Urban Planning & Construction

Climate Law

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Climate Law
Spring 2024

News & opinion

European Parliament adopts EPBD to decarbonise Europe’s buildings

25 March 2024

After two years of negotiation, the Energy Performance of Buildings Directive has been approved by the European Parliament. The proposed revision aims to progressively reduce greenhouse gas emissions and energy consumption in the EU building sector and make it climate-neutral by 2050.

The newly adopted version of the directive sets targets for reducing energy use in residential and non-residential buildings, with a focus on renovating the worst-performing structures.

Urban Planning & Construction? Framework

International law, positive obligations of the State to prevent disasters (*Fadeyeva v Russia*)

EU Law

- limited competence to adopt measures concerning town and country planning and specific rules on the maritime spatial planning
- EU Environmental Law
- Public procurement
- State aid
- Corporate Social Responsibility
- Protection of workers
- Climate Law

LIMITED COMPETENCE – Art. 192(2)(b) TFEU

Adoption of measures affecting town and country planning and land use or choice between different energy sources and the general structure of its energy supply is expressly foreseen by Art. 192(2)(b) TFEU.

Such competence does not equal direct harmonisation, though. Besides targeting exclusively environmental measures, the EU may only adopt measures that affect but do not harmonise national laws and regulations. In addition, such competence is subject to the principles of subsidiarity and proportionality.

This means that the EU can only act if the objectives of a proposed measure cannot be achieved by Member States acting alone. The EU must also ensure that any proposed measure is proportionate to the objectives it seeks to achieve.

To provide an example of its application, Art. 192 TFEU was used as a legal basis for the adoption of directives and regulations on energy efficiency and renewable energy between 2001 and 2009. Settled case law on the choice of a legal basis seems to preclude using Art. 192 TFEU as a legal basis for direct action in the energy sector after the adoption of Art. 194 TFEU.

EU ENVIRONMENTAL LAW

main requirements affecting planning and construction

(1) strategic environmental impact assessment (SEA) of the plans and programmes,

(2) environmental impact assessment (EIA) of the projects,

(3) impact assessment of the plans, programmes, and projects on Natura 2000 sites,

(4) technical requirements for building materials and waste management,

(5) public participation in environmental protection

EU's Regional Policy and the Transport Policy concerning projects of common interest (Art. 171 and Art. 172 TFEU) provides the definitions of essential key transport networks, effectively forming the Trans-European Network for Transport (TEN-T) Policy.

Tab. 6: MAIN EU ENVIRONMENTAL REQUIREMENTS ON PUBLIC CONSTRUCTION LAW					
Main requirements	**Requirements on spatial planning**	**Requirements on construction permitting**	**Terminology of public construction law**	**Support the merging and optimisation of processes**	
EIA Directive	Assessment of projects in Annex I and Annex II	NO	YES	NO	YES
SEA Directive	Assessment of plans and programmes for town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive	YES	NO	YES	YES
Habitats Directive	Natura 2000 management, assessment of plans and projects with the adverse impact on the protected sites, protection of species	YES	NO	NO	NO
Birds Directive	Protection of bird species and their habitats	NO	NO	NO	NO
WFD	Preparation of river basin management plans, ensuring that good status of surface water and groundwater is achieved and maintained	NO	NO	NO	YES
FD	Preparation of flood risk maps and flood risk management plans	NO	NO	NO	YES
IED	Integrated permitting including bast available technologies	NO	NO	NO	YES
Seveso III Directive	Taking measures to prevent major accidents and to limit their consequences	YES	YES	YES	YES
Air Quality Framework Directive	Complying to air quality standards, assessment of ambient air quality, preparation of air quality plans	NO	NO	NO	NO
Environmental Noise Directive	Preparation of noise maps and action plans	YES	NO	NO	YES
Waste Framework Directive	Managing construction and demolition waste, adoption of the waste management plans	NO	NO	NO	NO

