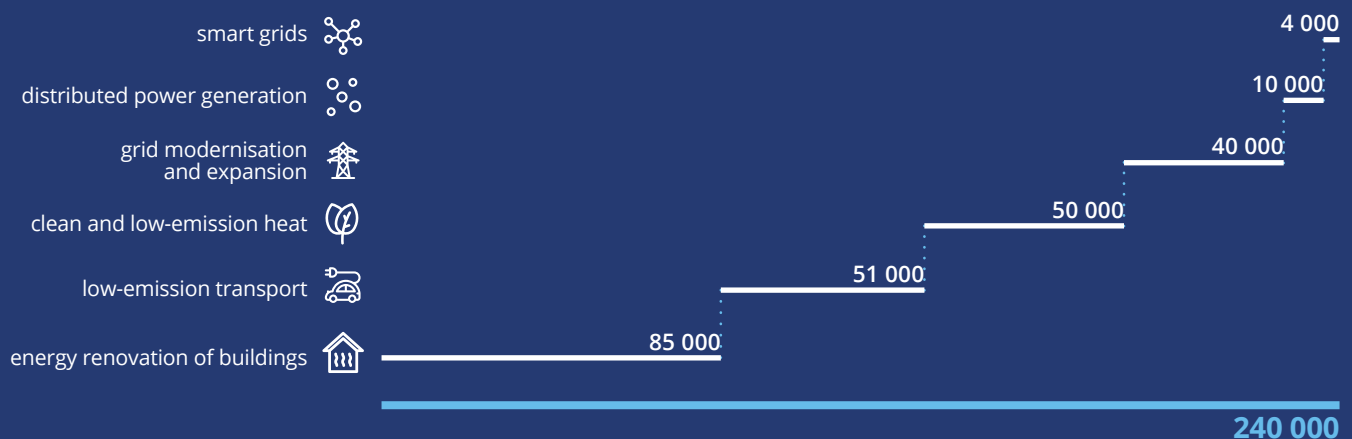
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Source: Polish government documents, Statistics Poland, Polish Press Agency.

It is estimated that the **investments will create 240 000 jobs**, in large part in industries with high development potential, and the final scale may be increased if Poland becomes an exporter of green technologies and solutions.

ESTIMATED NUMBER OF NEW JOBS CREATED BY THE IMPLEMENTATION OF THE ENERGY BOOST FOR POLAND



Source: Forum Energii and Polish Confederation Lewiatan compilation.

ROLE OF THE PUBLIC SECTOR

Public sector involvement is a prerequisite for the success of the initiative. Without strategic decisions at the governmental level, investment will be much lower, if none at all. The government's involvement will also signal strategic directions, mobilising the business sector and households to engage private resources.

THE SELECTION OF ACTIONS

The selection of actions combines:

- the need for urgent intervention;
- compliance with Poland's declarations in international forums and the priorities of the bodies in which it participates;
- embedding the intervention in existing initiatives (programmes) and known mechanisms of financing them (in particular, the distribution of funds) – the intervention is an extension of existing government programmes (e.g., Clean Air, My Electricity);
- significant financial expenditures for the implementation of international commitments;
- balanced special distribution of positive effects, including job creation;
- use of equipment produced by domestic companies (development of local supply chains, reduction of 'leakage' of support abroad);
- implementation of measures important for the quality of life and economy of future generations of Poles.

AREAS REQUIRING URGENT ACTION

Six areas require urgent support. The implementation of the intervention in the 2020-2030 decade involves a direct impulse of more than PLN 580 billion (approx. EUR 132.2 billion) and creates 240 000 jobs.

AREA 1

ENERGY RENOVATION OF BUILDINGS



Accelerated energy renovation of residential buildings (single and multi-family houses), public buildings and industrial objects is the most effective way to reduce energy demand for heating in winter and cooling in summer. Its direct effect is to improve the living (thermal comfort) and financial conditions of households (reduction of costs) and enhance the quality of life (clean air). As an energy efficiency measure, it allows for the adaption of buildings to new requirements. Investment in this area has great potential to mitigate the slowdown expected by the construction sector due to COVID-19. Comprehensive projects of the energy renovation of buildings should be promoted, covering both the insulation of the building itself and the exchange of heating systems and the use of modern heat and electricity sources.



