

PRESURCE

Actors and Activities in the field of Resource Efficiency in Poland

Combined presentation of the results from mapping actors and from mapping activities (at policy and economic level), relevant projects and networks in the field of resource efficiency in one country report (relates to outputs 5.1.5. and 5.1.13)

ProAkademia

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1. Summary

As an overall result of the review of actors relevant for resource efficiency (RE) in small and medium-sized enterprises of the manufacturing sector and their activities in Poland (done within the PRESOURCE project in 2013) the following can be stated:

- RE in Poland is affected by many different strategies and policies of public actors. Many public actors in Poland are active in different fields of policy concerning sustainable development and RE (including energy, emissions, waste and water). Biotic and especially abiotic resources are just about to become explicitly involved in efficiency policy
- There is a certain leeway for the degree of centralisation and coordination of RE policy. This relates to actors & strategies and provides room for further improving the coherence of political activity in the field of RE in Poland
- Projects, consulting & networking activities are often supported and operated by public actors

2. Introduction

One of the deliverables of the PRESOURCE project is an overview of actors relevant for resource efficiency in small and medium-sized enterprises of the manufacturing sector and another deliverable is to provide an overview of their activities in Poland.

The activities of different actor categories have been screened and those, who engage actively in promoting resource efficiency – especially in SME of the manufacturing sector – have been described in this country report on actors and activities.

The following actor categories have been found to initiate, support or manage relevant activities: national and regional government ministries and related agencies, other agencies and associations, chambers of commerce, norms and standards institutions, research institutes and think tanks, local networks, economic clusters and municipalities.

The activities relevant for resource efficiency in small and medium-sized enterprises of the manufacturing sector found in all mentioned actor categories are shortly described in the report, so that it provides a unique overview of actors and activities relevant for that thematic focus. The combination of the different levels from the public and private sectors gives a full picture of how different actors interact and complement in delivering progress on the way to a resource efficient economy. This research is a necessary condition to develop the ability to analyse the complex societal structure and the division of labour leading to desired political outcomes.

The second part of the report takes the perspective of activities and describes relevant forms of support structures, instruments and tools. It provides some concrete examples but does not repeat all activities of the above-mentioned actors. The relevance of the actors is determined by their activities, which are detailed in their descriptions. As for example nearly all actors are providing information services and some of them provide consultation services, the kind of information or consultation service they provide is explained in the description of the actors and their activities above. The second part mainly gives an overview of possible practical approaches, whose implementation and combination with other instruments can vary considerably.

3. Stakeholders & Activities

3.1. Additional national policies

Have additional national policies, incentives, voluntary agreements and strategies in the production sector been developed to fulfil objectives set in the Roadmap to a Resource Efficient Europe?

- Strategic directions of the energy policy in Poland are driven by the need to reduce demand for fuels and energy, reducing environmental impacts of the power sector, lowering emissions and reducing dependence on imports of fuels. While the rate of waste generation is slower than economic growth, key problems include predominance of landfilling as a main mode of waste management, and a declining share of industrial waste undergoing resource recovery

