



**7** AFFORDABLE AND  
CLEAN ENERGY



**Ensure access to affordable, reliable,  
sustainable and modern energy for all**



# | EU internal action

## Overview and challenges

Energy transition is at the heart of the European Green Deal. Since 2015, solid progress has been and continues to be made towards SDG 7. The share of renewable energy consumption rose from 17.5 % in 2015 to almost 22.1 % in 2020, exceeding the target of 20 %. In 2021, the share of renewable energy fell slightly to 21.8 %. Similarly, the EU was able to achieve its 2020 energy efficiency target of a 20 % reduction in energy consumption compared to 2007. However, in 2021, energy consumption bounced back after the COVID-19 pandemic; additional long-term energy efficiency improvements seem necessary to ensure the EU meets its current 2030 target of increasing energy efficiency by at least 32.5 % compared to 2007.

Despite notable progress, challenges remain as regards energy poverty, further exacerbated by the energy price crisis experienced in the EU. The EU has managed to lower the percentage of the population that was unable to keep their home sufficiently warm; nevertheless, over 34 million people experience some sort of energy poverty.

The unprovoked Russian military aggression on Ukraine of February 2022 has reinforced the sense of urgency for the EU to ensure its energy security and end its dependence on Russian fossil fuels, while tackling the ongoing climate crisis. The EU's response to this crisis – especially through the REPowerEU plan — has already had an impact on energy supply, by diversifying energy imports, increasing the share of renewable energy in gross final energy consumption, and increasing energy saving and efficiency efforts.

## Key initiatives

The EU has a wide range of legislation, strategies, policies, initiatives and tools in place to contribute to the implementation of SDG 7.

**Energy Union:** Adopted in 2015, the Energy Union strategy aimed to set an overarching EU framework to provide secure, affordable and clean energy for EU citizens and businesses. The [seventh report on the state of the energy union](#), published in October 2022, highlighted the challenges that the energy sector faced in the previous 12 months. It took stock of the EU's energy policy response to the current energy crisis and provided an analysis of the progress made in addressing both shorter-term issues and the EU's long-term energy and climate goals.

Adopted in 2019, this package of eight laws aims to decarbonise the EU's energy system. It introduced 2030 targets for renewable energy and energy efficiency, set up the governance system for the Energy Union and rules for the energy poverty monitoring and prevention of energy poverty. Member States were required to establish a 10-year [national energy and climate plan \(NECP\)](#) covering the period 2021 to 2030, set their contribution to the EU's 2030 energy and climate targets, and set out a strategy, policies and measures to achieve them. In 2023, Member States will submit to the Commission their first progress reports and update their national energy and climate plans in order to reflect the rapidly evolving geopolitical context and the EU's higher ambition in terms of decarbonisation, which have resulted in a significant changes to the EU's energy and climate policy..

# 2030 targets and trends at EU level

## Target and policy reference

32 % of renewable energy in gross final energy consumption

[Renewable Energy Directive \(EU\) 2018/2001](#)

32.5 % of energy efficiency in primary and final energy consumption

[Energy Efficiency Directive \(EU\) 2018/2002](#)

Reduce the share of households in energy poverty

Set in the [Directive \(EU\) 2019/944 on common rules for the internal market for electricity](#)

Greening of buildings: by 2050, all buildings will have to be net-zero

Energy performance of buildings Directive (EU) 2018/844

## Trends

The EU exceeded its 2020 target of 20 % and is on track to achieve the current 2030 target of 32 %. Negotiations among EU co-legislators ended in March 2023 with an agreement to increase the target to at least 42.5 % in 2030 with the aim to reach 45 %.

The share of renewables in the electricity mix is expected to grow from 37 % in 2021 to 69 % in 2030.

The EU achieved its 2020 target of 20 % energy efficiency by 2020 compared to the 2007 scenario. Without the 2020 economic slowdown, most probably the EU would not have met its energy efficiency target. In 2021 and after the COVID-19 pandemic, energy consumption bounced back but still a decrease from the pre-pandemic levels was recorded. Additional long term energy efficiency improvements are necessary to ensure that the EU meets its 2030 target.

Following the political agreement on the Energy Efficiency Recast proposal the EU binding target is a reduction of 11.7 % of final energy consumption in 2030, compared with the energy consumption forecasts for 2030 made in 2020. This translates into an upper limit to the EU's final energy consumption of 763 million tonnes of oil equivalent and of 993 million tonnes of oil equivalent for primary consumption.