VALUE OF INVESTMENTS: PLN 252 billion (approx. EUR 57.3 billion) to 2030 dominated by private funds, but public support is necessary; public funding: Clean Air Programme, European funds; tax incentives, revenues from the sale of CO₂ emission allowances, ESCOs



JOB CREATION:
85 000



R&D POTENTIAL:
low



EXPORT OPPORTUNITIES:
equipment, construction materials
(local supply chains)



BENEFICIARIES:
households, public utilities, local
authorities, construction industry



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives, reduction of CO₂ emissions, improvement of energy efficiency, reduction of low emissions – reduction of PM10, PM2.5 and others

AREAS REQUIRING URGENT ACTION

AREA 2

CLEAN AND LOW-EMISSION HEAT



The transformation of the heating sector is a necessary condition to make it modern, cost-competitive, and environment-friendly. This issue has been on the sidelines of national energy policy for too long. As a result, 80% of Poland's district heating systems are not classified as highly efficient, and Poland has the worst air quality in the EU for six months of the year. Regulations and financial investments are needed to modernise heating systems and replace inefficient heating sources in individually heated buildings. Investments should focus, among other things, on the use of renewable energy and waste heat in the manufacturing segment, energy storage facilities, as well as the development and modernisation of network infrastructure using intelligent solutions and the internet of things (IoT). With sufficient effort, in 2030, 40% of heat will come from RES. This level of ambition is an opportunity for technology providers. The current national production capacity is not sufficiently developed and the increased level of investment will help to expand the potential of the domestic sector of production and installation of RES equipment, including the R&D sector.



VALUE OF INVESTMENTS: PLN 95 billion (approx. EUR 21.6 billion) to 2030

dominated by private funds, but public support is necessary; public funding: Clean Air Programme, European funds; public funds on regional level, tax incentives, revenues from the sale of CO₂ emission allowances



JOB CREATION:

50 000 in production and installation of new heating sources



R&D POTENTIAL:
moderately high



EXPORT OPPORTUNITIES:

yes (local supply chains)



BENEFICIARIES:

households, producers of equipment, installation specialists, service technicians, local authorities



IMPLEMENTATION OF OTHER OBJECTIVES:

EU RES objectives, reduction of CO₂ emissions, low emission reduction – reduction of PM10, PM2.5 and others

AREAS REQUIRING URGENT ACTION

AREA 3

DISTRIBUTED POWER GENERATION



The global energy sector is increasingly decentralised. This trend arrived for good in Poland only in 2019, when 650 MW of new photovoltaic capacity was created in the prosumer sector. In the current economic situation, it is worthwhile to stimulate this market more strongly and develop the business prosumer area. Increased interest in this technology among households and businesses may lead to an average annual growth of prosumer installations of at least 1 GW. Additional measures are also necessary to improve the energy self-sufficiency of enterprises, i.e., RES installations for the enterprise's own needs and business solutions based on long-term agreements between consumers and suppliers (cPPAs) of energy from renewable sources.



VALUE OF INVESTMENTS: PLN 52 billion (approx. EUR 11.8 billion) to 2030 dominated by private funds, but public support is necessary; public funding: My Electricity Programme, tax incentives, revenues from the sale of CO₂ emission allowances



JOB CREATION:
10 000



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes (local supply chains)



BENEFICIARIES:
prosumers: households and enterprises,
producers of equipment, installation
specialists, service technicians



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives, reduction
of CO₂ emissions

AREAS REQUIRING URGENT ACTION

AREA 4

SMART GRIDS



Energy transition is increasingly challenging for distribution systems. It is necessary to gradually move towards the creation of smart grids that enable the connection and operation of an increasing number of distributed RES sources, the development of a market for prosumers and citizens' energy communities, the reduction of network operation costs, and the provision of energy for new system users, such as electromobility. The first significant step is to provide smart metering systems for electricity consumers. Unlike traditional consumer metering devices, smart meters enable real-time two-way communication between the electricity consumers and suppliers, providing space for the use of dynamic tariffs, among other things. Dissemination of these devices is an opportunity for domestic IT companies to develop.

