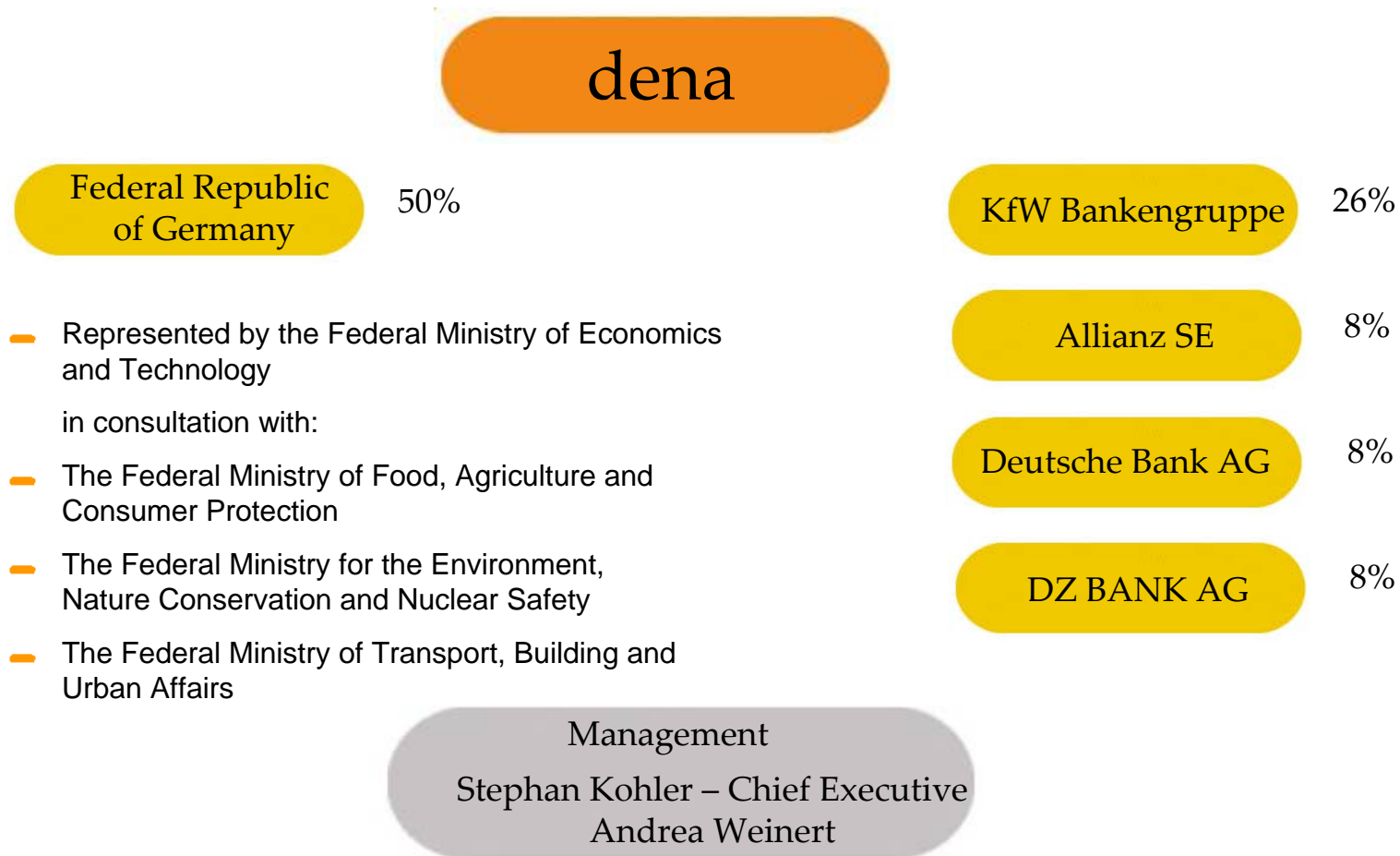


Martina Jäschke

Awareness raising on energy saving measures in Germany – successes and challenges.

05.11.2008, Latvia

Ownership Structure of the German Energy Agency.



Fields of Competence and Activity at dena.



Energy efficiency goals of the Federal Republic of Germany.

- Reduction of **greenhouse gas emissions** by 40% by 2020 compared to 1990
- To **double energy productivity** (economic performance of each use of primary energy) in Germany from 1990 to 2020
- To increase the share of **renewable energies** in electricity generation to **25-30%** by 2020
- To increase the use of **renewable energies in the heating sector** to **14%** by 2020
- To increase the share of **biofuels** in the fuel sector to 17% by 2020
- To increase the share of **combined heat and power** to the generation of electricity to **25%** by 2020

Key issues in the German Integrated Energy and Climate Programme (1).