The share of people unable to afford to keep their homes adequately warm fell to 6.9 % in 2021 compared with 9.4 % in 2012, despite a small spike in 2020 as a consequence of the economic slowdown linked to the COVID-19 pandemic.

Energy performance of buildings Directive (EU) 2018/844

Since 2005, energy consumption per EU inhabitant has fallen by 9.3 %, with a slight downward trend in total household energy consumption offsetting a 2.8 % increase in the population over the same period.

The EU has launched a renovation wave across the EU to reach its target.

More details on indicators and trends for SDG 7 can be found in the statistical and analytical annex and Eurostat's monitoring report on progress towards the SDGs.

The European Green Deal package: This included amendments to nearly all the legislation under the clean energy for all Europeans package, notably reinforcing the provisions and the EU's ambition on renewable energy, energy efficiency and energy performance of buildings. It also put forward measures to set up a new decarbonised gas and hydrogen framework and a proposal to reduce methane emissions in the energy sector. The package is now at the final stages of negotiations between the co-legislators and should enter into force soon.

**The REPowerEU Plan**, launched in May 2022, sets out short- and long-term measures to phase out the EU's dependence on fossil fuels from Russia. These measures include diversification of supply, energy savings and efficiency, and an acceleration

of renewable energy capacity. With the REPowerEU plan, the Commission proposed to raise the 2030 renewable energy targets from 40 % and 45 %. In March 2023 negotiations among EU co-legislators ended with an agreement to increase the target to at least 42.5 % in 2030 with the aim to reach 45 %. It is also accompanied by a recommendation to speed up permitting for major renewable energy projects and a targeted amendment to the Renewable Energy Directive introducing dedicated go-to areas for renewables and recognising renewable energy sources as an overriding public interest.

Beyond accelerating the deployment of renewables, the Commission also proposed to raise the EU's 2030 energy efficiency target from 9 % to 13 %. Negotiations among



EU co-legislators ended in March 2023 with an agreement for an energy efficiency target of 11.7% in 2030 compared to 2020 scenario. Emphasising the principle of energy efficiency first is crucial both in achieving the clean energy transition and in phasing out our dependence on Russian fossil fuels.

Furthermore, in March 2023, the Commission published a proposal for the reform of the Electricity Market Design which has three main aims. The reform will make the energy bills of EU consumers and companies more independent from the short-term market price of electricity (very often driven by volatile fossil fuel costs). It will enable an accelerated deployment of renewables and the phase out of gas by facilitating further the integration of renewables in the electricity system, providing stable revenues for investors in renewable and low-carbon energy and improving conditions for the use of flexibility solutions such as demand response, and storage. Crucially, it also aims to improve consumer protection and further empower consumers. The Commission also proposed amendments to the Regulation on wholesale energy market integrity and transparency (REMIT) to provide better protection against market manipulation and abuse and enhance the transparency of the market.

As part of the REPowerEU plan, the Commission also proposed a number of amendments to the cohesion policy framework. This will enable Member States to use unspent funds under their 2014-2020 allocation to provide direct support to vulnerable families and small and medium-sized businesses to help them face increased energy costs (i.e. SAFE — Supporting Affordable Energy). This is a great opportunity for Member States to commit to investments and reforms pertaining to the acceleration of renewable energy projects permitting.

**Projects of common interest (PCI):** Through the [Trans-European Networks for Energy](#) linking the energy systems of EU countries, energy projects of common interest can benefit from accelerated permitting procedures and up to EUR 5.84 billion in funding from the [Connecting Europe Facility](#)

(CEF), a financing instrument of EUR 33.71 billion (2021-2027) to support investments in EU infrastructure networks. CEF Energy is financing the better interconnection of energy networks to develop a single EU energy market and to support the clean energy transition. Since 2014, CEF Energy has provided funding of EUR 5.7 billion to support 154 projects. In March 2022, the Commission launched the first CEF call for renewable energy cross-border projects. In May 2022, the Commission launched a new call for key cross-border energy infrastructure projects for projects included in the fifth EU list of projects of common interest.

Other EU policies also support the energy transition. The common agricultural policy contains objectives and measures that support farmers to produce renewable energy, such as biogas or inputs for bioethanol production.

