ENERGY POLICY: GENERAL PRINCIPLES

Challenges facing the EU in the field of energy include issues such as increasing import dependency, limited diversification, high and volatile energy prices, growing global energy demand, security risks affecting producing and transit countries, the growing threats of climate change, decarbonisation, slow progress in energy efficiency, challenges posed by the increasing share of renewables, and the need for increased transparency, further integration and interconnection in energy markets. A variety of measures aiming to achieve an integrated energy market, security of energy supply and a sustainable energy sector are at the core of the EU’s energy policy.

LEGAL BASIS

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

Specific provisions:
— Security of supply: Article 122 of the TFEU;
— Energy networks: Articles 170-172 of the TFEU;
— Coal: Protocol 37 clarifies the financial consequences resulting from the expiry of the Treaty establishing the European Coal and Steel Community in 2002;
— Nuclear energy: the Treaty establishing the European Atomic Energy Community (Euratom Treaty) serves as the legal basis for most EU actions in the field of nuclear energy.

Other provisions affecting energy policy:
— Internal energy market: Article 114 of the TFEU;
— External energy policy: Articles 216-218 of the TFEU.

OBJECTIVES

According to the Energy Union (2015), the five main aims of the EU’s energy policy are to:
— Diversify Europe’s sources of energy, ensuring energy security through solidarity and cooperation between EU countries;
— Ensure the functioning of a fully integrated internal energy market, enabling the free flow of energy through the EU through adequate infrastructure and without technical or regulatory barriers;
— Improve energy efficiency and reduce dependence on energy imports, cut emissions, and drive jobs and growth;
— Decarbonise the economy and move towards a low-carbon economy in line with the Paris Agreement;
— Promote research in low-carbon and clean energy technologies, and prioritise research and innovation to drive the energy transition and improve competitiveness.

Article 194 of the TFEU makes some areas of energy policy a shared competence, signalling a move towards a common energy policy. Nevertheless, each Member State maintains its right to ‘determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply’ (Article 194(2)).

ACHIEVEMENTS

A. General policy framework

The current policy agenda is driven by the alignment of the EU energy targets to the climate targets of the new Fit For 55 package proposed in July 2021, including:
— A reduction of at least 55% in greenhouse gas emissions compared to 1990 levels by 2030;
— A reduction to net zero greenhouse gas emissions by 2050.

The comprehensive integrated climate and energy policy adopted by the European Council on 24 October 2014 and revised in December 2018 sets out to achieve these targets by 2030:
— An increase to 32% of the share of renewable energies in energy consumption;
— An improvement of 32.5% in energy efficiency;
— The interconnection of at least 15% of the EU’s electricity systems.

The new EU energy targets are currently being negotiated. These targets will be proposed for 2030:
— An increase of the share of renewable energies in energy consumption to 42-45%;
— A reduction of 40-42% for primary EU energy consumption and of 36-40% for final energy consumption.

Buildings Directive ((EU) 2018/844)), renewable energy (Renewable Energy Directive ((EU) 2018/2001)) and rules for the regulator, the EU Agency for the Cooperation of Energy Regulators (Regulation (EU) 2019/942 establishing ACER). The last element of the package, the Governance of the Energy Union Regulation, was finally adopted on 4 December 2019. Under the regulation, EU Member States need to establish 10-year integrated national energy and climate plans (NECPs) for the period from 2021 to 2030, submit a progress report every two years and develop consistent national long-term strategies to meet the goals of the Paris Agreement.

Decision (EU) 2019/504 introduced changes to the EU’s energy efficiency policy and the governance of the Energy Union in the light of the withdrawal of the United Kingdom from the EU. It made technical adjustments to the projected energy consumption figures for 2030 to correspond to the Union of 27 Member States.

On 14 July and 15 December 2021, the Commission published the Fit for 55 package, with the aim of reducing emissions by at least 55% by 2030 compared to 1990 levels, and making the EU carbon-neutral by 2050. This large package consists of a revision of all existing EU acts on climate and energy, including the Renewable Energy Directive (COM(2021)0557), the Energy Efficiency Directive (COM(2021)0558), the Energy Taxation Directive (COM(2021)0563), the energy performance of buildings directive (COM/2021/802), the gas directive (COM/2021/803) and regulation (COM/2021/804). It also includes new proposals, such as the regulation on the deployment of alternative fuels infrastructure (COM(2021)0559), the ReFuelEU Aviation Initiative (COM(2021)0561) and the FuelEU Maritime Initiative (COM(2021)0562).

