



# **Experience and lessons learned from developing the 2012 national resource efficiency strategy in Germany**

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# Challenges for Germany

- **Materials** account for **43% of costs** in German manufacturing sector
- **Rising and highly 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
- **Germany depends on imports of raw materials**
  - Germany is rich in minerals, but 66,8 % of metals are imported
- **Secure resources supply and resource efficiency**

# Initial process: National Strategy for Sustainable Development “Perspectives for Germany” (2002)

Sets the main route on resource efficiency policy:

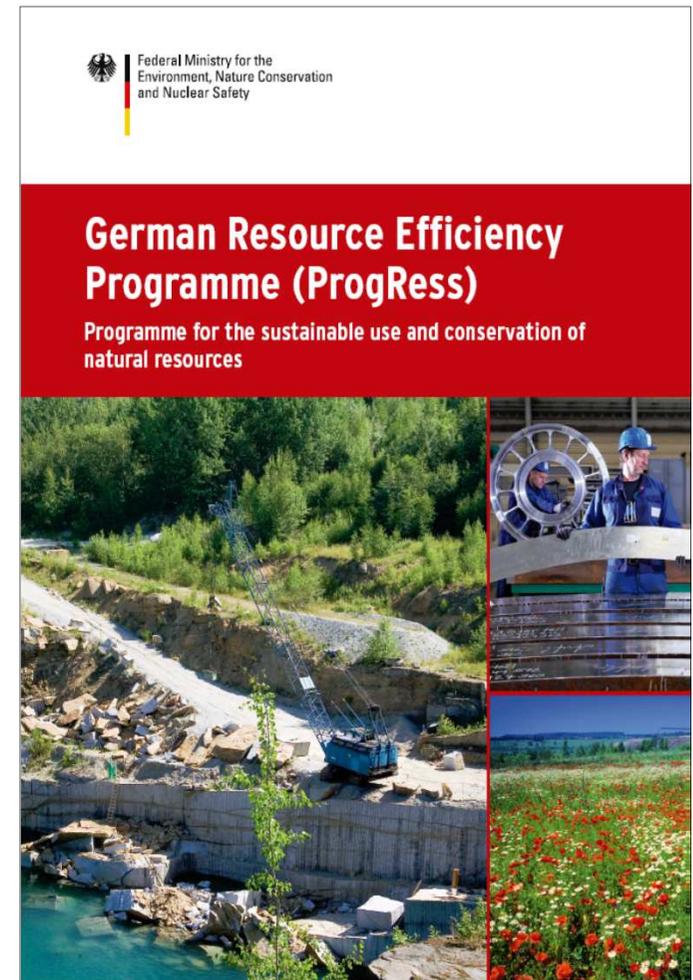
**Decoupling of economic growth and resource consumption  
and absolute reduction of resource use and its impact on  
the environment**

- Doubling of the abiotic material productivity by 2020 based on 1994 (indicator GDP/abiotic DMI)
- Doubling energy productivity by 2020 compared to 1990 (indicator GDP/TPES)
- Reduction of land sealing to the daily growth of 30 ha in 2020 (indicator increase in sealed area per ha and day)