The [European Pillar of Social Rights](#) lists energy among the essential services to which everyone should have access. In 2020, the Commission issued [recommendations on energy poverty](#) as part of the [renovation wave](#), proposing actions for Member States to alleviate [energy poverty](#). In July 2021, the Commission adopted the [Fit for 55 package](#), which includes specific measures to identify key drivers of energy poverty risks. As part of the package, a dedicated Social Climate Fund has been agreed so to abate the social impacts of the green transition on vulnerable households, micro-enterprises and transport users. In April 2022, the Commission established the [Energy Poverty and Vulnerable Consumers Coordination Group](#) to help Member States in tackling energy poverty.

## Selected enablers

The implementation of the REPowerEU plan will need additional investments of EUR 210 billion between now and 2027 to phase out Russian fossil fuel imports, on top of the financing needed to achieve the energy transition under the European Green Deal.



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The Recovery and Resilience Facility is at the heart of the REPowerEU plan implementation, providing additional EU funding. This facility was developed in 2020 to mitigate the economic and social impact of the coronavirus pandemic. To date, around EUR 108 billion in financing has been allocated to clean energy and energy efficiency measures.

Cohesion policy funds also provides significant support to energy efficiency improvements in buildings and housing, renewable energy and energy infrastructure outside the Trans-European Energy Network (smart energy systems, grids and storage). It therefore contributes to the achievement of a decarbonised building stock by 2050, thus reducing energy consumption and creating savings for households affected by energy poverty. For 2021-27 programmes and the Just Transition Fund, around EUR 47 billion of EU financing (leading to EUR 68 billion with national co-financing). Such investments will provide essential support to tackling the current energy crisis by boosting energy savings (particularly in buildings) and increasing energy security for the future via the further deployment of renewable energy production. Cohesion policy has already contributed EUR 28 billion of similar investment in 2014-2020.

The following instruments, among others, also support the energy transition and REPowerEU plan objectives.

- ▶ LIFE Clean Energy Transition (CET) — In May 2022, the LIFE call for proposals made available EUR 98 million for energy efficiency and clean energy projects. This call covers REPowerEU objectives, such as reduction in fossil fuel consumption for heating and accelerated deployment of energy efficiency solutions in housing, businesses and the public sector.
- ▶ The **Modernisation Fund** will contribute to the investment needs of the 10 lower-income EU countries: Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia. It supports investments in generation and use of energy from renewable energy sources, energy efficiency, energy storage, modernisation of energy networks, and the just transition in carbon-dependent regions. The total revenues of the fund may amount to some EUR 14 billion in 2021-2030, depending on the carbon price.
- ▶ Since 2011, the EIB-managed **ELENA facility** supports the development of energy efficiency and clean mobility projects. With a leverage factor of 33, it has an impressive capacity to attract private financing. In 2021, EUR 35.8 million was allocated to 18 new projects. These are expected to generate around 500 gigawatt hours of energy savings per year.
- ▶ The Social Climate Fund will help mitigate the costs of the energy transition for vulnerable households, microenterprises, and transport users. It will provide a total of EUR 65 billion over 7 years in funding for the

renovation of buildings, access to zero and low-emission mobility, or even temporary direct income support.

- ▶ The public sector loan facility, the third pillar of the [Just Transition Mechanism](#), is now operational. It supports regions most affected by the energy transition through grants and loans to accompany their economic conversion.
- ▶ In 2023, the first ever cross-border tender will take place under [the renewable energy financing mechanism](#). The tender will focus on solar photovoltaic projects. The mechanism will help unlock the EU's full renewable potential, and help Member States achieve the decarbonisation objective in a more cooperative manner.

The [Horizon Europe](#) programme allocated EUR 15 billion to support research and innovation in renewable energy technologies, energy efficiency, electrification of heating and cooling, and digitalisation of the energy system. For the energy performance of buildings, Horizon Europe is funding the following:

- ▶ the [BUILD UP initiative](#), a portal for sharing knowledge on how to make buildings more energy-efficient;
- ▶ the [4RinEU](#) project, which aims to provide new tools and strategies to encourage large-scale renovation of existing buildings and to promote the use of renewable energies (see [Home improvements for the planet](#)) and
- ▶ the EIT InnoEnergy, a Knowledge and Innovation Community, which brings together innovators and industry, entrepreneurs and investors in order to catalyse and accelerate the energy transition and build connections worldwide.