Tab. 3: DEVELOPMENT OF LAND-USE PLANNING REQUIREMENTS OF THE SEVESO DIRECTIVES	
Seveso II Directive	Art. 12 (Land-use planning): 1. Member States shall ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in their land-use policies and/or other relevant policies. They shall pursue those objectives through controls on: (a) the siting of new establishments, (b) modifications to existing establishments covered by Article 10, (c) new developments such as transport links, locations frequented by the public and residential areas in the vicinity of existing establishments, where the siting or developments are such as to increase the risk or consequences of a major accident. Member States shall ensure that their land-use and/or other relevant policies and the procedures for implementing those policies take account of the need, in the long term, to maintain appropriate distances between establishments covered by this Directive and residential areas, areas of public use and areas of particular natural sensitivity or interest, and, in the case of existing establishments, of the need for additional technical measures in accordance with Article 5 so as not to increase the risks to people. 2. Member States shall ensure that all competent authorities and planning authorities responsible for decisions in this area set up appropriate consultation procedures to facilitate implementation of the policies established under paragraph 1. The procedures shall be designed to ensure that technical advice on the risks arising from the establishment is available, either on a case-by-case or on a generic basis, when decisions are taken.

Seveso III Directive (major changes in bold)	Art. 13 (Land-use planning): 1. Member States shall ensure that the objectives of preventing major accidents and limiting the consequences of such accidents **for human health and the environment** are taken into account in their land-use policies or other relevant policies. They shall pursue those objectives through controls on: (a) the siting of new establishments; (b) modifications to establishments covered by Article 11; (c) new developments including transport routes, locations of public use and residential areas in the vicinity of establishments, where the siting or developments may be the source of or increase the risk or consequences of a major accident. 2. Member States shall ensure that their land-use or other relevant policies and the procedures for implementing those policies take account of the need, in the long term: (a) to maintain appropriate safety distances between establishments covered by this Directive and residential areas, buildings and areas of public use, recreational areas, and, as far as possible, major transport routes; (b) **to protect areas of particular natural sensitivity or interest in the vicinity of establishments, where appropriate through appropriate safety distances or other relevant measures;** (c) in the case of existing establishments, to take additional technical measures in accordance with Article 5 so as not to increase the risks to human health and the environment. 3. Member States shall ensure that all competent authorities and planning authorities responsible for decisions in this area set up appropriate consultation procedures to facilitate implementation of the policies established under paragraph 1. The procedures shall be designed to ensure that operators provide **sufficient information** on the risks arising from the establishment and that technical advice on those risks is available, either on a case-by-case or on a generic basis, when decisions are taken. **Member States shall ensure that operators of lower-tier establishments provide, at the request of the competent authority, sufficient information on the risks arising from the establishment necessary for land-use planning purposes.** **4. The requirements of paragraphs 1, 2 and 3 of this Article shall apply without prejudice to the provisions of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (15), Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (16) and other relevant Union legislation. Member States may provide for coordinated or joint procedures in order to fulfil the requirements of this Article and the requirements of that legislation, inter alia, to avoid duplication of assessment or consultations.**

Tab. 5: EVOLUTION OF NOISE LIMITS FOR SPECIFIC EQUIPMENT USED FOR CONSTRUCTION						
Equipment	**Directive**	**Permissible sound power level [dB/1 pW]**				
		1986–1989	1989–1996	1997–2001	2002–2006	2006–
Concrete-breakers and picks, hand-held (m < 20/20 ≤ m ≤ 35/m > 35)	84/537/EEC 2000/14/EC	110/113/116	108/111/114	108/111/114	107/ 94+11lgm/ 96+11lgm	105/ 92+11lgm/ 94+11lgm
Excavators, hydraulic/rope-operated (P ≤ 70/70 < P ≤ 160/160 < P ≤ 350/P > 350)	86/662/EEC 89/514/EEC 94/27/EC 2000/14/EC	-	106/108/112/118	96	83+11lgP	80+11lgP
Tower cranes	84/534/EEC 2000/14/EC	-	102	100	98+lgP	96+lgP

