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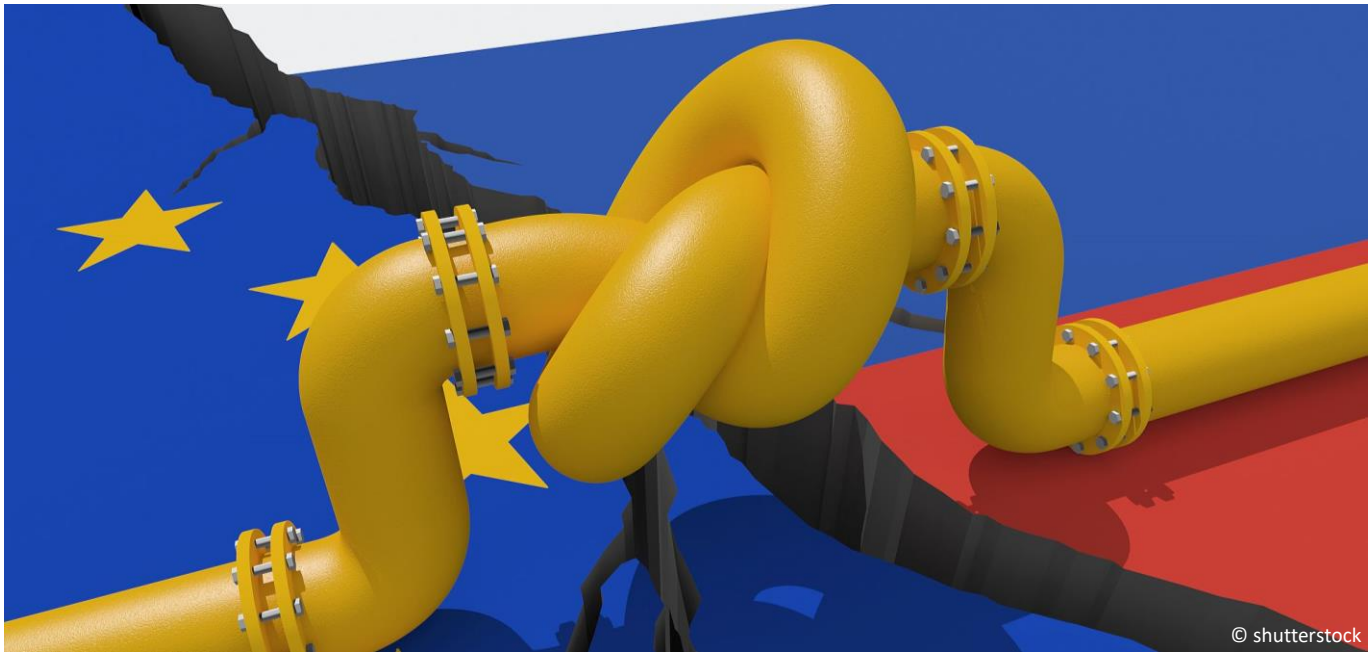
# REPowerEU: Struggling for EU Energy Sovereignty

## The EU Commission's Action Plan for Secure, Affordable and Sustainable Energy

Götz Reichert, Svenja Schwind, Martin Menner




**In reaction to the Russian invasion of Ukraine, the EU Commission has announced to propose by mid-May a detailed action plan ("REPowerEU") for phasing-out the EU's dependence on Russian gas by two thirds before the end of 2022 and on all Russian fossil fuels by 2027. Furthermore, it wants to mitigate detrimental effects of high energy prices and boost decarbonisation by the deployment of renewable energies. In order to regain its energy sovereignty, the EU is faced with tough choices on trade-offs between the goals of security of supply, affordability and sustainability of energy in the short-term, which must be balanced in the long-term.**

**Key Propositions**

- **Energy Security:** Short-term substitution of Russian gas is very challenging in various sectors due to technical constraints and higher costs. EU-wide cross-border coordination is crucial in order to mitigate short-term shortages of energy supply. In this respect, the EU and its internal energy market are truly an added value.
- **Energy Affordability:** Limits on retail energy prices, as planned by the EU Commission, should be avoided. Targeted direct support payments to vulnerable households and companies are preferable.
- **Energy Sustainability:** The EU Emissions Trading System (EU-ETS) will ensure that a short-term, temporary switch from Russian gas to coal of non-Russian origin for power generation will not endanger decarbonisation and the attainment of EU climate targets in the long-term.

## Content

# 1 Introduction

The Russian invasion of Ukraine in February 2022 is leading to a paradigm shift also in the energy policy of the EU and its Member States. The significant dependence on imports of fossil fuels from Russia makes the EU and its Member States vulnerable to Russian pressure, even outright blackmailing and threats. This dependence endangers not only Europe's energy security in a narrow sense[1], but also its ability to decide autonomously on its energy policy and other major "values and objectives"[2], including peace and war. To regain its autonomy – or **"energy sovereignty"**[3] – in relation to Russia, the EU needs to become independent from Russian fossil fuels. In this respect, the European Commission has outlined in a **Communication of March 8th**[4] and at the **Meeting of the Heads of State or Government of the EU in Versailles on March 10th 2022**[5] a plan (**"REPowerEU"**) it wants to propose in detail by mid-May. This plan will comprise a set of actions to make energy in the EU more **secure** by **phasing-out the EU's dependence on Russian gas by two thirds before the end of 2022 and on all Russians fossils fuels by 2027**. In addition, REPowerEU will aim to make energy more **affordable** by mitigating the detrimental effects of high energy prices on households and companies, and more **sustainable** by boosting the deployment of renewable energies.

