

## SME Perspective on Resource Efficiency

Feedback from PRESOURCE survey



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EUROPEAN UNION  
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DEVELOPMENT FUND

- The project aims at increasing resource productivity in enterprises
- Focus on SMEs in manufacturing sector

*Reducing the use and the costs of  
energy, material and water  
in the production process and product life cycle*

- Federal Environment Agency, DE
- Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, DE
- Fraunhofer MOEZ, DE
- ENVIROS, CZ
- ProAkademia, PL
- STENUM, AT
- ENEA, IT
- Corvinus University of Budapest, HU



## WP3 Exploiting the potential on the enterprise level

Improving in-house capacity → To enable SMEs in the production sector to identify and exploit their potential for increasing the resource efficiency of the production process and products - for the benefit of economy and environment.

## WP4 Economic incentives & recommendations for funding framework

Improving knowledge and mechanisms for risk sharing and for financing eco-innovations in SMEs → To provide incentives and innovative financing schemes for external and internal investment decisions.

## WP5 Transnational Exchange to prepare CE for EU2020

Improved framework conditions → To enable policy makers, intermediaries and multipliers in CE to respond to the European Union RE Roadmap.



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- SMEs from manufacturing sector
- RE measures implementation
- Financing of these measures



## SMEs in EU

- 99.8 % of enterprises
- 2/3 of jobs
- 58.6 % of value added

- Cost savings / increasing prices of inputs
- Green image
- Requirements of customers / stakeholders
- More attractive prices to customers
- Expected scarcity of resources
- Compliance with legislation and standards
- Reduction of health and safety risks
- Costs of pollution treatment



- Lack of ...
  - Finance
  - Internal resources
  - Information
- High payback period
- Other (cost) priorities
- Instable economic environment
- Resistance to change



- Energy savings
  - Production processes
  - Buildings
- Non-energy resources → „waste-driven“

- Water



- Chemicals





# Identification and monitoring of RE measures

- Internal enterprise procedures rather than standardized tools
- Monitoring is not regular
- No detailed evaluation
- Benchmarking
  - Business associations
  - EMAS statement
  - Competitors

## Information sources

- Sector-specific sources (associations, networks, publications)
- Technology suppliers
- Internet
- BREFs rather unknown

- Own sources
- Private financing
- Public funding
  
- Private equity
- Leasing
- Contracting

## Information sources

- Sector-specific sources (consultants, associations, journals, newsletters)
- Technology suppliers
- Internet
- Financial institutions do not play an important role

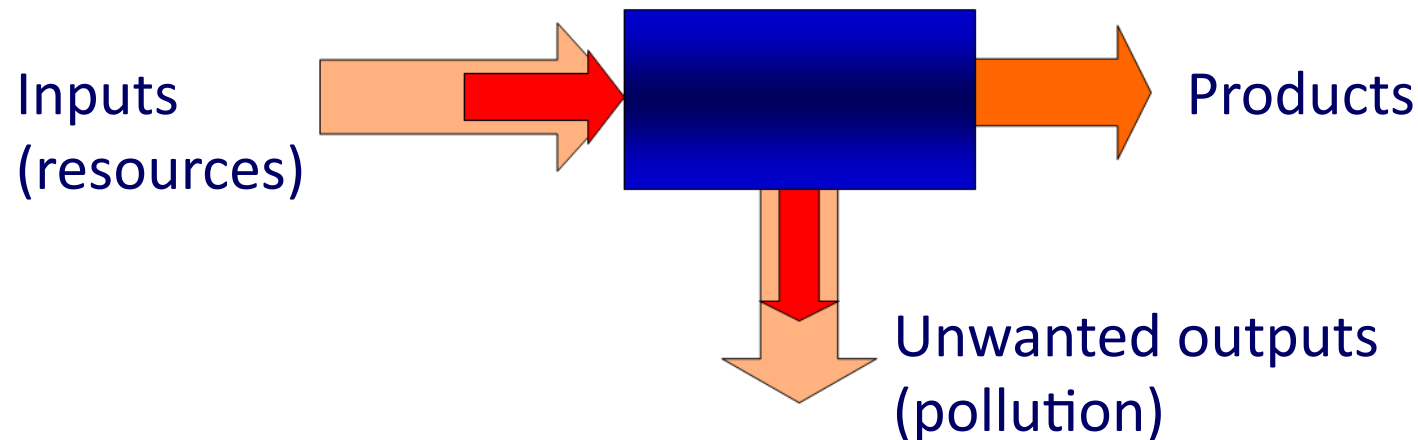
- Administrative burden / bureaucracy
- Lack of internal resources
- Several programmes with different conditions
- Lack of information
- Programmes not tailored for SMEs and small-scale projects



- Often no big problems perceived
- Long negotiations
- Problem with longer payback periods
- Limited information
- High administrative burden
- Hard conditions



- Enterprises from the survey
- EDIT Value
  - Eco-innovation diagnosis tool for increasing an enterprise value



- Material costs = 30 %
  - Scrap reduction and reuse
- Energy costs = 8 – 12 %
  - Heat recovery
  - Energy management system



- Dairy company
- About 200 employees
- Water consumption savings
- Implementation of energy management system
  - Monitoring & Targeting



