



Strasbourg, 8.3.2022
COM(2022) 108 final

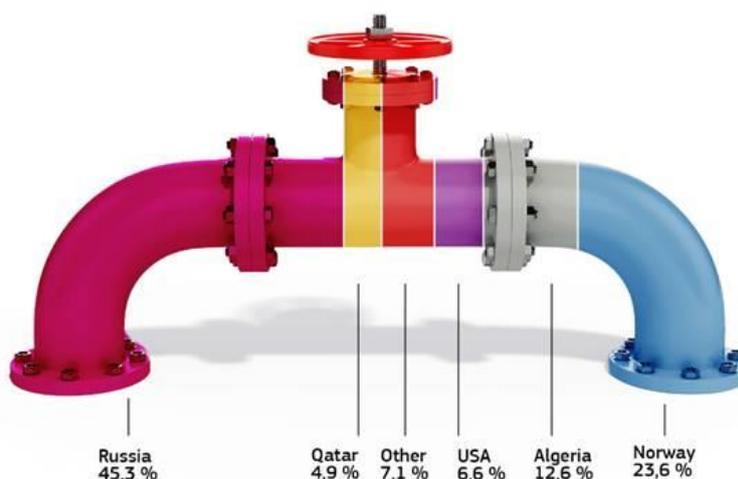
**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN
ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE
REGIONS**

REPowerEU: Joint European Action for more affordable, secure and sustainable energy

INTRODUCTION

Following the invasion of Ukraine by Russia, the case for a rapid clean energy transition has never been stronger and clearer. The EU imports 90% of its gas consumption, with Russia providing more than 40% of the EU's total gas consumption. Russia also accounts for 27% of oil imports and 46% of coal imports.

Share in EU natural gas imports, 2021



Source: European Commission

The EU needs to be ready for any scenario. It can reach independence from Russian gas well before the end of the decade. The sooner and more decisively we diversify our supply, accelerate the roll out of green energy technologies and reduce our demand of energy, the earlier we can substitute Russian gas. This communication sets out new actions to ramp up the production of green energy, diversify supplies and reduce demand, focusing primarily on gas, which significantly influences the electricity market and where the global market is less liquid. The focus can be extended to phasing out dependence on Russian oil and coal, for which the EU has a broader diversity of potential suppliers.

Accelerating the green transition will reduce emissions, reduce dependency on imported fossil fuels, and protect against price hikes. Rising fossil fuel prices hit energy-poor or vulnerable household consumers particularly hard, who spend a high share of their total income on energy bills¹, exacerbating the disparities and inequalities in the EU. Businesses, in particular energy-intensive industries, as well as the agri-food sector face higher production costs.

Providing companies and households with affordable, secure and clean energy requires decisive action, starting immediately with price mitigation and storing gas for next winter.

¹ See the [report](#) of the workshop on 'Energy Poverty', organised on 9 November 2016 for the EP Committee on Industry, Research and Energy (ITRE), [Gender perspective on access to energy in the EU](#), [Gender and energy | European Institute for Gender Equality \(europa.eu\)](#) and [GFE-Gender-Issues-Note-Session-6.2.pdf \(oecd.org\)](#)

I. ADDRESSING THE EMERGENCY

Very high energy prices are hurting the economy. The European Central Bank estimated before the invasion that the energy price shocks will reduce GDP growth by around 0.5 percentage points in 2022. Continued high energy prices are likely to increase poverty and affect business competitiveness. Energy-intensive industries in particular have faced higher manufacturing costs². High energy prices also mean higher prices for other commodities, notably food. A combination of higher energy, transport and higher food prices would exacerbate the pressure on low income households, with increased risks of poverty.

The Commission's toolbox³ of October 2021 has helped mitigate the impact of high energy prices. The measures should be continued as long as necessary.

To address the current emergency, the Commission will look into all possible options for emergency measures to limit the contagion effect of gas prices in electricity prices, such as temporary price limits. It will consult as a matter of urgency all concerned actors and propose options in the coming weeks.

The Commission will also assess options to optimise the electricity market design to reap the benefits from low cost energy. It will take into account the final report of the European Union Agency for the Cooperation of Energy Regulators (ACER) and other contributions on the functioning of the electricity market on benefits and drawbacks of alternative electricity pricing mechanisms. It will follow up as appropriate to keep electricity affordable without disrupting supply and further investment in the green transition.

