PRESOURCE

Country Report 3.1.3.

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 Czech Republic

Enviros, Czech Republic

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Content

1. Preface 3
2. List of Resource Efficiency (RE) related tools in Czech Republic 5
   - 2.1. TEST - Transfer of Environmentally Sound Technology 5
   - 2.2. Eco-Efficiency Check-up tool 5
   - 2.3. Ecomapping 5
   - 2.4. Three Steps to Eco-Efficiency 5
   - 2.5. Cleaner Production Excellence Model 6
   - 2.6. The Efficient Entrepreneur Calendar 6

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1. Preface

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

This country report for Czech Republic 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 Czech Republic in the field of eco-efficiency (e.g. the Eco-Efficiency Check-up 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 Czech Republic 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.

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

2.1. TEST - Transfer of Environmentally Sound Technology

Basic Characteristics: Integrated approach for introduction of resource efficiency and minimised end of pipe solutions

Description: Includes an initial review and focuses on integrated implementation of cleaner production, environmental management accounting, environmental management systems, technology transfer and sustainable enterprise strategy. Final selection of tools and their implementation is need driven. Strong feature is detailed analysis and exploration of resource efficiency potential within processes and minimisation (optimisation) of necessary end of pipe solutions). TEST brings good results also within difficult conditions of "hot spots" suffering from low environmental and economic performance. Weak area are tools utilised for intervention at the level of enterprise strategy (basically there is utilised only Sustainability Balanced Score Card). There is missing also tool for monitoring and verification of implemented RE measures (only RE indicators are provided as standard within cleaner production projects).

2.2. Eco-Efficiency Check-up tool

Basic Characteristics: On-line sector specific benchmarking tool

Description: Tool focusing on indication of resource efficiency at the process level through branch specific benchmarking within one country and through providing hints for possible resource efficiency measures.

2.3. Ecomapping

Basic Characteristics: A diagnosis tool focusing on quick assessment of environmental impacts and HS risks

Description: Strength - easy visualisation of origin of environmental problems. Weakness - end of pipe focus.

2.4. Three Steps to Eco-Efficiency

Basic Characteristics: Structured questions to find out what enterprise already knows about itself at qualitative level. Tool seems to be outdated

Description: Tool was developed to assist small and medium-sized manufacturers in Canada "to develop an eco-efficiency program that is custom tailored to their business needs". The process involves the following three steps:

1) Self-Assessment – determines the current level of eco-efficiency activity in company (on qualitative level only).
2) Strategic Planning – provides a framework to develop a customized eco-efficiency program (having an ideal enterprise as a starting point - program is proposed based on "benchmarking" of an enterprise with such an "ideal business")
3) Benefit-Cost Analysis - qualitative only.

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There are questions like „We have taken measures to reduce material, water and energy use in production“ with no quantification of RE potential

2.5. Cleaner Production Excellence Model

Basic Characteristics: A diagnosis tool build on basis of the EFQM excellence model with ambition to become a complex resource efficiency excellence evaluation tool

Description: This evaluation tool is trying to address the whole learning cycle leading to exploration of resource efficiency potential with an ambition to become an excellence model for cleaner production. It suffers from subjective evaluation and lack of quantitative analysis and need driven approach.

2.6. The Efficient Entrepreneur Calendar

Basic Characteristics: A complex assistance tool for SMEs

Description: Well understandable methodology for a quick review of an enterprise in 12 steps. Step by step methodology corresponds with the calendar form.

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