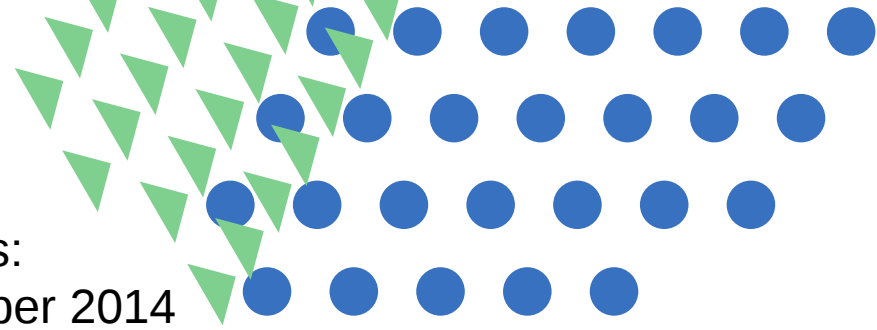




Identifying Resource Efficiency Potentials with the PRESOURCE EDIT Value Tool

Vladimír Dobeš - Senior Consultant - Enviros

Dr. Johannes Fresner - Managing Director - STENUM

PRESOURCE is implemented
through the CENTRAL EUROPE
Programme co-financed by the
ERDF



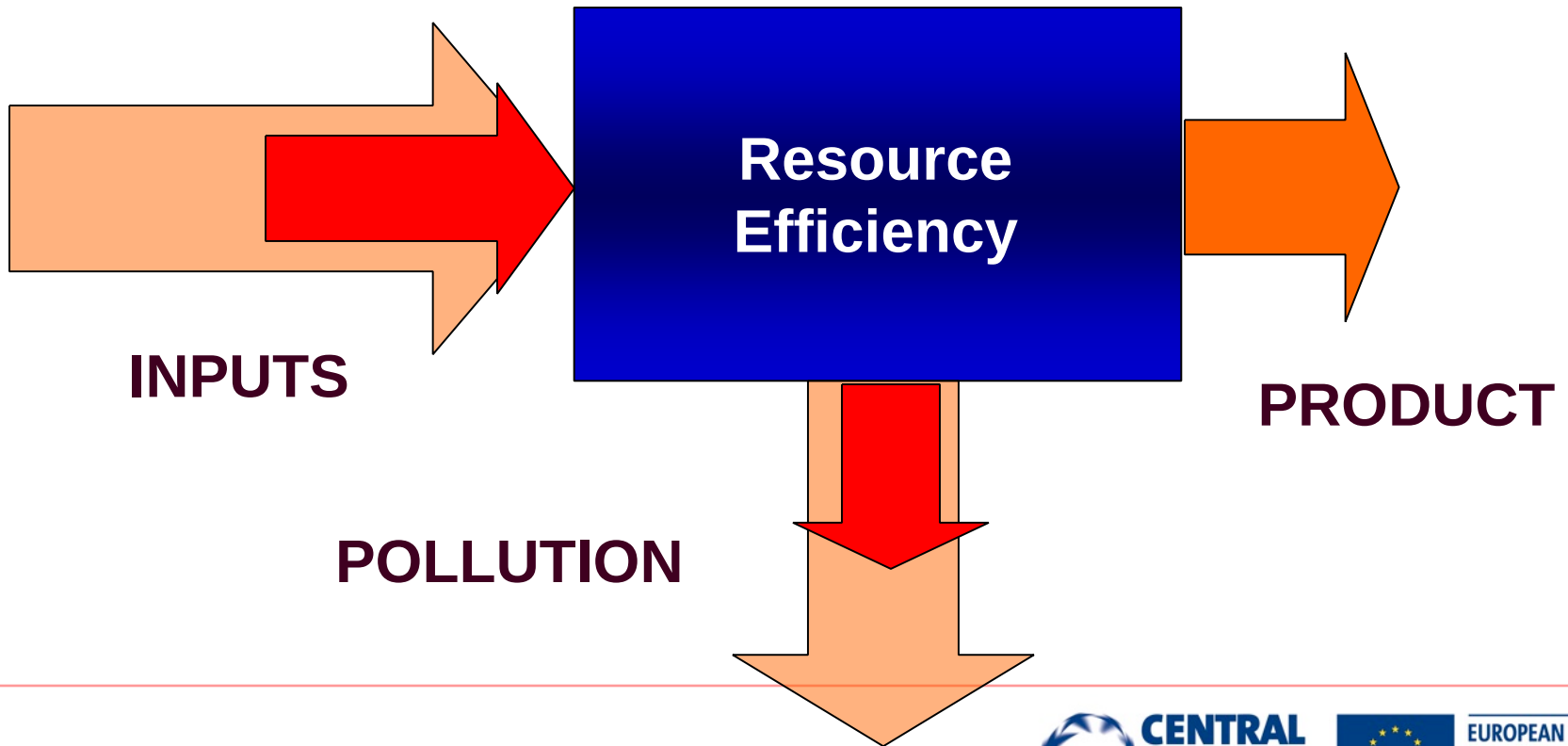
**CENTRAL
EUROPE**
COOPERATING FOR SUCCESS.