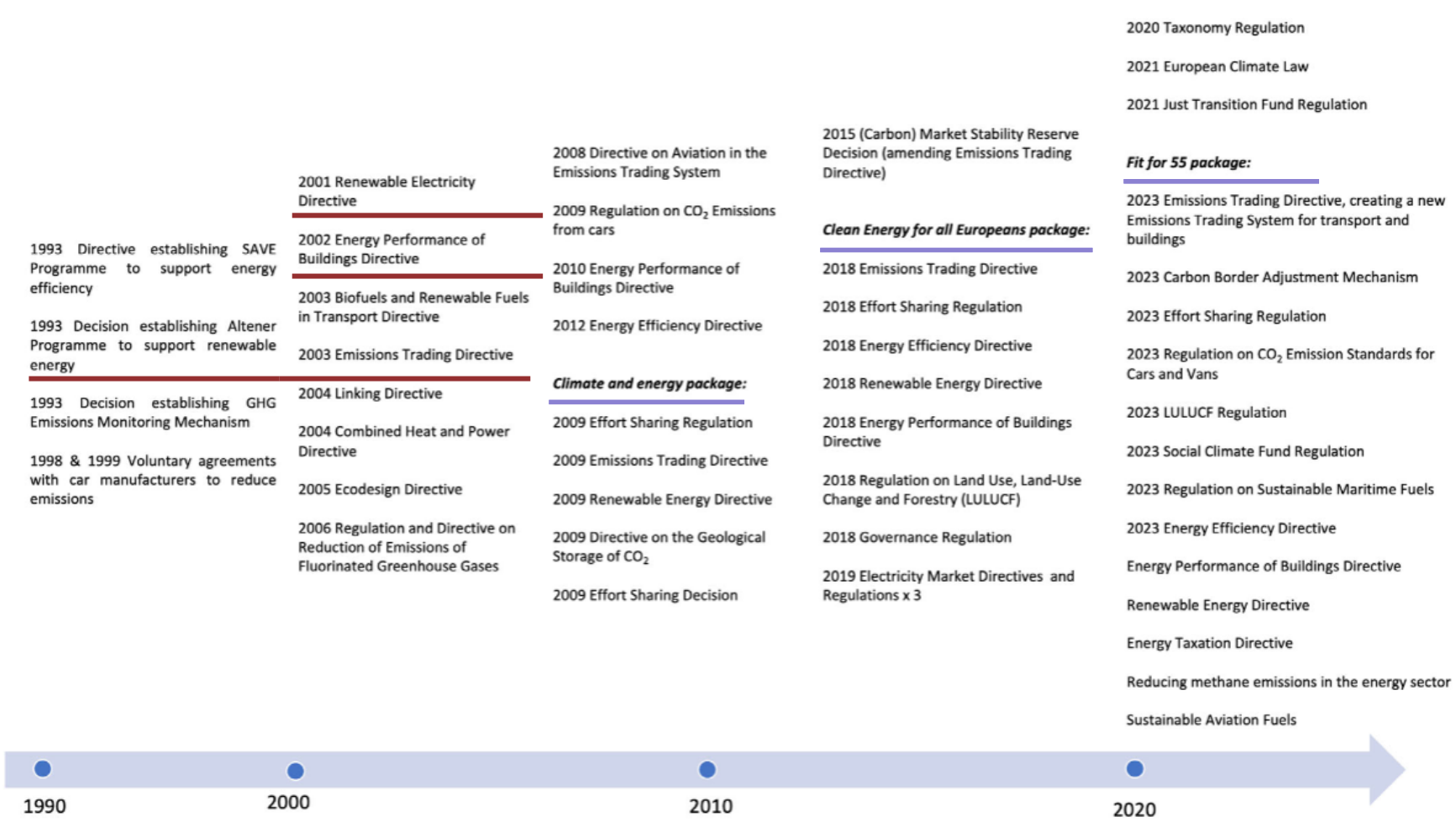

FIGURE 1 Overview of key policy measures to achieve targets. *Source*: EU official websites; Oberthür & von Homeyer, 2023.

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Effort Sharing Regulation:
sets emissions reductions targets for the EU and individual Member States in a wide range of sectors. It covers domestic transport (excluding aviation), buildings, agriculture, small industry and waste.

