



ENERGY EFFICIENCY

Reducing energy consumption and waste is of growing importance to the EU. In 2007, EU leaders set a target to cut the annual energy consumption of the EU by 20% by 2020. Energy efficiency measures are increasingly recognised as a means not only to achieve a sustainable energy supply, cut greenhouse gas emissions, improve security of supply and reduce import bills, but also to promote the EU's competitiveness. Energy efficiency is therefore a strategic priority for the Energy Union, and the EU promotes the principle of 'energy efficiency first'. The future policy framework for the post-2030 period is under discussion.

LEGAL BASIS

Article 194 of the Treaty on the Functioning of the European Union (TFEU).

ACHIEVEMENTS

A. General framework

The Commission launched its first 'Action Plan for Energy Efficiency: Realising the Potential' ([COM\(2006\) 0545](#)) in 2006. It was intended to mobilise the general public, policymakers and market actors, and transform the internal energy market in a way that would provide EU citizens with the most energy-efficient infrastructure (including buildings), products (including appliances and cars) and energy systems in the world. The objective of the Action Plan was to control and reduce energy demand and to take targeted action on consumption and supply in order to reduce annual consumption of primary energy by 20% by 2020 (compared with the energy consumption forecasts for 2020). Nonetheless, when estimates suggested that the EU was on course to achieve only half of the 20% objective, the Commission responded by setting energy efficiency goals as headline targets of the Europe 2020 strategy for smart, sustainable and inclusive growth, and by developing a new and comprehensive Energy Efficiency Plan (EEP) in 2011 ([COM\(2011\) 0109](#)).

The current energy efficiency framework consists of a number of directives, the revision of which is either ongoing or planned. The Energy Efficiency Directive ([2012/27/EU](#)), which entered into force in December 2012, requires Member States to set indicative national energy efficiency targets in order to ensure that the EU reaches its headline target of reducing energy consumption by 20% by 2020. Member States are free to make these minimum requirements more stringent as they strive to save energy. The directive also introduces a binding set of measures to help Member States achieve this target and sets legally binding rules for end-users and energy suppliers. Further energy



efficiency standards for products and buildings were set with the Ecodesign Directive ([2009/125/EC](#)), the Energy Efficiency Labelling Directive ([2010/30/EU](#)) and the Energy Performance of Buildings Directive ([2010/31/EU](#)).

In 2014, the Commission published a communication ([COM\(2014\) 0520](#)) on energy efficiency, in which it concluded that additional efforts on the part of the Member States would be needed, after its analysis had shown that the EU would only be able to achieve energy savings of around 18-19% by 2020. According to the Energy Efficiency Directive implementation progress report ([COM\(2015\) 0574](#)), published on 18 November 2015, the Member States were on track to achieve primary energy savings of only 17.6% by 2020. As a consequence, the 2015 Energy Union roadmap ([COM\(2015\) 0572](#)) announced a review of the energy efficiency directives.

On 30 November 2016, the Commission presented the Clean Energy for all Europeans ([COM\(2016\) 0860](#)) package of proposals with the aim of bringing EU energy legislation into line with the new 2030 climate and energy targets and contributing to the 2015 Energy Union goals ([COM\(2015\) 0080](#)). 'Energy efficiency first' is one of the key principles of the Energy Union, intended to ensure secure, sustainable, competitive and affordable energy supply in the EU. In the revised directive, the Commission proposed an ambitious 30% energy efficiency target by 2030. In January 2018, Parliament amended the Commission's proposal for the revised Energy Efficiency Directive, in an effort to make the proposal more ambitious overall. Following negotiations with the Council, an agreement was reached in November 2018, which sets a target of reducing energy consumption by 32.5% by 2030 at EU level.

B. Cogeneration

A previous Cogeneration Directive (2004/8/EC) was repealed when the Energy Efficiency Directive entered into force in December 2012. The Energy Efficiency Directive requires Member States to assess and notify the Commission of the potential for high-efficiency cogeneration and district heating and cooling on their territory and to conduct a cost-benefit analysis based on climate conditions, economic feasibility and technical suitability (with some exemptions). In the framework of the Energy Union package, the Commission launched an EU Strategy on Heating and Cooling ([COM\(2016\) 0051](#)) on 16 February 2016. The strategy includes plans to boost the energy efficiency of buildings, improve linkages between electricity systems and district heating systems, which will greatly increase the use of renewable energy, and encourage reuse of waste heat and cold generated by industry. Legislative provisions for this strategy are included in the Clean Energy for all Europeans package.

C. Energy performance of buildings

[Directive 2010/31/EU](#) on the energy performance of buildings contains several provisions to improve the energy efficiency of both new and existing buildings. Key provisions of the directive include requirements with regard to:

- The common general framework for a methodology for calculating the integrated energy performance of buildings and building units;



- Applying minimum energy performance requirements to new buildings and new building units, establishing, for instance, that by 31 December 2020 all new buildings must be nearly zero-energy;
- Applying minimum energy performance requirements to, in particular: existing buildings, building elements that are subject to major renovation, and technical building systems whenever they are installed, replaced or upgraded;
- Energy certification of buildings or building units, regular inspection of heating and air-conditioning systems in buildings and independent control systems for energy performance certificates and inspection reports.

On 30 November 2016, the Commission presented a proposal for a review of the Energy Performance of Buildings Directive (2010/31/EU), as part of the broader Clean Energy for all Europeans ([COM\(2016\) 0860](#)) package, that should help to deliver on the EU 2030 energy and climate goals. According to data from the Commission, buildings account for 40% of energy consumption and 36% of CO₂ emissions in the EU. Currently, about 35% of buildings in the EU are over 50 years old. By improving the energy efficiency of buildings, the total energy consumption in the EU could be reduced by 5-6% and CO₂ emissions by about 5%.