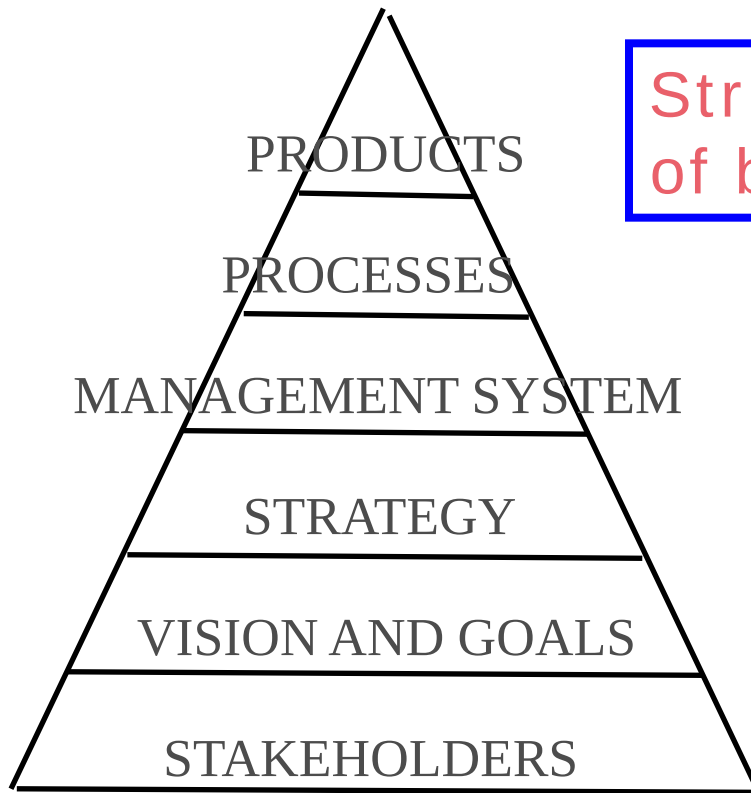


EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

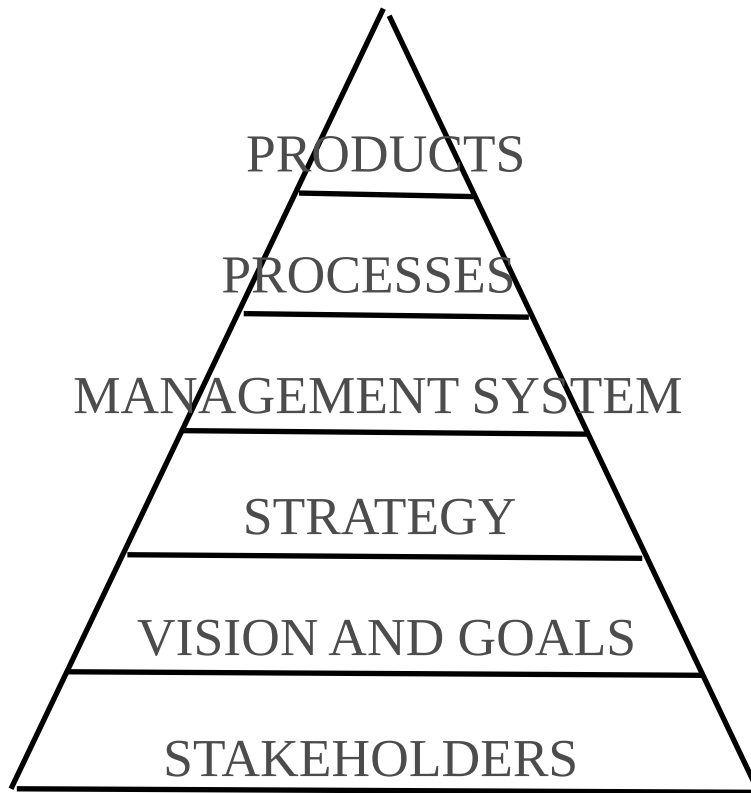
Principle of preventive environmental management

and its **DOUBLE BENEFIT**





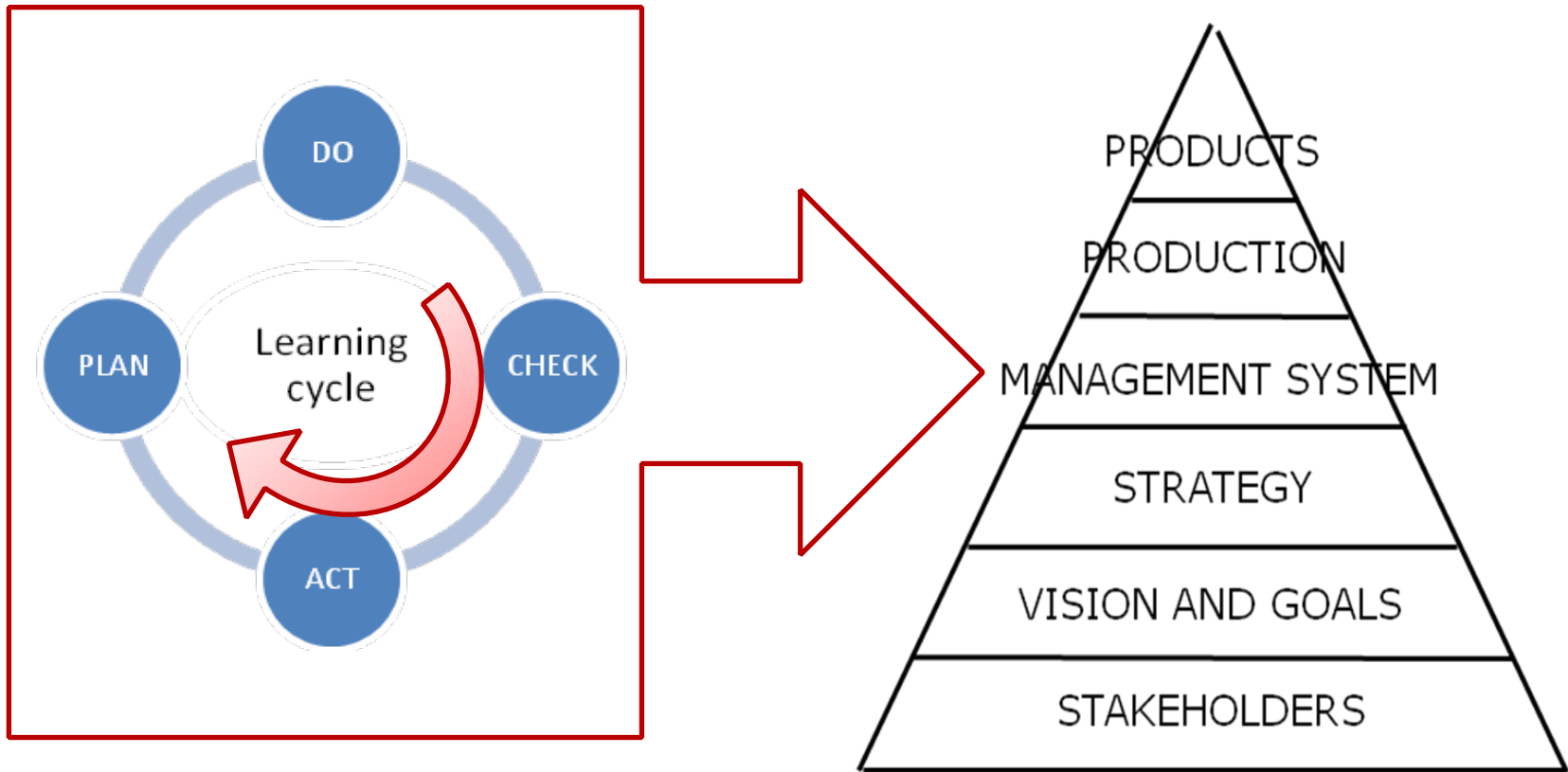
Structure of the key components
of business & their relationships