At their meeting in Versailles[6], the **EU Member States did not agree on an immediate embargo on imports of Russian fossil fuels**. Furthermore, proposals of the European Commission presented by Ursula von der Leyen[7] remain very contentious. This includes the **setting of temporary price limits**.

This cep**Adhoc** assesses the main actions envisaged by the Commission. From the outset it is clear, however, that the EU's struggle for regaining and preserving its energy sovereignty will be long and – in the words of Frans Timmermans, Executive Vice-President of the Commission – "bloody hard"[8]. While the **three main objectives of EU energy policy**[9] – **security of supply, affordability and sustainability** – can be reconcilable in the long-term, some **tough choices** will have to be made in the short-term, since the EU is forced to refocus on energy security due to the overall geopolitical environment.

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1 "Energy security" has been defined as "the uninterrupted availability of energy sources at an affordable price"; International Energy Agency, Energy Security. EU Commission (2014), Communication COM(2014) 330 of 28 May 2014, European Energy Security Strategy; see Bonn, M. / Reichert, G. (2014), Energy Security, cep**PolicyBrief** 38/2014.

2 According to Daniel Yergin's classic definition, the objective of "energy security" in a broad sense is *"to assure adequate, reliable supplies of energy at reasonable prices and in ways that do not jeopardize major national values and objectives"*; see Yergin, D (1988), Energy Security in the 1990s, in: Foreign Affairs, Vol. 67, No. 1 (Fall, 1988), pp. 110–132 (111).

3 "Energy sovereignty" is threatened in case of *"disruptions potentially arising from actions of 'external' actors, be it hostile powers or terrorists, 'unreliable' exporters, 'foreign' energy companies, or overly powerful market agents. Protection from such disruptions is seen in increasing control over energy systems, be it by military, political, economic or technical means. […] [A] sovereignty strategy is the quest for energy independence."*; see Cherp, A. et al. (2012), Energy and Security, in: Johansson, T. B. et al. (eds.), Global Energy Assessment: Toward a Sustainable Future, pp. 325–383 (330).

4 EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU: Joint European Action for more affordable, secure and sustainable energy [EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU].

5 EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

6 European Council (2022), Statement of the heads of state or government, meeting in Versailles of 10 March 2022, on the Russian military aggression against Ukraine.

7 EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

8 Press conference on the REPowerEU Communication of 8 March 2022, Opening remarks by Executive Vice-President Timmermans and Commissioner Simson.

9 Treaty on the Functioning of the European Union (TFEU), Art. 194 (1). See also EU Commission (2007), Communication COM(2007) 1 of 10 January 2007, An Energy Policy for Europe; Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. S. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, cep**Kompass**, p. 49 et seq.

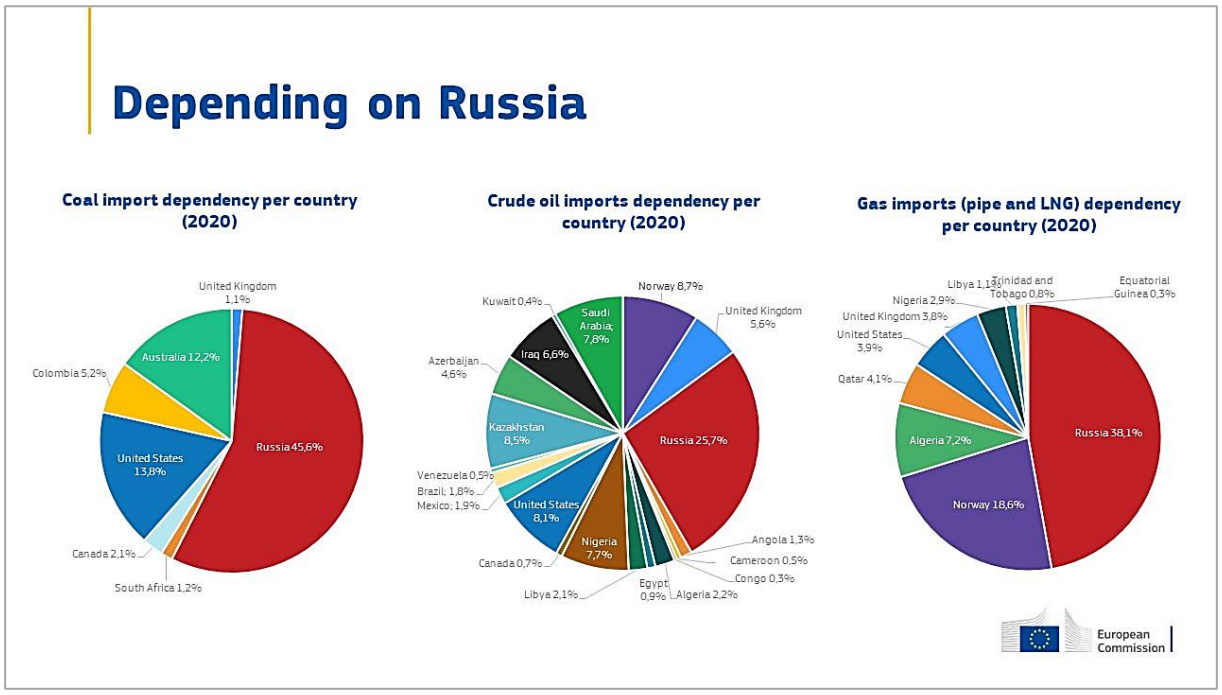
# 2 EU Actions for Secure, Affordable and Sustainable Energy