On 18 May 2022, the European Commission presented its REPowerEU plan (COM/2022/0230) as a response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine. The plan seeks to both end the EU's dependence on Russian fossil fuels and make further progress in tackling the climate crisis.

B. Completing the internal energy market

A fully integrated and properly-functioning internal energy market ensures affordable energy prices, gives the necessary price signals for investments in green energy, secures energy supplies and opens up the least costly path to climate neutrality.

The internal energy market legislation was first introduced in the Third Energy Package (2009-2014), covering five areas: unbundling; national independent regulators; cooperation; ACER; and fair retail markets. In order to improve cross-border cooperation the package created the European Networks for Transmission System Operators for Electricity (ENTSO-E) and the European Networks for Transmission System Operators for Gas (ENTSO-G). It included, among others, Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency, and the Trans-European Networks for Energy (TEN-E) policy, based on Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure.

The Fourth Energy Package (2015-2020), entitled ‘Clean energy for all Europeans’, focused on electricity market design (Electricity Directive, Electricity Regulation, Risk-Preparedness Regulation, ACER Regulation). It introduced new electricity rules on energy storage, incentives for consumers aiming to contribute to the better functioning
of the internal energy market, 10-year national energy and climate plans (NECPs) for 2021-30 and a reinforced role for ACER. In its final years, it also addressed Brexit (see fact sheet 2.1.9 on the internal energy market).

The Fifth Energy Package, entitled ‘Fit for 55’, was published in two parts on 14 July and 15 December 2021 and is currently under discussion. It aims to bring energy targets into line with the new European climate ambition of reducing emissions by at least 55% by 2030, compared to 1990 levels and becoming carbon neutral by 2050. It focuses mainly on renewables, energy efficiency, energy taxation, air and maritime transport and buildings.

In December 2021, the Commission proposed a revision (COM/2021/803, COM/2021/804) of the Gas Directive (2009/73/EC) and Gas Regulation ((EC) No 715/2009). This revision also proposes a regulatory framework for competitive decarbonised gas markets, including the design and development of the new EU hydrogen market.

On 18 May 2022, as part of its REpowerEU plan (COM/2022/0230), the Commission proposed a target of 10 million tonnes of domestic renewable hydrogen production and 10 million tonnes of imports by 2030 to replace natural gas, coal and oil in hard-to-decarbonise industries and transport sectors. On 14 September 2022, the Commission proposed an emergency intervention in Europe’s energy markets (COM/2022/473) to tackle recent dramatic price rises. This consisted of exceptional electricity demand reduction measures and measures to redistribute the energy sector’s surplus revenues to final customers.

C. Energy Efficiency

The cornerstone of EU energy efficiency policy is Directive 2012/27/EU on energy efficiency, which establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. The directive also introduced energy savings targets and many energy efficiency policies, including on energy efficient renovations and mandatory energy certificates for buildings, minimum energy efficiency standards for a variety of products, energy efficiency labels and smart meters, as well as setting out consumers’ rights. In December 2018, the revised Energy Efficiency Directive/2018/2002/EU increased the overall EU energy efficiency target for 2030 to at least 32.5%, measured against 2007 baseline projections.

In July 2021, the Commission proposed a revised Energy Efficiency Directive (COM/2021/558), which increases the 2030 energy efficiency targets to 39% for primary energy consumption and 36% for final energy consumption, measured against 2007 baseline projections. It also sets Member States’ annual energy savings obligations at 1.5% of their final energy consumption from 2024 to 2030.

As part of its Repower EU plan (COM/2022/0230), in May 2022, the Commission proposed revising energy efficiency targets (COM/2022/222) in order to phase out imports of Russian fossil fuels by means of a reduction in energy consumption of at least 13% in 2030 measured against 2007 baseline projections (in absolute terms, to no more than 750 million tonnes of oil equivalent (Mtoe) and 980 Mtoe of EU final and primary energy consumption by 2030). The proposal, currently under negotiation,
includes a range of reduction targets of 40-42% and of 36-40% for the EU primary and final energy consumption.

