Bundesverband Freier Immobilien- und Wohnungsunternehmen

Position paper

The new building energy law: Decarbonisation through technology openness

EN

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The Building Energy Law (GEG) needs a paradigm shift. The current system of requirements does not meet the challenges facing the building sector. Instead of focussing on energy efficiency, the GEG must in future concentrate on emission efficiency. This will enable the housing sector to achieve the climate goals. Politicians can help with decarbonisation with a new, simple system of requirements.

Energy decarbonisation instead of insulation: For a paradigm shift in the GEG.

The current system of the GEG is based on a theoretical energy requirement of the building, which results from the building envelope (transmission heat losses) and the primary energy factor. This does not provide any information on the actual greenhouse gas (GHG) emissions. Increasing the insulation thickness of the building envelope to the "40 standard" does not make sense in terms of affordable housing. As studies have shown (Bienert[1], Walberg[2]), the limiting energy benefit is already reached with the "70 standard".

Instead, a new system of requirements in the GEG must focus on the actual GHG emissions (see also requirement based on the LTRS) and even more on the efficiency of a building. For example, a building that is operated with a heat pump and obtains its electricity from 100% renewable energy is already de facto greenhouse gas-neutral in operation, and this should also be reflected in the amended Building Energy Law.

The new GEG: decarbonisation and resource conservation.

Decarbonisation.

The aim of the Building Energy law must be to reduce GHG emissions. The focus here is not only on the energy consumption of the building, but also on the type of energy generation. The aim must be to ensure a sensible level of energy efficiency in final energy consumption (low-temperature-ready) and to cover the remaining demand with renewable energy (preferably generated on-site). This not only ensures the financial feasibility and economically cost-efficient use of funds; it also supports ecologically efficient action, as too much grey energy is avoided through financially and ecologically questionable efficiency measures. It also ensures that the total renewable energy resources available in 2045 are distributed sensibly across all sectors.

In addition, a "cost factor" for particularly GHG-friendly construction methods can be used for buildings in the planning/construction phase. It should also be borne in mind that not only the official data from Ökobaudat should be used to determine GHG-friendly construction methods, but that the decarbonisation efforts of the industry through certifications must also be taken into account.

[1] Klimaneutralität vermieteter Mehrfamilienhäuser – aber wie?, Prof. Dr. Sven Bienert, Alexander M. Groth, Regensburg, 1. März 2022.
[2] Deutscher Immobilienkongress 2022: Klimaschutz, Wohnungsbau, Bezahlbarkeit?, Dietmar Walberg, ARGE Kiel, 2022.

This results in six factors that can be used to determine the emission efficiency of a building. This calculation forms a regulatory basis for the GEG. The parameters are geared towards achieving the climate targets.

	Construction phase	Operating phase
GHG emissions	x t	x t
Energy supplied	x kWh	x kWh
Resource consumption	x	x

Based on the 1.5-degree target set out in the Paris Agreement, the real values that a building may consume or emit can be used here. These values must be calculated by an independent expert and set by the legislator.

Conservation of resources.

The resource requirements of a building depend on its useful life and the materials used. In times of increasing material scarcity, recyclability is of great importance.

A greenhouse gas bonus system should be introduced for the new construction and refurbishment of existing buildings, which rewards building constructions that enable the reuse of used materials.

Decarbonisation through technology openness.

This system for a new building energy law offers two decisive advantages. Firstly, the system of requirements is simple and therefore easy to understand. It also does not require a great deal of bureaucracy. Secondly, this system makes it possible to realise the necessary greenhouse gas savings in a flexible and innovative way that is open to all technologies.

The decarbonisation of the building stock can and will only succeed with innovative technical approaches. Many already exist. A simple system of requirements based on a few key figures, as described here, makes it possible to achieve the key goals, but leave their fulfilment to the innovative power of the housing and property industry.

Separation of resource conservation and GHG emissions.

Conserving resources and reducing GHG emissions are two different things. Increasing insulation thicknesses increase the consumption of resources in the construction of buildings without achieving an appropriate benefit. The GHG savings effects are only small. Studies have shown that a higher insulation target increases the use of insulation material exponentially. Further energy and GHG savings can therefore only be achieved at great expense due to user behaviour.

Requirements for existing buildings.

