## Overview of Legislative Measures: Energy-Efficient Buildings

### European and National Strategies, Laws and Incentive Schemes

**European Level**

**2020 Climate & Energy Package**

In December 2008, the European Union agreed upon the 2020 Climate and Energy Package defining specific targets for climate protection and energy consumption. The package sets three key targets: 20% cut in greenhouse gas emissions (from 1990 levels), 20% of EU energy from renewables, 20% improvement in energy efficiency.

**2030 Climate & Energy Framework**

The updated 2030 Climate and Energy Framework sets two objectives for the upcoming period 2021-2030 and aims to: reduce at least 40% of greenhouse gas emissions, and increase up to 32% share for renewable energy, improving energy efficiency to 33.5%.

**2050 Climate & Energy Framework**

The European Union’s long-term strategy sets the vision of a prosperous, modern, competitive and climate-neutral economy by 2050. The strategy shows how Europe can lead the way to climate neutrality by investing into realistic technological solutions, empowering citizens and ensuring social fairness for a just transition.

**Energy Efficiency Directive 2018/844**

In 2018 as part of the Clean energy for all Europeans package, the EPRA was updated to accelerate the rate of building renovation and strengthen the energy performance of new buildings. Decarbonizing the existing, highly inefficient European building stock is one of its long-term goals. It promotes cost-effective renovation work, introduces a smartness indicator for buildings, simplifies the definitions of heating and cooling systems, and promotes electric mobility by setting up a framework for parking spaces for electric vehicles.

**Energy Efficiency Directive 2018/2025**

In 2018 as part of the Clean energy for all Europeans package, the amended Directive updated the policy framework in view of 2030 aiming towards the new energy efficiency target of at least 32.5%. This means that EU energy consumption should be no more than 1273 Mtoe of primary energy. EU countries will have to achieve new energy savings of 0.8% each year of final energy consumption for the 2021-2030 period.

**National Level**

**National Energy Concept**

The in September 2010 formulated guidelines for an environmental-friendly, reliable and affordable energy supply constituted the foundation of Germany’s Energy Policy, paving the way to a timely withdrawal from nuclear energy and coal power and a new age of renewable energy and energy-efficient buildings and infrastructure.

**National Action Plan on Energy-Efficiency (NAPE)**

NAPE is an essential building block of the Federal Government’s National Energy Concept and instrumental in achieving the targets set out on European and National level. In terms of Germany’s ambitious energy transition, energy efficiency constitutes the twin pillar next to renewable energy. Its three cornerstones are:

(a) stepping up energy efficiency in the building sector as buildings are responsible for 35% of Germany’s total energy consumption

(b) establishing energy efficiency as an investment and business model for facilitating Private-Private Partnerships

(c) increasing individual responsibility for energy efficiency by educating the general public.

**Energy-Efficiency Strategy for Buildings**

The strategy is based on the goal of achieving a virtually climate-neutral building stock by 2050 in line with the Federal Government’s National Energy Concept. Emphasis on the NAPE, the strategy paper specifies measures for a smooth energy transition in the buildings sector and addresses both technical and energy aspects.

**Energy Saving Act (EnEG)**

The Energy Saving Act (EnEG) is an important instrument of the Federal Government’s energy efficiency policy and the basis for the Energy Saving Ordinance. It is a legislative foundation for continuous improvement in terms of the European Energy Performance of Buildings Directive.

**Energy Saving Ordinance (EnEV)**

The Energy Saving Ordinance (EnEV) is based on EnEG and was revised in 2018 to ensure a continuous updating of the energy-saving requirements for buildings oriented towards the state of the art and economic efficiency which is an important contribution towards energy savings.

**Renewable Energies Heat Act (EEWärmeG)**

The Renewable Energies Heat Act (EEWärmeG) obliges owners to cover part of the heat demand of new buildings from renewable energy. In view of its exemplary function, the public sector is obliged to use renewable energy also in full-scale renovation projects for its building stock.

