

# PRESURCE

**Analytical report for market and stakeholder analysis**

-

**Output 4.1.6 - Poland**

**Based on expert interviews with financial stakeholders**

**ProAkademia**



**CENTRAL  
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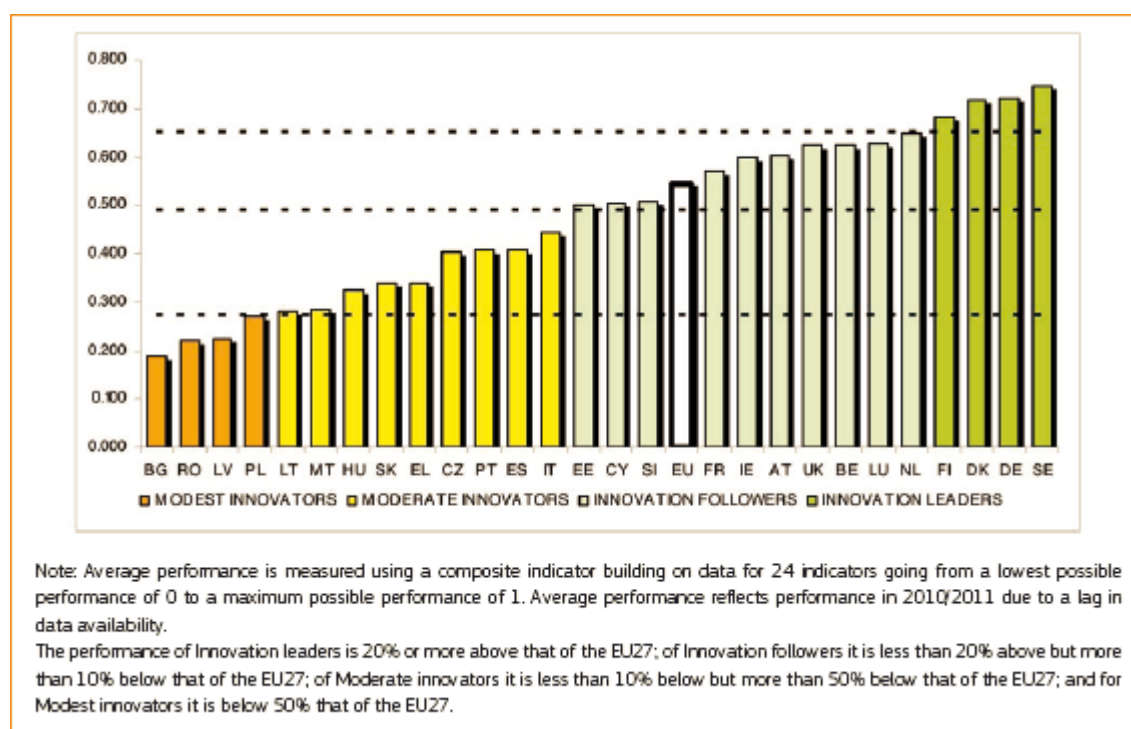
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## 1. Eco-innovation in Poland

Eco-innovation index in Poland is over two times lower than EU average and four times lower than in Sweden, the EU eco-innovation leader. Poland holds the last place among the EU countries and its position has worsened compared to 2010 (the index value has decreased by 6%). This negative assessment concerns each of the five components of the eco-innovation index, with socio-economic outputs the most positively evaluated. Involvement of Polish companies in implementation of eco-innovations gives Poland, together with Bulgaria, the last place – with the index value of 41. Other countries that have recently joined the EU have much higher index values, e.g. the Czech Republic – 171 and Slovenia -119. These results clearly prove that there is unfavourable climate and insufficient interest among Polish companies with respect to the introduction of eco-innovations.<sup>1</sup>