## 2.1 Secure Energy: Reducing Dependence on Russian Gas

**The EU and its Members States are dependent on imports of fossil energy (gas, oil and coal)**, amounting to 57% to 60% of gross energy consumption in the past five years.[10] Although domestic production of renewable energies has increased significantly, the declining production of EU hard coal, brown coal (lignite) and gas has meant that the EU remains dependent on imports of fossil fuels with Russia as its main supplier (**Figure 1**):

- For **hard coal**, in 2020 Russia delivered 45.6% of EU imports.
- For **crude oil**, in 2020 Russia accounted for 25.7% of EU imports.
- Of the EU's total import of **gas (pipeline and liquefied natural gas LNG)**, Russia provided around 38.1.% in 2020 and even 45% in 2021 – 140 billion cubic meters (bcm) through pipelines and 15 bcm as LNG[11].

**Figure 1: Dependence of the EU on Russian Fossil Fuels**




Source: EU Commission[12]

[10] For the following data see EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, Questions and Answers on REPowerEU, p. 1.

[11] International Energy Agency (2022), A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas [IEA (2022), 10-Point Plan].

[12] EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

The Member States depend differently on Russian gas (**Table 1**). While Finland imports 100% of its gas from Russia, its overall share of gas in its final energy consumption amounted only to 3% in 2020. In contrast, both the share of gas in the final energy consumption and the dependence on Russian gas is especially high in Germany, Hungary, Italy, Poland, Romania and Slovakia.

**Table 2: Dependence of the EU and Member States on Russian Gas**

| Member States (selected) | Share of Gas in Final Energy Consumption (2020) | Share of Gas Imported from Russia (2021) |
|---|---|---|
| Bulgaria | 12.00% | 99.54% |
| Estonia | 9.00% | 100.00% |
| Finland | 3.00% | 100.00% |
| Germany | 27.00% | 53.70% |
| Hungary | 32.00% | 78.00% |
| Italy | 31.00% | 33.40% |
| Netherlands | 38.00% | 5.70% |
| Poland | 13.00% | 81.32% |
| Romania | 25.00% | 30.00% |
| Slovakia | 25.00% | 79.50% |
| **EU-27** | **21.30%*** | **40.00%**** |

Source: Bruegel[13]; *Eurostat: Data for 2019[14]; **EU Commission[15]