- Ordinance regarding the **energy performance of buildings** (Energy Saving Ordinance, Energieeinsparverordnung):
 - Two-stage increase in demands (2008: 30%; 2012: up to 30%)
- Renewable energy heating act (Erneuerbare-Energien-Wärme-gesetz):
 - Obligation to use renewable energies for the supply of heat in new buildings
- **CO₂ Building Rehabilitation Programme** (CO₂-Gebäudesanierungsprogramm):
 - Reinforcement of current levels to 2011 (€700m p.a.)
- **Energy efficient modernization of social infrastructure:**
 - Financial incentives for energy efficiency measures in schools and kindergartens

Key issues in the German Integrated Energy and Climate Programme (2).

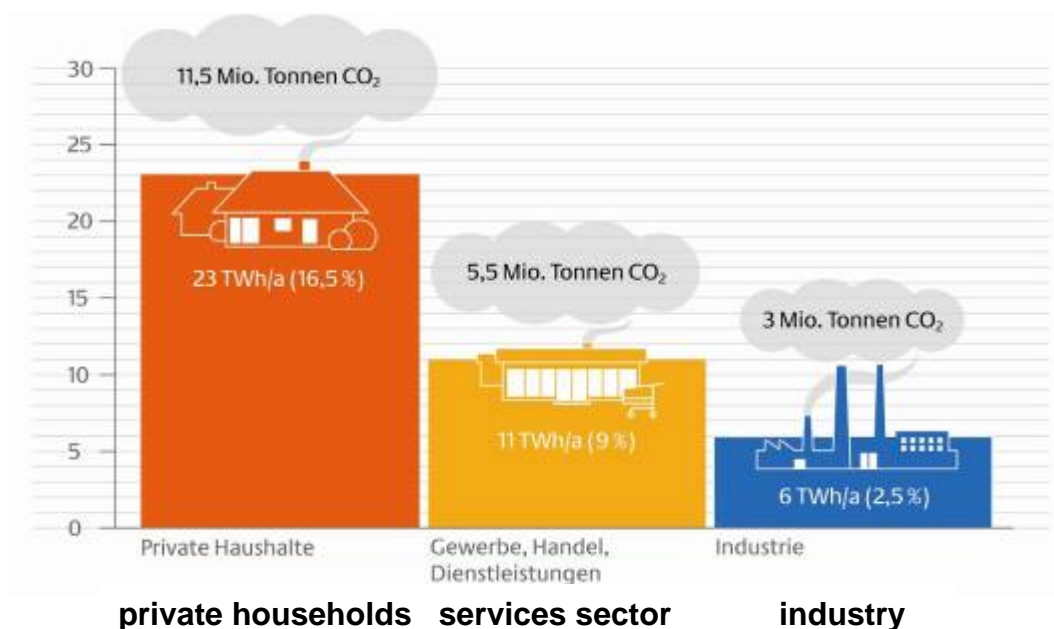
- **Smart metering** – intelligent measurement systems for energy consumption:
 - Opening the market for energy measurement services according to the Energy Industry Act (EnWG)
 - (Temporally precise) measurement and information on individual energy consumption is a precondition for energy savings
- **Support programmes** for energy efficiency and the mitigation of climate protection (examples):
 - New programme for energy efficiency in SMEs (funding for energy audits and energy efficiency investments),
 - Expansion of existing programme for advice on energy savings in private households
 - National initiative for export of energy efficient technologies, systems and services (Exportinitiative Energieeffizienz)

Key issues in the German Integrated Energy and Climate Programme (3).

- **Public Procurement of energy efficient products and services** by the Federal Republic and its institutions:
 - Development of technical guidelines to the effect that energy efficiency criteria become part of procurement decisions made by the Federal Republic of Germany
- **Research, development and innovation** in energy technologies and their application:
 - Increase in financial resources for energy research from 2008

Energy efficiency with electricity – what is the potential?

Energy must be used more efficiently to ensure a sustainable and secure supply. Energy efficiency measures could reduce annual electricity consumption in Germany by 40 TWh by 2020.



Energy efficiency – challenges for private households.