**Figure 1:** EU Member States innovation performance

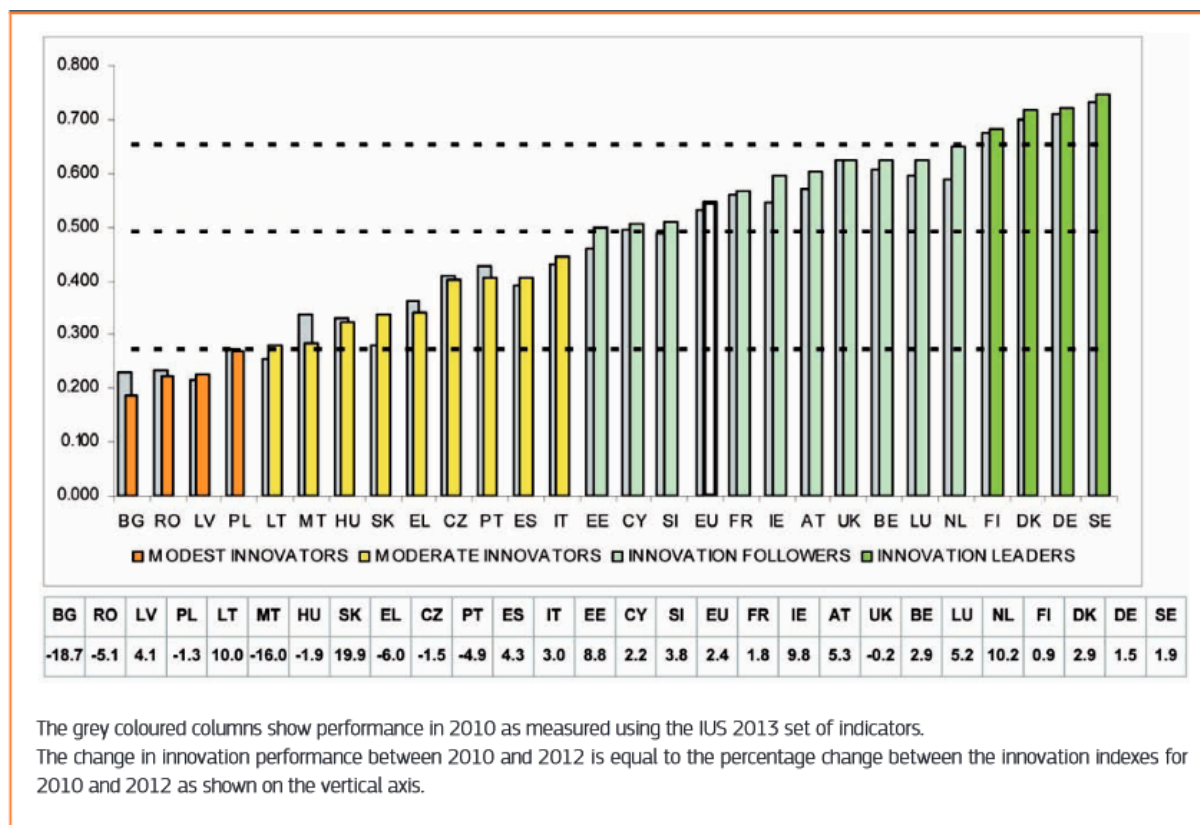


Source: Innovation Union Scoreboard 2013

Development of eco-innovation is strongly combined with innovation performance which is also rather poor in Poland (Figure 1). Situation seems to be rather unoptimistic – especially looking at the progress since the launch of the Europe 2020 Strategy (Figure 2).

<sup>1</sup> Eco-innovation Observatory

**Figure 2:** Progress since the launch of the Europe 2020 Strategy

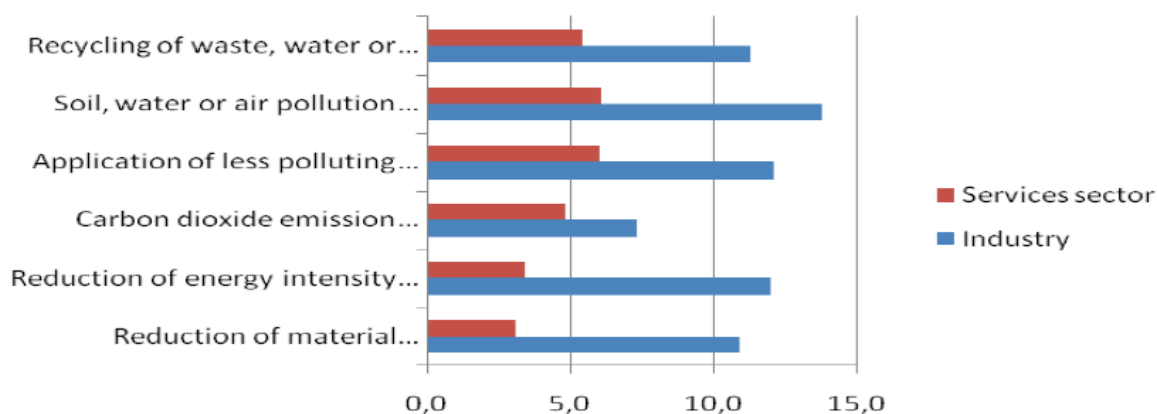


Source: Innovation Union Scoreboard 2013

The development of eco-innovation in small and medium enterprises heavily depends on stable, favourable external surroundings, which will ensure proper conditions for creation and operation. There is still visible lack of synergy – especially on the administrative level.