Another example is the project 'Facilitating renewable energy deployment in electricity sector of Slovenia', supported by the Technical Support Instrument under the 2021 call for proposals. Slovenia faces recurring difficulties to increase its share of energy from renewable sources. This affects the energy and climate transition as well as the economy as whole. The project aims to support the Ministry of Infrastructure and the Ministry of Environment and Spatial Planning in addressing barriers to renewable energy deployment and strengthen related administrative capacity.

## Stakeholder engagement

The EU delivers on SDG 7 in a collaborative approach, including through the following initiatives.

- ▶ The [EU Sustainable Energy Week](#) is the biggest event in the EU on renewables and energy efficiency, bringing together policymakers, industries and citizens.
- ▶ The [EU Energy Day](#) gathers key clean energy players to promote and strengthen cooperation on sustainable, secure and smart energy solutions.

- ▶ The [European Sustainable Energy Awards](#) aim to highlight individuals and initiatives that are contributing to Europe's clean and digital energy transition.
- ▶ The [Energy Infrastructure Forum](#) aims to remove technical and regulatory barriers to energy flowing freely across the EU, and to discuss major issues relating to infrastructure and EU energy policy.
- ▶ The [Clean Energy Industrial Forum](#) develops recommendations on how to strengthen the industrial basis and the EU value chain for renewable energy technologies.
- ▶ The [Citizens' Energy Forum](#) meets on an annual basis and aims to explore the consumer perspective and role in a competitive, smart, energy-efficient and fair energy retail market.
- ▶ In line with the [European industrial strategy](#), launched in March 2020, aiming at supporting the twin transition to a green and digital economy, the EU is developing industrial alliances to accelerate the development of key projects that support the manufacturing of low-carbon energy technologies (batteries, hydrogen, etc.) and which will maintain the EU's leadership in innovative and green technologies.

## Multilevel approach

SDG delivery implies ambitious action at all levels. Good practices in implementing SDG 7 include the following.

Greece is implementing an ambitious plan to remove lignite from the country's energy mix. This will facilitate the country's transition to a differentiated mixture of electricity production and to complete decarbonisation by 2028. The plan underpins the objectives set by the first national roadmap for transition to net-zero approved by the Hellenic Parliament in 2022.

To reduce the environmental impact of households, the region of Nord-Vest in Romania, with EU co-financing, invested over EUR 80 million in the thermal rehabilitation of over 4 572 apartments in old residential towers and multistore condominium buildings. Most residents of these buildings have low socio-economic backgrounds. These investments enhanced residential well-being, social equality and offset 10 033.45 tonnes of CO<sub>2</sub> equivalent annual emissions.



# EU external action

## Global trends

In the last 10 years access to electricity increased from 86.6 % of the world's population in 2015 to 90.5 % in 2020, but regional disparities remain wide. In 2020, 77 % of those without [access to electricity](#) or over 568 million people, lived in sub-Saharan Africa. High energy prices led nearly 90 million people in Asia and Africa who had previously gained access to electricity to no longer being able to pay for their basic energy needs.

The deployment of clean energy reached a record high in 2021 globally, but, due to rising commodity prices and supply-chain bottlenecks, this trend has been reversed in many countries, in particular on the African continent. Only 2 % of global investments in renewable energy in the last two decades were made in Africa, with significant regional disparities.

## Internal/external coherence including policy coherence for development

In May 2022, as part of the REPowerEU plan, the EU adopted a new external energy engagement strategy with three inter-linked objectives: ensuring the EU's energy security; providing support to partners that are impacted by Russia's aggression to Ukraine; and pursuing the global clean energy transition. Consistent with its internal policies, the EU will make use of all existing instruments to continue providing support to partner countries, particularly in Africa and the EU's neighbourhood, to help these countries to recover from multiple crisis, including in relation to energy, and to achieve an inclusive and sustainable growth. These are also the main objectives of the Global Gateway Africa-Europe Investment Package.

Under the European Green Deal, and to support the EU's commitment to climate neutrality by 2050, the EU adopted in October 2020 a strategy to reduce methane emissions in all key sectors covering energy, agriculture and waste. A legislative proposal on reducing methane emissions in the energy sector followed in 2021. The highest methane emissions occur during production and transport of fossil fuels produced outside the EU, thus international abatement efforts are a priority for the EU. At the COP26 UN Climate Change Conference, together with the United States, the EU launched the Global Methane Pledge to gather international commitment to reduce methane emissions by 30 % by 2030; 150 countries have now joined the pledge.