Energy efficiency:

- Efficient use of energy pays off **vs.** end user perspectives
- High purchase price but low energy costs **vs.** financial resources of users
- Economic advantages affect actions **vs.** priorities of desires and wants

Development of power consumption:

- Energy efficiency from technological advances **vs.** greater number of appliances and a longer useful life
- Adoption of energy-efficient technologies **vs.** better performance, more features, size of screens etc.

Challenge: to combine the technological advances, desires of the end users and political goals in such a way that markets for energy efficiency emerge!

Relevance of energy efficiency for daily life in Germany.

Opinion poll of 1,000 German employees (July 2008):

- 96% think the efficient use of electricity is important / very important**
- 50% think they could save 20-40% electricity by using it efficiently**
- 50% do not feel well informed as to the annual savings potential in euros**

The efficient use of energy is becoming more relevant:

People need well-prepared information on what energy efficiency measures are available to them and how much money they can save.

How to get the ball rolling?

There is a gap between the importance of energy efficiency and end user actions

Information and advice - communication of the advantages to the individual of saving money and energy

A single measure alone will not exploit the energy efficiency potential – a bundle of activities is needed

Getting the message across.

Creation of specific approaches for different target groups:



The *Initiative EnergieEffizienz* –
a public private partnership.



Initiated by:



Supported by:



Campaign: Energy Efficiency in Private Households I.

- since 2002
- Targets:
 - Raise **public awareness**
 - Provide **information and advice**
 - **Motivate consumers** to buy electric / electronic equipment and lighting with high energy efficiency standard and to use it accordingly
- Target group: approx. 39 Mio. households in Germany, special focus on young people

Campaign: Energy Efficiency in Private Households II.

- Intelligent purchasing decisions and energy efficient usage of household equipment help to avoid unnecessary energy consumption.
- Focus on the major topics:
 - Energy efficient consumer electronics and IT-equipment
 - Energy efficient high quality lighting
 - Energy efficiency in the white goods sector



Initiative EnergieEffizienz - Campaign for private households.

- Offering information to private consumers, especially at the point of sale:
 - More than 8,000 stores in Germany are active network partners
 - Consultancy days at retail stores (IKEA, Saturn, MediaMarkt etc.)
 - Exhibitions on energy efficiency in shopping malls
- Information on the top ten products for highly efficient appliances and devices
- Special information for sales agents
- Provision of a wide range of information on the internet and in regular press releases



General Information.

- Information brochures and leaflets with tips for consumers in order to purchase energy efficient equipment and lamps as well as for intelligent usage, detailed facts and comprehensive advice on energy efficiency (more than 8,9 million brochures distributed since Oct. 2002)
- Information materials, i.e. calculation disks for energy efficient lighting alternatives and white goods
- www.stromeffizienz.de - a website providing further information, examples, databases for electric / electronic household equipment, searching tools etc.
- Free of charge consumer hotline



Initiative EnergieEffizienz for young people.

A special approach for young people:

- PowerScout computer game
- Teaching and learning aids for schools
- PowerPakt – parent-children contract
- Energy-saving contests for students
- *lichtwert* design contest for students of industry and product design

The image displays two educational materials from the Initiative EnergieEffizienz. On the left is a large green poster titled "PowerPakt-Vertrag" (Power Pact Contract), which includes sections for "1. Einleitung" (Introduction) and "2. Inhalt" (Content). On the right is a "Tower of Power" kit box, which features a grid of portraits of people and a central graphic of a tower with a red arrow pointing down. The kit includes several green pens and a small booklet. The dena logo is visible in the top right corner of both items.

Co-operation with Retailers and Consumer Advice Centres.

- **Background:** Well-built network of retailers as well as consumer advice centres, consulting institutions and companies where consumers can get additional information on a range of energy topics.
- **Task:** Provision of information and advertising material on energy efficiency for the point of sale and consumer advice centres including brochures for customers and background information for sales assistants.
- **Network:** Nationwide approx. 8.000 electric and electronic retailers, department stores, do-it-yourself stores, discounters etc. Approx. 1.000 centres and institutions being partners of the *Initiative EnergieEffizienz*.



Initiative EnergieEffizienz – Challenges of the campaign.

