## **Profile "Alliance for Climate-Neutral Housing"**



## ("Allianz für einen klimaneutralen Wohngebäudebestand")

The goal of the German federal government of creating affordable, climate-neutral housing by 2050 is an immense challenge. The key to achieving this lies in the use of an efficient as well as renewable heat supply with, at the same time, a low heat consumption and this at minimal costs, if possible.

The most promising way to reduce heat consumption incorporates a combination of measures which is open to the use of different technologies of

- 1. the energy-related optimisation of the structural shell
- 2. the installation of highly efficient heat producers and
- 3. technical measures for the optimisation of heat generation efficiency and heat distribution as well as usage.

The individual combination of measures for a building must be established on the basis of an optimum costs-usage relationship.

The "Allianz für einen klimaneutralen Wohngebäudebestand" ("Alliance for Climate-Neutral Housing") aims to investigate the effectiveness of solely technical energy efficient measures in buildings in practice and publicises their benefits for the general public and politics. These measures include:

- Optimisation of the control and regulation or exchange of existing boilers
- Optimisation of heat distribution systems (e.g. hydraulic balance)
- Optimisation of usage transparency through modern communication media
- Smart Home and Smart Building approaches for the optimisation of the temperature control of rooms and heating systems
- Assistant systems for optimum ventilation

It is expected that such technical measures for a relatively low cost will make a comparatively large contribution to energy saving. To prove this, a practice orientated research project, so far the biggest of its kind in Germany, is being carried out in which the named measures and their effects are being examined individually and in combination with one another.

A further goal of the Alliance is to work towards achieving a legal framework which enables the building owners to choose energy efficiency measures from what is available with which they can achieve the set energy efficiency and carbon-neutrality standard and this with maximum cost effectiveness.

The founding members of the Alliance include companies, associations and renowned research facilities which have been working intensively in the field of energy efficient heat supply for housing for years: GdW – Federal Association of German Housing and Property Companies, the firms Vonovia, LEG, DOGEWO21, Spar- und Bauverein eG Dortmund, Danfoss, Techem, Bosch Thermotechnik, ista, Viessmann as well as the EBZ Business School – University of Applied Sciences with the Professorship for Energy Questions of the Property Industry and the Professorship for Building Energy Technology and Heat Supply of the Technische Universität Dresden.

The members of the Alliance are convinced that the above-named technical solutions are a meaningful addition to the currently available combination of measures out of an improved structural shell and heat generation as well as the use of renewable energy sources and that, in many cases, this will tap the full efficiency potential. They are, therefore, an important component in the cost effective realisation of climate-neutral buildings.