The amended Energy Performance of Buildings Directive (Directive (EU) 2018/844) sets out roadmaps with indicative milestones for 2030, 2040 and 2050 and long-term strategies for Member States to support the renovation of the national stock of residential and non-residential buildings, both public and private, with a view to creating a highly energy-efficient and decarbonised building stock by 2050. In October 2020, the Commission published the new renovation wave strategy (COM(2020)0662), which aims to double annual energy renovation rates in the next ten years.

In July 2021, the Commission proposed a revised Energy Performance of Buildings Directive (COM/2021/802) increasing the rate of renovation, particularly for the worst performing buildings in each country, replacing long-term renovation strategies with national building renovation plans, and introducing minimum EU-level efficiency standards.

The EU Ecodesign Directive (Directive 2009/125/EC) and the Energy Labelling Framework Regulation (Regulation (EU) 2017/1369) define ecodesign and energy labelling requirements for individual product groups (see fact sheet 2.4.8 on energy efficiency).

D. Renewable Energy

Solar power, onshore and offshore wind, ocean and hydropower, biomass and biofuels and hydrogen are all renewable energy sources. Energy markets alone cannot deliver the desired level of renewables in the EU, meaning that national support schemes and EU financing schemes may be needed. One of the agreed priorities of the May 2013 European Council was to intensify the diversification of the EU’s energy supply and to develop local energy resources in order to ensure security of supply and reduce external energy dependency. With regard to renewable energy sources, Directive 2009/28/EC of 23 April 2009 introduced a 20% target to be reached by 2020.

In December 2018, the new Renewable Energy Directive (Directive (EU) 2018/2001) set the EU’s binding overall renewable energy target for 2030 at minimum 32%. On 19 November 2020, the Commission unveiled the EU Strategy on Offshore Renewable Energy (COM/2020/741), stepping up efforts to make the Union climate neutral by 2050. The Strategy proposes to increase Europe’s offshore wind capacity from its current level of 12 GW to at least 60 GW by 2030 and to 300 GW by 2050. Different strategies exist to boost the uptake of each renewable source (see fact sheet 2.4.9 on renewable energy).

In July 2021, a proposal (COM(2021)0557) for a new Renewable Energy Directive set out to increase the overall renewable energy target to 40% by 2030. In May 2022, in line with the REPowerEU plan (COM/2022/0230) aiming to phase our Russian fossil fuels, the Commission proposed increasing the renewable energy target currently under negotiation to 45% by 2030. More specifically, the Commission has presented a solar strategy (COM/2022/0221) to double solar photovoltaic capacity by 2025 by installing 600 GW by 2030. It also sets targets for renewable hydrogen production to be achieved by 2030 (10 million tonnes for domestic production and 10 million tonnes of imports),
proposes a biomethane action plan to increase production to 35 billion cubic meters (bcm) by 2030 and shortened and simplified permitting processes.

E. Strengthening external energy relations

The EU established an information exchange mechanism in 2012 to facilitate coordination between EU countries and non-EU countries and to ensure that EU law is respected (Decision 994/2012/EU). It requires EU countries to submit all existing international energy agreements to the Commission for assessment and requires a certain level of information exchange among EU Members States.

The Commission responded to the Russian invasion of Ukraine in its REPowerEU communication (COM/2022/108) of 8 March 2022 by proposing reductions in fossil gas use by at least 155 bcm, which is equivalent to the volume imported from Russia in 2021, with the aim of achieving nearly two thirds of the reduction within a year.

In May 2022, in line with the REPowerEU plan (COM/2022/0230) aiming to phase our Russian fossil fuels, the Commission worked with international partners to diversify supplies and secured liquefied natural gas (LNG) imports and higher pipeline gas deliveries from international partners. It created an EU Energy Platform, a voluntary coordination mechanism supporting the purchase of gas and hydrogen for the EU and published an EU External Energy Strategy (JOIN/2022/23) supporting Ukraine, Moldova, the Western Balkans and Eastern Partnership countries, as well as the EU’s most vulnerable partners.

F. Improving security of energy supply

As part of the ‘Clean energy for all Europeans’ package, Regulation (EU) 2019/941 on risk-preparedness in the electricity sector requires the EU Member States to cooperate with each other to ensure that, in an electricity crisis, electricity goes where it is most needed. The regulation ensures that the Member States put in place the appropriate tools to prevent, prepare for and manage possible electricity crises in a spirit of solidarity and transparency.