Since 2015, the EU has been engaging with countries such as Japan and the USA, bilaterally and through multilateral fora such as the Clean Energy Mission or the International Partnership for a Hydrogen Economy (IPHE), to develop

standards and uptake of a global hydrogen market. To increase renewable hydrogen imports by 10 million tonnes by 2030, the EU has started to establish renewable hydrogen partnerships (e.g. [Namibia](#), [Egypt](#), Ukraine, Kazakhstan, Japan) to support the development of renewable energy, engage countries in the decarbonisation of their industry and supply the EU market with renewable hydrogen or derivative fuels.

To succeed, the green transition must be just and socially fair. This means reducing the social and economic impact of phasing out fossil fuels and offering new opportunities via green technologies while tackling issues like energy access, fossil fuel subsidies, skills development and distributional effects of the transition. The EU is supporting partners (such as the Western Balkans and Ukraine) to engage in phasing out coal and is sharing its experience of how it has been accompanying coal regions in their economic transition. The EU's experience will also contribute to the G7-led Just Energy Transition Partnerships (JETPs) signed with South Africa, Vietnam and Indonesia to accelerate the coal phase-out, while supporting vulnerable communities that depend on it and contributing to the roll-out of Global Gateway investment priorities.

As part of the Clean energy for all Europeans package, adopted in 2019, the EU strengthened the sustainability criteria of bioenergy, applying to bioenergy produced in the EU and imported. These criteria aim to reduce the competition of bioenergy production with agricultural land and with high carbon stock preventing indirect land use change (ILUC). The limits set in the revised Renewable Energy Directive on the volumes of high ILUC-risk bioenergy that can be counted towards the renewable target will gradually decrease to zero by 2030 and will lead to the sustainability of the global bioenergy market.

With regard to energy efficiency, the EU's contribution also involves measures promoting sustainable product design and consumption, notably the Commission's proposal for an ecodesign regulation for sustainable products and the related legislative package on 'making sustainable products the norm'. By setting common EU-wide minimum standards, the EU aims at reducing the negative environmental impacts of products along their value chains and increasing their energy and resource efficiency. The EU energy label has been a key contributor to the EU's energy efficiency target and contributes to the greening of the global appliances market beyond the EU.

In terms of volume, [the EU](#) is more or less self-sufficient in the material categories of biomass and non-metallic minerals, while it is a net importer of metal ores and fossil-energy materials.

## EU and Member States external financial support for SDG implementation and results

In 2021, EU institutions reported to the OECD commitments for EUR 4.5 billion in projects contributing to SDG 7. The largest share of the EU contribution to SDG 7 is accounted for by projects that target SDG 7 as the main SDG. These projects also contribute to other interlinked SDGs, mainly SDG 5, SDG 9, SDG 13 and SDG 14. A smaller but sizeable contribution to SDG 7 is accounted for by projects targeting the SDG as a significant objective. The main contributors are projects targeting SDG 1, SDG 8 and SDG 13. When taking into account also other official flows, private funds mobilized through public intervention and support to international public goods, the Total Official Support to Sustainable Development (TOSSD) of the EU to SDG 7 amounted to EUR 5.3 billion in 2021. In terms of selected results of assistance <sup>(21)</sup>, the EU support improved access to electricity for 29 million people and contributed to the installation of 91 megawatts of renewable energy capacity, resulting in 95.8 million tonnes of CO<sub>2</sub> emissions being averted.

Collectively, the EU and those Member States that reported on SDGs to the OECD in 2021 contributed EUR 8 billion to SDG 7. EU and Member State funding to SDG 7 predominantly focused on projects in Africa (49%), Asia (21%) and other countries in Europe (16%).

## Main policy orientations and initiatives for external engagement

Promoting access to affordable, reliable, sustainable, and modern energy is high on the EU's development cooperation agenda. This work links strongly with SDG 13 on climate action, but also with a range of SDGs, such as SDG 4 on education because access to sustainable energy in schools improves the quality of, and accessibility to, education. Similarly, it has strong connections with SDG 5 on gender equality since access to sustainable energy is a precondition for the achievement of gender equality and the empowerment of all women and girls. Furthermore, it is connected to SDG 3 on health, particularly through electrification of health services, and SDG 8 on decent work and economic growth, SDG 9 on industry, innovation and infrastructure, and SDG 11 on sustainable cities and communities.