- Despite relatively stable levels of water abstraction, rational management of water resources remains a key environmental priority, partly because of existing water shortages and partly because changes in climate may deepen the water deficit. National Strategy for Management of Water Resources 2030 indicated a number of operational goals to rationalise water needs and water use
- The Ministry of Environment and the Ministry of Economy are carrying out work to respond to the EU 2020 and its resource efficiency flagship
- The lead role of the implementation of the resource efficiency flagship is within the responsibility of the Ministry of Environment which takes active part in the preparation and implementation of the strategies and policies listed above. Minister of the Environment manages "The Environment" and "Water Management" sectors of the Governmental Administration. Under the Act on Governmental Sectors the water management sector includes development, protection and rational use of water resources and the environment sector covers among others: environmental protection and development including rational use of environmental resources, nature conservation including designation sites and species protection, forestry, management of natural resources, geological resources, including underground water reserves
- The lead responsibility for energy-related policies is with the Minister of Economy. This includes setting national targets concerning the energy mix as well as initiatives on renewable energy use and improvement of energy efficiency. The minister responsible for the economy is in charge of raw material policies and in particular the use of energy resources. The Ministry of Economy carries out the economic policy and supports the enterprise and innovation development. It cooperates with the Ministry of Environment
- The Ministry of Agriculture and Rural Development is responsible for agriculture, rural development, agricultural markets and fisheries sectors. The Ministry has the lead responsibility in Poland for the implementation of the EU Common Fisheries Policy aiming at ensuring sustainable and effective use of living marine water resources
- The Ministry of Infrastructure is in charge of issues related to construction, spatial order and housing, maritime economy, communications and transport
- The Ministry of Regional Development is responsible for shaping and coordinating numerous policies, including development policy to ensure a durable and sustainable development of the country and socio-economic cohesion, regional policy with the objective to enhance competitiveness of Polish regions as well as ensure territorial and spatial cohesion, spatial policy to maintain spatial order and a harmonious development of Poland, Cohesion Policy in Poland focusing on reducing the developmental disparities between EU regions. The most important tasks include managing European Funds
- Chief Inspectorate for Environmental Protection and sixteen voivodeship inspectorates for environmental protection are responsible for enforcement of environmental regulations, monitoring and assessment of the state of the environment, and prevention of major industrial accidents. Reports on the state of environment are available at:
<http://www.gios.gov.pl/stansrodowska/gios/index/en>
- The current State Environmental Monitoring Programme is available at:
<http://www.gios.gov.pl/zalaczniki/artykuly/pms.pdf>

- A great deal of information on waste management, concerning i.e. cross-border shipments of waste, WEEE, ELV recycling, is also available at the GIOS website
- The bulk of environmental statistics and indicators are compiled by the Polish Central Statistical Office (GUS), with many data and indicators produced by the Ministry of Environment and the Chief Inspectorate for Environmental Protection. Regularly published statistics on environment and energy are available at:

http://www.stat.gov.pl/gus/srodowisko_energia_ENG_HTML.htm

- The area of GUS's activities includes also environmental accounts (material flow accounts, environmental protection expenditures accounts, environmental goods and services sector, NAMEA Air Emission)

3.2. National/regional government ministries and agencies

Who is responsible for the topic of Resource Efficiency in the production sector on the governmental level? (e.g. Ministry of Commerce, Ministry of Environment) Which department is taking the lead? Which activities and actions to enforce RE are taken? In case of federal states, please include information on national and sub-national level.

3.2.1. Ministry of Economy

<https://www.premier.gov.pl/wydarzenia/decyzje-rzadu/krajowy-program-reform-na-rzecz-realizacji-strategii-europa-2020-0.html>

- National Reform Programme - 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
- Coordination of "Europe 2020" strategy implementation

3.2.2. Ministry of Economy

<http://www.mg.gov.pl/Bezpieczenstwo+gospodarcze/Gospodarka+niskoemisyjna/Narodowy+Program+Rozwoju+Gospodarki+Niskoemisyjnej>

- National Programme 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 Programme for Low-Emission Economy Development")

3.2.3. Ministry of Economy

http://bip.mg.gov.pl/files/upload/17490/PRP_do_konsultacji_ost.pdf

- The Enterprise Development Programme (PRP) 2011-2020

3.2.4. Council of Ministers

www.uzp.gov.pl/cmsws/page/GetFile1.aspx?attid=3225

- National Action Plan on sustainable public procurement for 2010-2012

3.2.5. Ministry of Regional Development

http://www.mrr.gov.pl/rozwój_regionalny/Polityka_rozwoju/System_zarządzania_rozwojem/Porządkowanie_dokumentów_strategicznych/Documents/Plan_uporządkowania_strategii_rozwoju_reasumpcja_decyzji_RM_1_0032010.pdf

- 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

3.2.6. Ministry of Environment Protection

http://www.mos.gov.pl/g2/big/2009_07/2826c539c3015384e50adac8fe920b0b.pdf

- The National Environmental policy for 2009-2012 and its 2016 outlook - identifies main challenges and strategic directions for the national environmental policy. The current policy adopted in 2008 (NEP is updated every four years) distinguishes between 'protection of natural resources', and 'improving the state of environment and environmental security'. Topics covered under the heading of natural resources include nature protection, sustainable forestry, rational use of water resources, soil protection, and sound management of geological resources. Areas under the heading of improving the state of environment and environmental security include health and environment, air quality, protection of water quality, waste management, noise and electromagnetic fields, and chemicals in the environment