Due to inefficient production processes prior to and during the early stage of the transition phase the business sector has been obliged to take steps to improve efficiency in material and energy consumption. In 2008, 0.07% of companies improved their material intensity and over 7% reduced their energy intensity, which places Poland in the half of the average for EU Member States. Furthermore the 2006-2008 Central Statistical Office found that 26.2% of industrial companies and 15.5% of service sector companies introduced eco-innovations (this refers to innovations that bring environmental benefits during product manufacturing as well as use). 24.1% of industrial companies and 12.7% of service sector companies introduced eco-innovations related to product manufacturing. Eco-innovations connected with product use were applied by 17.5% and 11.3% of companies respectively.

**Figure 3:** Share of companies that introduced innovations benefiting the environment during product manufacture or service preparation according to types of benefits, 2006-2008



Source: Eco-innovation Observatory

Implementation of the innovation policy in Poland is to a large extent supported through the EU structural funds for 2007–13, under the OP Innovative Economy, the OP Human Capital, the OP Infrastructure and Environment and at the regional level under the 16 Regional OPs. The subject of eco-innovation as an environment is addressed in numerous documents, reports and strategies but directly eco-innovation is addressed rarely. The state policy in this area lacks synergy; even the definitions used by different ministries are not the same. The use of the following terms is inconsistent: environmentally friendly technologies, environmental protection technologies, environmental technologies and eco-innovations.

## 2. Public organisations

### 2.1. Ministry of Economy

- National Reform Program - efficient use of resources is going to be emphasized i.e. in the section on infrastructure development, as well as in the section on innovation. The aim of the National Reform Program for 2008-2011 and the subsequent National Reform Program to Implement Europe 2020 Strategy, adopted in 2011, is to establish a basis for improving the standard of living of Polish citizens, among other things through application of innovative solutions in the area of environmental protection. The program integrates Polish development objectives with the priorities identified in Europe 2020 Strategy. The document focuses on the measures that prioritize development and implementation of environmental technologies, as they are necessary for complying with the EU legislation (the energy and climate package) and have a positive impact on the energy security, public health, transition to a low-carbon economy or addressing global sustainable development challenges. One of the important messages included in the program reads as follows: “Measures that change the perception of eco-innovations are necessary. They should not only create a positive “tendency” but also draw attention to the added value of such solutions”. For example, transition to a low-carbon economy requires favourable conditions for development of the market in green technologies and products (eco-innovations). Support for R&D in the area green growth is definitely important but at the same time one should remember about encouraging companies to invest in green technologies. After all development of new

technologies and wide Internet access are bound to increase innovativeness and dynamic growth of the Polish economy. (<https://www.premier.gov.pl/wydarzenia/decyzje-rzadu/krajowy-program-reform-na-rzecz-realizacji-strategii-europa-2020-0.html>)