1.1. Mitigating retail prices and supporting heavily exposed companies

The Commission confirms that price regulation and transfer mechanisms to help protect consumers and our economy are possible. The legal framework of the electricity market, and in particular Article (5) of the electricity Directive⁴, allows Member States, in the current exceptional circumstances, to set retail prices for households and micro-enterprises.

The Commission provides detailed guidance in Annex 1 to this Communication to help Member States devise schemes for regulated prices. This could be accompanied by incentives for energy efficiency and savings, to reduce energy bills.

EU State aid rules offer Member States options to provide short-term relief to companies and farmers affected by high energy prices, and help reduce their exposure to energy price volatility in the medium to long term. For example, Member States can offer temporary relief for companies facing liquidity needs due to current high energy prices, regardless of their size, based on the guidelines on rescue and restructuring⁵. The Commission will treat those cases

² Over half of the EU's aluminium and zinc smelters are today operating at reduced capacity or have temporarily closed. The EU has temporarily lost 650 000 tonnes of primary aluminium capacity, about 30% of its total.

³ COM(2021) 660 final of 13 October 2021: [Tackling rising energy prices: a toolbox for action and support](#).

⁴ Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L158, 14.6.2019, p. 125–199).

⁵ Communication from the Commission - Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty (OJ C 249, 31.7.2014, p.1). The aid can be granted in the form of liquidity support (loans or guarantees) for a maximum duration of 6 months for large undertakings in difficulty, or up to 18 months for SMEs. Undertakings that are not in difficulty can also benefit if they face 'acute liquidity needs due to exceptional and unforeseen circumstances'

with priority with special attention to gas utilities and intermediaries faced with increased supply costs due to contracts disruptions.

The EU Emissions Trading System State aid Guidelines⁶ enable Member States to specifically support sectors that, are most at risk of carbon leakage because of indirect emission costs. **In the agricultural sector, State aid rules⁷ allow investment aid in sustainable energy.** In the on-going review of those rules, the Commission's proposal⁸ under public consultation increases the options to provide support for farmers.

The Commission is ready to use the full flexibility of its State aid toolbox in order to enable Member States to support companies and sectors severely impacted by the current geopolitical developments. To enable Member States to remedy the serious disturbances to the economy resulting from Russia's military aggression against Ukraine, **the Commission will shortly be consulting Member States on the needs for and scope of a new, self-standing Temporary Crisis Framework⁹.** Such a Framework could for example allow liquidity support for all undertakings directly or indirectly affected by the crisis and aid to undertakings¹⁰, in particular energy-intensive consumers, to compensate for part of their increase in energy costs due to the price shock since the Russian invasion. The Commission has also consulted Member States on targeted amendments to the ETS State aid guidelines, in particular to expand the list of eligible sectors, while ensuring that they are subject to reinforced incentives to improve energy efficiency and/or decarbonise their production and limiting competition distortions among Member States.

To finance such emergency measures, Member States can consider temporary tax measures on windfall profits. According to the International Energy Agency **such fiscal measures on high rents** could make available up to EUR 200 billion in 2022 to partially offset higher energy bills¹¹. Such measures should not be retroactive, but should be technologically neutral and allow electricity producers to cover their costs and protect long-term market and carbon price signals. Annex 2 sets out the conditions those instruments should meet. **Member States can also use higher than expected ETS revenues.** From 1 January 2021 to 28 February 2022, the revenues generated from the auctioning from EU ETS allowances amounted to around EUR 30 billion¹².

The Commission recalled in its Communication on fiscal guidance for 2023 that the so-called **“general escape clause” of the Stability and Growth Pact (SGP) continues to apply in**

⁶ Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021, OJ C 317, 25.9.2020, p. 5.

⁷ Commission Regulation (EU) No 702/2014 of 25 June 2014 declaring certain categories of aid in the agricultural and forestry sectors and in rural areas compatible with the internal market in application of Articles 107 and 108 of the Treaty on the Functioning of the European Union. OJ L 193 du 1.7.2014, p. 1–75. Guidelines for State aid in the agricultural and forestry sectors and in rural areas 2014 to 2020. OJ C 204 du 1.7.2014, p. 1–97.