3.2.7. Ministry of Economy

http://www.mg.gov.pl/files/upload/8134/Polityka%20energetyczna%20ost_en.pdf

- 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 recognises that coal (hard coal and lignite) will continue to be the basic fuel in Poland's primary energy mix as well as for generation of electricity and heat, but its share in the energy mix will decline

3.2.8. Ministry of Economy

http://www.mg.gov.pl/files/upload/12326/KPD_KE.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 harmonisation 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

3.2.9. Ministry of Environment Protection

http://www.mos.gov.pl/artykul/326_lesnictwo/296_krajowy_program_zwiekszenia_lesistosci.html

- National Program for Augmentation of Forest Cover highlights the importance of nature protection and landscape management as well as increasing the biodiversity resources in the afforesting work. The augmentation of forest cover is the priority of the Forest Policy and is particularly important due to the changes in the ecosystems already observed and multipurpose role of forests

3.2.10. National Water Management Authority

<http://www.kzgw.gov.pl/pl/Projekt-Polityki-wodnej-panstwa-do-roku-2030.html>

- Draft National Strategy for Management of Water Resources 2030 - prepared for the Minister of Environment in 2010. The strategic goal of implementing an integrated water management system is to provide the population with access to clean and healthy water, and reduce the risks related to floods and droughts. This is to be achieved together with ensuring good quality of water resources and related ecosystems, as well as meeting water needs of the economy

3.2.11. Ministry of Economy

http://www.mg.gov.pl/files/upload/12707/SliEG_konsultacje_02.2011.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

3.2.12. Ministry of Environment

http://qcm2.quicksilver.pl/img/20/strategia_ZPP.pdf

- Strategy of Implementation of Integrated Product Policies in Poland - and the Executive Programme 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

3.3. Additional comments

Any additional comments on the responsibilities of Resource Efficiency? (e.g. unclarity about distribution of responsibilities, main political driver)

- In Poland the unclarity lays mainly in the fact that both the Ministry of Environment and the Ministry of Economy have in their competences RES, resource efficiency and sustainable development. Sometimes their competences cross

3.4. Agencies, chambers, associations and networks

Which are relevant actors contributing to the implementation of Resource Efficiency actions concerning the production sector?

3.4.1. Public agencies (state owned)

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 on 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

National Energy Conservation Agency (NAPE)

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

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

The Polish National Energy Conservation Agency (KAPE)

http://www.kape.gov.pl/new/about_us.phtml

- 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 it creates optimal energy efficiency solutions. 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 programmes 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) programme, which is itself part of the wider Competitiveness and Innovation Framework Programme (CIP)

Mazovian Energy Agency (MAE)

<http://www.mae.com.pl/english-version.html>

- Specific objectives include development of complete regional energy plan and enforcing instruments, energy market monitoring and implementation of the regional energy planning system, which are crucial for regional energy policy. The abovementioned objectives constitute a plan for sustainable energy development and specify the role of Mazowsze in achieving EU and national goals for 2020
- The agency aims to conduct a quality RES mapping, monitoring of energy consumptions in many sectors. This will result in the energy profile which will hopefully attract foreign investors. Unexploited RES (rural areas) and RUE (urban areas) potential, coupled with regional energy planning, supported by considerable economic and human potential, should trigger RUE and RES actions and contribute to the region's energy security and quality of environment

3.4.2. Private sector agencies

Kulczyk Investment House

<http://kulczykinvestments.com>

- KI has been creating Poland's first energy group operating internationally. A vertically integrated group of companies working under a common brand Polenergia in the field of energy generation from conventional and unconventional sources, as well as energy trading and distribution. Polenergia is one of the key assets in the Kulczyk Investments portfolio as an operational centre, know-how base and a platform to carry out innovative



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energy projects in Poland and within the region. The Polenergia Group is run by a team of international experts with unique competence in managing complex investment projects

3.4.3. Chambers (e.g. Chamber of Commerce, Chamber of Industry)

The Polish Economic Chamber of Renewable Energy

<http://www.pigeo.org.pl/?menu=przegladaj&id=18>

- PIGEO is an organisation representing the companies operating on the market of renewable energy sources (RES) in Poland. It is the biggest non-governmental organisation, which actively represents the interests of its associated members in Poland, acting in individual fields of energy from renewable sources:
 - wind power
 - biomass and biofuels
 - biogas
 - hydropower
 - solar energy
 - geothermal energy and heat pumps