### 2.1.1 Diversifying Gas Supplies: LNG, Pipeline Gas, Biomethane, Hydrogen

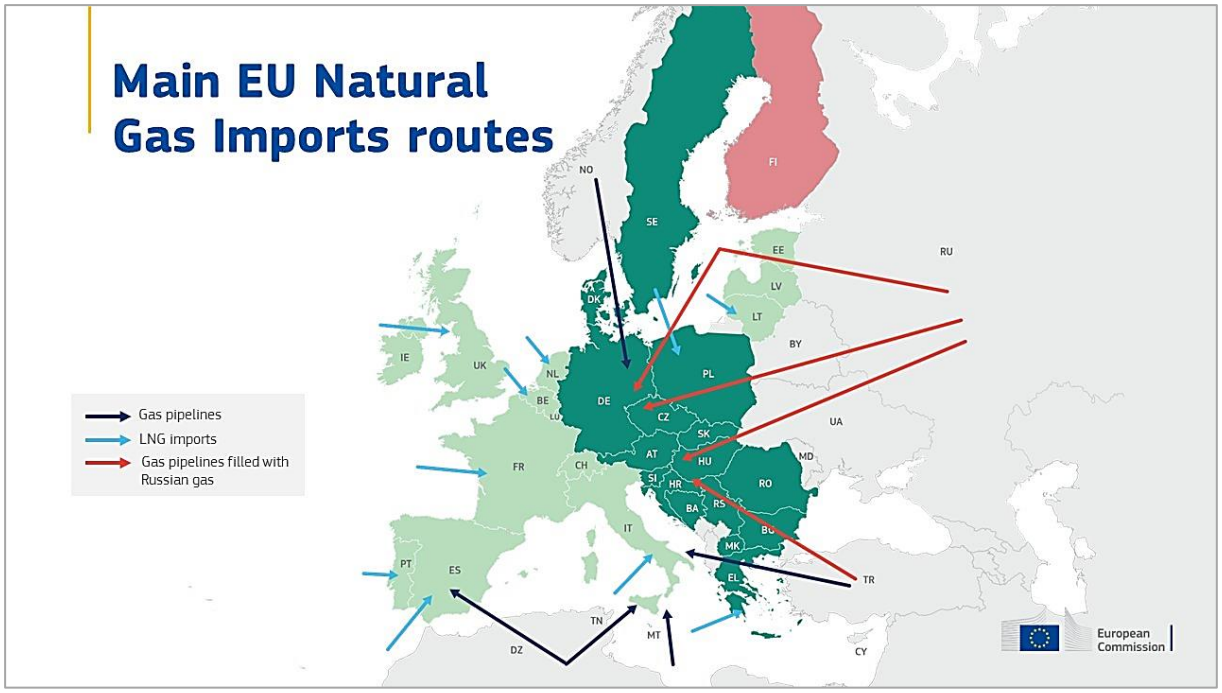
#### 2.1.1.1 EU Actions

The Commission proposes to reduce the dependence of the EU on Russian gas by diversifying gas supplies, via higher imports of liquefied natural gas (LNG) and pipeline imports from non-Russian suppliers (**Figure 2**), and higher levels of biomethane and hydrogen.[16]

One option is the increase of **LNG imports** from other suppliers. In contrast to Russian gas, which needs to be transported to the EU via land and sea pipelines, LNG can be transported independently from such infrastructure by ship and road. The Commission wants to intensify efforts to purchase additional amounts of LNG from LNG suppliers worldwide (Qatar, US, Egypt, West Africa). In addition, additional **pipeline gas** from non-Russian sources (e.g., Azerbaijan, Algeria, Norway) should be purchased.

[13] McWilliams, B. / Sgaravatti, G. / Tagliapietra, S. / Zachmann, G. (2022), Preparing for the first winter without Russian gas, Bruegel Blog of 28 February 2022 [Bruegel Blog of 28 February 2022].
[14] Eurostat (2022), Energy production and imports.
[15] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, Questions and Answers on REPowerEU, p. 1.
[16] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, pp. 7 et seq.

**Figure 2: Main EU Natural Gas Import Routes (Pipelines and LNG)**




Source: EU Commission[17]

Furthermore, the Commission suggest that Member States should channel funding to the increased production of **biomethane** from sustainable biomass sources, including in particular agricultural wastes and residues.[18]

Finally, the Commission wants to accelerate to production and use especially of "green hydrogen" produced with renewable energies (**"Hydrogen Accelerator"**). According to the Commission, other forms of fossil-free hydrogen, notably nuclear-based, should also play a role in substituting natural gas. To this end, the Commission wants to 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.[19]

#### 2.1.1.2 cep-Assessment

##### Substitution of Russian Gas With LNG

The purchase of LNG from different regions worldwide is one option to diversify gas supplies and to achieve energy independence from Russian gas. LNG contracts are flexible, meaning that LNG sellers and buyers can agree on very different conditions. In this way they provide short-term flexibility to international gas markets.[20] However, this will come at a price: LNG prices are also volatile and higher than for gas delivered via pipelines.[21] Coordination of the EU and its Member States with each other

[17] EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

[18] See generally EU Commission (2020), Communication COM(2020) 663 of 14 October 2020 on an EU strategy to reduce methane emissions; see Schwind, Svenja / Reichert, G. (2021), Methane Strategy, cep**PolicyBrief** 02/2021.

[19] See generally EU Commission (2020), Communication COM(2020) 301of 8 July 2020, A hydrogen strategy for a climate-neutral Europe; see Menner, M. / Reichert, G (2020), EU Hydrogen Strategy, cep**PolicyBrief** 14/2020.

[20] Bruegel Blog of 28 February 2022.

[21] IEA (2022), 10-Point Plan, p. 5.

and also with other LNG buyers worldwide can prevent may mitigate further price shocks. However, LNG can only be one element of the EU strategy for the diversification of energy sources. Apart from finite availability of LNG on the world market, there are further limiting factors: For example, currently 600 tankers are shipping LNG worldwide. To replace only the German gas imports from Russia the supply of 400 of these 600 tankers would be needed.[22] Moreover, not all Member States are equally well connected to the LNG network and cross-border transport of LNG to neighbouring Member States is still constrained. However, LNG terminals are located across the EU (**Figure 3**). In this respect, the **EU-wide cross-border coordination is truly an added-value of the EU and its internal energy market, since it increases significantly security of energy supply for Member States that do not have their own LNG terminals and gas storage facilities**.[23]

**Figure 3: LNG Infrastructure EU-27 and UK**


Source: EU Commission[24]

[22] Gasbedarf Deutschlands mit Flüssigerdgas LNG nicht zu decken, Deutsche Verkehrszeitung (DVZ) of 3 March 2022.

