



Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety

---

# Developing and Implementing Resource Efficiency Policies in Germany

**Dynamix Workshop  
Brussels, 24 October 2013**

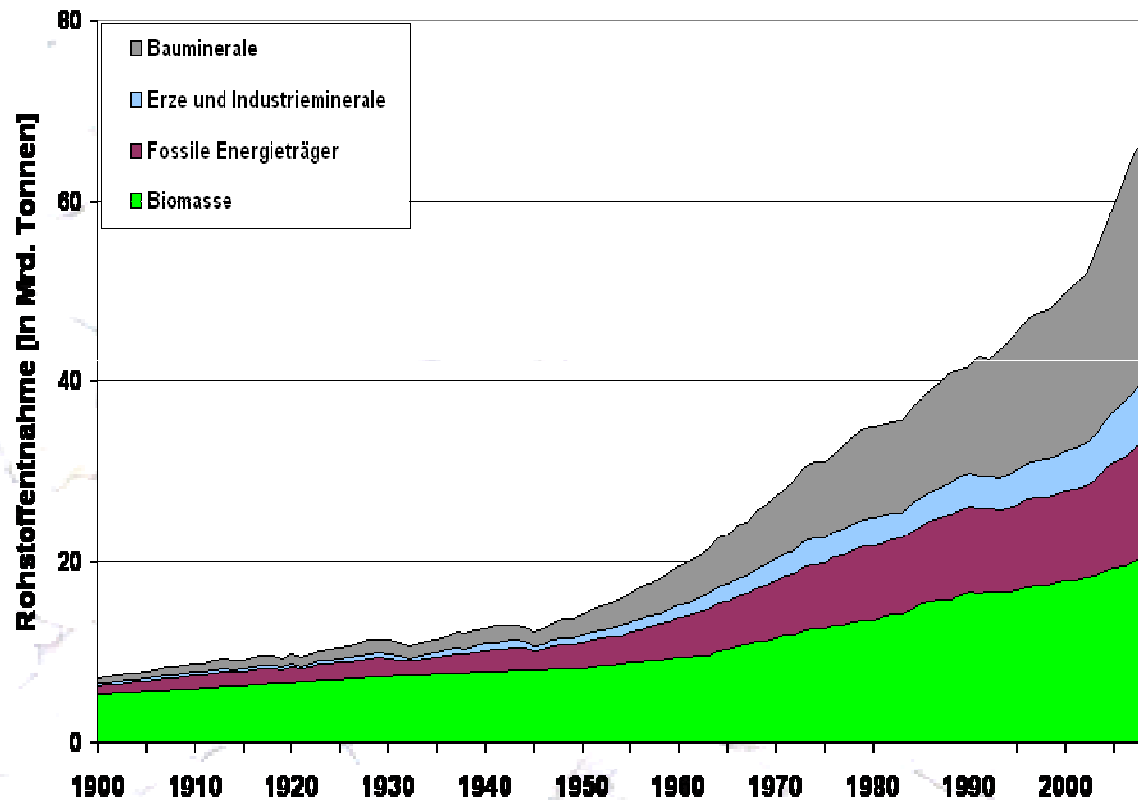
**Birgit Schwenk**

Head of Division WA III 4

“European and International Affairs of Resource Efficiency, Raw Materials Policy”  
**Federal Ministry for the Environment, Nature Conservation and Nuclear Safety**



# 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: ?

Ref.: Krausmann et al. (2009): Growth in global materials use, GDP and population during the 20th century, Ecological Economics Vol. 68, Nr. 10, 2696-2705, Version 1.2 (August 2011), [www.uniklu.ac.at/socec/inhalt/3133.htm](http://www.uniklu.ac.at/socec/inhalt/3133.htm)



# 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

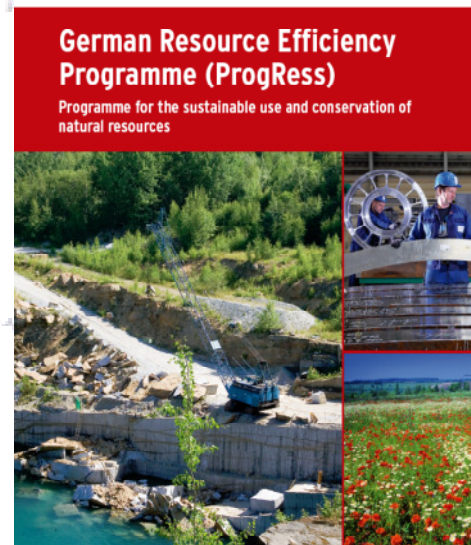
---

- **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 (ProgRes)