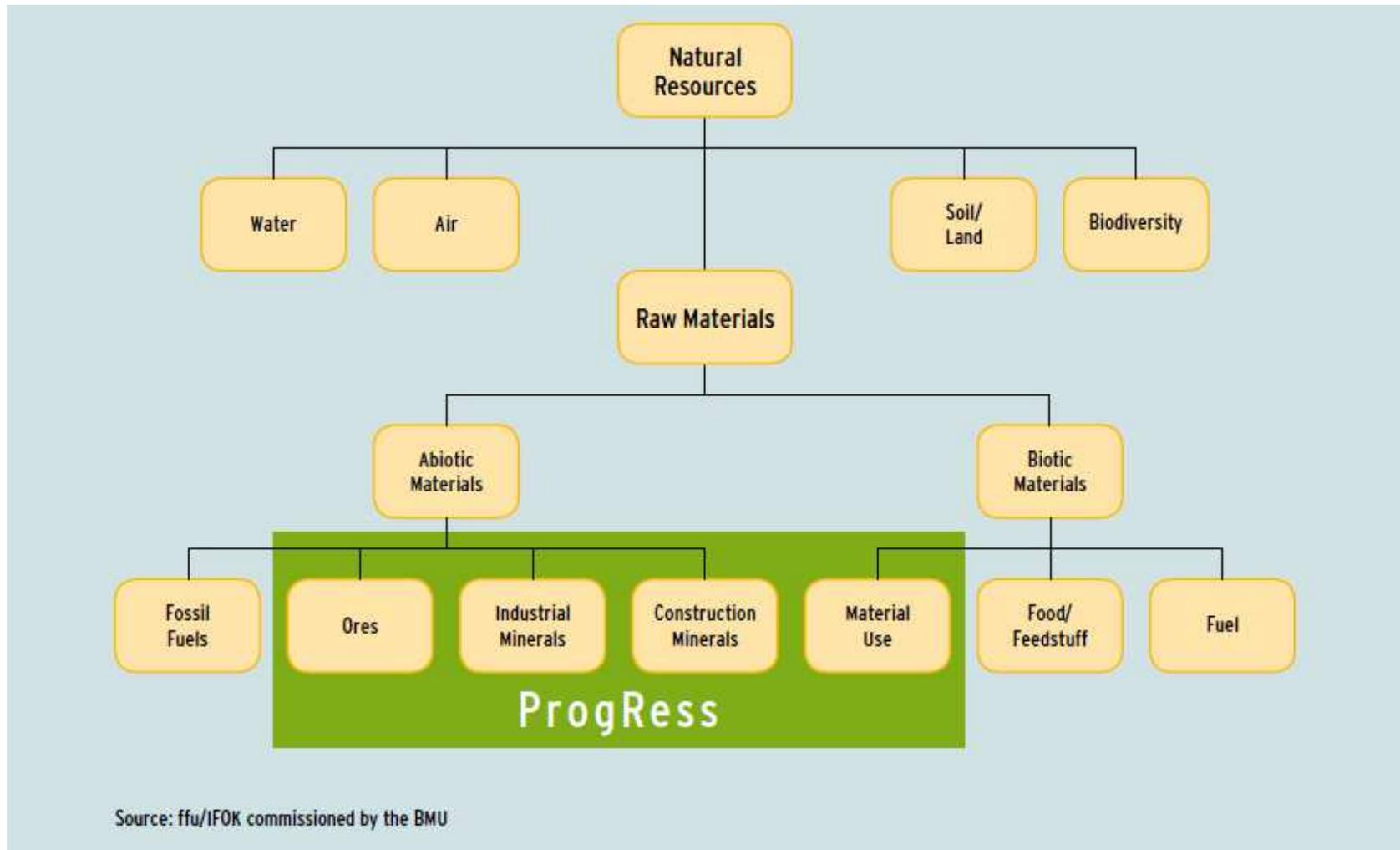


# The German Resource Efficiency Programme (ProgRes)

- Adopted 29 February 2012 by entire government
- Goals:
  - **Decouple** economic growth from resource use
  - **Reduce** environmental impacts of resource use
  - **Improve** the sustainability and competitiveness of the German industry
- Impacts along the whole value chain
  - raw materials supply
  - production and product design
  - consumption
  - closed cycle management