- Encouragement of intelligent purchasing and investment decisions
- Information on how to optimize the use of electric and electronic appliances
- Help in the realization of energy and cost savings potential by:
 - Finding answers: When, where and what information does the end user need?
 - Providing information to the user **just in time and in the right place**
 - Because: **energy efficiency pays off!**



Challenge: to reduce complexity

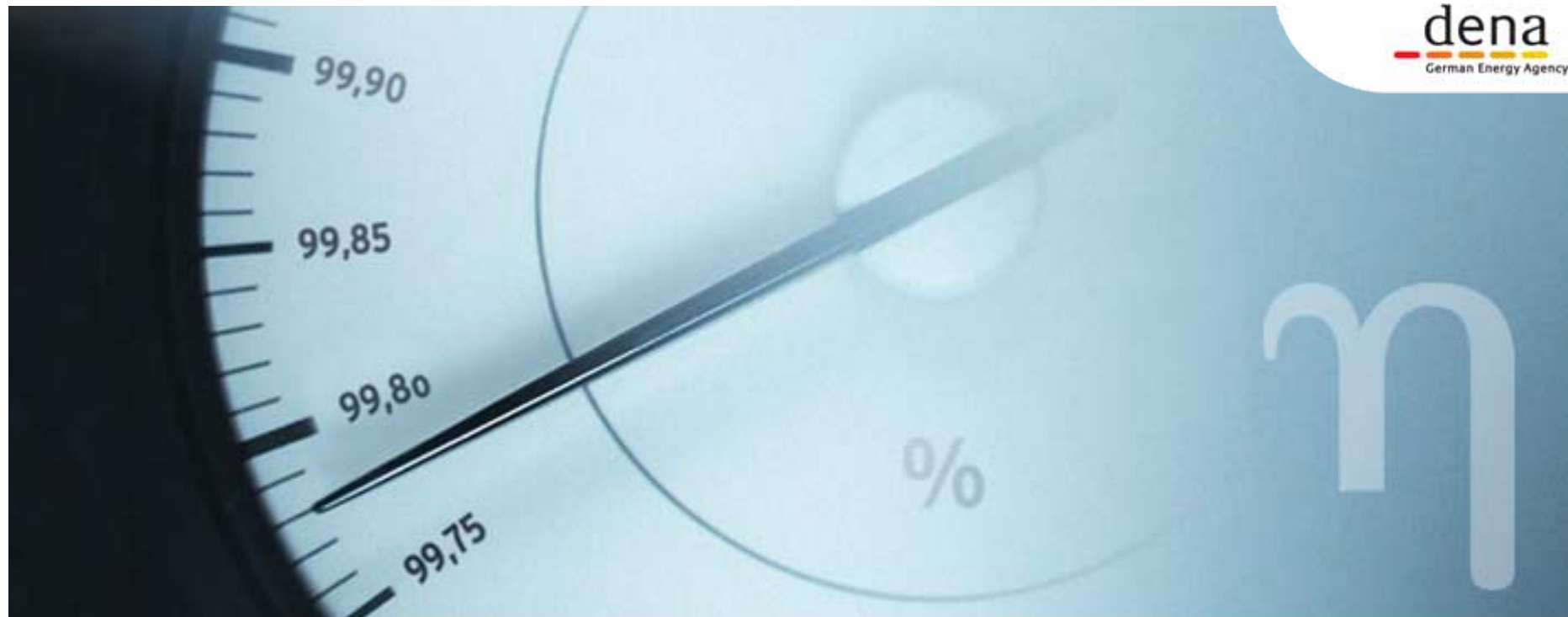


Initiative EnergieEffizienz – a successful model in Germany.

- Political aims go hand in hand with the development of energy efficiency markets
- A single measure alone will not result in the efficient use of energy – a bundle of activities is needed to save energy
- Creation of networks and role as an interface between stakeholders
- Provision of information and orientation as two ways of increasing energy efficiency
 - Crucial for success: addressing different targets groups just in time and in the right place
 - Provision of manifold propositions for different target groups
- Public private partnerships have proven to be a fruitful financing solution

The Campaign's Impact.

- Very successful in building up a network of retailers and consumer advice centres co-operating with the *Initiative EnergieEffizienz*
- High press coverage despite the fact that energy efficiency is a topic of “low interest”
- Change in public awareness and attitudes between 2002 and 2007 (according to a survey carried out by forsa), i.e.:
 - Knowledge about additional energy costs caused by stand-by + 13%
 - Recognition of the EU Energy Label + 14%
 - Use of switched socket extension leads + 19%
 - Appreciation of cost-saving characteristics of compact fluorescent lamps (CFL) + 12%
 - Knowledge about the variety of CFL + 15%
 - Implementation of energy saving measures (surveyed since 2005) + 11%



Efficiency decides.

Thank you.