⁸ Public consultation on revised State aid rules for the agricultural and forestry sectors and in rural areas.

⁹ Under Article 107(3)(b) TFEU

¹⁰ With the exception of undertakings linked to or controlled by natural persons included in the list of sanctions adopted by the EU and/or beneficiaries controlled by Russian or Belarussian legal entities.

¹¹ A 10-point plan to reduce European Union's reliance on Russian natural gas, 3 March 2022, International Energy Agency

¹² While ETS funds should primarily support further emission reductions through in particular investments into energy efficiency measures, the energy transition and innovation in clean technologies, Article 10(3) of the ETS Directive (Directive 2009/29/EC) determines that Member States can use the ETS revenues to provide financial support in order to address social aspects in lower- and middle-income households.

2022, allowing Member States to take exceptional measures in the current exceptional circumstances.

1.2. Preparing for next winter by ensuring sufficient gas storage

Gas supplies are sufficient until the end of this winter even in case of full disruption of supplies from Russia.

In order to be well-prepared for next winter, filling of gas storage across the EU should start now. During the heating season, storage reduces the need to import additional volume. Storage contributes to absorbing supply shocks. Gas storage supplies 25-30% of gas consumed in winter. Gas storage levels have proven to be particularly low at sites owned by third country entities (i.e. Gazprom). In parallel, transmission system operators should also coordinate measures to update and optimise capacities available in the network in case of reduced or no flows and pressure from the East.

The Commission will make a legislative proposal by April so as to ensure an annual adequate level of storage¹³. This proposal will require that existing storage infrastructures in the EU territory are filled up to **at least 90%** of their capacity by 1 October each year. In order to make storage more attractive to market participants, the Commission will propose to increase the rebate level to 100% as an incentive to refill storage.

An **EU gas storage policy** will ensure fairness and allow making smart use of existing infrastructure, limiting the need for new infrastructure as not all Member States have underground storage facilities in their territories. The legal proposal will set out a mechanism to ensure a fair allocation of security of supply costs. Indeed, the benefits of having a guaranteed high filling level, in terms of the insurance value against security of supply risks and price dampening effects in winter are not limited to the country where the storage is located. Interconnectors are essential to ensure the uninterrupted energy flow within the whole EU. If new infrastructure is needed, it should be hydrogen compatible.

In the light of the current geopolitical environment, the Commission envisages that this legal proposal will identify gas storage as a **critical infrastructure** and introduce provisions to tackle **ownership risks for gas infrastructure**. Member States will have to require the regulatory authority or another competent authority designated by the Member State to certify that ownership by a person or persons from a third country does not put at risk the security of supply. Such assessment will have to be done for all existing and future storage operators. In the **short term** and pending the legislative process, Member States should act as if the legislation was already in place and take measures to ensure refilling of storage in time for next winter. Moreover, as foreseen by the existing Gas Security Supply Regulation¹⁴, they need to conclude **solidarity arrangements**. Given the current context this should be done **without delay**.

To incentivise the refilling, Member States can provide aid to suppliers under Article 107(3)(c) TFEU for example in the form of guarantees (**‘two-way contract for difference’**).

¹³ 13 Member States - BE, BG, DK, ES, FI, FR, HU, IT, LT, LV, PL, PT, SE have storage obligations in place. Others, e.g. DE announced plans to introduce them.

¹⁴ Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (OJ L 280, 28.10.2017, p. 1–56).

For its part, the Commission can **coordinate refilling operations**, for example through joint procurement, collecting orders and matching supplies. A joint European platform for contractualisation of gas supply based on bilateral negotiations with major gas producers would help diversification and smart risk management, hence ensuring security of supplies on favourable conditions for all buyers across the EU.

The Commission is also pursuing its investigation into the gas market in response to concerns regarding potential distortions of competition by companies active on the European gas markets, notably by Russian gas supplier Gazprom. The company displays unusual business behaviour, and the average filling level of EU Gazprom-operated storage is around 16%, whereas non-Gazprom storage is at 44%. The Commission is currently investigating as a matter of priority all allegations of potential anti-competitive commercial conduct by Gazprom and gathering additional information from market players.