[23] EU Commission (2016), Communication COM(2016) 49 of 16 February 2016 on an EU strategy for liquefied natural gas and gas storage; see Bonn, M. / Reichert, G (2016), Liquefied Natural Gas and Gas Storage, cep**PolicyBrief** 17/2016.

[24] EU Commission (2022), EU-U.S. LNG Tade – U.S. liquefied natural gas (LNG) has the potential to help match EU gas needs.

While LNG is a viable option to increase energy security of the EU in the short-term, its increased use will be costly, thereby conflicting with the objective of affordable energy prices. Furthermore, its production by fracking and its use raises questions regarding its environmental sustainability with regard to the protection, e.g., of freshwater resources and – like pipeline gas – increasing $CO_2$ emissions. While the objectives of security of supply, affordability and sustainability can be reconcilable in the long-term, **the increased use of LNG to secure energy supply is one of the tough choices the EU is faced with at least in the short-term**.

### Substitution of Russian gas with biomethane and hydrogen

In contrast to LNG and pipeline gas, the Commission promotes the increased production and use of biomethane and green hydrogen as more sustainable alternatives to LNG and pipeline gas. In the short-term, however, it is technically not possible to replace gas in the industry sector – e.g. by using green hydrogen. To replace gas in the buildings sector, according to the estimates of the Commission **the necessary quantities of biomethane and hydrogen are just not available at the moment**,[25] especially since the deployment of heat pumps as an alternative will take time.

### Substitution of Russian gas with coal

In the electricity sector, by contrast, gas can be substituted even in the short-term by increasing the amount of coal until sufficient capacities for electricity generation by renewable energies are available.[26] This could reduce gas demand by approximately 22 bcm.[27] Against this background, it is remarkable that the Commission is not dealing with this option.

Although coal is expensive and a big source of $CO_2$ emissions, it is still cheaper than gas and available from non-Russian suppliers even within the EU. Although it is necessary to phase out coal in the long-term to decarbonise the economy and meet the EU climate targets and achieve climate neutrality in 2050, temporarily increasing the use, for example, of lignite (brown coal) from Germany could help to become less dependent on Russian gas in the short-term without raising overall $CO_2$ emissions of the EU. Since 2005, $CO_2$ emissions caused by power generation and industrial processes are already regulated by the EU Emission Trading System (EU-ETS).[28] In the EU-ETS, the total amount of permitted $CO_2$ emissions – irrespective of the amount of coal used for power production – is fixed by way of a "cap" on emission allowances which is reduced annually in accordance by a yearly rate with a fixed long-term reduction plan. Consequently, the pursued reduction of $CO_2$ emissions is achieved effectively. Hence, the temporarily increased use of coal for electricity generation would not cause any additional $CO_2$ emissions within the EU-ETS. Due to the design of the EU-ETS, these $CO_2$ emissions must inevitably be saved somewhere else. Therefore, emissions trading is an effective and efficient means of ensuring that EU climate targets continue to be met. As long as these climate targets themselves are not watered down, **the EU-ETS will ensure that even a short-term, temporary switch from Russian gas to coal will not endanger their attainment**.

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25 EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 6.

26 Klimaökonom Edenhofer fordert Rückgriff auf Braunkohle: „Ab Winter wird die Lage schwierig", Handelsblatt of 4 March 2022.

27 IEA (2022), 10-Point Plan, p. 11.

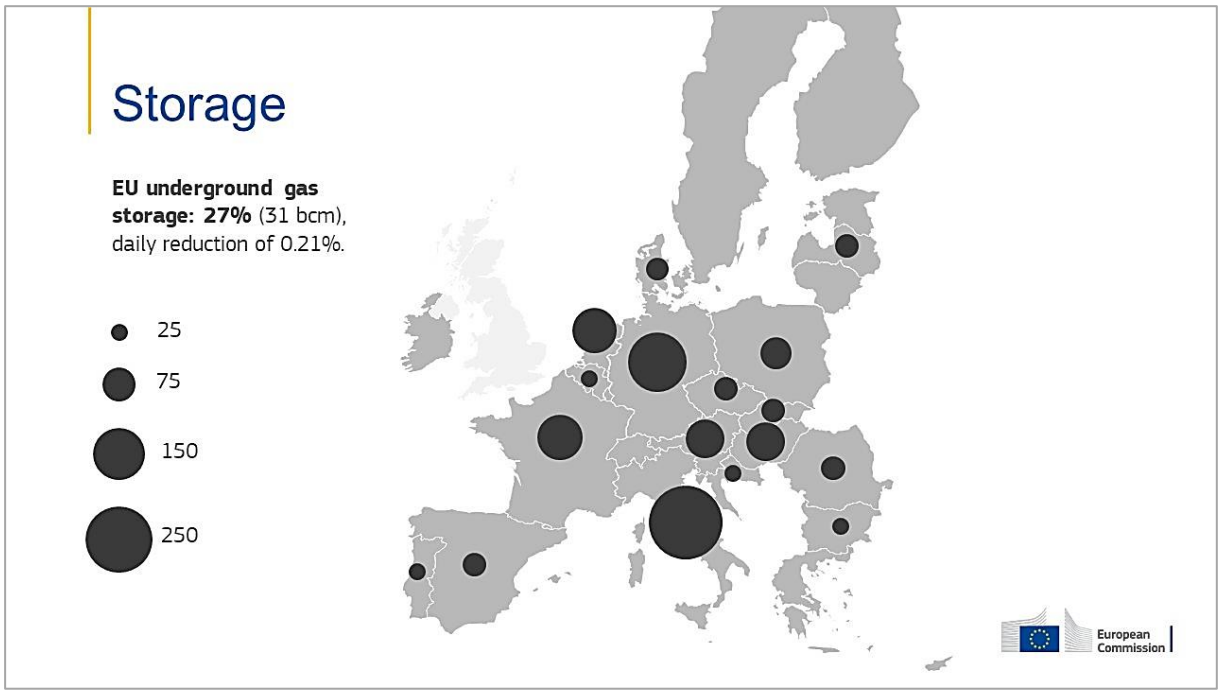
28 For the functioning of the EU-ETS see generally Bonn, M. / Reichert, G. (2018), Climate Protection by way of the EU ETS, cep**Input** 03/2018.

