

Overview of the German Resource Efficiency Programme (ProgRes)

Achieving more with less: Federal Cabinet adopts German Resource Efficiency Programme

The current use of natural resources is already far exceeding the Earth's regenerative capacity. A responsible and efficient use of natural resources will therefore be a key competence for any society seeking to ensure its future viability. Improving resource efficiency can limit environmental damage, strengthen the competitiveness of the German economy, create new jobs and secure long-term employment. Therefore, on 29 February 2012, the Federal Cabinet adopted the German Resource Efficiency Programme (ProgRes). With this, the German government implemented the decision in its Raw Materials Strategy of 20 October 2010 to develop a national resource efficiency programme. This paper provides an overview of the key elements of ProgRes.

1. Background information:

Natural resources, especially raw materials, are key production factors and are therefore at the heart of our prosperity. More than 68 billion tonnes of raw materials were used worldwide in 2009. This is around one third more than in 2000, two thirds more than in 1990 and about twice as much as at the end of the 1970s. With a projected world population of more than 9 billion people in 2050 and rapid economic growth in newly industrialising countries, demand for raw materials continues to rise strongly. Per capita raw material consumption is currently around four times higher in industrialised nations than in less developed countries.

This is a major challenge from an economic, ecological and social perspective. Rising and volatile raw material prices and supply risks present a heavy burden for the German economy. It is becoming increasingly difficult to obtain some key raw materials such as crude oil, cobalt and heavy rare earths from readily accessible sources. At the same time, resource use has impacts on the environment across the entire value chain, ranging from the release of greenhouse gases and inputs of pollutants into the air, water and soil to adverse effects on ecosystems and biodiversity. The current use of natural resources is already far exceeding the Earth's regenerative capacity.

A responsible and efficient use of natural resources will therefore be a key competence for any society seeking to ensure its future viability. Germany is in an excellent position to lead the way in the necessary global transformation

towards a resource-efficient economy. Improving resource efficiency can limit environmental loads, strengthen the competitiveness of the German economy, create new jobs and secure long-term employment.

Germany is willing to take on a pioneering role internationally by proving that resource efficiency in a highly developed country can be increased without a detrimental impact on prosperity while at the same time reducing raw material consumption. Germany can already demonstrate increased economic performance with reduced resource use: While there was strong economic growth during the years 2000 to 2010, resource consumption decreased by 11.1%.

As early as in 2002, the German government in its National Sustainability Strategy laid down the goal of doubling raw material productivity by 2020 compared with 1994. This goal makes Germany an international pioneer. The German Resource Efficiency Programme aims to contribute to reaching it.

2. Programme content and goal:

The goal of the German Resource Efficiency Programme is to make the extraction and use of natural resources more sustainable and to reduce associated environmental pollution as far as possible. By doing this we want to live up to our responsibility to future generations and create a prerequisite for securing a high quality of life for the long term.

The German government is striving to decouple economic growth as far as possible from resource use, to reduce the burden on the environment and to strengthen the sustainability and competitiveness of the German economy, thus promoting stable employment and social cohesion. Resource efficiency policy will help us meet our global responsibility for the ecological and social impacts of resource use. Our goal must be to reduce the use of resources.

In this context, ProgRess deals with raw materials. The focus is on abiotic, non-energetic resources, supplemented by the material use of biotic resources. The use of raw materials is connected to the use of other natural resources such as water, air, land, soil, biodiversity and ecosystems. However, as these resources are already covered by other programmes, processes or legislation, they are not addressed in any detail by ProgRess.

ProgRess gives an overview of numerous existing activities and describes approaches and measures for increasing resource efficiency. It covers the entire value chain. It is about securing a sustainable raw material supply, raising resource efficiency in production, making consumption more resource-

efficient, enhancing resource-efficient closed cycle management and using overarching instruments.

3. Contents and measures:

ProgRes is based on a draft text by the Federal Environment Agency (UBA). It is divided into three parts: basic programmatic statements, strategic approaches along the entire value chain and specific examples. Proposals for government measures are made for the strategic approaches and examples. An annex lists activities already being carried out by the German government, the Federal Länder and associations and institutions in the field of resource efficiency.

The first part of the programme analyses the **opportunities and potential of resource efficiency** in Germany and worldwide. It sets out **guiding principles and objectives** as well as potential indicators that can be used to measure progress in improving resource efficiency.

The German Resource Efficiency Programme is shaped by four 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.

The **second part** of the programme contains **specific measures** on the basis of an analysis of the entire value chain. Five strategic approaches are considered:

- Securing a sustainable raw material supply
- Raising resource efficiency in production
- Steering consumption towards resource efficiency
- Enhancing resource-efficient closed cycle management
- Using overarching instruments.

A total of **20 strategic approaches** are identified and underpinned with measures. The programme attaches particular importance to market incentives, information, expert advice, education, research and innovation and

to strengthening voluntary measures and initiatives by industry and society. Examples include measures for strengthening efficiency advice for small and medium-sized enterprises, supporting environmental management systems, taking greater account of resource aspects in standardisation processes, placing greater focus on the use of resource-efficient products and services in public procurement, strengthening voluntary product labelling and certification schemes, enhancing closed cycle management and increasing the transfer of technologies and knowledge to developing countries and emerging economies.

The **third part** of the programme presents eleven **examples** of material flows, areas of life and technologies that are particularly relevant for the chosen strategic approaches and specify them in more concrete terms. Examples include sections on bulk metals, rare and strategic metals, future technologies such as photovoltaics and electric mobility, but also on sustainable construction, which is an especially significant sector for the resource balance, and the closed-cycle management of plastic waste.

An **annex** to ProgRess details activities by six Federal ministries, 14 Federal Länder and 24 associations and institutions in the field of resource efficiency. The annex is designed as a 'living document' that will be supplemented in the coming months.

4. Procedure:

The Federal Environment Ministry BMU carried out a broad consultation process in the first half of 2011 involving meetings, talks and events. Detailed discussions on ProgRess were held with experts and representatives of civil society, associations and the Länder in the course of nine meetings at working level, two conferences by the Resource Efficiency Network and numerous individual meetings; participation by the general public was ensured through internet consultation. Around 100 written opinions and contributions from associations, civil society and the scientific sector have been incorporated into the programme.

When it adopted ProgRess on 29 February 2012, the German government decided that it will report every four years on the development of resource efficiency in Germany, assess progress and develop the Resource Efficiency Programme accordingly. On 8 March 2012, the Bundestag passed a resolution to support the work on ProgRess and requested a report every four years.

By launching ProgRess, the German government is joining European efforts. The European Commission has devoted one of the seven flagship initiatives under the Europe 2020 strategy to the goal of creating a resource-efficient Europe and adopted a detailed roadmap on this in September 2011. In doing

this the Commission has reinforced its call to the member states to draw up national resource efficiency programmes. With ProgRess, Germany is one of the first European countries to present a comprehensive resource efficiency programme.

5. Outlook

The German Resource Efficiency Programme does not mark the end; it is in fact the beginning of a process in policymaking, science and society. Implementing the measures contained in ProgRess will require a high level of self-initiative and activities by many social actors, close cooperation between politics, industry, science and civil society as well as the commitment of the German public. The programme aims to provide sound and long-term orientation for all stakeholders. Implementing this programme will contribute to the conservation of the ecological foundations of life, economic growth and long-term employment, and will safeguard the prospects of prosperity for future generations.