Measure	Investment	Annual savings
Water savings	-	5.500 €
Changes in technological process	70.000 €	10.000 €
Use of gas for warming the air		60.000 €
Use of waste heat for warming the air		
Use of waste heat for warming the water		7.000 €

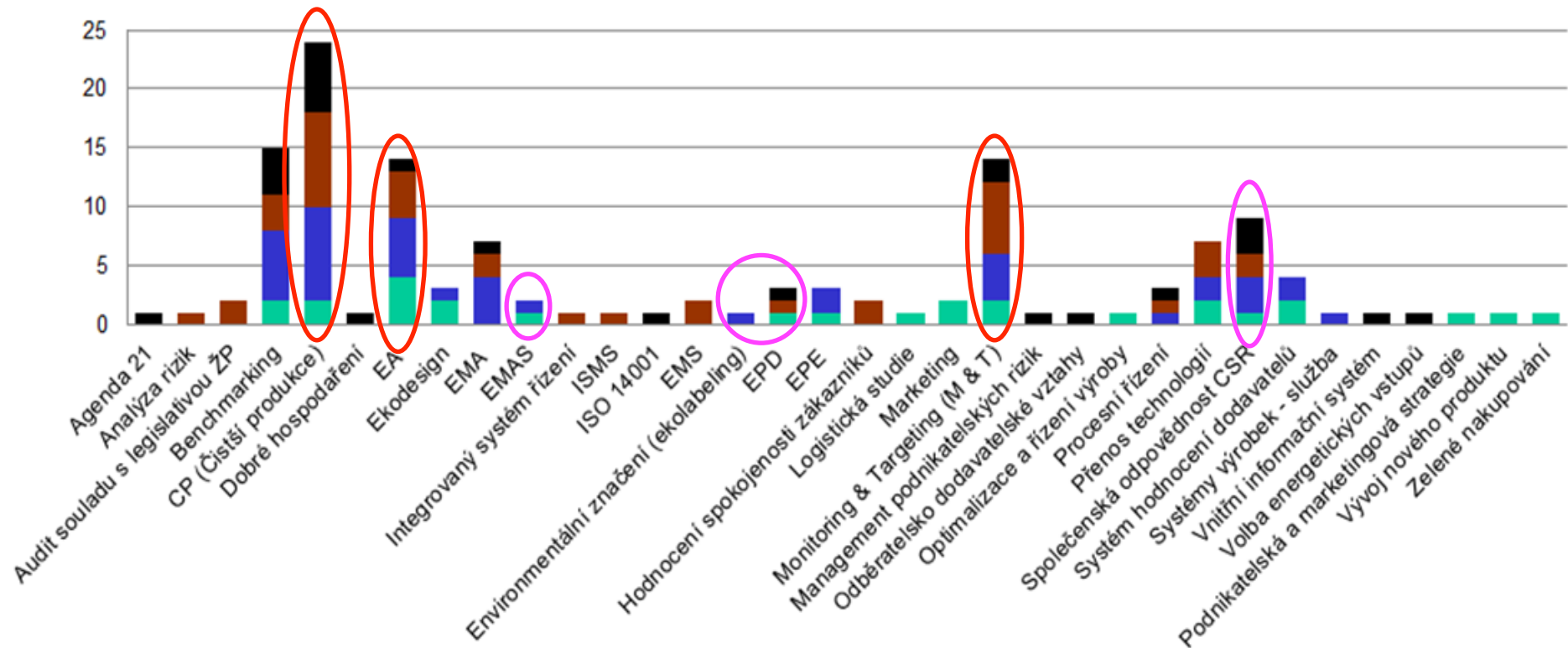


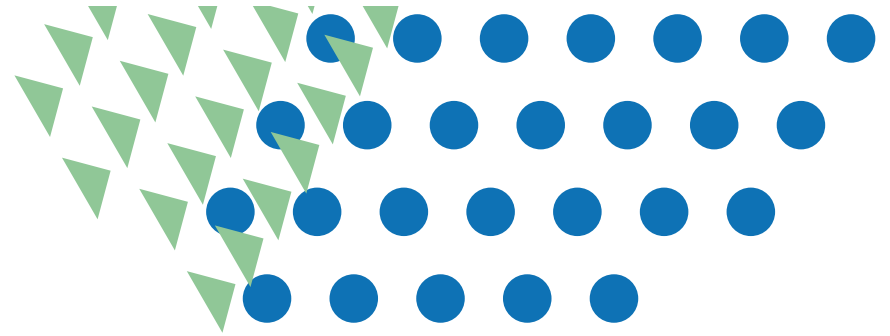
- Typical measures
  - Energy savings (heat recovery, pipes insulation, new compressor, lighting system)
  - Water savings (optimization of bottle washing)
  - Chemicals (automatic dosage of detergents)
- Employee training
- Monitoring and controlling



- Interesting savings potential even in well-managed enterprises
- Still big potential in production processes
  - Real efficiency of energy and material flows is not monitored and evaluated sufficiently
- Importance of stakeholders engagement

- Complex analysis of an enterprise
- Tool for setting priorities
- Win – win solutions identified
- Importance of employees involvement





Thank you for your attention

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