Despite numerous benefits, the prospect of a widespread use of smart meters is regularly postponed. The government's current strategy is to reach 80% of installed smart meters by the end of 2028. Today, this share is only 8.4% (about 1.4 million customers), more than four times less than the European average (34.2%). Postponing these plans will undermine further development of a competitive energy market and limit the modernisation of the national power sector.



VALUE OF INVESTMENTS: minimum PLN 9 billion (approx. EUR 2.0 billion) to 2030
public funding – European funds; revenues from the sale of CO₂ emission allowances



JOB CREATION:
4 000



R&D POTENTIAL:
moderately high



EXPORT OPPORTUNITIES:
yes



BENEFICIARIES:
IT companies, distribution system operators, installers and service technicians, consumers (including in particular SMEs and households), trading companies, aggregators, civil society energy communities



IMPLEMENTATION OF OTHER OBJECTIVES:
compliance with the provisions of the Market Directive, EU RES objectives, ensuring the development of new services such as electromobility, reduction of CO₂ emissions

AREAS REQUIRING URGENT ACTION

AREA 5

LOW-EMISSION TRANSPORT



The development of low- and zero-emission public and private transport clearly contributes to improving air quality. It can also foster the development of the economy through R&D support and investment in manufacturing low- and zero-emission vehicles, their parts and components. Desirable measures include promoting purchases or leasing new low- and zero-emission vehicles (electric and hybrid) using financial and behavioural incentives and the upgrading public transport fleets to low carbon standard (electric, hybrid, gas or hydrogen). A prerequisite for further development of low and zero-emission mobility in Poland is technological neutrality and widely available infrastructure for vehicle charging, including a network of fast chargers.



VALUE OF INVESTMENTS: PLN 81.5 billion (approx. EUR 18.5 billion) to 2030
(electromobility only)

discounts, other / private funds; public funds: Low Emissions Transport Fund, European funds, public funds at the regional level



JOB CREATION:
minimum 51 000
(electromobility only)



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes



BENEFICIARIES:
consumers, car manufacturers, charger manufacturers, service providers



IMPLEMENTATION OF OTHER OBJECTIVES:
reduction of CO₂ emissions from vehicles, reduction of emissions – reduction of PM10, PM2.5 and NO_x

AREAS REQUIRING URGENT ACTION

AREA 6

GRID MODERNISATION AND EXPANSION



The programme of expansion and modernisation of the power grid (both distribution and transmission) determines the further development of renewable energy. It includes investment in distribution networks (including moving from one-way to two-way networks, their gradual wiring), due to their significant role in the development of distributed energy, electromobility, energy storage, and ensuring flexibility in the national power system. The safety and quality aspects of grid operation are also crucial – without a functioning grid, creation and development of local energy markets are not possible. The potential costs of undelivered electricity due to the condition of Poland's grids (approx. 1.4 billion PLN = EUR 0.3 billion per year) are also important in this context. Therefore, it is necessary to at least maintain the hitherto planned level of investment in the grid, to ensure that RES installations are connected to it.

The grid development programme should be accompanied by changing the way the energy market works, in particular, the introduction of a locational market, which will increase the efficiency of energy management at the local level and rationalise the expenditure on grid development (cf. Forum Energii 2019).



VALUE OF INVESTMENTS: PLN 92 billion (approx. EUR 20.9 billion) to 2030

Public funds: European funds, revenues from the sale of CO₂ emission allowances



JOB CREATION:

40 000



**R&D
POTENTIAL:**
low



EXPORT OPPORTUNITIES:

–



BENEFICIARIES:

construction sector, RES industry, prosumers, distribution system operators, energy consumers



IMPLEMENTATION OF OTHER OBJECTIVES:

EU RES objectives and CO₂ reduction targets

AREAS OF LONG-TERM ACTIONS

Six additional areas require long-term actions, which should be initiated today in order to mobilise future funding. They have the potential to make significant contributions to the development of the Polish economy over the next 5-10 years. However, it is necessary to eliminate legal barriers now and support the creation of markets.