Therefore, the EU and its Member States approach energy as a horizontal issue, strengthening the links between the 2030 Agenda and the Paris Agreement. Special attention has been given to SDG 7 as an enabler for sustainable growth and human development. Due to the interconnectedness of energy issues and other SDGs, the EU and its Member States have used work across a range of SDGs to contribute to the objectives

of improved access to energy, renewable energy generation, and energy efficiency, to achieve a sustainable balance between energy production and consumption while bolstering the fight against climate change. This has involved supporting political ownership, improved governance, and reform of the energy sector in partner countries, as well as promoting the use of digital technologies and boosting sustainable investment through innovative financing.

In this context and in line with partner countries' own policies and plans for affordable, reliable, sustainable and modern energy for all, the EU priorities for its external actions contributing to SDG 7 and interlinked SDGs include:

- ▶ investing in sustainable energy infrastructure, including on renewable energy generation (including solar, wind, hydropower, sustainable biofuels), electricity transmission and distribution, and enhanced access to energy services;
- ▶ investing in capacity building and skills needed for the management of energy systems based on renewable energy, the development of energy communities, and for renewable energy value chains; and
- ▶ developing the global renewable hydrogen market to support the decarbonisation of heavy transport and industrial sectors.

Energy is an investment priority of the Global Gateway, which is taking these commitments a step further, including by promoting green technology exchanges and strengthening energy security. In the framework of the Africa-Europe Investment Package, the Africa-EU Green Energy Initiative (AEGEI), a Team Europe Initiative launched on the occasion of the EU-AU Summit in February 2022, contributes to the Global Gateway by supporting Africa's green transition in the energy sector. It aims to increase electricity production and access to energy, promote energy efficiency, create a conducive regulatory environment for private investments, and advance market integration. The initiative is also aligned with and contributes to the African Union's Agenda 2063 ambition to increase renewable energy generation capacity in Africa by 300 gigawatts by 2030 and to secure access to affordable, reliable, and sustainable energy. The total combined sustainable energy budget in support of this initiative is estimated at more than EUR 3.4 billion in grants for the period 2021-2027, which is expected to leverage more than EUR 20 billion in investment. Current initiatives include the EU support to the development of an African Single Electricity Market and the Continental Power System Masterplan, which aims to build and invest in energy infrastructure, including electricity interconnections and transmission lines and connect the five African power pools.

<sup>(21)</sup> For the methodology and results, please see the description under SDG 2.





The EU is committed to leading and speeding up the global green transition and supporting its international partners in the process. This includes working together on renewable energy, energy efficiency and savings, the circular economy, green growth, natural resource protection, critical raw materials, clean technologies, and future-proof infrastructure. Energy security and green transition are supported in Ukraine, Moldova and the partner countries in its immediate neighbourhood, including by accelerating implementation of the Economic and Investment Plan. Boosting investment in renewable energy, energy efficiency and in phasing out coal are also core pillars of the Economic and Investment Plans for the EU's neighbourhood, and of the Green Agenda for the Western Balkans.

Energy is also among the priority investment sectors covered by the European Fund for Sustainable Development Plus (EFSD+), which is a financing tool of the Global Gateway and the financing arm of the EU's Neighbourhood, Development and International Cooperation Instrument (NDICI) — Global Europe and the Instrument for Pre-Adhesion III (IPA III). It de-risks investments with budgetary guarantees and thus attracts more private investment into emerging and developing country markets, and in this way supports the transformation towards sustainable energy systems.

Overall, by the end of 2021, the EU-supported sustainable energy activities in partner countries led to the creation of 31 megawatts of [new renewable energy](#) capacity. This enabled more than 29 million people to gain access to sustainable energy and energy services, and avoided 95.8 million tonnes of CO<sub>2</sub> emissions. By the end of 2020, the Commission had committed EUR 732 million to energy, 44.7 % of which was in support of energy policy and 36 % in support of renewable-sourced energy generation.