### 2.1.2 Gas Storage

#### 2.1.2.1 EU Actions

The Commission emphasises that gas supplies in the EU are sufficient until the end of this winter even in case of full disruption of supplies from Russia (**Figure 4**).[29] However, in order to be well-prepared for next winter, filling of gas storage across the EU should start now.

**Figure 4: Gas Storage (March 2022)**




Source: EU Commission[30]

The Commission announced that it plans to make a legislative proposal by April 2022 so as to ensure an annual adequate level of storage. 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**.[31] As not all Member States have underground storage facilities in their territories, the legal proposal will ensure fairness and allow making smart use of existing infrastructure, limiting the need for new infrastructure. It will also set out a mechanism to ensure a fair allocation of security of supply costs between the Member States.

[29] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 4.
[30] EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.
[31] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 4.

The Commission, assisted by the Gas Coordination Group, will use mechanisms under the Security of Gas Supply Regulation[32] for monitoring as well as coordinating measures[33] to ensure that actions are taken early if storage filling rates are not sufficient.

To incentivise the refilling, the Commission highlights that Member States can provide State aid to suppliers under Art. 107 (3) (c) TFEU for example in the form of guarantees ("**two-way contracts for difference"**).

Gas storage levels have proven to be particularly low at sites owned by third country entities (i.e. **Gazprom**).[34] In the light of the changed geopolitical environment, the Commission announces that its legal proposal will also identify gas storage as a **critical infrastructure** and introduce provisions to tackle **ownership risks for gas infrastructure**. Member States will have 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 future and existing storage operators, including Gazprom.

#### 2.1.2.2 cep-Assessment

Gas storage implemented in summer, when gas prices are typically lower than in winter, protect against unexpected events and therefore against an increase of energy prices. Currently, the gas market is quite deregulated and private companies are responsible to ensure gas storages are filled in summer. As today gas prices are high and expected to remain on a high level, **the current situation does not provide enough incentives to increase the gas storage**[35]. At current gas prices filling gas storages costs at least 70 billion Euros – and thus 58 billion Euros more compared to the years before.[36]

Against this background, standardised EU requirements for operators to store gas can ensure the storage capacities are used optimally.[37] **Coordinated action on EU level** can prevent Member States from outbidding each other to refill their gas storages due to the limited available gas supply.[38]

The proposed **two-way contracts for difference** are an option of risk sharing between the private gas companies and governments.

It is also important to substitute gas wherever possible and diversify the gas supply where a replacement is not possible yet. If gas continues to be purchased from Russia, **Gazprom will be able to have some leverage over the EU's gas supply**. When the storage facilities are filled at high prices, the quantities that have been held back so far can be put on the market by Gazprom. The operators would incur high losses due to the decline in prices. However, if the storage facilities are not filled, Gazprom can continue to withhold gas.[39]

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[32] Regulation (EU) 2017/1938 of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No. 994/2010 [Security of Gas Supply Regulation]. See Bonn, M. / Voßwinkel, J. S. (2019), Gas Supply in the EU – Status and Outlook, cep**Input** 06/2019, pp. 10 et seq.; Bonn, M. / Reichert, G. (2016), Security of the Gas Supply, cep**PolicyBrief** 12/2016.

[33] Security of Gas Supply Regulation, Art. 4.

[34] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 4.

[35] IEA (2022), 10-Point Plan, p. 6.

[36] Bruegel Blog of 28 February 2022.

[37] IEA (2022), 10-Point Plan, p. 6.

[38] Bruegel Blog of 28 February 2022.

[39] Bruegel Blog of 28 February 2022.