- Coordination of Europe 2020 implementation Strategy
- National Development Strategy – 2007-2015 – strategy sees intensified environmental protection as support for eco-innovations in investment, production, technological and organizational activities that should contribute to higher GDP and improvement of the standard of living with a lower use of natural resources and decreased emission of pollutants.
- National Program for the Development of Low-Emission Economy – objective: improvement of efficiency of use of raw materials (adoption of the document expected in 2012, in August 2011 the Council of Ministers adopted the “Assumptions for National Program for Low-Emission Economy Development”).
- Such a transformation will require involvement of all economic sectors. Implementation of the program should foster adaptation to low-carbon requirements and will involve various fields of activity. Development of low-carbon energy sources is indispensable for changing the generation structure of electricity, heating and cooling in Poland. Expansion of innovative industries will facilitate this process. The document refers also to resource efficiency improvement, i.e. efficient acquirement and utilization of raw materials and energy carriers as well as implementation of innovative solutions. Therefore, it will be necessary to review available technologies and support their development with relevant measures, so that they take into account the needs of energy efficiency, resource and material management and efficient waste management. Clean coal technologies should have special importance. <http://www.mg.gov.pl/Bezpieczenstwo+gospodarcze/Gospodarka+niskoemisyjna/Narodowy+Program+Rozwoju+Gospodarki+Niskoemisyjnej>
- The Enterprise Development Program 2011-2020  
[http://bip.mg.gov.pl/files/upload/17490/PRP\\_do\\_konsultacji\\_ost.pdf](http://bip.mg.gov.pl/files/upload/17490/PRP_do_konsultacji_ost.pdf)
- The Road Map for the implementation of the EU Environmental Technologies Action Plan (ETAP) in Poland (KETAP) specifies activities related to environmental technologies and innovations, how they should be coordinated and how information exchange in this area should be improved. Activities aimed at development and implementation of environmental technologies in Poland can be classified as follows:
  - i. specification of main progress directions for research and development – identification during the National Foresight Program of strategic areas and priority directions for research under the National Framework Program, focused on development of environmental technologies and their application through ordered research projects and, since 2008, strategic research and development programs and strategic research projects
  - ii. monitoring of environmental technologies development and implementation assessment of how research in the field of environmental technologies progresses and to what extent it is applied (implemented in industry); verification and certification of technologies – development and application of clear assessment criteria, so called “environmental criteria” {Position of

the Polish Government on the EC Communication COM (2006) 502} and criteria for certification of environmental technologies

- iii. specification of environmental objectives – a measure that can be applied at any level of environmental policy programming (local, regional, national), taking into consideration the need to harmonize provisions (National Environmental Policy for 2009-12 and its 2016 Outlook) and development strategies in this area (2007-15 National Development Strategy and National Reform Program for 2008-11 to Implement the Lisbon Strategy
  - iv. introduction of green public procurement – integration of environmental criteria and requirements with public procurement procedures in order to maximize the presence of environmental issues in tender procedures (National Action Plan for Green Public Procurement for 2007-09)
  - v. Concentration of financial resources – development of conditions, e.g. through joint initiatives of industry and research units (environmental technological platforms), and financial mechanisms fostering investments in environmentally-friendly technical solutions (OP Infrastructure and Environment, OP Innovative Economy), with focus on public private partnerships and such forms of support for innovations as technological credit.
- Energy Policy of Poland until 2030, adopted by the Council of Ministers in November 2009 (the Energy Law requires that energy policy be revised every 4 years) includes, among others, provisions for improving energy efficiency and for development of renewable energy sources. The latter mainly concerns the use of biomass and the construction of wind farms, which have the biggest potential in Poland. The Policy recognizes that coal (hard coal and lignite) will continue to be the basic fuel in the Poland's primary energy mix as well as for generation of electricity and heat, but its share in the energy mix will decline.  
[http://www.mg.gov.pl/files/upload/8134/Polityka%20energetyczna%20ost\\_en.pdf](http://www.mg.gov.pl/files/upload/8134/Polityka%20energetyczna%20ost_en.pdf)
  - National Action Plan for Renewables – document was prepared by the Prime Minister's Board of Strategic Advisors in June 2009. Identifies climate and energy security as one of ten key challenges for the next two decades, and calls for the harmonization of energy and environmental policies. Report recommendations include preparing a comprehensive plan for the protection of natural resources and the environment, intensifying the use of renewable sources of energy, and ensuring energy security of the state.  
[http://www.mg.gov.pl/files/upload/12326/KPD\\_KE.pdf](http://www.mg.gov.pl/files/upload/12326/KPD_KE.pdf)
  - Draft Strategy for Innovation and Efficiency of the Economy is focused on the cooperation improvement and creating good conditions for enterprise development, innovation and efficient management of human, financial, material and natural resources.  
[http://www.mg.gov.pl/files/upload/12707/SiiEG\\_konsultacje\\_02.2011.pdf](http://www.mg.gov.pl/files/upload/12707/SiiEG_konsultacje_02.2011.pdf)



- Best practices:

Picture 1: Green Evo



The GreenEvo Project – Green Technology Accelerator (GTA), run by the Ministry of the Environment, plays an important role in the development of the market for eco-innovations. The project helps Polish companies to get involved in the creation of green technologies to promote their unique products on international markets. The companies which participate in GreenEvo – the Green Technology Accelerator receive different forms of support. In this way, the Ministry of the Environment strengthens international activities of the companies which participate in the scheme.