LULUCF Regulation:
sets out how the land use sector contributes to the EU's climate goals. The LULUCF Regulation was revised in 2023 for the period up to 2030.

To help reach climate neutrality, for the first time, the revised LULUCF regulation has a separate land-based net carbon removals target of 310 million tonnes of CO2 equivalent by 2030.

This EU-wide target is to be implemented through ambitious, fair and binding net removal national targets for the LULUCF sector.

Carbon Boundary Adjustment Mechanism (CBAM):
sets the price of (some) products entering the EU market to take account of the emissions associated with their production, a new emissions trading scheme covering buildings and transport, and a social climate fund set up to offset the negative impacts of this new, expanded emissions trading scheme.

What else? Green public procurement, ESG, etc.

EU ETS

As part of the 2023 revisions of the ETS Directive, a new emissions trading system named ETS 2 was created, separate from the existing EU ETS. This new system will cover and address the CO2 emissions from fuel combustion in buildings, road transport and additional sectors (mainly small industry not covered by the existing EU ETS).

The ETS 2 will become operational in 2027. Although it will be a ‘cap and trade’ system like the existing EU ETS, the ETS 2 will cover emissions upstream. It will be fuel suppliers, rather than end users such as households or car users, that will be required to purchase and surrender allowances to cover their emissions. The ETS 2 cap will be set to bring emissions down by 42% by 2030 compared to 2005 levels.

EFFORT SHARING REGULATION

- sets emissions reductions targets for the EU and individual Member States in a wide range of sectors. It covers domestic transport (excluding aviation), buildings, agriculture, small industry and waste.
- Initially adopted in 2018, the Regulation was amended in 2023.With their new national targets Member States will collectively contribute to an emission reduction at EU level, in the Effort Sharing sectors, of 40% compared to 2005 levels. The revision was adopted as part of a package of proposals aimed at reducing the EU's emissions by 55% by 2030 (compared to 1990 levels) and deliver the European Green Deal.

PROMOTION OF RENEWABLE ENERGY

- The RED II requirements assumably present a massive impact on the building industry.

- First, Member States must introduce a minimum level of renewable energy in new buildings and buildings undergoing major renovations in their building regulations and codes. Member States should aim to increase the share of renewable energy in heating and cooling by an indicative 1.3% per year between 2020 and 2030.

- Second, Member States must ensure that qualified authorities at national, regional, and local levels **include measures facilitating the deployment of renewables when carrying out spatial planning and when building or renovating urban infrastructure and commercial or residential areas**. They must introduce appropriate **measures in their building regulations and codes** to increase the share of all kinds of energy from renewable sources in the building sector.

PROMOTION OF RENEWABLE ENERGY

▪Most significantly, adjustments must be made to administrative procedures, regulations, and codes according to Art. 15 of RED II. Member States must ensure that *any* relevant national rules concerning the authorisation, certification, and licensing procedures are proportionate and necessary and contribute to the implementation of the *energy efficiency first* principle. This general rule is further elaborated on to several steps: a) streamlining administrative procedures; b) objective, transparent, and proportionate rules concerning authorisation, certification, and licensing which take fully into account the particularities of individual renewable energy technologies, c) cost-related administrative charges, d) simplified and less burdensome authorisation procedures for decentralised devices, and for producing and storing energy from renewable sources.

PROMOTION OF RENEWABLE ENERGY

▪Third, the RED II introduced detailed procedural requirements for construction permitting procedure in its Art. 16, which are also a complete novelty in EU law. There is a direct requirement to **link construction and operational procedures,** which requires Member States to establish or designate contact points that "*shall, upon request by the applicant, guide through and facilitate the entire administrative permit application and granting process. The applicant shall not be required to contact more than one contact point for the entire process. The permit-granting process shall cover the relevant administrative permits to build, repower and operate plants for the production of energy from renewable sources and assets necessary for their connection to the grid*."

PROMOTION OF RENEWABLE ENERGY

- There are several **additional EU legislative and policy measures** promoting the use of renewable resources with an impact on public construction law.

