

# **Country Report 3.1.4.**

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 Austria

STENUM, Austria









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# 1. Preface

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

This country report for Austria 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 Austria in the field of energy auditing / energy efficiency (e.g. the Klima:aktiv 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 pyramid<sup>1</sup> 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 Austria also comprises different levels within this management pyramid.

<sup>&</sup>lt;sup>1</sup> 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 Austria

## 2.1. Prepare toolkit including Prepare Plus

<u>Description:</u> The Prepare Toolkit provides guidance for companies and consultants on eco-efficiency. It gives a feeling how an environmental team should look like and how waste, energy and water can be managed through a simplified environmental management system. Moreover it also includes tools on legal compliance. The toolkit provides several work sheets for these topics.

**Author: STENUM** 

User group / target group: companies and trainers (about 200)

Language: German

Relevance for EDIT tool:

- promotes resources efficiency and legal compliance
- SME friendly

# 2.2. Ecoprofit materials,

Source: files available from STENUM GmbH

<u>Description:</u> These materials support the introduction of the environmental management system called Ecoprofit. They consist of check list, step-by-step guidance and also an environmental reporting template with KPIs for self-assessment.

Author: STENUM

User group / target group: companies and trainers (about 2000 companies in Germany and Austria)

Language: German/English

### Relevance for EDIT tool:

- promotes resources efficiency
- SME friendly
- Easy to use & straightforward
- Focused on impact

#### 2.3. PRE-SME Toolkit

<u>Description:</u> This electronic resource kit enables SMEs to achieve cleaner and resource efficient production organized by resource category (water, energy, chemicals, wastes and materials) with a clear methodological guidance, based on an in-depth survey and review of existing tools and techniques. It is accompanied by a handbook built upon the lessons and experiences from the cleaner production activities.

Author: Companies within AREC and ASSIST









<u>User group / target group:</u> SMEs, CP service providers, also for developing countries, NCPCs

Language: English

#### Relevance for EDIT tool:

- SME friendly
- Extensive materials

#### 2.4. UNIDO ToT materials

<u>Description:</u> These materials by UNIDO aim at the training of trainers in the field of cleaner production. It consists of 12 volumes (team building, flow analyses, green procurement, idea generation,...). It can be ideally combined with the setup of a CP project.

Author: Stenum

User group / target group: NCPCs

<u>Language:</u> English/Spanish Relevance for EDIT tool:

Integrated and extensive due to coping with many aspects of SD

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# 2.5. WRAP - Online Resource Efficiency Tools

<u>Description</u>: The UK-based network called WRAP for a world without waste provides several online resource efficiency tools. They range from training materials, a water monitoring tool, presentation slides, guidance and video case studies to a publication wizard.

Author: diverse authors on behalf of WRAP (formerly envirowise)

User group / target group: companies

Language: English

#### Relevance for EDIT tool:

- Emphasis is on water
- Good combination of training, monitoring and guidance materials

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#### 2.6. Klima:aktiv tools

<u>Description:</u> This is a collection of various tools on energy saving, buildings and refurbishing and renewable energies. Some give support in calculating savings or profitability; others are for benchmarking or simple check-lists for energy efficiency measures.

<u>Author:</u> Klima:aktiv, Austrian governmental initiative to tackle climate change

<u>User group / target group:</u> Companies, consultants, consumers and households

Language: German

Relevance for EDIT tool:









- Only a few different topics
- Focuses on households

## 2.7. PIUS Check + CHEMIUS

<u>Description:</u> PIUS is a German abbreviation and stands for "environmental protection integrated into production". It can be seen as a consultation for making material flows visible within a company. With CHEMIUS an IT-tool is provided which helps in monitoring the material input during production and its legal compliance.

Author: Efficiency Agency, North Rhine-Westphalia, Germany

User group / target group: consultants to work in companies

Language: German

#### Relevance for EDIT tool:

- Focus on materials
- · Only in combination with consulting
- Process level

#### 2.8. Ökoeffizienzcheck Handwerk

<u>Description:</u> This service is similar to the PIUS check but focuses on skilled crafts and trade.

Author: Efficiency Agency, North Rhine-Westphalia, Germany

User group / target group: consultants, companies

Language: German

#### Relevance for EDIT tool:

• Less appropriate due to narrow focus on crafts and trade

# 2.9. Jump Tool

<u>Description:</u> Consultation tools for product development to leverage resource efficiency from the beginning by methodical guidance like LCC.

Author: Efficiency Agency, North Rhine-Westphalia, Germany

<u>User group / target group:</u> consultants, companies

Language: German

## Relevance for EDIT tool:

• Less appropriate due to narrow focus on product development









# 2.10. Ecocockpit

<u>Description:</u> In combination with consultation companies are enabled to quantify their product-process- or company-based CO2 emissions. Backed with specific data, the tool can identify the most relevant areas for action.

Author: Efficiency Agency, North Rhine-Westphalia, Germany

User group / target group: consultants, companies

Language: German

#### Relevance for EDIT tool:

- CO2 centered
- Product, process or system level

### 2.11. PINE tools

Description: Energy efficiency check in two stages with benchmarking and scouting.

Author: Circe, Stenum

<u>User group / target group:</u> Consultants

Language: English

## Relevance for EDIT tool:

Tools and methodology are still to be defined

## 2.12. M & T tool

<u>Description:</u> Monitoring & Targeting (M&T) is a well-proven method of energy management. It is generally seen as an IT tool which helps to manage energy and environmental issues in the same way as the business manages other costs and risks.

Author: Enviros

<u>User group / target group:</u> consultants and companies

Language: English

#### Relevance for EDIT tool:

System level

## 2.13. Nachhaltigkeitskompass Kanton Bern

<u>Description:</u> This tool can be used to qualitatively evaluate the sustainability of projects, concepts and programmes. It provides checklists to rate the effects in the three dimensions of sustainability and helps to make decisions.