The Commission continues to work with neighbours and partners in the Western Balkans, and in the Energy Community, which share the EU's fossil fuel dependencies and exposure to price hikes, while also having committed to the same long term climate goals. For Ukraine, Moldova and Georgia, the EU stands ready to support to ensure reliable and sustainable energy as necessary. The ongoing effort to provide for an emergency synchronisation of the Ukrainian and Moldovan electricity grids with the continental European grid is a clear token of this commitment.

II. REPOWER EU: ELIMINATING OUR DEPENDENCE ON RUSSIAN FOSSIL FUELS

Phasing out our dependence on fossil fuels from Russia can be done well before 2030. To do so, the Commission proposes a REPowerEU plan that will increase the resilience of the EU-wide energy system based on two pillars:

- **Diversifying gas supplies**, via higher LNG imports and pipeline imports from non-Russian suppliers, and higher levels of biomethane and hydrogen.
- **Reducing faster our dependence on fossil fuels** at the level of homes, buildings and the industry, and at the level of the power system by boosting energy efficiency gains, increasing the share of renewable and addressing infrastructure bottlenecks.

Full implementation of our Fit for 55 proposals would lower our gas consumption by 30%, equivalent to 100 bcm, by 2030. Together with additional gas diversification and more renewable gases, frontloaded energy savings and electrification have the potential to jointly deliver at least the equivalent of the 155 bcm imports of Russian gas.

The energy efficiency first principle is more relevant than ever and should be applied across all sectors and policies, with demand response measures complementing those on the supply-side.

Given the circumstances, the co-legislators might also want to consider to boost the Fit for 55 proposals with higher or earlier targets for renewable energy and energy efficiency.

REPOWER EU TRACK	FOCUS	FF55 AMBITION BY 2030	REPOWEREU MEASURE	REPLACED BY THE END OF 2022 (BCM equivalent) estimate	ADDITIONAL TO FF55 BY 2030 (BCM equivalent) estimate
<u>GAS DIVERSIFICATION</u>	NON-RU NATURAL GAS	-	LNG diversification	50*	50
		-	Pipeline import diversification	10	10
	MORE RENEWABLE GAS	17 bcm of biomethane production, saving 17 bcm	Boost biomethane production to 35bcm by 2030	3.5	18
		5.6 million tonnes of renewable hydrogen, saving 9-18.5 bcm	Boost hydrogen production and imports to 20mt by 2030	-	25-50
<u>ELECTRIFY EUROPE</u>	HOMES	Energy efficiency measures, saving 38 bcm	EU-wide energy saving, e.g. by turning down the thermostat for buildings' heating by 1°C, saving 10bcm	14	10
		<i>Counted under overall RES figures below</i>	Solar rooftops front loading – up to 15 TWh within a year	2.5	frontloaded
		30 million newly installed heat pumps installed in 2030, saving 35 bcm in 2030	Heat pump roll out front loading by doubling deployment resulting in a cumulative 10 million units over the next 5 years	1.5	frontloaded
	POWER SECTOR	Deploy 480 GW of wind capacities and 420 GW of solar capacities, saving 170bcm (and producing 5.6 Mt of Green Hydrogen)	Wind and solar front loading, increasing average deployment rate by 20%, saving 3bcm of gas, and additional capacities of 80GW by 2030 to accommodate for higher production of renewable hydrogen.	20	Gas savings from higher ambition counted under green hydrogen, the rest is frontloaded
<u>TRANSFORM INDUSTRY</u>	ENERGY-INTENSIVE INDUSTRIES	Front load electrification and renewable hydrogen uptake	Front load Innovation Fund and extend the scope to carbon contracts for difference	<i>Gas savings counted under the renewable hydrogen and renewables targets</i>	

**all figures are estimates*

The Commission stands ready to propose a REPowerEU plan based on an identification, in dialogue with Member States, of the most suitable projects and reforms, at national, regional and EU levels. This will build on national energy and climate plans and their updates, existing Recovery and Resilience Plans (RRPs), cohesion policy operational programmes and

any other relevant plans and climate resilience needs. Projects completing internal market in energy and those **with a strong cross-border dimension should be privileged**, for instance the critical connection between Portugal, Spain and France and , between Bulgaria and Greece. Such projects will improve the interconnection of the European gas and electricity networks and other infrastructure and fully synchronise our power grids, such as between the Baltic States and the Continental European Network. A regional analysis should underpin Member States plans. The Commission would provide support as done for RRP and technical assistance via the Technical Support Instrument. **Financing needs** will be assessed based on a comprehensive mapping of the needs of Member States as well as of cross-border investment needs. To meet these, all resources and tools available at national and EU level should be mobilised, with public funding designed to crowd-in private investment.