RESOURCE EFFICIENCY (RE)
is related to material and energy flows at the physical level of a business (processes and products)

RE is influenced by all levels of the management pyramid

Elements of business are changed through learning



Management Pyramid and examples of RE instruments

Ecodesign, Design for Sustainability
Environmental labelling, Product Service System

BAT – Best Available Techniques

EMA – Environmental Management Accounting

M&T – Monitoring and Targeting

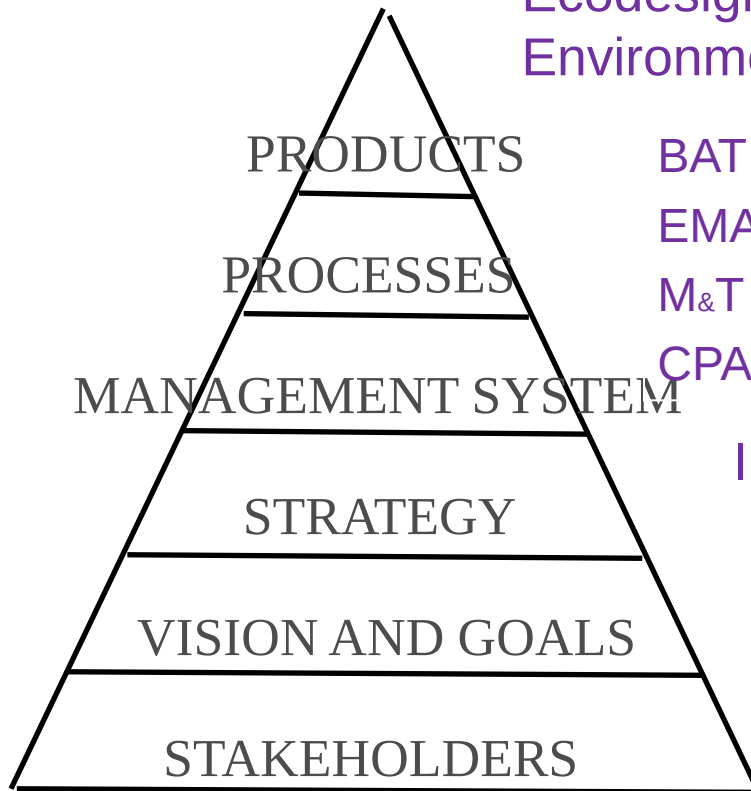
CPA – Cleaner Production Assessment

IMS, EMS,

Social Responsibility

Business planning tools

External communication



Problems of existing approaches and diagnosis tools:



- **Tool driven** (either specific tool or an „ideal enterprise“)
- **Selective** (only some levels of a business are addressed)
- **Qualitative**

Challenge

to develop Eco-Innovation Diagnosis and Implementation Tool which will be:

- **Driven by the potential for improvement**
- **Complex** (addressing all levels of a business)
- **Quantitative**

so that it will lead to an optimal increase of Enterprise **Value**

- **within existing framework conditions** and
- **with limited resources available**

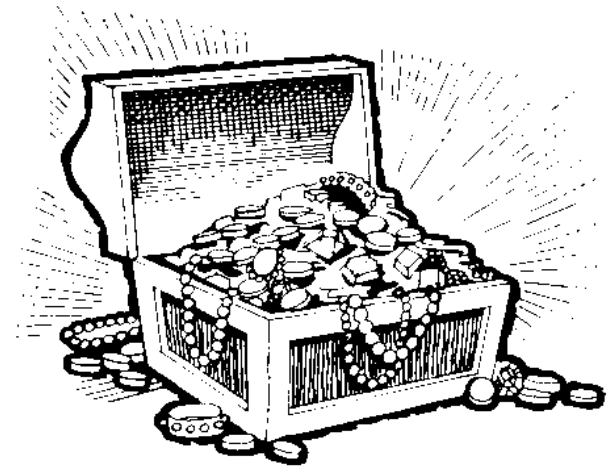
WHAT IS EDIT?