- **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**



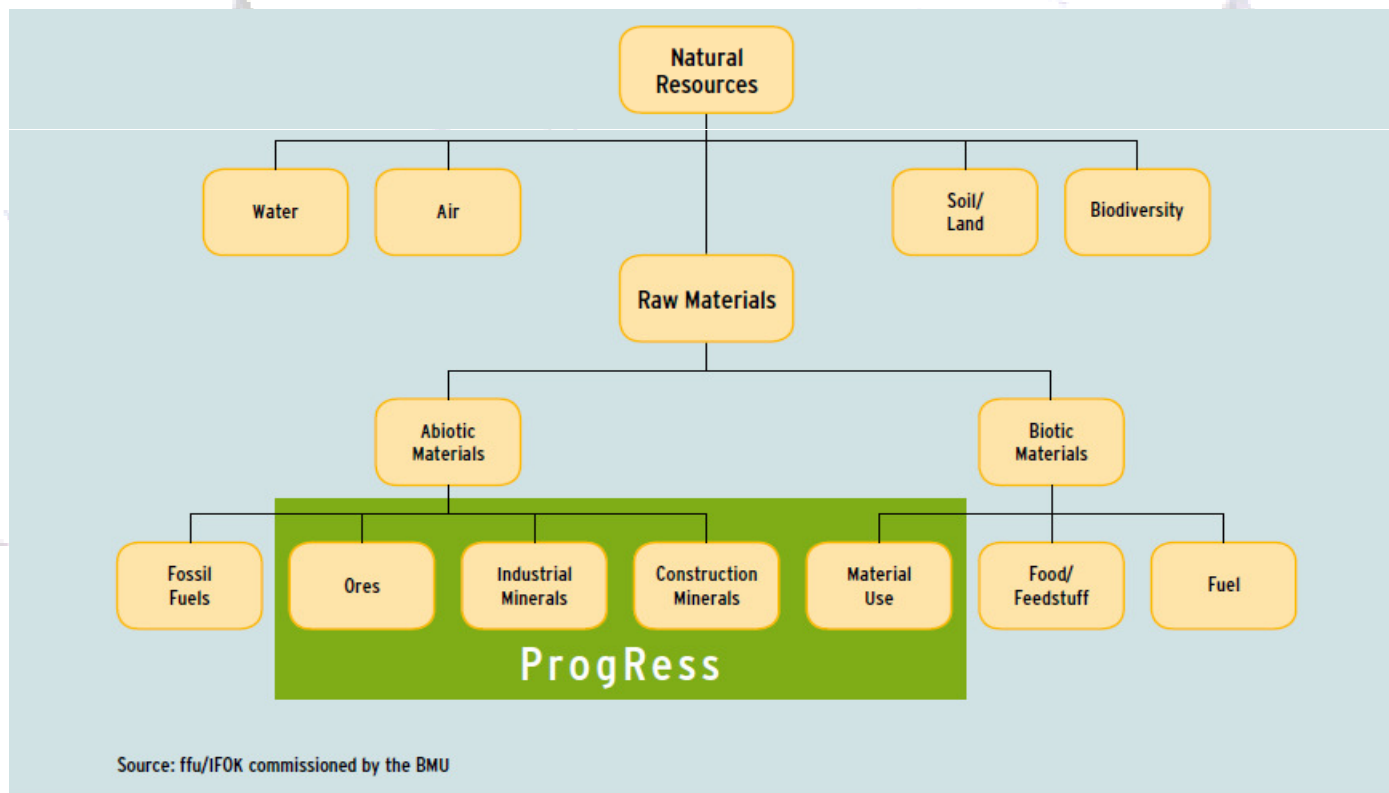


# Focus on Abiotic Materials

Narrow scope of resources covered in ProgRes:

Abiotic raw materials and material use of biomass

Energy carriers excluded



# ProgRes - Structure

Guiding Principles	1 For Environment & Economy	2 Global Responsibility	3 Lessen dependence on primary resources	4 Transition: Qualitative Growth
<b>Fields of Action / Approaches</b>				
Sustainable Raw Materials Supply	Resource Efficient Production	Resource Efficient Consumption	Closed Cycle Management	Overarching Instruments
Raw Materials Strategy	Advise Companies	Awareness Raising	Product Responsibility	Instruments for Market Penetration
Use of Renewable Materials as Feedstock	Production & Manufacturing Processes	Trade & Consumer Decisions	Optimizing Recycling	Research
	EMAS	Certification Schemes	Prevention of Illegal Exports	Legal Framework
	Product Design	Public Procurement		Technology Transfer
	Standardisation			EU / international
<b>Examples/Material Flows</b>	<ul style="list-style-type: none"> <li>• Mass Metals</li> <li>• Rare Strategic Metals</li> <li>• Construction &amp; Living</li> <li>• Photovoltaics, Electric mobility</li> <li>• Green IT</li> </ul>		<ul style="list-style-type: none"> <li>▪ Phosphorus</li> <li>▪ Indium</li> <li>▪ Gold</li> <li>▪ Plastics waste</li> </ul>	
<b>Annex: Stakeholders</b>	<b>Departments, Länder, Associations, Institutions</b>			



