INFORMATION

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INFORMATION

Project

The project Resource Efficiency Atlas

The research project "resource efficiency atlas" is carried out by the Wuppertal Institute for Climate, Environment and Energy, the Fraunhofer Institute for Industrial Engineering IAO, the Trifolium - Beratungsgesellschaft and the IAT of the University of Stuttgart on behalf of the German Federal Ministry of Education and Research entitled "International examination of resource efficiency potentials of technologies and products as a part of an innovation policy for sustainable development".
Project run time: 09/2008–12/2010.

SPONSORED BY THE
Federal Ministry of Education and Research

Further information:
www.wupperinst.org/rea

Printed on 100% recycling paper "Ökokat matt" | May 2010 | Design: VisLab, Wuppertal Institute | Pictures: PhotoDisc / VisLab

Ressourceneffizienzatlas
Resource Efficiency Atlas

Resource efficient technologies and products

International good practice for resource efficiency will be published in the Resource Efficiency Atlas.

Going to print: 11/2010

The Resource Efficiency Atlas.
A contribution to innovation politics in the area of sustainable development.

SITUATION

Resource efficiency counts

Resource efficiency — a competitive advantage

All economic activities are based on natural resources. However, during the past 30 years the global resource consumption and the prices of resources have increased strongly. Therefore, the management of natural resources becomes an even greater challenge to politics, economy and science.

Increasing extraction and overuse of resources do not only affect ecological impacts but are connected to economic and social consequences as well: Inefficient resource use results in competitive disadvantage. Shortage of resources endangers the development of companies and thereby employment.

Although versatile innovations in products and manufacturing processes conserve natural resources, these innovations are put into practice too rarely because of:

- a lack of knowledge transfer between science and politics, politics and business, business and science,
- risks perceived with changing established manufacturing processes with new, material efficient ones,
- a lack of cooperation between the actors along the value chain in order to improve efficiency of resource consumption.

The industrial countries act as if there were several earths available. Thus, without a radical increase of resource productivity there will be no sustainable development.

Schmidt-Bleek (2009): Earth

INTENTION

Boosting resource efficient technologies and products

Increasing resource efficiency

Additionally to saving natural resources, resource efficient key products and technologies can save money. In doing so, technologies can be applied like this:

- New resource efficient technologies substitute well-known technologies or the former state-of-the-art (competitor technology / substitution technology).
- Functionalities of new technologies unknown so far lead to a new application spectrum concerning resource efficiency (new technology area).

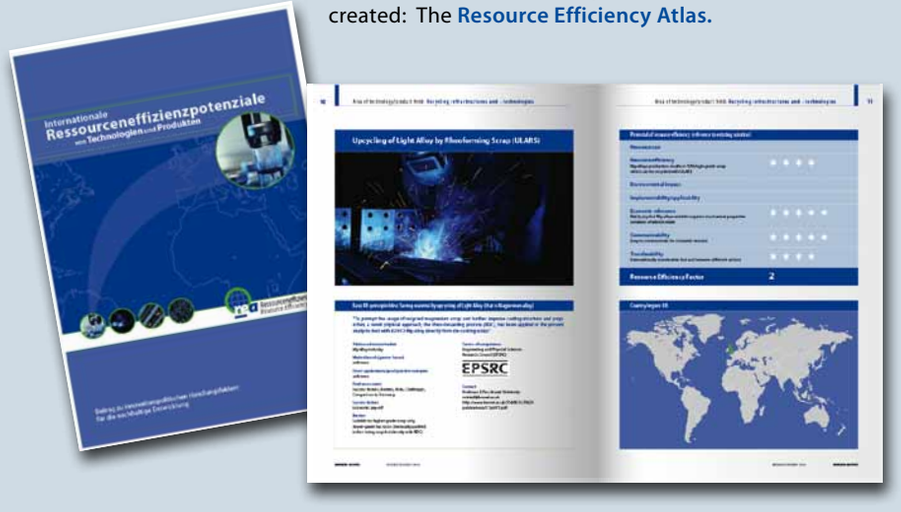
Exceptionally relevant areas of products and technologies

- Production and Manufacturing
- IT and communication
- Automation
- Optics
- Environmental technology
- Energy technology
- Textiles
- Foodstuffs
- Micros ystems
- Biotechnology
- Nanotechnology
- Materials
- Buildings and Housings
- Transportation

Resource Efficiency Atlas — an international collection of efficient technologies and products

The success of technologies and products in terms of resource efficiency often depends on information and on the examples applied. Looking beyond one's own nose will expand the pool of knowledge with international developments and approaches.

The resource efficiency atlas shows exemplary technologies and products in other countries that can contribute to the release of resource efficiency potentials.



By means of in-depth desk research, interviews, surveys of experts and your help a global collection of innovative, resource efficiency increasing products and technologies with an estimation of their potentials included will be created: The **Resource Efficiency Atlas.**