Polish Chamber of Commerce

<http://www.kig.pl>

- Committee for climate-energy policy, committee for environment protection – conferences, debates

National Economy Chamber of Energy Efficiency KIGEE

http://www.kigee.org.pl/index_en.php

- While promoting energy efficiency causes and true energy savings, KIGEE represents businesses of its members within auditing, optimisation and energy efficiency sectors. The main reasons of KIGEE establishment were lack of opinions and comments from specialised entrepreneurs in debates about energy efficiency
- The main goal of Chamber is propagation of energy efficiency cause and support of governmental initiatives within Renewal Energy Sources emergence
- Public awareness of necessary energy efficiency improvement is very little. Chamber would like to change that fact and loudly spread the idea of positive impact that energy efficiency improvement will bring not only to environment but also to commerce

3.4.4. Associations (e.g. Association of Engineers)

Association of Renewable Energy

<http://www.seo.org.pl>

Association of Energy Trading

<http://www.toe.pl>

- The Association of Energy Trading is a voluntary, self-governing and apolitical non-profit association created at the end of 2003. At the beginning of 2004, a permanent set of governing bodies representing the Association was created: the General Assembly, the Executive Board and the Internal Audit Commission. During the first meeting of the General Assembly, decisions were taken on the plan of action for the Association, on the internal codes of operation, and on the financial plan and budget for 2004

Research and Innovation Centre Pro-Akademia

<http://www.proakademia.eu>

- Pro-Akademia promotes smart specialisations of Polish regions in the processes of design of new Regional Innovation Strategies for the years 2014-2020. Its main field of expertise is renewable energy and sustainable development

3.4.5. Networks (e.g. Resource Efficiency Network)

Bioenergy for the Region Cluster

<http://www.bioenergiadlaregionu.eu>

- Cluster 'Bioenergy for the Region' is a co-operation platform of companies, research institutions, local administration and business support institutions. The main aim of co-operation is sustainable energy development in Central Poland. In the context of climate change it promotes innovative solutions in renewable power engineering in local and regional dimensions

Cluster 3x20

<http://www.klaster3x20.pl>

- Implementation of "3x20" climate package strategy

Baltic Eco-energy Cluster

<http://www.imp.gda.pl>

- The main mission of BEEC is to introduce and promote a widely understood idea of distributed co-generation, understood as simultaneous small and medium scale production of thermal energy and electricity from renewable energy sources, mainly biomass, but also by converting water, solar and wind energy

Polish-Swedish Platform of Sustainable energy

<http://www.pimot.org.pl/wspopraca/porozumienia/szwedzko-polska-platforma-zrownowaonej-energetyki>

- Implementation of RES, support of energy efficiency and sustainable development

3.5. Norms and standards institutions

Who is determining the norms, standards and guidelines for Resource Efficiency in SMEs in the production sector?

3.5.1. Polish Normalisation Committee

<http://www.pkn.pl>

3.6. Research institutes and think tanks

Which research institutes and think tanks are engaged in Resource Efficiency in the production sector?

3.6.1. Institute of Power Engineering

<http://www.ien.com.pl>

- The Institute of Power Engineering (IEn) is one of the largest institutes in Poland and Central Europe providing research in the field of energy technologies. The Institute is a modern state owned research and development centre. The Institute covers a wide area of energy research from expert works for the power sector, to investigations of the most advanced technologies of energy generation, such as fuel cells, clean coal technologies and renewable energy sources. The advantage of the Institute is the experienced scientific, engineering and technical staff as well as numerous modern, sometimes unique laboratory facilities

3.6.2. EC BREC IEO – Institute for Renewable Energy

<http://www.ieo.pl>

- The idea of creating an independent Institute was to merge R&D with investments and consultancy services without public support. The income generated by commercial activities and services has been spent on further research activities as well as strengthening of the think-tank capacities. The above strategy enables to realise long-term societal goals as well as public mission in the area of sustainable local development, dispersed generation, as well as the development and nurturing RES technologies on the energy market