### Examples of EU actions (with a focus on Global Gateway and Team Europe initiatives)

In relation to SDG 7, renewable hydrogen plays a crucial role in the global decarbonisation effort, especially in hard-to-abate sectors. It is estimated that demand for global hydrogen and its derivatives will reach 22 % of global final energy use by 2050. In 2022, the EU and Namibia signed a memorandum of understanding which envisages a close cooperation in the development of green hydrogen and critical raw materials by facilitating public and private investments in these sectors. Aligned with the priorities of the European Green Deal and RePowerEU plan, the Team Europe Initiative on green hydrogen in Namibia, which contributes to the roll-out of the Global Gateway strategy, aims to foster inclusive green growth and access to sustainable energy.

Achieving clean and affordable energy systems is closely linked to SDG 13 on climate action. The [EU](#) provided technical support to many partner countries in their efforts to upgrade their nationally determined contributions in 2021 ahead of COP26, with a particular focus on the sustainable energy sector. Similarly, the [Africa-EU Energy Partnership \(AEEP\)](#) supports universal access to reliable, affordable and sustainable energy in Africa, by providing an institutionalised platform for strategic dialogue between Africa and the EU in the energy sector, thus contributing to the implementation of SDG 7 and SDG 13.

Increasing the proportion of renewable energy sources in the global energy mix is a priority for SDG 7. Hence, in Togo, a Team Europe Initiative aims to build the country's renewable energy capacity and support the fulfilment of a national target of 100 % electrification by 2030 with 50 % renewable energy. The initiative supports the Global Gateway investment



priorities on climate and energy, as efforts are directed towards the enhancement of energy efficiency, ensuring a green energy transition and strengthening the role of Togo as a fully-fledged actor in the West African power pool.

Access to affordable and safe energy sources is a key component of SDG 7, but is also directly related to other SDGs, including SDG 2 on zero hunger, SDG 4 on quality education, SDG 5 on gender equality, SDG 8 on sustainable growth and SDG 10 on reduced inequalities. In Mauritania, for example, the Team Europe initiative on transition towards green and blue aims, in association with the private sector, to bring renewable energy to remote areas in order to stimulate employment opportunities, and sustainable and inclusive growth, thus contributing to SDG 8, SDG 2 and SDG 11, along with the commitments of Global Gateway and its Africa-Europe Investment Package. Similarly in Vietnam, the EU's programme for sustainable energy has improved households' access to energy in rural and remote areas and supported the shift towards a future of greener energy.

Given that 70 % of global energy consumption occurs in cities, improving energy infrastructure is a key concern for urban areas and demonstrates the link between SDG 7 and SDG 11. For example, in Balti, Moldova's second largest city, the district heating system was upgraded and modernised with the Eastern Europe Energy Efficiency and Environment Partnership (E5P) fund. This project will reduce the energy bill of households in Balti and save about 18 300 tonnes of CO<sub>2</sub> each year.

In 2022, the Commission launched an Energy Support Package worth EUR 1 billion for its Western Balkans partners to address immediate, short-term and medium-term needs in the context of the ongoing energy crisis. Half of the funding was provided as direct budget support, and half invested through the Western Balkans Investment Framework (WBIF), a joint initiative

of the EU, financial institutions, bilateral donors and beneficiaries, all working in line with the Team Europe approach to support the short- and mid-term investments in the field of renewable energy generation, green transition and energy efficiency in the region.

The Green for Growth Fund supported by the EU, advances energy and resource efficiency, and renewable energy, in Armenia, Azerbaijan, Georgia, Moldova and Ukraine. It leverages funds from the private sector and development banks, and provides refinancing for investments in energy efficiency and capacity building, consulting, and training and invests in energy efficiency and renewable energy projects.

Actions by the EU and its Member States are mutually reinforcing and coordinated to ensure complementarity and impact in support of the SDGs. In addition to acting together with the EU through joint programming and Team Europe Initiatives, Member States carry out their own projects in support of the 2030 Agenda, including SDG 7, such as the following illustrative initiative. Austria contributes to UNIDO's Global Network of Regional Sustainable Energy Centres (GN-SEC) platform and the regional Centres for Renewable Energy & Energy Efficiency (Caribbean, Pacific, ECOWAS and Central American Integration System). Austria also supports the energy sector and its interlinkages with micro-, small and medium-sized enterprises development, climate change, and gender, by funding projects that tackle energy efficiency measures to reduce emissions and energy consumption as well as expand production capacities.