EDIT =

- *Eco-Innovation*
- *Diagnosis and*
- *Implementation*
- *Tool*

*for Increase of
Enterprise **Value***

MAP OF



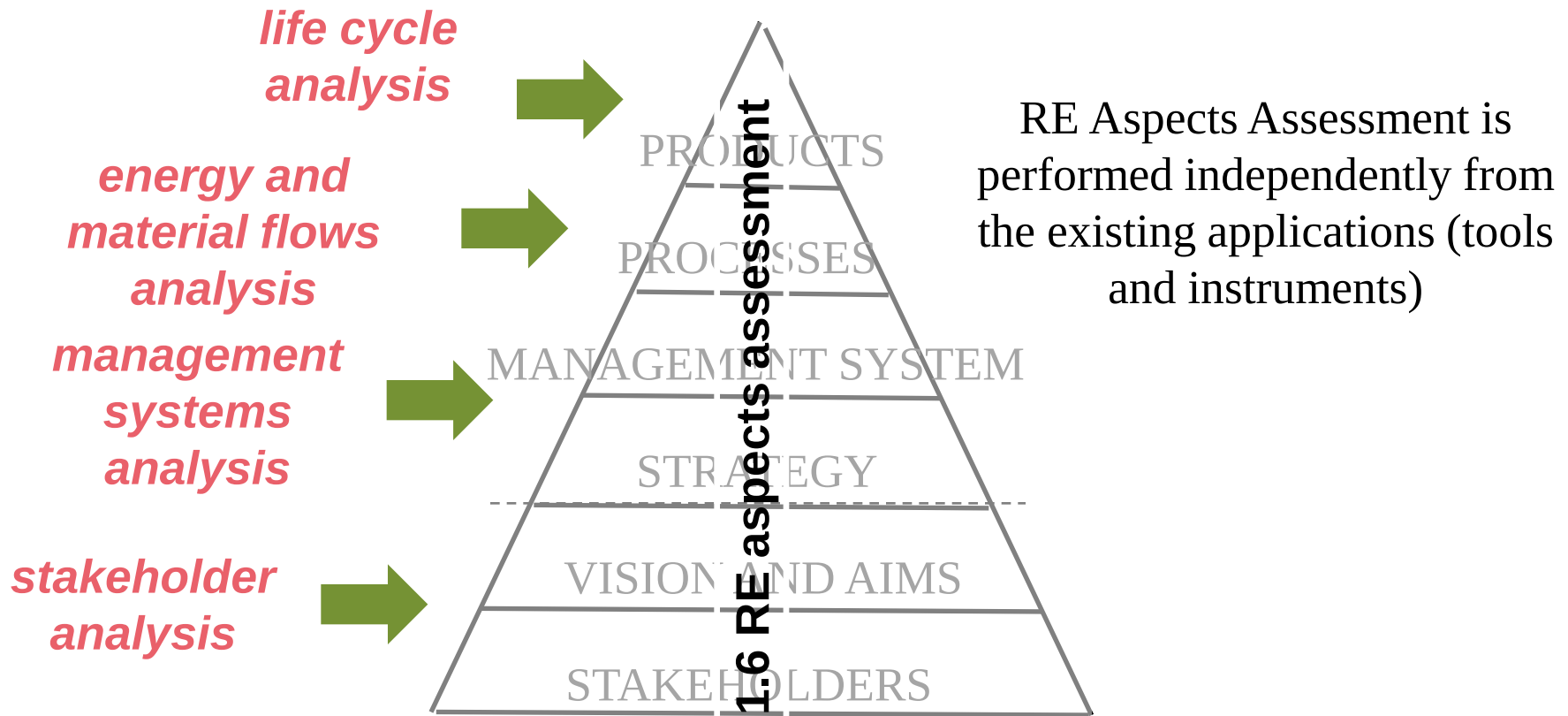
Three basic steps:

1) Potentials - identification of areas with potential for improvement

2) Applications - Allocation of possible applications (instruments) for intervention / improvement

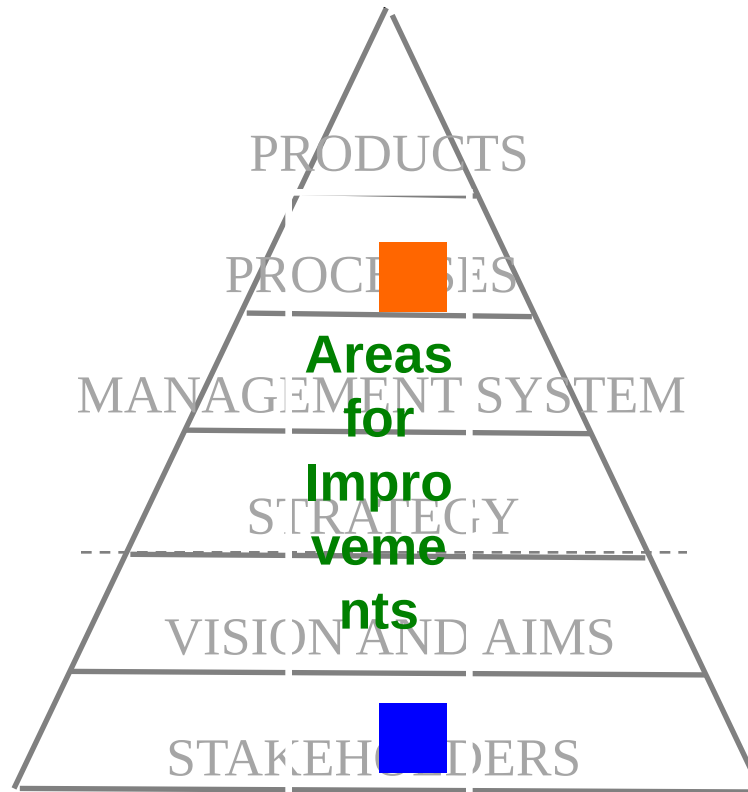
3) Action Plan - Feasibility of applications (instruments) and innovations identified (**cost benefit analysis, possible sources of funding**)