# ProgRess: Focus on raw materials





## ProgRes: guiding principles

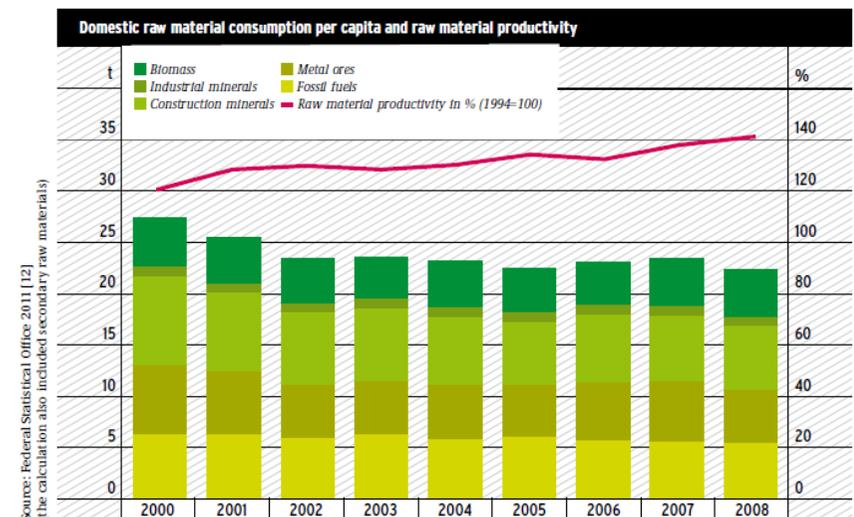
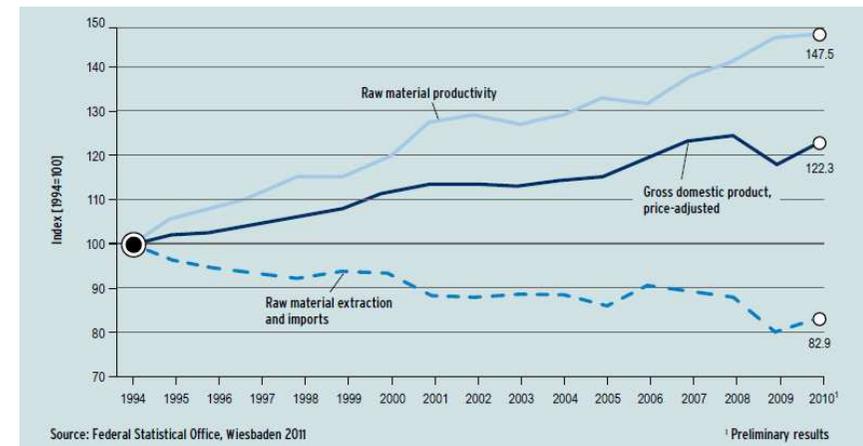
- **Guiding principle 1:** Joining **ecological necessities** with **economic opportunities**, innovation support and social responsibility
- **Guiding principle 2:** Viewing **global responsibility** as a key focus of our national resource policy
- **Guiding principle 3:** Gradually making economic and production practices in Germany **less dependent** on primary resources, developing and expanding **closed cycle management**
- **Guiding principle 4:** Securing sustainable resource use for the long term by guiding society towards **quality growth**

# ProgRes: Main structure

<b>Guiding Principles</b>	<b>1 For Environment &amp; Economy</b>	<b>2 Global Responsibility</b>	<b>3 Innovation: Low Resource Economy</b>	<b>4 Transition: Qualitative Growth</b>
<b>Fields of Action / Approaches</b>				
<b>Sustainable Raw Materials Supply</b>	<b>Resource Efficient Production</b>	<b>Resource Efficient Consumption</b>	<b>Closed Cycle Management</b>	<b>Overarching Instruments</b>
Raw Materials Strategy	Efficiency Advice	Awareness Raising	Product Responsibility	Instruments for Market Penetration
Use of Renewable Materials as Feedstock	Production & Manufacturing Processes	Trade & Consumer Decisions	Optimizing Recycling	Optimizing Instruments
	EMAS	Certification Schemes	Prevention of Illegal Exports	Research
	Product Design	Public Procurement		Legal Framework
	Standardisation			Technology & Knowledge Transfer
				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>		

# ProgRes: Indicators and targets

- **Doubling of the abiotic material productivity by 2020 based on 1994 (indicator GDP/abiotic DMI)**
- **Raw Material Input (RMI)** currently exploratory shown in official reporting to take into account structural relocation effects
- **Raw Material Consumption per capita (RMC/cap)** to take account of international production patterns and Germany's export-oriented economic structure and to ensure international comparison
- **Long-term: unused extraction to be included to show our global material consumption (TMC/cap)**





## Lessons learned from developing ProgRes

- **Broad stakeholder involvement** through a series of stakeholder roundtables considerably fostered the overall commitment to ProgRes
- Getting an **widely accepted balance between regulatory and fiscal instruments on the one hand and voluntary measures and information instruments on the other hand** is a long but necessary process
- **Well-balanced argumentation on economic and ecological motivations and advantages** of resource efficiency is essential for a successful implementation
- Addressing resource efficiency along the whole value chain with concentration on raw materials was beneficial, but **interlinkages to other natural resources and strategies must be clearly demonstrated**
- Having **concrete and widely accepted targets** (NDS) was advantageous in developing and discussing the strategy



## Experiences 15 month after adaptation of ProgRess

- Resource efficiency is a **hot topic on the political agenda** from local to national level
- Resource efficiency is a **rapidly raising issue in business and society**, in which economic aspects and competitive advantages are leading the discussion
- **Capacity building and knowledge transfer** through efficiency advice of SMEs, research funding and innovation programmes is manifold and highly successful
- **Link to / inclusion of other natural resources is often postulated**, in particular energy/energy efficiency and land use
- Preference on voluntary measures and information instruments is still controversial
- Link between ProgRess and national Raw Material Strategy is still weak

**Thank you for your attention**



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