**Renewable Energy Sources Act (EEG)**

The revised EEG (2017) has set a goal of generating 35% of electric supply from renewable energy resources by 2020. In recent revisions introduced new features: introduction of an auction system for nearly all renewable energy sources, existing auction scheme will be extended to cover rooftop plants and installations; onshore wind will be auctioned and “central Danish target model” will be introduced in terms of offshore wind parks.

**Climate Action Plan 2030**

The Federal Government is currently reviewing a draft on the Future Building Energy Law. It is expected to be adopted by the end of 2019. The latest draft (28 May 2019) contains new provisions on an energy standard of Low-Energy Buildings and aims to consolidate regulations of EnEV and EEG that need to be harmonised with the NAPE and other national legislation.

**Building Energy Law (GenG)**

The Heating Cost Ordinance is part of energy saving legislation and regulates the metering, distribution and accounting of heating costs and hot water between tenants and landlords. It has contributed towards an average reduction in energy consumption of around 31%.

### Incentives

**Incentives**

- **Provision of reliable information and consulting services regarding energy efficiency and renewable energy for private households, companies and public institutions.**
- **Energy consulting services provided through subsidised programs:** On-Site Energy Consulting (funded by BMWi); Energy Efficiency Campaign (funded by BMWi, Lemmer-Stromberg-Check Plus); Energy Consulting for SMEs, etc.
- **CO2 Building Renovation Programme:** Funding takes the form of grants, low-interest loans or alternatively investment grants that may be combined with loan-repayment grants. As a rule, financial support is awarded on the basis of the CO2 savings from the renovation measures.
- **Market Incentive Programme for Renewable Energies (NAPE):** Promoting investments in renewable energy used largely in existing buildings, but also the planned extension of urban areas.
- **Energy Efficiency Programme (APEE):** Funding will be provided for the modernisation of heating and ventilation systems and aims to create a stimulus for innovation and investment.

**KfW**

KfW is a German state-owned development bank, supporting private households, SMEs and public actors in financing sustainable investments in energy efficiency and renewable energy projects.

- **Loans and Grants with low interest rates and often co-funded by Federal Ministries:**
  - e.g. Energy Efficient Building Refurbishment (Nos. 113/121); Energy Efficient Building Construction (Nos. 113/15); KfW Programme Renewable Energy “Standard” (No. 270) etc.

**Awards**

- **Efficiency Award 2018:** German Government has awarded the Efficiency Award to private and public companies that have achieved outstanding achievements in increasing energy efficiency. The internationally-acknowledged awards endowed with prize money totaling 100,000 €.
- **KfW Award for Construction:** The KfW awards every year building owners with the KfW Construction Award to promote private investment in sustainable buildings and future-oriented technologies.

### Other Mechanisms

- **Energy Tax Act and Electricity Tax Act:**
  - The tax relief is granted as part of tax-closing if the enterprises consumed operate an energy or environmental management system.
  - Renewable Energy Source Act:
    - Special remuneration arrangement is contingent on implementation of energy-related provisions.

- **Tendering Scheme**

  - With the introduction of the Competitive Tendering Scheme for energy efficiency, the German government opened a new approach for promoting close-to-market renewable energy solutions.
  - Pilot Project Step-up: aims at reducing electricity consumption by promoting electricity-related measures across households, public actors, and small to medium-sized enterprises (sme) with plans funding 150 mio EUR in 2018.

### Funding & Grants

- **EU Energy Efficiency Award (EEA):**
  - A quality management and award system for municipalities and regions supporting local authorities in establishing interdisciplinary planning approaches and implementing effective energy and climate policy measures through the increased use of renewable energies.
  - HORIZON 2020

- **European Energy Efficiency Fund (EUEEF):**
  - The EUEEF aims to provide market-based financing for commercially viable public energy efficiency, renewable energy and clean urban transport projects related to public sector activities in the EU member countries. It contributes with a layered risk/reward structure to enhance energy efficiency and foster renewable energy in the form of a public-private partnership (PPP).

- **NEPC: National Energy Action Plan on Energy Efficiency:**

- **KfW Funding:**

  - A bank for international cooperation and development (KfW) is an institution of the Federal Republic of Germany and serves as a provider of financial products for development projects and lending in foreign countries.

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