2.1. Diversify gas supplies

2.1.1. LNG and pipe imports

An unprecedented LNG supply to the EU in January 2022 has ensured security of gas supply for this winter. The EU could import 50 bcm more of LNG (e.g. from Qatar, USA, Egypt, West Africa) on a yearly basis. Diversification of pipe sources (e.g. Azerbaijan, Algeria, Norway) could deliver another 10 bcm of yearly savings on Russian gas imports.

The Commission will assess as a matter of priority whether measures and investments are needed in hydrogen-ready gas infrastructure and interconnections to overcome bottlenecks to the full use of the EU's LNG capacity.

While diversifying supply, the EU fosters its international partnerships. The Commission will continue discussing within G7 and with major global purchasers of gas (Japan, South Korea, China, India) medium-term market developments.

2.1.2. Increase the EU production of biomethane

Doubling the objective of Fit for 55 for biomethane would lead to the production of 35 billion cubic metres (bcm) per year by 2030. To do so, Member States' CAP strategic plans should channel funding to biomethane produced from sustainable biomass sources, including in particular agricultural wastes and residues.

2.1.3. Hydrogen Accelerator

An additional 15 million tonnes (mt) of renewable hydrogen on top of the 5,6 mt foreseen under the Fit for 55 can replace 25-50 bcm per year of imported Russian gas by 2030. This would be made of additional 10 mt of imported hydrogen from diverse sources and an additional 5 mt of hydrogen produced in Europe, going beyond the targets of the EU's hydrogen strategy and maximising the domestic production of hydrogen¹⁵. Other forms of fossil-free hydrogen, notably nuclear-based, also play a role in substituting natural gas.

The Commission will further develop the regulatory framework to promote a European market for hydrogen and support the **development of an integrated gas and hydrogen infrastructure, hydrogen storage facilities and port infrastructure. New cross border**

¹⁵ COM(2020) 301 final: [A hydrogen strategy for a climate-neutral Europe](#).

infrastructure should be hydrogen compatible. The Commission will assess State aid notification for hydrogen projects as a matter of priority. It commits to complete the assessment of the first Important Projects of Common European Interest on hydrogen within 6 weeks from the submission by the participating Member States of a complete notification. The shared aim should be to enable the assessment to be completed by summer.

Additionally, the Commission will support pilot projects on renewable hydrogen production and transport in the EU neighbourhood, starting with a Mediterranean Green Hydrogen Partnership. It will also work with partners to conclude **Green Hydrogen Partnerships** and with the industry to establish a **Global European Hydrogen Facility**, boosting Member States' access to affordable renewable hydrogen.

2.2. Reducing faster our dependence on fossil fuels

2.2.1. Rolling out solar, wind and heat pumps

Fit for 55 foresees the doubling of the EU's photovoltaic and wind capacities by 2025 and tripling by 2030, saving 170bcm of yearly gas consumption by 2030.

By accelerating the roll out of rooftop solar PV systems by up to 15TWh this year the EU could save an additional 2,5 bcm of gas. The Commission will present in June a communication on solar energy with the aim of helping unlock solar energy's potential as a major renewable energy source in the EU. Based on an analysis of the state of play of solar energy across the EU, the solar strategy will propose a European Solar Rooftops Initiative, which will identify barriers, propose measures to accelerate the roll-out and ensure that the public can fully reap the benefits of rooftop solar energy.

The Commission will help further develop the **value chain for solar and wind energy and for heat pumps**, also boosting the EU's competitiveness and tackle strategic dependencies. If necessary to crowd-in sufficient private investment, measures will include channelling EU financing to next-generation technologies, mobilising InvestEU or Member States' support. Particular attention would be paid to the acceleration of investments in reskilling and upskilling of the workforce, which are essential to support the transformation.