Given the structure of the Polish economy, energy transition is a unique opportunity for a growth leap resulting from filling new niches in this dynamically growing business, moving to more profitable elements of supply chains and earning rents from innovation. It should be remembered that the COVID-19 pandemic is intensifying restructuring globally and within national economies. This means that more countries may have the appetite for new niches in the energy sector. However, when building the national position, it is important to ensure a fair transition, i.e., create equal opportunities to benefit from the changes.

AREA 1

OFFSHORE WIND ENERGY



Offshore wind energy should become a new business niche, making extensive use of existing Polish industries (e.g., shipping). At the same time, as a source of cheap and clean domestic energy, it will improve energy security. For this to happen, it is necessary to stimulate the development of this technology, in particular, to reduce the cost of investment and boost spending on transmission networks. A necessary step is the rapid adoption of the Act on the Promotion of Electricity Generation in Offshore Wind Farms and the expansion of domestic ports. Container terminals, which will store elements of turbines, as well as smaller ports used for installation and maintenance of the farms will be needed.



EMPLOYMENT OPPORTUNITIES:
high



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes (local supply chains)



BENEFICIARIES:
private investors, construction sector,
RES industry, shipbuilding



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives and CO₂ reduction targets

AREAS OF LONG-TERM ACTIONS

AREA 2

MANUFACTURING CAPACITY OF RES APPLIANCES AND ENERGY-SAVING TECHNOLOGIES AND APPLIANCES



Polish producers already play important roles in the supply chains for zero-emission heat and power generation equipment sold globally. Because of COVID-19, Polish entities can gain even more from diversification trends. Predictable industrial policy and a clear strategy for the energy sector will provide security for domestic consumers, create demand for the industry, and increase the role of its new branches in domestic production.



EMPLOYMENT OPPORTUNITIES:
high



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes (local supply chains)



BENEFICIARIES:
private entrepreneurs, construction sector, RES sector



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives and CO₂ reduction targets

AREA 3

LOW-CARBON TECHNOLOGIES OF THE FUTURE



A number of RES technologies in the power and heating sector are already economically competitive (cf. onshore wind and solar power). To maximise their benefits, it is necessary to develop related technologies. Green hydrogen electrolysers, energy-storage facilities, and electric cars are already technically available but require economies of scale through mass production, which will significantly reduce costs. The production capacity in Europe is increasing and it is worth fighting for the Polish industry to be an important player in this market. A factor fostering the improvement of Poland's position is the strengthening of internal demand, which should be created through predictable rules and a support system, for example, home electricity storage facilities.



EMPLOYMENT OPPORTUNITIES:
high



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
high



BENEFICIARIES:
private entrepreneurs, construction sector, RES sector



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives and CO₂ reduction targets

AREAS OF LONG-TERM ACTIONS

AREA 4

ENERGY EFFICIENCY IN INDUSTRY AND SERVICES



The improvement of energy efficiency is a key tool to reduce greenhouse gas emissions, improve air quality and the health of citizens, increase energy security, reduce electricity and heating costs for consumers, and increase the competitiveness of Polish industry and services. From the perspective of the implementation of long-term climate, environmental, economic, and social objectives, this is a rational and cost-effective approach. Additionally, continuous improvement of energy efficiency will support the energy transition through the optimisation of its demand side.

Actions in this area should largely focus on energy-intensive sectors of the economy. Despite the upward trend, there is still potential for improvement. The barriers include limited financial resources, low environmental awareness, and insufficient knowledge of energy-saving methods. The white certificate system, which was supposed to promote such investments, still does not provide the right incentives in this area. It is therefore necessary to provide an effective mechanism to encourage increased investment in energy efficiency in industry and services.