In this context, the Commission's plan to qualify gas storage as critical infrastructure and take measures, such as **ownership unbundling**, against potentially **unreliable storage owners** from third countries, is important.

### 2.1.3 Solidarity Gas Deliveries between Member States

#### 2.1.3.1 EU Actions

To ensure the supply of protected customers, such as households, across borders and in all situations within the EU, the Commission urges Member States to conclude outstanding **"solidarity agreements"** pursuant to the Security of Gas Supply Regulation.[40] Accordingly, all Member States whose gas networks are directly connected or connected via a third country are required to sign such bilateral agreements with one another. In the event of an extreme gas shortage, **"solidarity deliveries"** are to be made as a measure of last resort to ensure that households, district heating systems, and essential social services in the Member State affected are supplied with gas.

#### 2.1.3.2 cep-Assessment

**Solidarity gas deliveries** in times of emergency between Member States, applicable pursuant to EU law since December 2018, demonstrate – again – that the **EU-wide cross-border cooperation is truly an added-value of the EU and its internal energy market. It increases significantly the security of energy supply for all Member States**.[41] Accordingly, the "solidarity principle", ensures that protected consumers, such as private households and hospitals in a Member State that is affected by a gas supply crisis, have priority over companies in other Member States when it comes to the gas supply. It ensures that higher national supply standards in neighbouring Member States do not stand in the way of the gas flows required for solidarity. Compensation payments for gas supplies that are rerouted in an emergency, prevent Member States from casually risking an emergency in the hope of solidarity from neighbouring Member States. Therefore, Member States should speedily agree on the specific terms for such solidarity gas deliveries if they have not already done so.

## 2.2 Affordable Energy: Mitigating the Effects of High Energy Prices

**Energy prices are at record highs and remain volatile.**[42] In 2021 their rise was mainly caused by growing global demand for gas in the post-COVID-19 economic recovery. In February 2022, shortly before the beginning of the war, wholesale gas prices were 200% higher than a year before in February 2021.

Due to the design of the EU electricity market ("merit order"), gas prices also define electricity prices (**"contagion effect"**). Accordingly, electricity prices are based on the marginal costs of electricity generation, i.e. the costs incurred for the last megawatt-hour produced. For this purpose, the electricity-generating power plants are ranked according to their marginal costs, and their electricity production is used by the electricity trading platform in line with this ranking – starting with the least-cost producer (**"merit order"**). The power plant with the highest marginal costs sets the price for the whole market ("market clearing price"). On windy or sunny days renewable energy sources with approximately zero

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40 Security of Gas Supply Regulation, Art. 13.

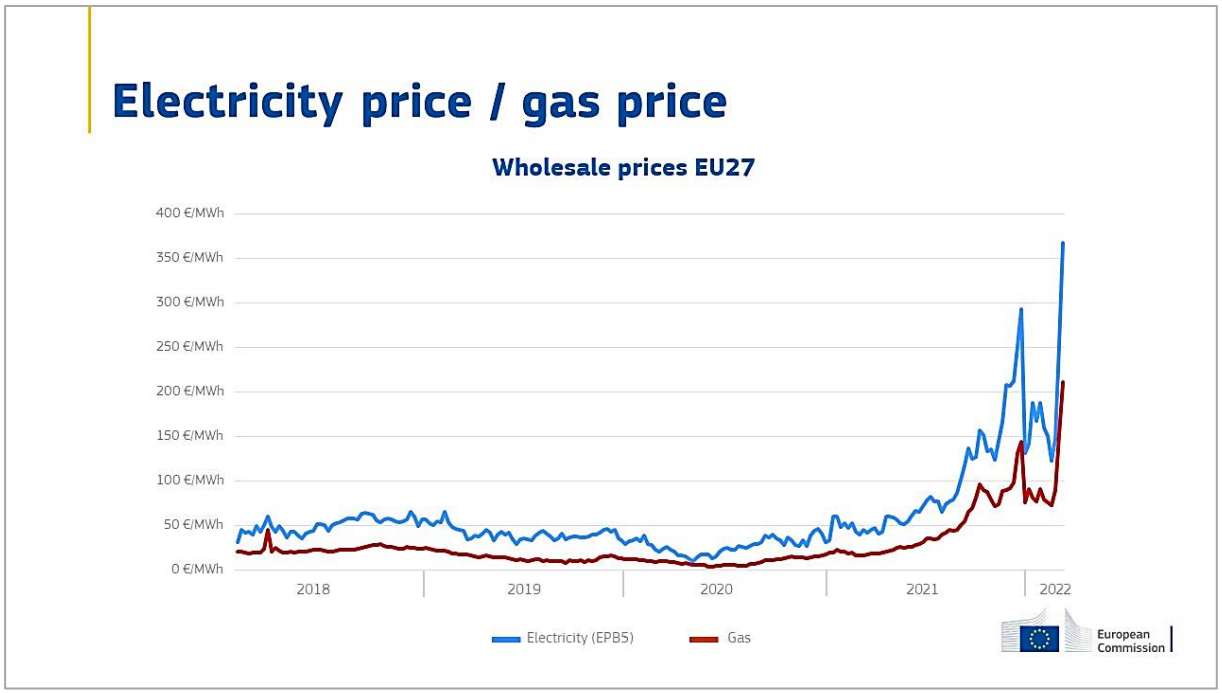
41 See Bonn, M. / Voßwinkel, J. S. (2019), Gas Supply in the EU – Status and Outlook, cep**Input** 06/2019, pp. 13 et seq.; Bonn, M. / Reichert, G. (2016), Security of the Gas Supply, cep**PolicyBrief** 12/2016.