## 2.2. Ministry of Regional Development

Key nine integrated strategies for national development - Resource efficiency will first of all feature in the Strategy for Innovation and Efficiency of the Economy and The strategy for energy security and environment which are being prepared by the Ministry of Economy. Resource efficiency is also featured in the Transport Development Strategy and Sustainable Development of Rural Areas, Agriculture and Fishery Strategy.

[http://www.mrr.gov.pl/rozwoj\\_regionalny/Polityka\\_rozwoju/System\\_zarzadzania\\_rozwojem/Porzadkowanie\\_dokumentow\\_strategicznych/Documents/Plan\\_uporzadkowania\\_strategii\\_rozwoju\\_reasumpcja\\_decyzji\\_RM\\_10032010.pdf](http://www.mrr.gov.pl/rozwoj_regionalny/Polityka_rozwoju/System_zarzadzania_rozwojem/Porzadkowanie_dokumentow_strategicznych/Documents/Plan_uporzadkowania_strategii_rozwoju_reasumpcja_decyzji_RM_10032010.pdf)

## 2.3. Ministry of Environment

Strategy of Implementation of Integrated Product Policies in Poland - and the Executive Program for Implementation of an Integrated Product Policy in Poland were adopted by the Ministry of Environment in 2005. The National Environmental Policy in force also addresses the issue of eco-friendly products. Regarding eco-labelling in Poland, the EU Eco-label and national eco-label are in place. In order to ensure the cohesion of integrated product policy, one main governmental body – The Ministry of Economy – is responsible for integrated product policy in Poland.

[http://qcm2.quicksilver.pl/img/20/strategia\\_ZPP.pdf](http://qcm2.quicksilver.pl/img/20/strategia_ZPP.pdf)

## 2.4. Polish Agency for Enterprise Development

Various projects, for instance: Sustainable production models in the activity of SMEs – a proposal for systemic solutions supporting the implementation of sustainable production models in SMEs under Sub-measure 2.1.4 HC OP. The aim of the project is to provide suggestions, recommendations and



proposals as regards systemic solutions that support implementation of sustainable production patterns in SMEs, these comprising legislative and institutional instruments, as well as a direct support system. The taking of the above issues by PARP is a reflection of the growing pressure consumers and public administration bodies exert on entrepreneurs in regard to their meeting environmental requirements.

[www.parp.gov.pl](http://www.parp.gov.pl)

## 2.5. National Energy Conservation Agency (NAPE)

NAPE offers consulting services in broadly understood energy management for central and local administration, private companies, and building administrators. The services include counselling and elaborating:

- vi. energy audits and renovation audits of buildings according to the Act on supporting thermo-modernization and renovation of buildings of 21.11.2009
- vii. energy performance certificates for all types of buildings (residential, public, with and without cooling)
- viii. organization of financing for energy management investments
- ix. energy counselling, including elaborating foundations for heating, electricity, and gas fuels supply schemes
- x. hydraulic calculations for district heating systems

<http://www.nape.pl/eng/home.aspx>

## 2.6. The Polish National Energy Conservation Agency (KAPE)

The Mission of KAPE is to promote and implement global standards and practices in the fields of Energy Efficiency and Sustainable Development, on the basis of which we create optimal energy efficiency solutions for our customers. Strategic aim is to support the increasing competitiveness of the Polish economy through improving Energy Efficiency and simultaneous respect for the rules of Sustainable Development. KAPE offers complex advisory and training services in the fields of Energy Efficiency and Sustainable Development for companies and building sector entities. The Agency also provides expert opinions for the Polish government and municipalities and conducts educating and promotional activities in the field rational energy consumption and the development of Renewable Energy Sources. Acting as either the managing or implementing body in Poland, KAPE is involved in a range of international projects set up as part of the European Union's energy programs and national projects co-financed with public funds. In addition to the above, the Agency acts as the national contact point for beneficiaries of the Intelligent Energy Europe (IEE) program, which is itself part of the wider Competitiveness and Innovation Framework Program (CIP).