- The EU **Offshore Renewable Energy Strategy** was approved in 2020. To scale up the deployment of offshore renewable energy in Europe, the Strategy assumes the need to identify and use a much larger number of sites for offshore renewable energy production and connection to the power transmission grid. Simultaneously, offshore renewable energy development must comply with the EU environmental legislation and the Integrated Maritime Policy. For this purpose, maritime spatial planning must be used.

- The **Hydrogen Strategy** mentions the possibility of building on the provisions of RED II to regulate different aspects of this energy carrier further and promote its development. For example, the adoption of support measures, including demand-side policies in end-use sectors.

PROMOTION OF RENEWABLE ENERGY

▪The **Alternative Fuels Infrastructure Regulation** (**AFIR**) adopted in July 2023 within the sustainable transport initiative under the Fit for 55 introduces requirements on recharging points and alternative fuel refuelling points in the EU for the cars, planes, and ships that use them. Recharging stations on main roads (TEN-T) for cars (light-duty electric vehicles) must be available at least every 60 km by the end of 2025 and for heavy-duty vehicles by the end of 2030. On other roads, the number of recharging stations must grow with the number of registered cars; for heavy-duty vehicles, at least two recharging points must be available in each safe and secure parking area by 2027 (and four by 2030). Similarly, hydrogen refuelling stations and liquefied methane refuelling points are supported. Regarding seaports, at least 90% of container ships and passenger ships must have access to shore-side electricity supply in the busiest seaports, and there must be at least one installation providing shore-side electricity in most of the inland waterway ports by 2030. All aircraft stands next to the terminal must be equipped with an electricity supply by 2025 and remote stands by 2030, except for the small airports.

PROMOTION OF RENEWABLE ENERGY

▪An **unprecedented short-term measure in the area of support for renewable energy** was introduced by Council Regulation (EU) 2022/2577, laying down a framework to accelerate the deployment of renewable energy (**ARE Regulation**).

▪The ARE Regulation mainly serves as an exception from EU environmental requirements limited to 18 months with a review clause allowing the Commission to propose an extension if necessary.

▪The ARE Regulation establishes a rebuttable presumption that there is an overriding public interest in renewable energy projects and that such projects serve public health and safety for the purposes of the relevant EU environmental legislation, namely the WFD Directive, the Habitats Directive and the Birds Directive

▪Art. 4 of the ARE Regulation then focuses on speeding up the permitting procedure for the installation of solar energy installations. It states explicitly that in the case of the authorisation procedure for the installation of solar energy installations, including self-consumers of renewable energy, with a capacity of 50 kW or less, the authorisation shall be deemed to have been granted if the competent authorities or bodies have not replied within one month of the application being submitted, provided that the capacity of the solar energy installation does not exceed the existing capacity of the connection to the grid.

BUILDING MATERIALS

▪There is no specific EU law exclusively focused on building materials. However, several EU regulations and directives govern aspects related to construction products and their use in buildings. Generally, these regulations aim to ensure building materials' safety, health, and environmental performance.

▪The Consturction Products Directive was revised in 2011 and replaced by Regulation (EU) No 305/2011, also known as the **Construction Products Regulation** (**CPR**), which came into force in 2013. It remains a key legislation that sets out harmonised rules for marketing construction products in the EU.

▪The new regulation aims to simplify and streamline the procedures for assessing the performance of construction products and to promote the use of sustainable materials and energy-efficient technologies in construction. The CPR covers a wide range of construction products, including materials such as cement, steel, insulation, windows, and many others.

▪The CPR also establishes the conditions for **CE marking**

BUILDING MATERIALS

▪In 2022, the Commission adopted a proposal for a revised CPR. Compared to the current version, the proposed regulation explicitly mentions the introduction of rules on how to express the environmental, climate, and safety performance of construction products in relation to their essential characteristics, as well as the establishment of environmental, climate, functional, and safety product requirements.

▪The scope of the regulation would also include, for instance, 3D-datasets permitting the 3D-printing of construction products and materials used in 3D-printing; construction products manufactured on the construction site for immediate incorporation into construction works; and some types of pre-fabricated one-family houses. The regulation would also apply to used construction products in some cases, e.g., if the intended use has changed compared to the use assigned by the initial manufacturer.