# Looking ahead

In the coming years, the European Union will have to consolidate the implementation of the REPowerEU plan, addressing the triple energy security, price and climate crisis. In line with the European Green Deal, in 2023, the EU will strive to do the following. — Revise its renewable energy and energy efficiency targets. In March 2023, the EU co-legislators ended with an agreement to increase the renewable energy target to at least 42.5 % in 2030 with the aim to reach 45 % and energy efficiency target of 11.7 % in 2030 compared to 2020 scenario. This will be translated into law in view of achieving the Fit-for-55 objectives as well as the EU's energy security and resilience objectives of the REPowerEU plan. — Propose a 2040 climate target in 2024. This target needs to be based on a thorough impact assessment and the Commission is starting the necessary analysis now. — Adopt a new regulation on methane emissions reduction in the energy sector, including for imports of fossil fuels. — Adopt a revised directive for energy performance of buildings, that will set in the law that all new buildings should be zero-emission buildings by 2030, and that existing buildings should be transformed into zero-emission buildings by 2050. — Adopt a revised Electricity Regulation and Directive that will further integrate renewables, protect and empower consumers and accelerate the deployment of renewable energy. — Adopt a revised Regulation on wholesale energy market integrity and transparency to provide better protection against market manipulation and abuse and enhance the transparency of the market. — Adopt the hydrogen and gas markets decarbonisation package to enable the transition of the gas sector towards renewable and low-carbon gases, in particular biomethane and hydrogen, in view of reaching the EU's goal of climate neutrality in 2050. — Adopt a new directive on the taxation of energy products and electricity. The aim will be to ensure that the taxation of energy products and electricity better reflects the impact they have on the environment and on health, by removing disadvantages for clean technologies and introducing higher levels of taxation for inefficient and polluting fuels. — Create a new European hydrogen bank to kick-start the hydrogen market in the EU and beyond.

Member States will also submit revised National Energy and Climate Plans reflecting the rapidly evolving geopolitical context and significant changes to EU energy and climate policy, including REPowerEU objectives.

On the external side, the EU will continue to take focused actions to accelerate the implementation of SDG 7 globally, including through the roll-out of a range of multiannual indicative programmes with partner countries where affordable and clean energy is a shared priority.

Aligned with the REPowerEU plan and the European Green Deal, the EU will support the reconstruction and transition

of Ukraine's energy system through the development of renewable energy. It will continue to support the energy transition and the integration of energy systems in Eastern Europe countries through the Energy Community.

At multilateral level, the EU will continue to actively support the global clean energy transition, sharing policy and approaches in multilateral organisations such as the International Energy Agency, the International Renewable Energy Agency or the Clean Energy Ministerial, and supporting initiatives such as the Energy Efficiency Hub or the Global Methane Pledge. As an important part of the EU's external energy engagement strategy, the EU will continue to support coal regions in their transition internationally, with the setting up, with Germany, of a global platform for coal regions.

Aligned with the REPowerEU plan and the European Green Deal, the EU will support the reconstruction and transition of Ukraine's energy system through the development of renewable energy. It will continue to support the energy transition and the integration of energy systems in Eastern Europe countries through the Energy Community.

The EU aims to deploy a range of Global Gateway flagship projects on sustainable energy infrastructure as a contribution to SDG 7, SDG 13 and other interlinked SDGs. They will have a focus on renewable energy sources, electricity transmission and distribution, energy efficiency and enhanced access to energy services, as well the development of green hydrogen across the world. Global Gateway will be deployed at regional and national level through Team Europe Initiatives, such as the Africa-EU Green Energy Initiative. This will support Africa's green transition in the energy sector through improving access to energy services, increasing the share of renewable energy in Africa's energy mix, and supporting energy efficiency in the framework of the Global Gateway Africa-Europe Investment Package

Additionally, through EFSD+, the EU aims to provide EUR 6.05 billion in financial guarantees to support 40 investment programmes in sub-Saharan Africa, Latin America and the Asia-Pacific. The guarantees are expected to generate more than EUR 50 billion in investments in key sectors of the Global Gateway, of which around 25 % in renewable energy.

As to EU-funded humanitarian aid, the minimum environmental requirements and recommendations come into force in 2023. To meet these requirements, the use of clean energy in humanitarian interventions is essential.

