



**zukunft haus**

Energie sparen. Wert gewinnen.



## Energy-Efficient Buildings.

### “zukunft haus” (“future house”).

#### **The challenge of energy efficiency.**

The rising need for energy across the world, surging energy prices, and not least climate change have all brought the issue of energy efficiency to the public and political eye. The aims are ambitious: the European heads of government and state have agreed to reduce primary energy consumption and greenhouse gas emissions by 20 percent against the 1990 levels by the year 2020. At the same time, the contribution made by renewable energies is to be increased to 20 percent.

#### **Energy efficiency potential in buildings.**

Around 30 per cent of the total end energy consumed in Germany can be attributed to heating and hot water generation. Yet energy consumption could be reduced by up to 80 per cent with a comprehensive energy refurbishment, and not only ecological factors speak for such measures. The value of the building increases and its marketability is enhanced, while improved energy efficiency means a more comfortable home and greater independence from fluctuations in energy prices, in the long term increasing the resident's discretionary income and thus strengthening domestic demand in Germany.

#### **dena's energy-efficient building projects.**

The Deutsche Energie-Agentur GmbH (dena) – the German Energy Agency – initiates and manages projects to capture the energy efficiency potential offered by the building sector under its “zukunft haus” (“future house”) umbrella. In collaboration with the German government and powerful partners, dena develops market instruments and information campaigns aimed at the creation of favourable market conditions and the accelerated introduction of energy-efficient services and technologies.



# Encouraging energy efficiency in the building sector.

## Strategies for more energy efficiency.

In order to achieve its climate targets, the German government has tabled the Energy Concept 2010, which includes measures to increase energy efficiency in the building sector. The climate targets are to be achieved with a three-fold strategy:

1. **Regulatory measures** such as the Energy Saving Regulation (EnEV) and the Renewable Energy Heating Act (EEWärmeG) provide the necessary legal framework.
2. **Grant programmes** such as the KfW energy efficient construction and refurbishment programmes or the market incentives programme MAP are an effective stimulus for investment in energy efficiency. They increase the economic viability of the building measures and offer the owner or property developer flexible financing.
3. **Market-based measures and instruments** such as the Energy Performance Certificate and flagship projects create favourable market conditions for energy efficiency services. They increase market transparency and communicate missing knowledge and expertise.

## Examples of dena projects in the field of energy-efficient buildings:



dena has developed and tested the **Energy Performance Certificate for Buildings** as a central strategic mechanism towards reducing carbon emissions in the building sector. In addition to a national **database of experts** dena has also developed a seal of approval for energy certificates. This means that owners are guaranteed a top quality certificate which is completely reliable.

The **Centre of Expertise for EnEV & Assessment** aids the German government in the development of the energy performance certificate, the EnEV and the implementation of European Directives. It also helps qualify specialists in the use of the EnEV by answering technical questions.

In the **Efficient Homes project**, dena has initiated and coordinated the refurbishment of over 400 residential and non-residential buildings throughout Germany to the best energy standards in collaboration with a competence network. The experiences of the project are being used to define new subsidy standards and to complement existing legislation.

dena **Efficient House Quality Mark** makes it easy to recognise homes with particularly low energy consumption. A sign draws attention to the fact that the building's energy needs have been examined and comply with dena's quality standards.

In its project **Contracting in Public Buildings**, dena promotes the use of energy services by the public authorities, provides the necessary specialist knowledge and campaigns for an improved structural framework.

The **Efficient House Principle** is a printed step-by-step guide to building and refurbishment for building owners.

The **Efficient Heating Systems** campaign has been proving since 2006 that low-cost measures are a good starting point in the refurbishment process.

The **Energy-Efficient Municipalities** project aims to introduce energy management systems for a sustained and continuous increase in energy efficiency in the local authorities. A large number of tools and information packages improve the transfer of knowledge and trigger emulation.

All projects are accompanied by intense public relations under the umbrella of "zukunft haus" ("future house"). dena provides consumers, specialists and the media with information through press releases, events and publications.

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