[www.kape.gov.pl](http://www.kape.gov.pl)

## 2.7. National Fund for Environmental Protection and Water Management + Regional Funds (in each voivodeship in PL)

The mission of the Fund, according to the NFEP&WM Strategy for 2009-2012, is to financially support undertakings intended for environmental protection and respecting its value, on the basis of the principle of sustainable development included in the constitution. The Fund participates in implementation of the environmental policy of Poland as a source of financing and cooperates, along with the Ministry of the Environment, with commissions of environmental protection at the Sejm and

Senate. The National Fund and voivodeship (Regional) funds provide financial support for projects which contribute to enforcement of Polish obligations resulting from the Accession Treaty and other EU directives. Fund also supports activities undertaken by the Minister of the Environment in the scope of meeting Polish obligations resulting from the Climate Convention, Biodiversity Convention, implementing the LIFE+ Financial Instrument, NATURA 2000 and environmental education, implementing the motto “Fund friendly to beneficiaries”.

[www.nfosigw.gov.pl](http://www.nfosigw.gov.pl)

## 2.8. Bank for Environment Protection

BOŚ Bank is a Polish bank, owned 77.27% by The National Fund for Environmental Protection and Water Management, 6.50% by State Forestry and 16.23% by others. Until 2006 the Swedish SEB was the largest shareholder, but sold its shares to the National Fund and the State Forestry. BOŚ operates as a universal bank offering services to individual clients, enterprises and local governments. The bank has retained its environmental profile with loans for environmental investments as well as consulting and intermediate financing for EU funded projects. It also co-operates with the European Investment Bank, Council of Europe Development Bank, the German Kreditanstalt für Wiederaufbau and the Nordic Investment Bank.

## 2.9. PolSEFF – Polish Sustainable Energy Financing Facility

PolSEFF is a Polish Sustainable Energy Financing Facility with a credit line of €150m. The offer of PolSEFF is addressed to small and medium-size enterprises (SMEs) interested in investments in new technologies and equipment decreasing energy consumption or generating energy from renewable sources. Application of new, energy-efficient technologies and use of energy from renewable sources may help decrease energy costs by as much as 30%. Savings on this level increase profits, raise competitiveness as well as contribute to an increase in production quality and capacity. In order to facilitate investments of this type, the European Bank for Reconstruction and Development (EBRD) provided €150m. These funds will be distributed by local banks and lease companies participating in PolSEFF. Financing can be obtained in the form a credit facility or lease up the amount of €1m. Projects implemented within the scope of PolSEFF may be divided into four groups of investments:

- xi. investment projects enabling to obtain at least 20% of savings;
- xii. investment projects increasing efficiency of energy use in buildings - investments in renewable sources of energy and devices increasing efficiency of its use, which allow for decreasing energy consumption in commercial buildings and administrative buildings of SMEs by 30%;
- xiii. investments in renewable energy sources;
- xiv. investments in selected technologies - investments in projects and devices selected from the list of technologies with high efficiency

## 3. Private organisations

### 3.1. BGZ Bank

BGŻ bank is active in the Polish banking sector since 1975. Experience and a modern approach to product offer make bank one of the most willingly chosen commercial banks in Poland by individual customers, the agricultural sector, as well as the national and international business sectors among the most willingly chosen commercial banks. It has a network of more than 400 branches.

[www.bgz.com.pl](http://www.bgz.com.pl)

### 3.2. Bank Gospodarstwa Krajowego

Since 1998, it has been running the Thermo-modernization Fund, transformed in 2009 into the Thermo-modernization and Renovation Fund, whose main task is to provide support for initiatives that:

- i. decrease consumption of energy for heating of buildings and tap water in residential buildings and buildings where local governments fulfil their public tasks;
- ii. decrease energy losses in local heating networks and related local heat sources, provided that activities aimed at lowering the consumption of energy supplied to the buildings have been initiated;
- iii. allows for partial or total replacement of conventional energy sources with alternative sources, including renewable energy.

### 3.3. Venture capital/Investment Funds – for instance: European Investments and Partners Sp. z o.o.

European Investments & Partners was central Europe's first financial advisory firm focused on the environmental and clean energy sectors. Founded in 1998, EIP has been advising the pioneering investment fund, Environmental Investment Partners I, II and III, on its investments in the region. EIP has advised on 20 investments in early stage companies in the "green" sectors with total capital deployed in excess of \$50 mm. Of the 20 investees: 6 have been listed on stock exchanges, 4 have been sold in trade sales, 3 remain private, 3 have undergone restructuring and 4 are still in their early growth phase. EIP has advised many companies regarding their IPO's, mergers and acquisitions and project financings. These transactions have in aggregate totally over \$1000 mm. Among these transactions were financings for wind and PV parks, waste water companies, district heating and biogas IPOs. EIP is currently very active assisting renewable energy firms with capital raising, project financings and sales of existing assets.

