Developing and Implementing Resource Efficiency Policies in Germany

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The global challenge: Rapidly rising raw materials use

**Resource use:**
- Steep rise: +50% in last 30 years
- Impacts on the environment

**Drivers:**
- Population growth
- Growth in prosperity

**2050:**
- 9.2 billion people
- Resource Use: ?

Specific Challenges for Germany

- **Export-oriented** economy with strong industrial base
- Germany depends on imports of raw materials
  - Germany is rich in minerals, but 66.8% of metals are imported
- **Materials** account for 42% of costs in German manufacturing sector
- Sensitivity to rising and volatile prices
  - 85% of German entrepreneurs report a moderate or even dramatic rise in material costs in last 5 years
  - 97% expect rising costs in future

- Secure resources supply and resource efficiency
Government Strategies most relevant for Resource Efficiency

• **National Strategy for Sustainable Development (2002)**
  – Identified set of 21 indicators for sustainable development and established a series of quantified targets
  – i.a. target to double resource productivity by 2020 against 1994
  – Bi-annual progress reports

• **German Raw Materials Strategy (2010)**
  – goal: safe, secure and sustainable raw materials supply
  – measures, e.g.: bilateral raw materials partnerships, setting-up of the German Raw Materials Agency DERA
  – mandate for MoE to develop resource efficiency programme

• **German Resource Efficiency Programme “ProgRess” (2012)**
German Resource Efficiency Programme (ProgRess)

- Adopted 29 February 2012 by entire government
- Goals:
  - Decouple economic growth from resource use
  - Reduce environmental impacts of resource use
  - Improve sustainability and competitiveness of German industry
- Measures along the whole value chain
  - raw materials supply
  - production and product design
  - consumption
  - closed cycle management
- Focus: Abiotic raw materials
- Programme to be reviewed every 4 years
Focus on Abiotic Materials

Narrow scope of resources covered in ProgRess:
Abiotic raw materials and material use of biomass
Energy carriers excluded
## ProgRess - Structure

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### Fields of Action / Approaches

- **Sustainable Raw Materials Supply**
  - Raw Materials Strategy
  - Use of Renewable Materials as Feedstock
- **Resource Efficient Production**
  - Advise Companies
  - Production & Manufacturing Processes
  - EMAS
  - Product Design
  - Standardisation
- **Resource Efficient Consumption**
  - Awareness Raising
  - Trade & Consumer Decisions
  - Certification Schemes
  - Public Procurement
- **Closed Cycle Management**
  - Product Responsibility
  - Optimizing Recycling
  - Prevention of Illegal Exports
- **Overarching Instruments**
  - Instruments for Market Penetration
  - Research
  - Legal Framework
  - Technology Transfer
  - EU / international

### Examples/Material Flows

- Mass Metals
- Rare Strategic Metals
- Construction & Living
- Photovoltaics, Electric mobility
- Green IT
- Phosphorus
- Indium
- Gold
- Plastics waste

### Annex: Stakeholders

Departments, Länder, Associations, Institutions
Example: Resource Efficiency Consulting for SME

Why focus on resource efficiency in SMEs?

- ~ 23 mio. SMEs in Europe - backbone of European economy
- Low awareness for resource efficiency in most SMEs
- SMEs encounter barriers to investments
- Consultancy service for SME on resource efficiency show potential gains of ~ 200,000 € p.a. per SME

Experience in Germany since 1998:

- Regional Efficiency Agencies (e.g. EFA NRW)
- German Material Efficiency Agency (demea)
- VDI Centre for Resource Efficiency (VDI ZRE)
  - Cooperation with German Engineers Association
  - Information Platform, awareness raising: Campaign “Competitive Advantage: Resource Efficiency” (http://www.das-zahlt-sich-aus.de)
  - Initiative to establish European Network of Agencies
Some Lessons Learned

- **Concrete and widely accepted target in sustainability strategy** was advantageous in developing and building consensus on the programme.

- **Narrow focus on abiotic materials** coupled with encompassing picture of entire value chain allowed for a **comparably detailed and concrete programme**. However, **interlinkages** with other resources and policy areas will have to be treated **more thoroughly** in the future.

- **Broad stakeholder involvement** important for building a consensus (series of roundtables, online consultation, Annex to Progress with contributions by various stakeholders, motion/discussion in Parliament)

- **Communication of economic advantages** is key

- **Contentious**: indicators/targets, economic instruments, regulation

- Much can be achieved by **supporting industry initiatives** and **information**
Next steps

• First **Review** due February 2016
• **Implementation** of measures
• Broaden **scope of resources** covered?
• Develop **set of indicators** to accompany existing indicator of GDP/DMI
Decoupling in Germany

Germany’s raw materials use decreases
(- 11.1% since 2000)
as German economy grows successfully

→ Decoupling and economic success go hand in hand

Source: Federal Statistical Office
Thank you very much for your attention!

www.bmu.de
www.netzwerk-ressourceneffizienz.de