The Commission, Member States and industry should continue to closely monitor the supply of critical and other raw materials, promote strategic partnerships for securing supplies and consider taking other action, such as strategic stockpiling, if necessary.

By doubling its planned yearly pace of deployment of heat pumps in in the first half of this period, the EU would reach 10 million heat pumps installed in the next five years. This would save 12 bcm for every 10 million heat pumps installed by households. The accelerated market deployment of heat pumps will require rapid upscaling of the entire supply chain and be accompanied by measures to boost building renovation and district heating system modernisation.

Beyond home and building projects, energy supplies based on wind, solar and other low emission sources for power generation would also reduce our dependence on gas.

2.2.2. Decarbonising industry

The REPower EU plan could accelerate the deployment of innovative hydrogen-based solutions and cost-competitive renewable electricity in industrial sectors. The Commission would bring forward the implementation of the Innovation Fund in order to support the switch to electrification and hydrogen, including through an EU-wide scheme for carbon contracts for difference, and to **enhance the EU's manufacturing capabilities** for innovative zero and low carbon equipment, such as electrolysers, next generation solar/wind, and other technologies.

2.2.3. Enabling faster permitting

A precondition for the acceleration of renewable energy projects to materialise is to simplify and shorten permitting. Lengthy administrative procedures have been identified as one of the key obstacles for investments in renewables and related infrastructure. These should be addressed by full and rapid transposition of the Renewable Energy Directive¹⁶ currently in force, implementation of the corresponding reforms and measures in Member States' recovery and resilience plans as well as the provisions relating to permitting of infrastructure in the revised TEN-E framework¹⁷.

The Commission calls on Member States to ensure that the planning, construction and operation of plants for the production of energy from renewable sources, their connection to the grid and the related grid itself are considered as being in the overriding **public interest and** in the interest of public safety and **qualify for the most favourable procedure available in their planning and permitting procedures.**

Member States should **swiftly map, assess and ensure suitable land and sea areas that are available for renewable energy projects**, commensurate with their national energy and climate plans, the contributions towards the revised 2030 renewable energy target and other factors such as the availability of resources, grid infrastructure and the targets of the EU Biodiversity Strategy. The Commission will propose in the **upcoming nature restoration law** proposal that Member States should, when preparing their national plans to meet restoration targets, take into account limited and clearly defined areas as particularly suitable (**'go-to' areas**), while avoiding as much as possible environmentally valuable areas. Member States can use the review of their plans under the Maritime Spatial Planning Directive to further the deployment of renewable energy projects.

In May, the Commission will publish a recommendation on fast permitting for renewable energy projects and will work to support the use of all flexibilities already granted by EU legislation and the removal of remaining obstacles, whatever their origin.

The Commission will also provide guidance on when and how **regulatory sandboxes** are needed to enable the testing of innovative technologies, products or services that aim to advance the coexistence of renewable deployment and environmental protection. The guidance will focus on setting up the boundaries of regulatory sandboxes such as defining the timeframe, territory and continued regulatory supervision to minimise any risks.

¹⁶ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).

¹⁷ Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009.

The Commission and the EIB Group will conclude in 2022 on the financing mechanisms that would be best suited to promote the development of **power purchase agreements (PPAs)** in Europe, which is already possible under InvestEU. This will include facilitating better access to PPAs for new off-takers such as SMEs.

CONCLUSION

Developments in energy markets in recent months, and especially the dramatic change in our security situation in recent weeks, require to drastically accelerate the clean energy transition and thereby increase Europe's energy independence.

Immediate actions are warranted to mitigate the impact of high prices for households, farmers, businesses and industry.

Breaking the dependency on Russian fossil fuels will accelerate the change of the energy mix in Member States, which should be reflected in the functioning of the electricity market.

A European policy on gas storage will improve preparedness for the next winter season and beyond. Joint and coordinated action is the best contingency response to the challenges we face.

The Commission is ready to develop a REPowerEU plan, in cooperation with Member States, by the summer, to support the diversification of energy supplies, accelerate the transition to renewable energy and improve energy efficiency. This would accelerate the phasing out of Russian gas imports and reliance on fossil fuels and provide the best insurance against price shocks in the medium term by fast-forwarding the EU's green transition, with a special focus on cross-border and regional needs. The need for greater security of supply is adding a new impetus to the objectives of the European Green Deal.