The directive requires Member States to establish long-term national strategies to support renovations of their national buildings. The directive sets out to ensure a highly energy-efficient and decarbonised building stock in each Member State, as a cost-effective contribution to achieving the energy efficiency targets for Europe — such as reducing CO₂ emissions in the EU by 80-95% compared to 1990.

In addition, a ‘Smart Finance for Smart Buildings ([COM\(2016\) 0860 — Annex I](#)) initiative was presented at the same time. It analyses how to stimulate public and private investment concerning the energy efficiency of buildings and is intended to send a signal of confidence to the market and encourage investors to engage with energy efficiency.

D. Energy efficiency of products

With regard to the energy efficiency of products, several measures have been introduced at EU level, including, inter alia, measures for the:

- Indication, through labelling and standard product information, of the consumption of energy and other resources by ‘energy-related products’, which have a significant direct or indirect impact on energy consumption, which is governed by [Framework Directive 2010/30/EU](#). Specific directives and regulations set out requirements for various household appliances. The labelling of office equipment and the labelling of tyres are covered by separate regulations;
- Ecodesign requirements for energy-using products, governed by [Framework Directive 2009/125/EC](#), recasting Directive 2005/32/EC as amended by Directive 2008/28/EC. Implementing regulations cover a wide range of products, including heaters, vacuum cleaners, computers, air conditioners, dishwashers, lighting products, refrigerators and freezers, televisions and electric motors.



As part of the Energy Union strategy ([COM\(2015\) 0080](#)) announced in February 2015, the Commission proposed to review the above-mentioned energy efficiency directives for products. [Regulation 2017/1369](#), published in July 2017, sets a new framework for energy efficiency labelling in order to establish deadlines to replace the current A+, A++ and A+++ classes with an A to G scale.

ROLE OF THE EUROPEAN PARLIAMENT

Parliament has continuously called for more ambitious energy efficiency targets and stricter regulations. In its resolution of 15 December 2010 on the revision of the Energy Efficiency Action Plan ([P7_TA\(2010\)0485](#)), Parliament made it clear that a binding target on energy efficiency of at least 20% by 2020 should be adopted.

In 2012, Parliament played a key role in the negotiation of the Energy Efficiency Directive ([COD/2011/0172](#)) and ensured that the requirements for national building renovation strategies and mandatory energy audits for large companies were kept in the final compromise agreed with the Council. It also succeeded in keeping an amendment calling for rules on demand response mechanisms, which allow energy consumers to adjust their energy use to supply conditions and thus reduce their energy bills.

In 2013, Parliament adopted a resolution on the implementation and impact of the energy efficiency measures under Cohesion Policy ([P7_TA\(2013\)0345](#)), welcoming new opportunities offered by the European Structural and Investment Funds, especially in the building sector. Parliament called for awareness-raising measures and information dissemination, and stressed the need for capacity-building and technical assistance in this area.

More recently, Parliament has repeatedly appealed to the Commission and the Member States — in its resolutions on a 2030 framework for climate and energy policies ([P7_TA\(2014\)0094](#)), the 2014 UN Climate Change Conference — COP 20^[1] in Lima, Peru ([P8_TA\(2014\)0063](#)) and towards a new international climate agreement in Paris ([P8_TA\(2015\)0359](#)) — to set a binding 40% reduction in energy consumption and greenhouse gas emissions target, with accompanying individual national targets. All three resolutions make clear that an ambitious energy efficiency target would bring jobs and savings, increase economic competitiveness, boost innovation, reduce dependency on energy imports and increase energy security. Following the European Council's adoption of a 27% target on 23 October 2014, Parliament aims at setting an ambitious target for energy efficiency. On 17 January 2018, it supported a reduction of 40% in EU energy consumption by 2030^[2]. On 23 June 2016, Parliament adopted a resolution on the implementation report on the Energy Efficiency Directive ([P8_TA\(2016\)0293](#)) and concluded that the existing directive, despite offering a framework for reducing the energy demand, had been poorly implemented. It called on the Member States to implement it rapidly and fully. In addition, it argued that a serious energy efficiency policy could enable the EU to reach its energy and climate goals in line with the 2016 Paris

[1]COP 20 refers to the 20th Universal Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to combat climate change ([2.5.2](#) — Climate change and the environment).

[2]<http://www.europarl.europa.eu/news/en/press-room/20180112IPR91629/meps-set-ambitious-targets-for-cleaner-more-efficient-energy-use>



Agreement at the COP 21, and help it improve energy security by reducing dependence on external energy sources.

In November 2016, the Commission presented a proposal to amend Directive 2012/27/EU on energy efficiency. The amended Energy Efficiency Directive was then adopted by Parliament and the Council in December 2018.

On 13 September 2016, Parliament adopted a resolution on an EU Strategy on Heating and Cooling ([P8_TA\(2016\)0334](#)), calling on the Commission to focus action on energy efficiency measures in buildings, especially in energy-poor households.

On 6 February 2018, Parliament adopted a series of non-legislative recommendations drafted by the Industry, Research and Energy Committee (ITRE). Parliament supports education schemes to help European citizens understand how they can conserve more energy. Furthermore, Parliament is in favour of an increase of at least 50% in financing for low-emission energy projects^[3].

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[3]<http://www.europarl.europa.eu/news/en/press-room/20180202IPR97028/clean-energy-innovation-needs-a-change-of-mind-set>