PRESOURCE Step No. 1: Identifying potentials



PRESOURCE Step No. 1: 1.6 Identification of potentials

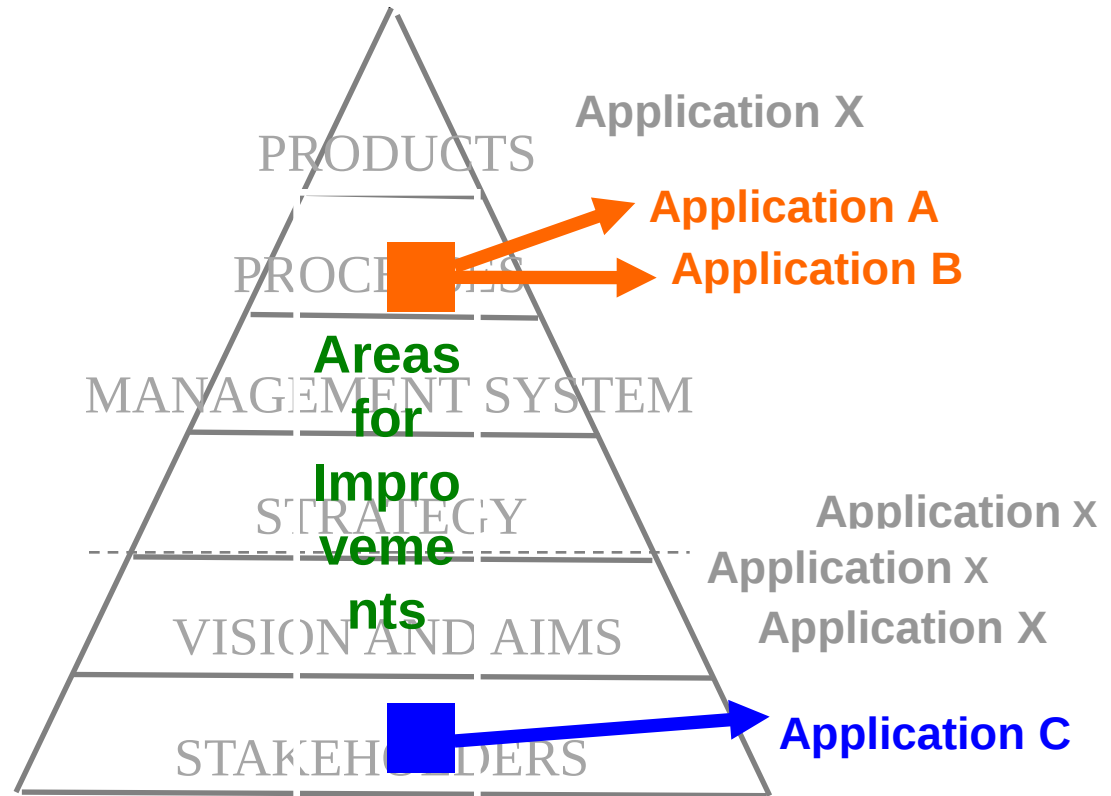
Evaluation of all aspects (areas with potential effects for a given enterprise)



Number of aspect Title of aspect					
NA	Absence	Preparation	Integration	Proaction	WEIGHT
0	First level of addressing aspect – there is no any action	Enterprise is preparing an action to address given aspect	Enterprise address given aspect on a standard basis	Enterprise address given aspect in proactive way	A
					B
					C
Source		Source of information for evaluating the aspect			
Remark		Any more detailed specification needed			

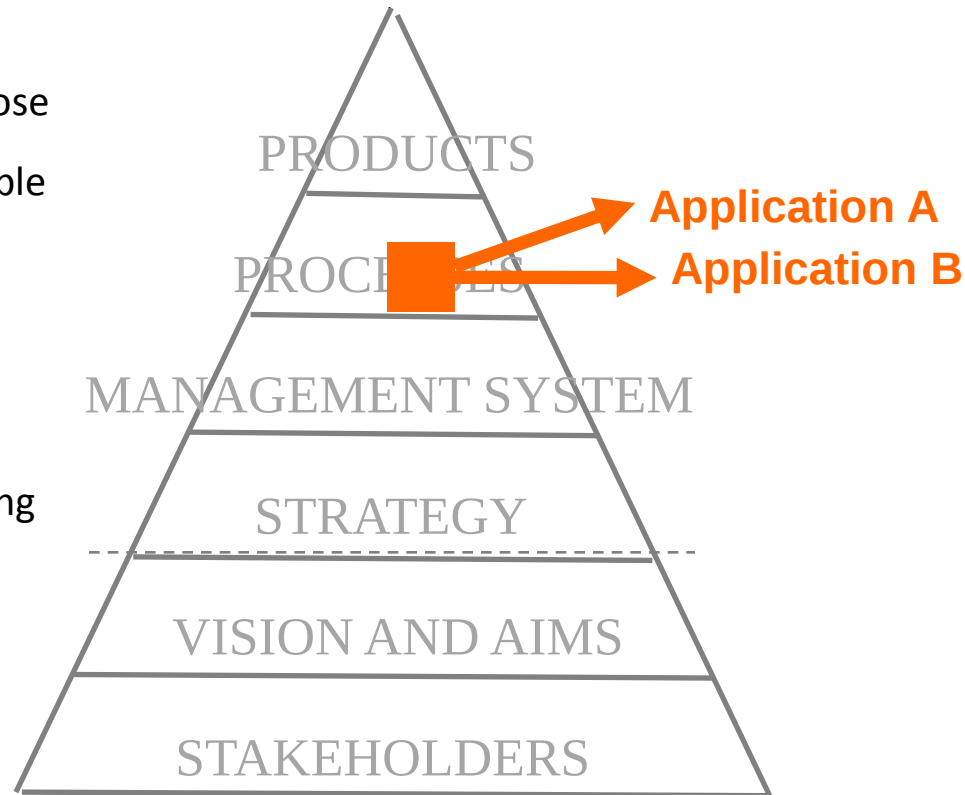
High importance (weight A,B) + high potential (1-3 - low level of addressing aspect) = aspects with possible potential for further investigation