It is far more difficult to implement energy requirements in existing buildings than in new buildings. The current building stock emits more GHGs than new buildings. Technical and economic approaches are therefore needed to improve the energy efficiency of existing buildings. A long-term renovation strategy without neglecting new construction makes sense.

Establish primary energy factor in the GEG.

The new Building Energy Law must last a long time. Building owners and planners need reliability and the certainty that framework conditions will not change at short notice. This includes a clear definition of what counts as renewable energy and what does not. If required technologies such as biogas can no longer be used to achieve the renewable energy share, planning will collapse. There therefore needs to be a clear definition of what is "renewable" and how CO2 balancing is to be carried out. The primary energy factor must be enshrined in the Building Energy Law. The new GEG must create a reliable basis on which planning over several years is possible.

Standardised CO2 accounting.

In order to achieve the goal of reducing CO2 emissions in the building sector and to take into account the entire life cycle of a building, a standardised CO2 balance is required. It must be clear which materials are to be included in the assessment and to what extent. To this end, existing assessment methods (DGNB, BNB, CRREM) must be standardised and further developed in order to develop a standardised calculation module for CO2. As described above, it must also be possible to include individual certified products from the industry in the calculation module.

Affordable housing for everyone.

A central objective of the GEG must be to ensure the affordability of housing. The statutory new-build standard must be affordable for broad sections of the population with an average income. It is a socio-political imperative to provide housing for all. However, top standards are only affordable for top earners.

Higher standards that are politically desirable must be promoted. A consistent distinction must be made between the economically feasible building standard and the politically desired top standard. The funding gap must be closed through subsidisation. Excessively high requirements for the standard of new builds would mean that less is built and housing would no longer be affordable for large sections of the population.

Economic efficiency must be guaranteed.

The new Building Energy Law must guarantee the economic viability of construction projects. If this is not the case, climate protection will only exist on paper. With the new GEG, project developers must be able to build reliably for the coming years. For this reason, a profitability analysis is needed that takes this into account.

The report commissioned by the Federal Ministry for Economic Affairs and Energy (now the Federal Ministry for Economic Affairs and Climate Protection) in the last legislative period is based on incorrect assumptions.[3] In Chapter 6 "Economic efficiency analysis", a construction project is calculated with an interest rate of 0% over 30 years. Based on this incorrect assumption, the economic viability in the report is significantly more positive than would have been the case with a more realistic approach. A construction interest rate of 4% as the basis for the calculation would have led to a different and far more realistic result. The change in economic conditions in 2022 has led to a different starting position. This report was commissioned at the end of the last legislative period and does not take this into account.

In order to reduce greenhouse gas emissions in residential construction and operation, this must be harmonised with economic efficiency. If this is not achieved, climate protection will only exist on paper. An economic efficiency analysis must therefore be carried out for the new Building Energy Law.

[3] Kurzgutachten zur Überarbeitung von Anforderungssystemen und Standards im Gebäudeenergiegesetz für Neubauten sowie Bestandsgebäude einschl. der Wirtschaftlichkeitsbetrachtungen für Neubauten und Bestandsgebäude, im Auftrag des Referat II C 2 des Bundesministeriums für Wirtschaft und Energie, Heidelberg, Berlin, Dresden, 2022.

Bundesverband Freier
Immobilien- und Wohnungs-
unternehmen

BFW BUNDESVERBAND FREIER IMMOBILIEN- UND WOHNUNGSUNTERNEHMEN

Dem BFW Bundesverband Freier Immobilien- und Wohnungsunternehmen e. V. als Interessenvertreter der mittelständischen Immobilienwirtschaft gehören derzeit rund 1.600 Mitgliedsunternehmen an. Als Spitzenverband wird der BFW von Landesparlamenten und Bundestag bei branchenrelevanten Gesetzgebungsverfahren angehört.

Die Mitgliedsunternehmen stehen für 50 Prozent des Wohnungs- und 30 Prozent des Gewerbeneubaus. Sie prägen damit entscheidend die derzeitigen und die zukünftigen Lebens- und Arbeitsbedingungen in Deutschland. Mit einem Wohnungsbestand von 3,1 Millionen Wohnungen verwalten sie einen Anteil von mehr als 14 Prozent des gesamten vermieteten Wohnungsbestandes in der Bundesrepublik. Zudem verwalten die Mitgliedsunternehmen Gewerberäume von ca. 38 Millionen Quadratmetern Nutzfläche.

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