In the light of the crucial importance of gas and oil for the security of the EU’s energy supply, the EU has adopted several measures to ensure that risk assessments are carried out and that adequate preventive action plans and emergency plans are developed. In 2017, the security of Gas Supply Regulation (Regulation (EU) 2017/1938) introduced gas security safeguards and enhanced prevention, solidarity, and crisis response mechanisms. Under the EU’s Oil Stocks Directive (Directive 2009/119/EC), Member States are required to maintain minimum oil stocks, corresponding to either 90 days of average daily net imports or 61 days of average daily inland consumption, whichever is greater. The Commission has proposed extending the scope of application of the Gas Directive (Directive 2009/73/EC) to pipelines to and from third countries, including existing and future pipelines (COM(2017)0660). The Gas Directive was amended in 2019 by Directive (EU) 2019/692, ensuring that the rules governing the EU internal gas market apply to gas transmission lines between a Member State and a third country, with derogations for existing pipelines. Special provisions exist under the Directive on Safety of Offshore Oil and Gas Operations (Directive 2013/30/EU). Regulation (EU) 2017/1938 provides...
for enhanced regional cooperation, regional preventive action plans and emergency plans, and a solidarity mechanism to safeguard the security of the gas supply.

The priority of security of supply in the EU energy market increased dramatically after the Russian invasion of Ukraine in February 2022. On 8 March 2022, the EU REPoWerEU Communication (COM/2022/108), proposed several measures to address the weaponisation of Russian oil and gas, such as gas supply interruptions to several EU Member States. On 23 March 2022, the Commission published a communication on security of supply and affordable energy prices (COM/2022/138) and a proposal for a new regulation on gas storage (COM/2022/135). The proposed gas storage regulation introduced a minimum 80% gas storage level obligation by 1 November 2022, increasing gas storage levels to 90% for the following years, intermediary targets, and a new certification process to reduce the risks of outside interference. On 18 May 2022, the REPowerEU plan (COM/2022/0230) operationalised the end of the EU dependence on Russian fossil fuels, through energy savings, diversification of energy supplies, and accelerated rollout of renewable energy. On 27 June 2022, the Gas Storage Regulation (EU) 2022/1032 introducing minimum gas storage levels obligations was adopted in record time.

Given the risk of further gas supply cuts from Russia, in July 2022 the Commission proposed a new Council Regulation on coordinated demand reduction measures for gas (COM/2022/361) to reduce gas use in Europe by 15% by spring 2023. It also published the EU ‘Save Energy Communication’ (COM/2022/240), with numerous options for short-term savings, such as targeted lowering of heating and cooling in public buildings.

As part of the European Green Deal, the proposed Just Transition Fund (COM(2020)0022) supports coal and carbon-intensive regions in making the transition to low-carbon energy sources.

The energy infrastructure of EU countries is covered by the TEN-E policy (Regulation (EU) No 347/2013), which focuses on linking the energy infrastructure of EU countries and identifies nine priority corridors (four electricity corridors, four gas corridors and one oil corridor) and three priority thematic areas (smart grids, electricity highways, cross-border carbon dioxide networks) to develop better-connected EU energy networks. The TEN-E is funded by the energy part of the Connecting Europe Facility 2021-2027 (Regulation (EU) 2021/1153).

The Regulation on the Governance of the Energy Union (2018/1999) set an interconnection target of at least 15% by 2030 to encourage EU countries to interconnect their installed electricity production capacity. The 15% cross-border capacity ratio was calculated by dividing import capacity by EU countries’ installed generation capacity.

In April 2022, the co-legislators adopted the new TEN-E Regulation (EU) 2022/869, in line with the Union’s 2030 and 2050 energy and climate objectives. The Regulation identified the EU projects of common interest (5th PCI list) and projects of mutual interest (PMIs), connecting the EU with third countries, ended support for new natural gas and oil projects and introduced mandatory sustainability criteria for all projects.
G. Research, development and demonstration projects

Horizon Europe (Regulation (EU) 2021/695) is the framework programme running from 2021 to 2027. It is the main EU tool for promoting energy research, with a budget of EUR 95.5 billion (in 2018 prices), including EUR 5.4 billion from the NextGenerationEU programme.

Adopted in 2007, the European strategic energy technology plan (SET-Plan), aimed to accelerate the market introduction and take-up of a climate neutral energy system through the adoption of low-carbon technologies. The plan identified 10 actions for research and innovation (renewable technologies, reducing costs of technologies, new technologies and services for consumers, resilience and security of energy systems, new materials and technologies for buildings, energy efficiency for industry, competitiveness in the global battery sector and e_mobility, renewable fuels and bioenergy, carbon capture and storage, and nuclear safety), covers the whole innovation chain, including financing and the regulatory framework, and had an overall governance structure.