ENERGY EFFICIENCY OF BUILDINGS

the 2002 Energy Performance of Buildings Directive (**2002 EPBD**, 2002/91/EC) was adopted to boost the energy performance of buildings. Its aim was not to harmonise the planning or permitting procedures but to set rules for the calculation of energy performance and certification of buildings, and to apply minimum requirements on the energy performance of new buildings or large existing buildings that are subject to major renovation

- The 2002 EPBD was recast in 2010 (**2010 EPBD**, 2010/31/EU) and amended twice in 2018 (by Directive 2018/844 and Regulation 2018/1999) as part of the *Clean Energy for All Europeans* package. The 2010 EPBD lays down requirements in several key areas.

- First, the 2010 EPBD sets minimum energy performance requirements for new buildings, major renovations, and existing buildings undergoing renovation (**Minimum Energy Performance Requirements**). These requirements aim to ensure that buildings meet certain energy efficiency standards and contribute to the overall reduction of energy consumption.

ENERGY EFFICIENCY OF BUILDINGS

▪Second, the 2010 EPBD establishes a target for all new buildings to be nearly zero-energy buildings by a specific date (**Nearly Zero-Energy Buildings, NZEBs**). NZEBs are buildings with a very high energy performance, with most of their energy needs met by renewable sources produced on-site or nearby.

▪Third, the EPB standards are promoted as the Member States are required to describe their national calculation methodology following the national annexes of the overarching standards, namely ISO 52000-1, 52003-1, 52010-1, 52016-1, and 52018-1. The 2010 EPBD thus does not force Member States to apply a set of EPB standards but forces them to explain where and why they deviate from these standards, which is likely to lead to a greater recognition and promotion of the EPB set of standards.

▪Fourth, the 2010 EPBD requires Member States to develop and implement long-term renovation strategies (**LTRS**). These strategies outline plans and objectives for the renovation of existing building stock to improve energy efficiency, reduce emissions, and promote sustainable practices.

ENERGY EFFICIENCY OF BUILDINGS

▪The 2010 EPBD requires all buildings being constructed, sold, or rented to have an Energy Performance Certificate (**EPCs**). EPCs provide information about a building's energy performance and recommendations for improvements. They help prospective buyers or tenants make informed decisions regarding energy consumption and costs. Moreover, in buildings occupied by public authorities and frequently visited by the public (with a total useful floor area over 250 m^2) or other buildings frequently visited by the public (with a total useful floor area over 500 m^2), the EPCs must be is displayed in a prominent place clearly visible to the public.

▪The 2010 EPBD mandates **regular heating and air conditioning inspection**s in buildings to assess their efficiency, identify potential energy-saving measures and improve overall performance. Independent control systems for energy performance certificates and inspection reports must be established.

ENERGY EFFICIENCY OF BUILDINGS

▪The next significant set of EU requirements on energy efficiency is embodied in the **Energy Efficiency Directive** (EED) after its significant 2018 amendment. The EED is aimed at promoting energy efficiency and reducing energy consumption. The Directive sets out measures to improve energy efficiency across various sectors, including buildings, transport, and industry.

▪The EED has significant implications for the construction industry, especially building standards and regulations. Member States must establish minimum energy performance requirements for new buildings and major renovations, ensuring that new constructions meet higher energy efficiency standards. This encourages the construction industry to adopt energy-efficient technologies and practices in their projects. The EED also emphasises the importance of renovating existing buildings to improve energy performance. Member states are encouraged to set renovation targets and develop long-term strategies to increase the energy efficiency of buildings. This creates opportunities for the construction industry to engage in retrofitting projects implementing energy-saving measures in older structures.

ENERGY EFFICIENCY OF BUILDINGS

▪One of the major requirements set by Art. 6(1) of the EED (*Purchasing by public bodies*) requires Member States to ensure that central governments purchase only products, services, and buildings with high energy-efficiency performance insofar as that is consistent with cost-effectiveness, economic feasibility, wider sustainability, technical suitability, as well as sufficient competition. Furthermore, public bodies at regional and local levels must be encouraged to follow the exemplary role of their central governments.

