

Economics in Brief



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EnEV 2014: Housing stock is key to success – nine million buildings in need of renovation

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Month of May – time of change?

"Yes and no". The new German Energy Saving Ordinance (Energieeinsparverordnung – EnEV) came into force on 1st May 2014. But as far as existing building stock is concerned, the minimum energy efficiency requirements applicable to major renovation projects remain practically unchanged. For example, anyone renewing more than 10% of the external wall must automatically apply the energetical requirements of the EnEV. Boilers above a certain age must be replaced.

In contrast, the standard for the construction of new buildings is being raised. From 2016, the maximum primary energy demand of a new build will be 25% lower than the level currently required under EnEV 2009. At the same time, electricity will be slightly favoured as an energy source compared to the previous EnEV.

New buildings: On the home straight

The EU requires, that from 2021 onwards all new buildings must comply with a nearly zero-energy standard). Tightening the regulatory law on new buildings is therefore the first mandatory step in this direction. The readiness to construct buildings with challenging levels of energy efficiency is already in place: in 2013, more than 50% of approved new residential housing units were supported by the KfW programme "Energy-efficient Construction") and hence meet an energy efficiency standard which already surpasses the legislative requirements of EnEV 2009. KfW efficiency houses are already achieving standards above the targets in EnEV 2014. This saves additional energy and increases the value of the property.

Building stock: Renovate more!

But the crucial potential for increasing energy efficiency in residential buildings lies in

the existing housing stock. It is true that in 2013 almost 11% more residential new building units were approved than in the previous year (a total of approx. 240,000 units) – which is even 50% higher than 2009. However, at less than 1%, residential new builds in Germany represent only a very small proportion of all residential buildings.

Germany's energy policy calls for its building stock to be almost climate-neutral by 2050. Today's buildings will still constitute at least two thirds of all residential buildings in the year 2050. But the energetical standard is for the most part low: Today, over half of all residential buildings – around nine million in total – have inadequate insulation, and 90% of these date back to 1978 and before. The potential for refurbishment is immense.

Amendment of the EnEV

- The new EnEV came into force on 1st May 2014.
- The standard for new buildings will be raised by 25% from 2016.
- No tightening of standards for the refurbishment of existing buildings.

The fact that the new EnEV is not tightening the energy efficiency requirements for the existing building stock is no reason to relax. On the contrary, more needs to be done in this area; only if the rate of renovation is doubled from its current level of around 1 to 2% the ambitious objectives of the German "Energiewende" will be achievable. For this to happen, the number of refurbishments must be raised significantly and the extent of the renovation work needs to be expanded. Complete refurbishment will play a key role in this process.

Energy efficiency – a mainstay of the energy turnaround

Energy efficiency is a central pillar of the energy turnaround and is closely linked to the objective of reducing greenhouse gas emissions. The potential which residential buildings offer in this respect has been demonstrated by the KfW programmes "Energy-efficient Construction and Refurbishment". Projects supported by these programmes regularly save around 2,000 GWh of energy per year. The energy turnaround targets a reduction in the heating demand of residential buildings of 20% by 2020. The KfW programmes contribute around 20% towards this target every year.

Energy savings from 2013 lead to a reduction of greenhouse gas emissions by around 800,000 tonnes of annually. Germany's energy concept calls for a reduction in greenhouse gas emissions of 40% by 2020. Assuming that private households have a proportional share in this, the KfW programmes are thus achieving around a third of the annual reduction required. To put this another way: This has roughly the same effect in terms of annual emission reduction as closely planting 144,000 football pitches with beech trees.

Conclusion: Lead the way!

The requirements for energy efficiency and climate-related matters issued by the German government and the EU are calling for a significant increase in the energy efficiency of buildings. For the construction of new buildings, this is reflected in the tightening of the EnEV legislation. But greater potential for energy saving can be found in the existing building stock. Given that the energy requirements under the EnEV have not changed in this area, the number respectively the extent of renovation measures needs to be increased significantly. This is the only way in which it will be possible to realise energy efficiency objectives and climate-related goals. Through a combination of low-interest loans and grants, KfW's "Energy-efficient Construction and Refurbishment" programmes are supporting ambitious levels of energy efficiency in residential buildings that exceed the requirements of the EnEV. ■