RE Aspects Assessment



Feasibility and plan:

- Basic information and purpose
- Benefits including quantifiable effects and their monitoring
- Implementation and costs
- Links to other applications
- Barriers and their overcoming
- Sources of funding
- Tasks and time schedule



PRESOURCE Experience from the pilot phase

COMPANY 1 Czech Republic

Production of industrial packaging

90 employees

Annual Turnover: 15 Mio EUR

RESULTS: Less waste and therefore better competitiveness, lower price of product for customer. Major identified applications:

- Purchase of precise cutting plotter (savings and less waste, higher quality and efficiency)
- Energy efficiency and better well-being
- Introduction of new Human Resource Management System leading to higher identification of staff with the company
- Extension of existing management system – management of energy and material flows will be integrated into regular quality management review

See more information on the poster

PRESOURCE **Experience from the pilot phase**

COMPANY 2 Czech Republic

Furniture industry

50 employees

Annual Turnover: 2 Mio EUR

RESULTS:

- Installation of new CNC electro-hydraulic bender will increase material efficiency (savings 213 000 EUR / year with a payback period of 5,5 years - investment with a subsidy)
- Energy efficiency – company will change gas supplier, optimize electricity consumption, change the paint operation, reconstruct an indoor lightning
- Company will introduce material flow and energy management based on principles of Monitoring and Targeting
- New recycling scheme for chair foam has already been implemented
- The SME will work out own marketing strategy

See more information on the poster

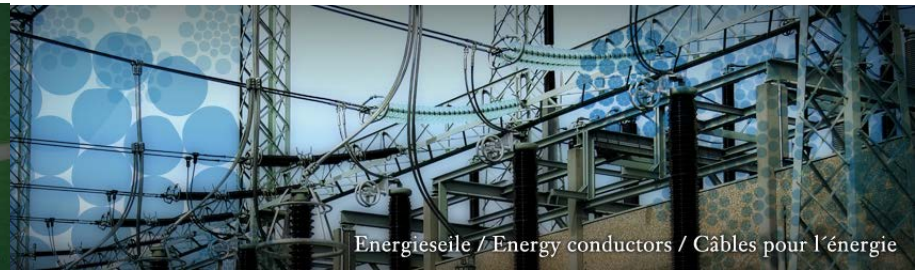
PRESOURCE Experience from the pilot phase

Companies from Austria

See information on the posters!

PRESOURCE Cable manufacturer

- Number of employees: 48
- Products: Energy conductors, rope and lifting systems



PRESOURCE Chocolate manufacturer

- Number of employees: 120
- Annual revenue: EUR 17.000.000
- Products:
 - Handmade chocolate
 - Drinking chocolate



PRESOURCE Animal Food producer

- Number of employees: 32
- Annual revenue: EUR 24.000.000,00
- Products: Animal food



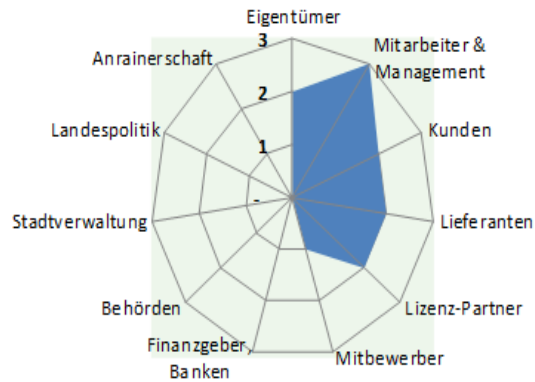
PRESOURCE Spirit manufacturer

- Number of employees:
91
- Annual revenue:
EUR 25.000.000
- Products:
Production, bottling and sales of
national and international spirits