[www.eip.com.pl](http://www.eip.com.pl)

## 4. Summary of interviews with financial actors

Generally all interviewees understand the importance and impact of eco-innovation on Polish development. They understand the importance of reducing energy, water and material consumption in production process of companies. LCA is for the rather new and unknown in details although one on them heard about it. Poland since EU accession has been trying to introduce RES – mainly in rural areas – thanks to utilizing EU funds. State of natural environment improved while the resources productivity and energy intensity have increased.

Under eco-innovation people that have been questioned understand new technologies within RES, energy efficiency in buildings, product policy and environment protection. They are not very familiar with this topic as generally RE policy is something relatively new and definitely not well spread in Poland.

They estimate that there will be relatively big growth in eco-innovation sector within next five years. Despite the fact that the official state policy in the area of eco-innovation misses synergy, the eco-innovations have been addressed via national policy strategies on environmental protection, product policy, energy efficiency in buildings, etc. The interest of SMEs in eco-innovation is slowly growing, especially in relation to cost reduction possibilities (notably reduction of energy consumption and decreasing expenditures related to pollutant emissions). Interviewee mentioned that according to Eco-innovation Scoreboard 2011 Poland takes the last place within eco-innovation factor, counting 27 EU Member States.

Questioned actors have different possibilities within eco-innovation financing. BGZ Bank offers several products which are directed to eco-innovation. Product which is called: investment credit – “Clean Energy”. Using Clean Energy loan you can finance projects that includes min. 20% reduction in energy consumption and power plants in the renewable energy sources. Thanks to the cooperation of BGZ Bank and the European Bank for Reconstruction and Development (EBRD), the Program Sustainable Energy Financing in Poland (PolSEFF), farmers and SMEs can receive a premium investment from the EU of 10 or 15% of the loan amount.

Program mentioned above is ideal for introducing resource efficiency within company and financing of eco-innovations.

Mrs. Wochna from BOS Bank says that CSR and eco-innovation are crucial part of bank activity. Growth potential regarding eco-innovation is constantly growing – in Poland/ Lodz region. Lots of companies are interested in energy saving systems as well as in RES development. Even when are talking about conventional investments projects, bank always takes into consideration the factor regarding environment protection (emission reduction, RES implementation). Bank, due to cooperation with National Fund for Environmental Protection and Water Management and other banks (KfW- German one), is able to offer favourable financing for projects connected with eco-innovations. Mrs. Wocnha indicates that the EU is an important driver of eco-innovation in Poland, through its structural funds and through its climate, energy and wider environment policies. Supplementary funding comes from Poland’s public sector, such as support for installation of solar panels through the National Fund for Environmental Protection and Water Management, and private sector but there is still no tax relief for eco-innovators.

Generally, banks are still not very eager to invest (give credits) in eco-innovation solutions. This is due to several reasons. Firstly, the policy regarding RES is still very unstable. Poland is waiting for new regulations which has been set but still not adopted into legislation. It means that potential investors are still not safe on the market (their revenue is not guaranteed) and thus there is a threat of not being able to repay their loans (given by banks). Secondly, investments in eco-innovations are often

characterized by high risk-level. According to interviewees in most cases bank sector in Poland reacts conservatively. They prefer lower rate of return, but secured, than a higher one but more risky.

Decision makers representing interviewed financial actors agreed that the most important factor towards SME's decision to invest in eco-innovation is firstly, a strong need for cost reduction and secondly, possibility to use EU funding for environmental investments.

According policy – there is a general misunderstanding and lack of appropriate vision for future regarding eco-innovation. There is funding, there is interest of entrepreneurs but there is still lack of public engagement. Interviewees emphasize a lack of stronger role of policy makers – especially Ministry of Economy (which is mainly, not only, in charge of RE policy).