Owing to the major role of electricity in decarbonisation, batteries as electricity storage devices have been identified as key enabler technologies of a low-carbon economy. The EU legislation on waste batteries is embodied in the Batteries Directive (Directive 2006/66/EC). The strategic action plan on batteries (COM(2018)0293) aims at building a globally integrated, sustainable and competitive industrial base for batteries.

On 10 December 2020, the Commission proposed (COM(2020)0798) a new Batteries Regulation to ensure that batteries entering the EU market are sustainable and safe throughout their entire life cycle. Interinstitutional negotiations on the battery regulation are currently ongoing.

ROLE OF THE EUROPEAN PARLIAMENT

Parliament has always expressed its strong support for a common energy policy addressing decarbonisation, competitiveness, security and sustainability issues. It has called numerous times for coherence, determination, cooperation and solidarity between Member States in facing current and future challenges in the internal market and for the political commitment of all Member States, as well as a strong initiative from the Commission as regards progress towards the 2030 and 2050 objectives.

Parliament has been striving for greater energy market integration and the adoption of ambitious, legally binding targets for renewable energy, energy efficiency and greenhouse gas reductions. In this connection, Parliament supports the adoption of stronger commitments to the EU’s own targets, underlining the fact that the new energy policy must support the objective of reducing the EU’s greenhouse gas emissions and reaching climate neutrality by 2050.

Parliament’s latest resolutions on energy have seen an increase in the relevance of all climate and environmental objectives underpinning EU energy policy: on 28 November 2019, it declared the climate and environmental emergency in Europe[1]; on 15 January 2020, it confirmed the European Green Deal as the climate rationale for the Energy

Union's targets[2]; on 10 July 2020 it urged the Commission to update the guidelines for the trans-European energy infrastructure, bringing it into line with the new EU climate policy[3]. On 8 October 2020, Parliament voted to enter into negotiations with the Council to set an overall target of a 60% reduction in greenhouse gas emissions by 2030 and to phase out all direct and indirect fossil fuel subsidies by 2025 at the latest[4]. As a reaction to the COVID-19 pandemic, green and digital strategies have been reaffirmed as the cornerstones of a more integrated, robust and efficient EU Energy Union.

Parliament has adopted the following key positions on the Russian invasion of Ukraine and the ensuing energy crisis:

— On 1 March 2022, Parliament condemned Russia's illegal, unprovoked and unjustified military aggression against Ukraine and Russia's invasion of Ukraine[5].

— On 7 April 2022, it called for an immediate full embargo on Russian imports of oil, coal, nuclear fuel, and gas[6].

It has also adopted several other resolutions on specific aspects of the conflict: welcoming the Commission’s formal recommendation to grant EU candidate status to Ukraine; Moldova and a European perspective for Georgia; enhancing the EU’s protection of children and young people fleeing the war in Ukraine; the impact of the war against women.

Parliament has adopted the following positions on the current Fit for 55 package:

— On 14 September 2022, Parliament supported more ambitious Energy Efficiency targets than the Commission’s original proposal of July 2021[7], equivalent to a 40% reduction in final energy consumption and a 42.5% reduction in primary energy consumption, corresponding to absolute upper limits of 740 Mtoe and 960 Mtoe respectively. This is slightly more ambitious than the revised targets proposed in May 2022 by the Commission in its RepowerEU plan.

— On 14 September 2022, Parliament supported a more ambitious Renewable Energy target of 45% renewable energy sources in final energy consumption by 2030[8]. This is consistent with the RepowerEU plan to phase out energy imports from Russia and accelerate the deployment of renewable energies.

Parliament also supports the diversification of energy sources and routes of supply. It has stressed the importance of the gas and electricity interconnections through central and south-eastern Europe along a north-south axis for creating more interconnections, diversifying LNG terminals and developing pipelines, thereby opening up the internal market.

In highlighting the significant role of research in ensuring a sustainable energy supply, Parliament stressed the need for common efforts in the field of new energy technologies.

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and both renewable energy sources and sustainable fossil fuel technologies, as well as for additional public and private funding to ensure the successful implementation of the plan.

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