ENERGY EFFICIENCY OF BUILDINGS

▪The **2018 amendment** introduced several fundamental changes. First, the amended Directive sets **a new binding energy efficiency target** for the EU, aiming for an energy efficiency increase of at least 32.5% by 2030. This headline energy efficiency target replaced the original EED's non-binding target of 20%. However, it is still non-binding, and its achievement relies strongly on the savings resulting from the implementation of national measures, which must be reported to the Commission and EU legislation such as the 2010 EPBD.

▪There are additional links between the EED and the 2010 EPBD. For example, while the EED requires the Member States to establish clear and transparent criteria for energy audits and energy auditors and promote the availability of these to all final energy consumers, for the building sector, the 2010 EPBD requires financial support to be linked to targeted or achieved energy savings – and those savings can be documented by different tools, including with an energy audit according to the EED.

ENERGY EFFICIENCY OF BUILDINGS

- Second, the amendment required EU member states to establish indicative **national energy efficiency targets** for 2030. These targets should be calculated based on methodologies set out in Annex IV of the amended Directive. The **energy savings obligation,** extended beyond 2020 (originally in force only for 2014–2020), requires Member States to save a certain amount of energy annually by either stablishing an energy efficiency obligation scheme or adopting alternative measures that achieve the same effect.

- The amendment also introduced a new requirement for **public bodies to lead by example in renovating** at least 3% of their total floor area to meet minimum energy performance requirements each year. Besides emphasis on public bodies, there is a strong social element in the EED as the Member States must implement measures addressing vulnerable households, including those affected by energy poverty, and, where appropriate, social housing.

TARGETS OF SELECTED EU ENERGY LEGISLATION RELEVANT FOR PUBLIC CONSTRUCTION LAW				
	2010 EPBD	**EED**	**RED II**	**AFIR**
Main requirements	State level: Supporting building renovation – long term renovation strategies, mobilisation of investment, advisory tools	2030 energy efficiency target of 32,5%, energy savings obligations beyond 2020 (Art. 7)	2030 renewable energy target of 32%	requirements on recharging points and alternative fuel refuelling points for the cars, planes and ships
Public construction law	minimum energy performance requirements for new buildings, major renovations, and existing buildings undergoing renovation; target for all new buildings to be nearly zero-energy buildings by a specific date; requires that all buildings being constructed, sold, or rented must have an Energy Performance Certificate	requires Member States to establish minimum energy performance requirements for new buildings and major renovations, ensuring that new constructions meet higher energy efficiency standards	renewable energy in buildings	implied (flexibility)
Public participation	no	no	no	no

ENERGY EFFICIENCY OF BUILDINGS OUTLOOK

Emissions-reduction targets

- All new buildings should be **zero-emission as of 2030**, while new buildings occupied or owned by public authorities should be **zero-emission as of 2028**. When calculating the emissions, Member States will **take into account the life-cycle global warming potential of a building**.
- For residential buildings, Member States will have to put in place **measures to ensure a reduction in the average primary energy use of at least 16% by 2030 and at least 20 to 22% by 2035.**
- Member States will have to **renovate the 16% worst-performing non-residential buildings** by 2030 and, by 2033, the worst-performing 26% through minimum energy performance requirements.
- If technically and economically suitable, Member States would have to **deploy solar installations progressively in public and non-residential buildings**, depending on their size, and in all **new residential buildings by 2030**.

Phasing out fossil fuel boilers

- Member States have to outline how they will adopt measures to decarbonise heating systems, to **phase out fossil fuels in heating and cooling by 2040**. Subsidising stand-alone fossil fuel boilers will be prohibited as of 2025.
- Financial incentives will still be possible for hybrid heating systems that use a considerable share of renewable energy, such as those combining a boiler with a solar thermal installation or a heat pump.

Exemptions

- Agricultural buildings and heritage buildings can be excluded from the new rules, while EU countries may decide to also exclude buildings protected for their special architectural or historical merit, temporary buildings, and churches and places of worship.

THANK YOU FOR YOUR ATTENTION!

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