EMPLOYMENT OPPORTUNITIES:
high



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes (local supply chains)



BENEFICIARIES:
private entrepreneurs, RES sector,
service sector

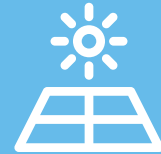


IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives and CO₂ reduction targets, energy efficiency improvement

AREAS OF LONG-TERM ACTIONS

AREA 5

RES SUPPORT SCHEME



Over its five years of operation, the auction system has contributed to contracts of more than 5 GW of new RES capacity, which will generate electricity worth nearly PLN 37 billion (approx. EUR 8.4 billion) over the next 15-20 years. The existing anti-crisis packages have introduced a number of solutions supporting the implementation of those projects won at auction. However, without appropriate government actions, the development of additional investments will be radically limited. Therefore, it is necessary to extend the rules of support under the auction systems and FIP/FIT tariffs, which expire in 2021, as well as to create a multi-year auction schedule and to liberalise the 10H rule to allow for further development of onshore wind energy. Supporting stable development of photovoltaic and wind sources should be the norm, given their dominant role in the new energy reality.



EMPLOYMENT OPPORTUNITIES:
high



R&D POTENTIAL:
high



EXPORT OPPORTUNITIES:
yes (local supply chains)



BENEFICIARIES:
private entrepreneurs, construction sector, RES sector



IMPLEMENTATION OF OTHER OBJECTIVES:
EU RES objectives and CO₂ reduction targets

AREA 6

UPSKILLING AND RESKILLING



An effective implementation of the energy transition is impossible without significant capital and labour inputs. Leading-edge technologies and their new applications create new jobs, but at the same time require the employees to acquire new competences and qualifications. In addition, in coal-dependent regions, more attention should be paid to attitudes towards climate change and sustainability. Well-designed labour market policies will play an important role in helping workers acquire the skills they need to become winners in the energy and economic transition.



EMPLOYMENT OPPORTUNITIES:
not applicable



R&D POTENTIAL:
not applicable



EXPORT OPPORTUNITIES:
not applicable



BENEFICIARIES:
energy, construction, transport workers and their households



IMPLEMENTATION OF OTHER OBJECTIVES:
labour market policy

FUNDING OF THE PACKAGE

The fundamental advantage of the **ENERGY BOOST FOR POLAND** is the use of public, private, and European funds, which have been acquired or are planned to be used. There are many sources of financing, provided that the energy and heat markets in Poland are reformed so that they start to create the right price incentives. Moreover, we suggest preparing Poland to absorb EU funds in the new financial framework. Loans from the European Investment Bank (EIB) may also be an attractive source of financing. However, we see the most important role in a tool that has not been noticed and properly managed in Poland for years – i.e., funds from the European Emissions Trading Scheme (EU ETS).

A wide range of funds will flow from the Emissions Trading Scheme in 2021-2030. Assuming a CO₂ price of 30 EUR/t (and an exchange rate of 4.40 PLN/EUR), Poland will have at its disposal:

- funds from the trade of CO₂ allowances – 984 million allowances, approx. PLN 130 billion (approx. EUR 29.5 billion);
- Modernisation Fund – 135 million allowances, min. PLN 17 billion (approx. EUR 3.9 billion);
- new special fund established after cancelling free allowances for the power industry – 275 million allowances, min. PLN 36 billion (approx. EUR 8.2 billion).

The table below presents the available financial resources.

| | Central budget | National Fund for Environmental Protection and Water Management | Regional Funds for Environmental Protection and Water Management | Polish Development Fund | Local funds | National ETS revenues | EU 2021-2027 | Low-Emission Transport Fund | Modernisation Fund | Just Transition Fund | European Investment Bank | Private funds |
|----------------------------------|----------------|---|--|-------------------------|-------------|-----------------------|--------------|-----------------------------|--------------------|----------------------|--------------------------|---------------|
| energy renovation of buildings | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | | ✓ |
| clean and low-emission heat | | ✓ | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| distributed power generation | | ✓ | ✓ | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| smart grids | | ✓ | ✓ | | | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| low-emission transport | | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| grid modernisation and expansion | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | |

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