PRESOURCE

Country Report 3.1.5.

Tools that are designed to identifying and exploiting the potential for resource efficiency within the production process and life enterprise and their unwanted shift into pollution in Poland

Pro-Akademia, Poland

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Content

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1. Preface

Pro-Akademia has conducted in the framework of the PRESOURCE project (www.presource.eu) a desk research on existing tools already utilized in Poland for providing support to entrepreneurs and intermediaries in the field of resource efficiency in SMEs in a partner country.

This country report for Poland summarizes the findings of this research. It focuses on innovative tools, which are:

- Utilised to identify and/or to explore resource efficiency potential (or which contribute to this goal);
- Utilised within SMEs by enterprises themselves and/or by third parties which assist SMEs in order to achieve particular changes / innovations.

We were not interested in general instruments as described for example within ISO standards (like for example ISO 14001 for environment management systems) but rather focused on tools utilised in particular to increase resource efficiency in enterprises of the manufacturing sector.

We had expected that there would exist similar tools under different names in the 6 participating PRESOURCE countries (Germany, Czech Republic, Poland, Austria, Hungary and Italy). Therefore e.g. the tools we collected in Poland in the field of energy auditing / energy efficiency (e.g. the EFEmotor tool) will be cross-checked with tools from the other countries in order to avoid unnecessary duplications in the analysis.

This is important as all these results shall be used in the development of the EDIT VALUE tool (Eco-innovation Diagnosis and Implementation Tool for Increase of Enterprise Value).

The EDIT tool shall be based on an objective approach assisting SMEs in answering question where to allocate limited resources which can be devoted to increasing resource efficiency through use of so called “voluntary instruments” of industrial management for sustainable development. It will be developed as a multi-criteria decision support system helping SMEs within production sector to explore resource efficiency potential both within their production processes as well as within the life cycle of their products.

Within the EDIT tool all levels of an enterprise’s management pyramid[1] shall be assessed in a systematic way from the perspective of possible resource efficiency opportunities for improvements, which could enhance enterprise’s value. That’s why the current country report for Poland also comprises different levels within this management pyramid.

[1] We distinguish the following basic levels within a management pyramid: stakeholders, vision and objectives, strategy, management system, production process and products

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In this respect the current country report on tools constitutes the first step in the development of the EDIT tool.

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2. List of Resource Efficiency (RE) related tools in Poland

2.1. Environmental audit and advisory support

Characteristics: Identification of degree of compliance with the legal requirements in the following areas:

general legal requirements, water and waste management, air emissions, recycling and recovery of packaging and products, other activities affecting the environment, as well as consulting support in the implementation of any corrective action.

Author: RIC Pro-Akademia

Source: www.bioenergiadlaregionu.eu

Relevance for development of the EDIT tool: Maintaining the appropriate standards in environmental protection activities to avoid financial penalties for any irregularities.

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2.2. Training: Practical use of the software to calculate the level of use of the environment and the calculation of charges for use of the environment.

Characteristics: Transfer to SMEs of the practical knowledge how to use the environmental measurement tools to calculate the level of use of the environment

Author: RIC Pro-Akademia

Source:www.bioenergiadlaregionu.eu

Relevance for development of the EDIT tool: SME's self-monitoring the level of use of the environment.

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2.3. ICT Calculator for counting charges of the use of the environment

Characteristics: The ICT tool

Author: Regional Environmental Departments

Source: e.g. www.wrotamalopolski.pl

Relevance for development of the EDIT tool: Allowing SMEs to self-monitor the level of environmental charges.

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2.4. ICT calculator of the product fee

Characteristics: The ICT tool calculating the product fee

Author: Specialized website

Source: www.oplataproduktowa.org.pl

Relevance for development of the EDIT tool: Allowing SMEs to self-monitor the implementation of the obligation of providing an appropriate level of recovery and recycling of packaging waste.

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2.5. Studies of physical and chemical measurement

Characteristics: e.g. measurement of water quality, CO2 emission, the level of noise, laboratory waste testing

Author: Commercial

Source: e.g. www.krakow.pios.gov.pl/laborat.php

Relevance for development of the EDIT tool: Providing information about the various aspects of the SMEs' impact on the environment

2.6. Energy audits / energy certificate

Characteristics: Measurment of the energy efficiency of buildings

Author: Commercial

Source: www.transport.gov.pl www.sap.sejm.gov.pl

Relevance for development of the EDIT tool: The possibility of reducing energy bills, thereby improving economic thanks to application of modern ecological solutions

2.7. EFEmotor

Characteristics: A tool aimed at supporting operation of electric motors in industry. The software can also serve as a tool useful for making decisions towards minimizing consumption of electricity and mitigating the related costs generated by electric drives.

Author: Polish Foundation for Energy Efficiency

Source: www.efemotor.pemp.pl

Relevance for development of the EDIT tool: Promotes resources efficiency on the process level

2.8. ProMot (Promotion of Energy Efficient Motor Systems)

Characteristics: A tool for the assessment of the efficiency potential in electric drive systems, including engines electrical, compressed air systems, pumping systems, cooling systems. The tool created with with the support of the European program SEVE.

Author: the Joint Research

Source: Centre – DG JRC

http://promot.cres.gr/promot_plone

Relevance for development of the EDIT tool: Promotes resources efficiency on the process level – not in Polish language version

2.9. EINSTEIN (Expert system for an Intelligent Supply of Thermal Energy in Industry)

Characteristics: Project aims to contribute to a widespread implementation of integrated energy-efficient solutions for **thermal** energy supply in **industrial companies**

Author: Intelligent Energy Europe

Source: sourceforge.net/projects/

einstein

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Relevance for development of the EDIT tool: Promotes resources efficiency on the process level – not in Polish language version

2.10. RETScreen® International

Characteristics: ***RETScreen 4*** is an Excel-based clean energy project analysis software tool that helps decision makers quickly and inexpensively determine the technical and financial viability of potential renewable energy, energy efficiency and cogeneration projects. ***RETScreen Plus*** is a Windows-based energy management software tool that allows project owners to easily verify the ongoing energy performance of their facilities.

Author: Natural Resources Canada

Source: http://www.retscreen.net/

Relevance for development of the EDIT tool: Used to assess the technical and economic viability (life cycle cost) of production based on energy-saving technologies and renewable energy sources and a wide range of projects in energy efficiency. Available in Polish language version

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