Public institutions are generally opened to eco-innovations. Reason therefore is that in Poland they act very often as intermediaries of EU Funds – like Regional Fund for Environmental Protection and Water Management. They are obliged to fulfil the requirements of 2020 EU Strategy. Economic instruments used by the National Fund are intended for co-financing mainly large investments with the nationwide and supra-regional significance. Their objective and environmental effect is to eliminate pollution of water, air and soil. Moreover, activities concerning water management, geology and mining, monitoring of the environment, prevention of environmental risks, protection of the environment and forestry, promoting environmental knowledge, children's health prevention as well as scientific and research work and expertise are financed. Investments connected with improving energy efficiency and using renewable energy sources are treated as special priorities.

Barriers mentioned during interview according implementation of eco-innovation: market uncertainty, financial constraints, outdated infrastructure, limited workforce, frequent changes in legislation.

## 5. Problems encountered during interviews

Experts from R&IC Pro-Akademia tried to contact over 30 financial actors – by e-mail, telephone, personally. Only 4 interviews were conducted successfully. In most cases either the institution was 'not in scope of eco-innovation topic', was 'not interested' or it was impossible to meet with someone who is authorized to give interview (even if it was mentioned that the results of interview are anonymous and the signature is just for documentary of the project). Last situation mainly addresses to banks branches which very rarely and unwillingly want to give their opinions. They ask to address the headquarters in Warsaw (mainly). That shows very centralized structure of such institutions in Poland.

The same problem was encountered with public authorities/actors who mostly did not find time to meet with our representatives.

## 6. Conclusion

Obtaining funds for the eco-innovative project in Poland is not impossible, but in many cases very difficult. Eco-innovation is very rarely recognized by financing entities as a distinct activity of enterprises. Innovative projects in the field of environment are evaluated according to the same criteria as other investment, including innovative ones. They often focus less directly on the economic effects, they can, using the same criteria, get worse scores overall. The problem is that significant resources to environmental protection are distributed to local governments to implement typical projects in this area, such as the construction of sewers, sewage treatment, or the promotion of cleaner energy sources.

This reduces the possibility of obtaining funds for investment by SMEs. Too little emphasis has been put in the current programming period on the combination of innovation and environmental

protection within the range of single investment project. This was probably the result of the fact that one of the major problems is generally low competitiveness of Polish enterprises and serious problems including high unemployment.

## 7. SWOT Analysis – financing of eco-innovations in Poland

<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> <li>• A large number of strategic documents refer to the significant role of eco-innovations in Poland's development;</li> <li>• Slow but steady strengthening of the scientific and technological base, which may eventually lead to a turning point;</li> <li>• Establishment of numerous local initiatives that can evolve into a strong wave of eco-innovation promotion.</li> <li>• EU policy which fosters eco-innovation and gives grants for that kind of actions</li> </ul>	<ul style="list-style-type: none"> <li>• A lack of political and social climate for development of eco-innovations;</li> <li>• Largely insufficient financing;</li> <li>• A lack of system support for eco-innovations;</li> <li>• A high risk level of investments in innovations and eco-innovations in particular;</li> <li>• Insufficient cooperation between research units and companies/financial institutions;</li> <li>• Focus on the availability of funds and their fast utilisation and not on how to fulfil objectives and ensure durable benefits, which is especially important for eco-innovations;</li> </ul>
<i>Opportunities</i>	<i>Threads</i>
<ul style="list-style-type: none"> <li>• The EU energy and climate policy;</li> <li>• New requirements of the increasingly stringent environmental protection law;</li> <li>• The new EU financial perspective for 2014-2020, with focus on innovativeness, low-carbon economy and sustainable development;</li> <li>• Low energy efficiency and resource productivity, which provides opportunities for obtaining abrupt and significant results from eco-innovation implementation (e.g. the need to replace large, centralised energy generation units with distributed energy generation);</li> <li>• The significant potential for development of eco-innovative products and services in Poland discerned by foreign capital;</li> </ul>	<ul style="list-style-type: none"> <li>• Perceiving the concept of a low-carbon economy only as a threat that will weaken economic growth foundations</li> <li>• Out-dated industrial sectors are strongly supported by the governmental and political establishment, which limits incentives for development of eco-innovations;</li> <li>• Excessive EU fund support for traditional sectors and transport infrastructure – instead more funds should be allocated for R&amp;D and implementation of innovations;</li> <li>• Given the high risk level and high marginal costs associated with introduction of eco-innovations on the market, the looming financial crisis may significantly slow down eco-innovative development;</li> </ul>