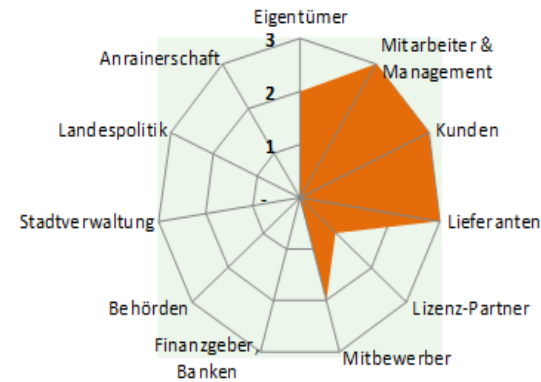


PRESOURCE Stakeholder analysis

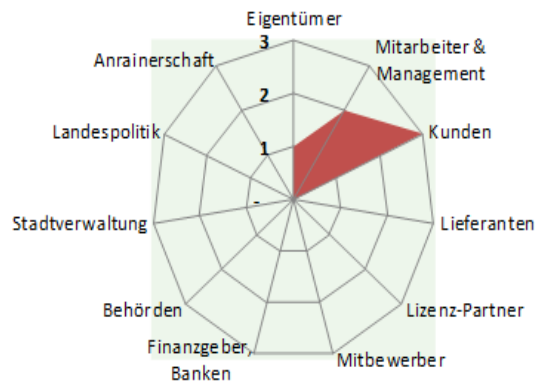
Verbessern Produkt-Qualität



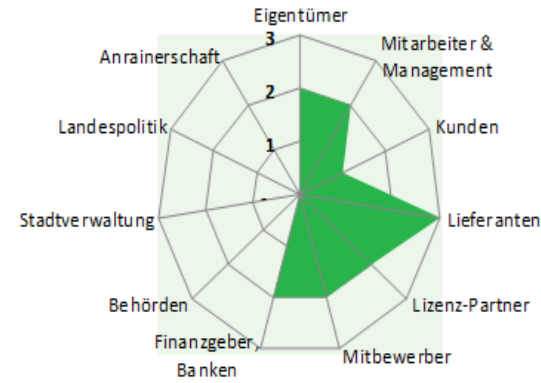
Entwickeln neuer Produkte



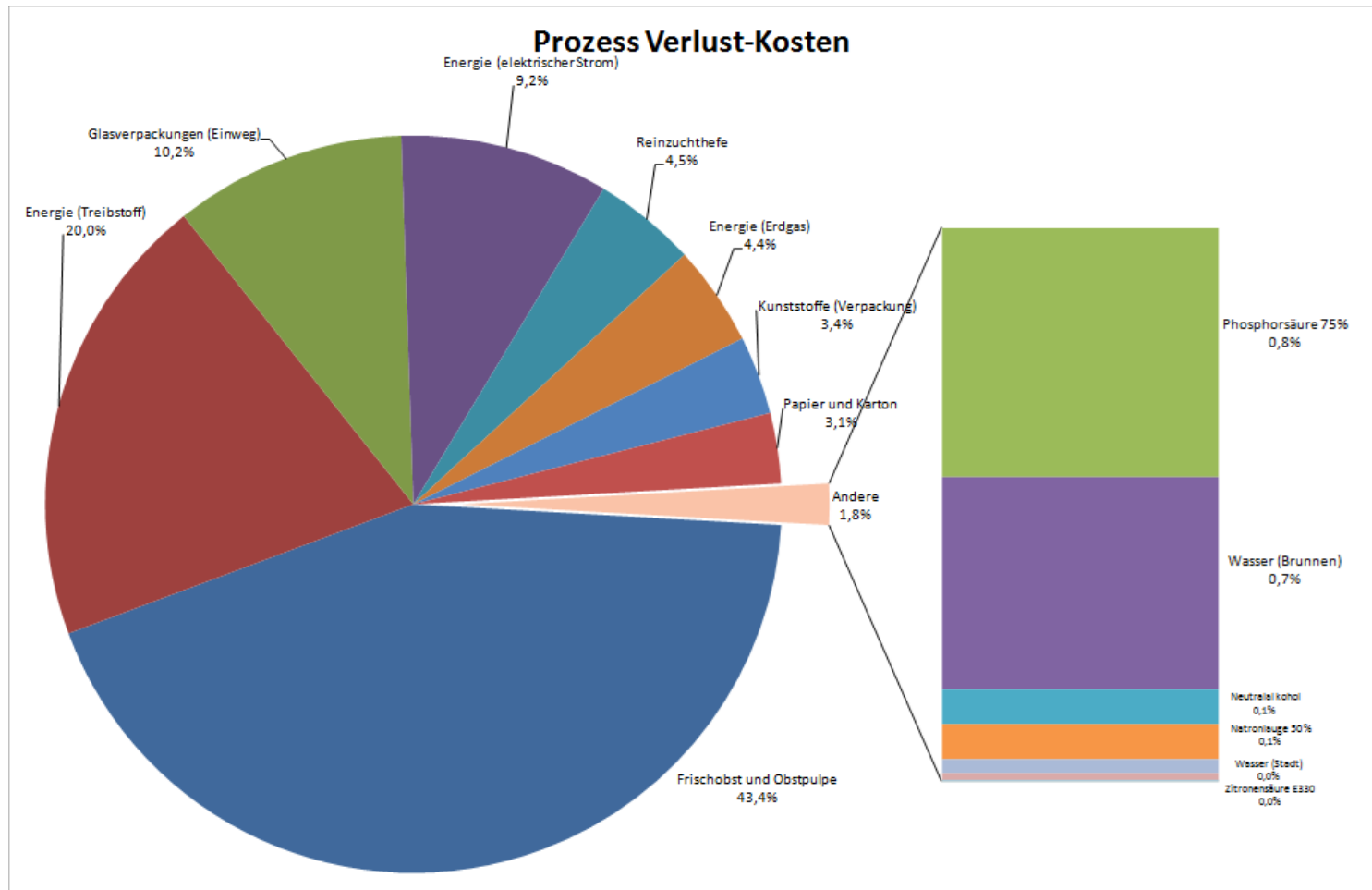
Steigern des Umsatz



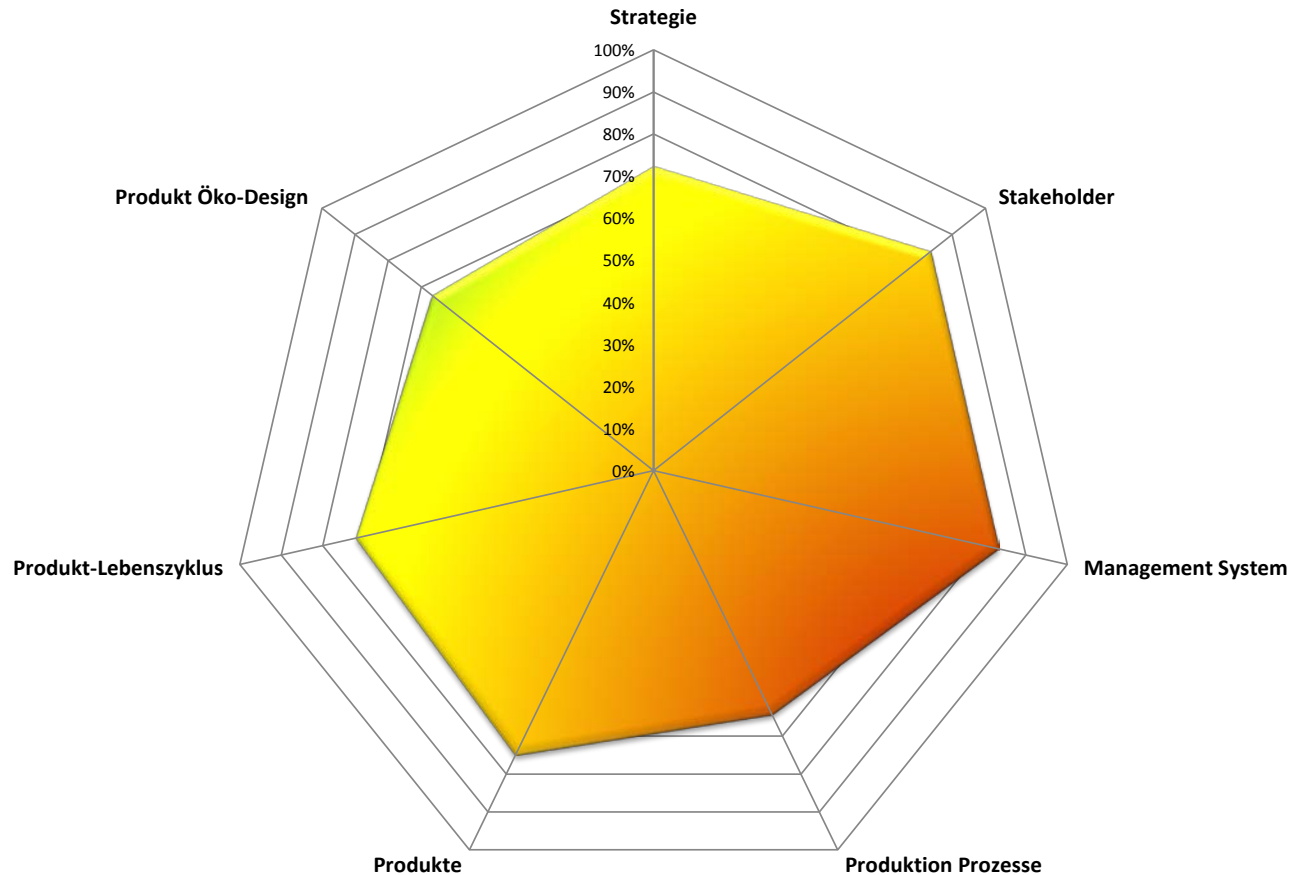
Senken der Produktionskosten



PRESOURCE Cost of process losses



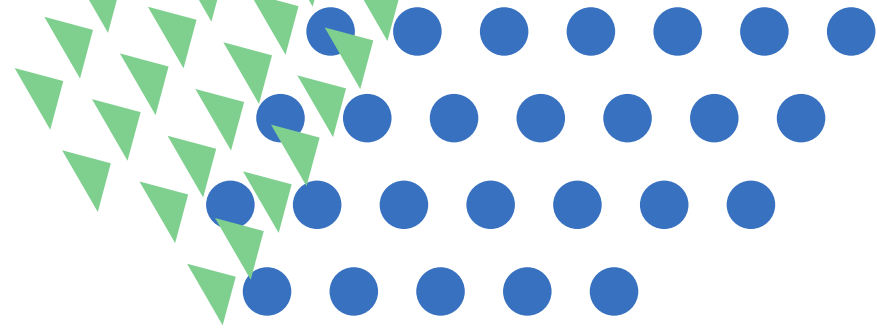
PRESOURCE Evaluation of sustainable potentials



- **Electricity**
(Optimization of the compressed air system, implementation of energy meters)
- **Fuel**
(optimization of mobility of sales team)
- **Heat: Record of the heat consumption per unit**
(e. g. for hot water for cleaning)

- **Brewer grains (wash)**
(Cooling of mash, Recycling of wash in a biogas plant)
- **Raw materials**
(Local provider for alcohol)
- **Products**
(Redesign of bottles, evaluation of alternatives to small non-returnable glass bottles)
- **Management System**
(energy management system, employee suggestion scheme)

- Companies appreciated an independent, complex and need driven review and EDIT tool findings
- Aha! effects even in well-managed enterprises
- If applications were already known EDIT helped to set up priorities and to improve feasibility study
- Large RE potential in production processes due to poor management of material and energy flows
- Importance of CEOs commitment and employees involvement



Thank you for your attention

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