Author: Kanton Bern, Switzerland

User group / target group: Regional government in first place. Possibly companies









Language: German

#### Relevance for EDIT tool:

- System level
- Easy to use
- For teamwork

## 2.14. Material-bewertungstools

<u>Description:</u> This tool enables the graphical visualisation of material streams (amount and connections) and their environmental effects. An integrated algorithm can detect weak spots within the streams.

Author: Resource efficiency network of 4 companies, Germany

<u>User group / target group:</u> Companies, focus on SMEs

Language: German

#### Relevance for EDIT tool:

Easy to communicate within company

# 2.15. Carbonfootprint Tool

<u>Description:</u> This tool helps to calculate Carbon footprints on company or product level. The results can be visualised and exported to different file formats. The tool only includes a data base with little amount of data.

Author: Resource efficiency network

User group / target group: companies

Language: German

#### Relevance for EDIT tool:

- Easy to communicate
- Free of charge

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#### 2.16. The READ Toolkit

<u>Description:</u> The READ (Resource Efficiency Appraisal and Development) toolkit is a set of tools that help to improve the usage of resources for large and polluting industry sectors. There's an index for benchmarking (its data is collected by the Environment Agency), a management tool which measures the performance by a questionnaire and an auditing tool.

Author: Environment Agency, UK

<u>User group / target group:</u> companies

Language: English

#### Relevance for EDIT tool:

· Expertise in benchmarking









Heavy industry

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# 2.17. Resource efficiency pack

<u>Description:</u> The pack consists of a brochure which serves as a guide with tips and case studies. Furthermore there is a environmental audit tool for the identification of areas of interest and a matrix tool for monitoring progress.

Author: City of Belfast

User group / target group: companies

Language: English#

#### Relevance for EDIT tool:

- Good starting point
- Low level of information content

## 2.18. Sustainable Action Planning (SAP). CO2 Resource Efficiency Tools

<u>Description</u>: This is a guide which outlines the overall Resource Efficiency approach, which is introduced by 19 different tools that can be applied during workshops. The red line is like the following: identifying the issues, spotting the opportunities, prioritising the few big issues to act on. Then making an action plan that will work and choosing measurables to know what is achieved.

Author: The campaign for greener healthcare

User group / target group: ompanies, more likely for medium sized entreprises

Language: English

#### Relevance for EDIT tool:

- Complete guidance from the beginning
- Good for teamwork

## 2.19. Business resource review tool

<u>Description:</u> The tool assists businesses in identifying areas for improvement in the use of energy, water and materials, and the associated economic opportunities. It is a series of simple questions and answers from which a report is generated highlighting the opportunities for addressing resource. There are checklists available for different business sectors: Rural, Hospitality, Food & Drink, Engineering, Construction, Retail and Services.

Author: Resource Efficiency East; Eastern England

User group / target group: companies

Language: English

#### Relevance for EDIT tool:

Focus on SMEs









- For free
- Good starting point

# 2.20. REMake Resource and Recycling Efficiency

Source: www.ecomanufacturing.eu

Description: Ecodesign tool

In the meantime: website' out of service!

<u>Author:</u> Eco-manufacturing project <u>User group / target group:</u> companies

Language: French/Spanish

## 2.21. Material Efficiency and Resource Conservation

<u>Description:</u> One part of this huge project with about 30 partners was the potential analysis of selected technologies, products and strategies regarding resource efficiency

Author: Wuppertal Institute, Fraunhofer,...

User group / target group: companies

<u>Language:</u> German/English

<u>Relevance for EDIT tool:</u>

Highly scientific

## 2.22. Sustainable business and Resource efficiency

<u>Description:</u> The Department for Environment, Food and Rural Affairs (Defra) informs businesses about RE on its website. The top 10 general tips are a good starting point for further reading.

**Author:** Defra

<u>User group / target group:</u> companies

Language: English

Relevance for EDIT tool:

Low barrier for starting

## 2.23. GRI indicator checklists

<u>Description:</u> The GRI Content Index serves as a 'road map' for any GRI report's content. The built-in checklist can be used to assess the extent of reporting for each disclosure.

Author: GRI

User group / target group: consultants, companies









Language: English, German

#### Relevance for EDIT tool:

Holistic approach

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#### 2.24. Ecolizer 2.0

<u>Description</u>: The Ecolizer 2.0 is an ecodesign tool and aims at an estimation of the environmental impact of product designs by means of eco-indicators. The indicators summarise the environmental impact of materials and processes in one figure.

Author: OVAM

designers and companies

Language: English

#### Relevance for EDIT tool:

- Easy to use
- Accessible
- Product level

# 2.25. Resource Productivity Guide

<u>Description</u>: The Guide provides a core set of enterprise level resource productivity and pollution intensity indicators, explains how these indicators can be applied. The Guide is also supported by a set of success stories, which demonstrate how the indicators can be applied in different companies.

Author: UNIDO, UNEP

User group / target group: Focus on SMEs

Language: English

#### Relevance for EDIT tool:

- Focus on SMEs
- comprehensive

## 2.26. Oekobench

<u>Description:</u> Web-based benchmarking database which covers at the moment the following industry sectors: metal-working, surface treatment

Author: Fraunhofer, EFA

User group / target group: Companies, service providers

Language: German

Relevance for EDIT tool:









• tailored for SMEs

# **2.27.** Naviko

Description: Qualitative assessment of project ideas and concepts regarding sustainability

**Author:** Styrian Government

<u>User group / target group:</u> Individuals, all organisations

Language: German