# 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

VDI Zentrum Ressourcen Effizienz  
und Klimaschutz

Seminar  
Beraterqualifizierung  
Ressourceneffizienz 2012



Partner



Effizienz-Agentur NRW  
Trägergesellschaft  
prima service GmbH



Imu Augsburg GmbH & Co KG



RKW Haderbachstr. GmbH





## 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 ProgRes 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**



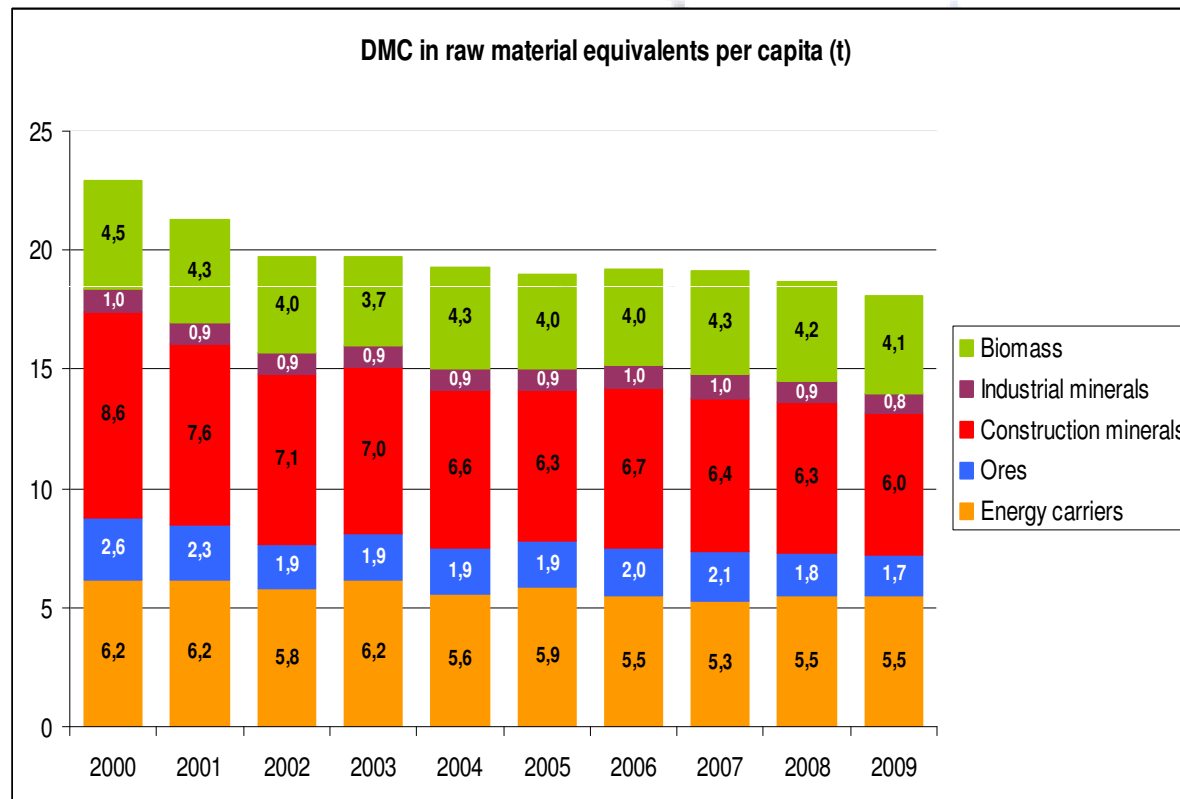
# Next steps

---

- 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



Source: Federal Statistical Office

**Germany's raw  
materials use  
decreases**

*(- 11,1% since 2000)*

**as German economy  
grows successfully**

→ Decoupling and  
economic success go  
hand in hand



Federal Ministry for the  
Environment, Nature Conservation  
and Nuclear Safety

---

**Thank you very much for your attention!**

[www.bmu.de](http://www.bmu.de)

[www.netzwerk-ressourceneffizienz.de](http://www.netzwerk-ressourceneffizienz.de)