- The Institute's mission is to generate and use the up-to-date scientific and technical knowledge in the area of RES utilisation in order to:
 - Support the economically viable wind, solar, biogas and biofuels investments
 - Develop theoretical solutions and practical application as well as promote local dispersed RES generation
 - Introduce to the market innovative products (technical solutions, software, statistical and market development reports) as well as services in the area of renewable energy sources
- The main task of the Institute is to bring to the market players modern technologies, which have been elaborated either by own staff or other R&D domestic and foreign institutions. The key clients for the Institute's products and services are small and medium size enterprises, local authorities, corporative clients (e.g. due-diligence) and independent RES energy producers (e.g. feasibility studies). The institute also performs think-tank services for public administration in the evaluation of RES impact on the economy or the environment

3.6.3. CIRE – Information Centre about Energy Market

<http://www.cire.pl>

- Information service about energy market – publications, reports, interviews with key players regarding RES, resource efficiency

3.7. Other actors and multipliers

Which other actors are multipliers to SMEs for Resource Efficiency in the production sector? (e.g. Suppliers, Tradesmen)

3.8. Economic clusters, regions and municipalities

Are there economic clusters, regions or municipalities that are particularly known for their initiative/support concerning Resource Efficiency in SMEs? If yes, which ones are they and what are they famous for?

- See point 3.4.5.
- Resource efficiency topic is still not well recognised in Poland. Although there are some municipalities (regions) that are known in Poland for their interests in RES and RE policy. For instance Dszyna Commune (in Lodz Region) is strongly developing RES and is investing in energy efficiency measures – PV street lighting, CHP plant, solar panels on the inhabitants roofs

3.9. Any additional comments

- Political awareness regarding RE is still very low in Poland. Nevertheless the situation seems to be changing – mainly because of EU directives and regulations

4. Instruments/Tools

4.1. Support structures (awards, EMAS)

Which support structures exist to highlight resource efficient approaches in SMEs? (e.g. Awards, EMAS)

4.1.1. EMAS - Eco Management and Audit Scheme

<http://www.gdos.gov.pl/Articles/view/2563>

- About 30 companies in Poland

4.2. Other specific tools and instruments

List existing instruments/ tools that are used to improve Resource Efficiency in SMEs (please indicate whether instruments are used by private actors, public actors or both)

Environmental, energy audits

- Inspection, survey and analysis of energy flows for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s)

EU funding sources

- Financing of projects concerning RE, RES, energy effectiveness and sustainable development
- Financing of cooperation between R+D, communities and business
- Financing of research projects

4.2.1. Related to production processes

Energy audits within companies

4.2.2. Related to products

Analysis of product lifecycle

4.2.3. Related to the entire supply chain

Ecodesign PILOT (see above)

- See also methodologies (as well as the corresponding tools and databases) to support the assessment of resource efficiency, which in principal consider the whole life cycle, e. g. DIN EN ISO 14040, DIN EN ISO 14044, VDI 4600 (both public and private actors, mainly private actors)

4.3. Labelling

Which resource efficient labelling exists?

- Poland is required to apply mandatory labelling of products, in accordance with the EU directives, to inform potential purchasers about products' energy consumption
- Directive 92/75/EEC of 22 September 1992 introduced mandatory labelling of household appliances such as lamps, ovens, refrigerators, freezers, washing machines, tumble-dryers and dishwashers
- The new directive 2010/30/EU of 19 May 2010 extended the scope of the mandatory labelling to "energy-related products" which "have a significant direct or indirect impact on the consumption of energy and, where relevant, on other essential resources during use".¹ The revised energy labelling directive will have to be transposed into national law by 20 June 2011. The European Commission will review it by 31 December 2014
- Appliances and energy related products are classified from A to G, where class A is for the most energy-efficient. Three additional classes can be added, A+, A++ and A+++ showing even greater efficiency compared to class A

4.4. Standards

Which standards regarding the measurement of Resource Efficiency exist?

4.4.1. PN-EN 16001:2009

- System of energy management. It was approved and published in 2009. The standard specifies the requirements for the energy management system that allows enterprises to systematically strive for continuous improvement of energy efficiency, taking into account legal and other requirements that the company must comply with
- Takes into account all the factors affecting energy consumption, which can be monitored by the company and the size of which it affects

- Norm can operate independently or can be used in parallel or can be integrated with other management systems

4.4.2. ISO 14001

<http://www.iso.org/iso/home/standards/management-standards/iso14000.htm>

- One of the ISO standards used in environmental management. Specifically, it focuses on environmental management systems