

Country Report 3.1.6.

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 Italy

ENEA, Italy









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1. Preface

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

This country report for Italy 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 Italy in the field of energy auditing / energy efficiency (e.g. the Kilowàttene 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 (Ecoinnovation 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 pyramid¹ 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 Italy 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









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 Italy

2.1. Kilowättene

<u>Description</u>: Kilowàttene is a work sheet for the evaluation for household electric energy audit and for evaluation of possible savings in domestic buildings. Target groups of the tool are: SMEs of the Energy Efficiency and Renewable Energy sector, electric equipment operators and installers, green energy (Photovoltaic panels, wind generators, biomass) providers and installers, ESCOs (energy service companies), retailers, municipalities.

2.2. Promoting Resource Efficiency in Small and Medium Enterprises (PRE-SMEs)

The PRE-SMEs Toolkit is a user-friendly electronic Flash based toolkit that provides SMEs with comprehensive learning on resource efficiency and various techniques to achieve it. It uses a simple interactive voice over technique supported by videos, presentations and an interactive visual representation of an industrial plant to aid users throughout the assessment

2.3. REMake

It is a project of the funded by European Commission Enterprise and Industry. This is a self-check tool in which the resource efficiency of a SME is compared with benchmarks.

2.4. Rethink Waste: Resource efficiency for manufacturers

The tool is constituted by six modules to fill:

- 1. Data collection (waste map);
- 2. Identifying cost and resource saving improvements and developing an Action Plan;
- 3. Prioritising your Action Plan and implementing key measures;
- 4. Preparing to implement change;
- 5. Getting everyone on board;
- 6. Quantifying savings and sharing success.

Every module corresponds to data and the information an entrepreneur have to collect in order to determine the baseline and the benchmarks for the enterprise.

2.5. Resource Efficiency Assessment Questionnaire

This is an online questionnaire constituted by 19 questions covering the following areas: how do you plan for efficiency? What do you do for being efficient? How do you review your work? How do you set and meet targets?

Since the tool is just based on qualitative judgments, the output of the questionnaire (a report) is quite generic. Furthermore the judgments that can be inserted in the questionnaire can be manipulated and can distort the final report.









2.6. Resource Efficiency Audit Tool

The tool is mainly focused on the assessment of the waste production and the related costs/revenues. The inputs requested are for instance the amount of different type of wastes produced as well as the cost/revenue per unit of wastes produced. The outputs are mainly charts (i.e., bar graphs and pie chart) in which the data are reported. Furthermore, a Key Performance Indicator (KPI), that relates the quantity of wastes produced to the company size and activity, is calculated. At the end some general tips are provided. The tips are generic and are not addressed to the specific case study.

2.7. The Rippleffect: water efficiency for businesses

The Rippleffect provides business with a straightforward and structured approach to help SMEs to:

- understand how much water your business uses;
- identify simple ways to start saving water and money;
- measure the water and cost savings that you have made;
- learn about 'quick win' water saving devices

2.8. WRAP Waste Hierarchy

WRAP Waste Hierarchy is an online tool for that provides guidance and suggestions about the hierarchy options for wastes.

2.9. Business Resource Efficiency Review Tool

General information about the company are required such as: the business field the company is in; energy consumption and costs; main uses of energy; programmes adopted for decreasing energy use; water use and costs; other resource use and costs; waste and hazardous waste stream and costs; transport (number of vehicles owned by the company and fuel use); environment management programmes the company has already undertaken; initiatives undertaken for decreasing consumptions and wastes.

The report provides the recommendations in order to optimize each resource used, the references useful for enhancing the environmental profile of the company as well as sectors the company has to work on in order to enhance its environmental profile (e.g., water; energy; transport; waste management).

2.10. EverdEE "new" (and Ecosmes Platform "new")

A web based tool for screening Life Cycle Assessment designed to adapt the ISO 14040 requirements and to offer easy-to-handle functions with sound scientific base, to be used directly by SMEs. Complex methodological problems of LCA methodology (system boundaries definition, choice of elementary flows and impact categories, data quality estimation and documentation) are simplified according to SMEs needs. The tool is available for free at www.ecosmes.net, a platform which provides:

1. environmental information and downloadable documents concerning eco-innovation policies, regulations and tools;









- 2. simplified LCA and eco-design tools (eVerdEE and TESPI), supported by sector-specific and pre-elaborated databases;
- 3. training material targeted at SME technicians and consultants (i.e. technical guidelines specialized for sector/product chain with information on environmentally-significant processes, best practices, case studies, economic trends and legislation). A training course on eVerdEE tool and LCA methodology are available for free.