42 EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, Questions and Answers on REPowerEU, p. 1.

marginal costs set low energy prices. However, fossil energies such as gas set the price on days on which renewable energies cannot be produced in sufficient quantities.[43]

Due to this "contagion effect" of rising gas prices, wholesale electricity prices have similarly risen (**Figure 5**). Russia's invasion of Ukraine in February 2022 has aggravated this development considerably. Given the growing uncertainties about the reliability of Russian energy supplies[44], the Commission estimates that energy prices will remain high for some time.

**Figure 5: Wholesale Electricity and Gas Prices (EU-27)**




Source: EU Commission[45]

In October 2021, the Commission provided guidance to Member States on potential measures they could use under existing EU law to mitigate detrimental effects of high prices for vulnerable consumers and companies.[46] This **"toolbox"** included energy subsidies and vouchers, tax reductions and measures to avoid energy disconnection. As a follow-up, the Commission now adapts its previous guidance to the worsening situation.

[43] Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. S. (2014), Die Klima- und Energiepolitik der EU – Stand und Perspektiven, cep**Kompass**, p. 69.

[44] See, for example, Bloomberg of 7 March 2022, Russia Threatens to Cut Natural Gas Flows to Europe Via Nord Stream 1.

[45] EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

[46] EU Commission, Communication COM(2022) 660 of 13 October 2022, Tackling rising energy prices: a toolbox for action and support.

### 2.2.1 Regulating Energy Prices

#### 2.2.1.1 EU Actions

EU law requires that electricity suppliers must be free to determine electricity prices in order to facilitate effective competition and lower prices for consumers.[47] However, **in exceptional cases** – such as extremely high price increases – **Members States are allowed to regulate prices** in order to protect vulnerable households, and in limited cases also households in general and micro-enterprises.[48] Accordingly, such public intervention must pursue a general economic interest, not go beyond what is necessary to meet this interest, be limited in time and proportionate as regards their beneficiaries.

To support Member States in designing public interventions for regulating prices which are in line with EU law, the Commission has published detailed guidelines.[49] In addition, the Commission has announced that it is also **considering to propose by the end of March 2022** measures to limit the contagion effect of gas prices on electricity prices, including the option of **temporary price limits**.[50]

#### 2.2.1.2 cep-Assessment

**Public interventions in the price setting mechanism of markets to limit energy prices should be avoided** since they deprive energy users from the cost information embedded in prices and lead to adverse effects: Regulated energy prices reduce incentives for efficient energy use and energy savings. As a consequence, households wasting energy would benefit more than those saving energy, which runs counter to the user-pays principle. Therefore, Member States should be very cautious in regulating electricity prices and follow strictly the guidance provided by the Commission.

**A preferable alternative to mitigate detrimental effects of high energy prices on households are direct support payments.** They provide relief for household budgets while also preserving the market price signals and the corresponding incentives. Therefore, in view of the current high energy prices and the need to adequately price $CO_2$ emissions in the buildings and transport sectors across the EU in the future, as proposed by the Commission[51], the EU should encourage Member States to quickly set up schemes for direct support payments to households in the form of a lump-sum. This will allow households to be relieved effectively and in a socially acceptable[52] way from high energy prices now and from costs of carbon prices imposed by emissions trading for buildings and transport in the future,

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47 Directive (EU) 2019/944 of 5 June 2019 on common rules for the internal market for electricity [Electricity Directive], Art. 5 (1). See Bonn, M. / Reichert, G., The EU Internal Electricity Market, cep**Input** 04/2019; Bonn, M. / Reichert, G. (2017), Internal Electricity Market – Part I (Directive), cep**PolicyBrief** 09/2017.

48 Electricity Directive, Art. 5 (2)–(5).

49 EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, Annex 1: Guidance on Application of Article 5 of the Electricity Directive during current situation.

50 EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

51 EU Commission (2021), Proposal COM(2021) 551 of 14 July 2021 for a Directive amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757.

52 KlimaAllianz Deutschland (2022), Machbarkeitsstudie zur Klimaprämie: Zivilgesellschaft fordert zeitnahe Einführung, Press Communication of 17 February 2022.

without jeopardising incentives to save energy and reduce $CO_2$ emissions. Furthermore, as a short-term support measure Member States could also apply the reduced VAT tariff to energy.[53]

### 2.2.2 Supporting Sectors with Carbon Leakage Risk

#### 2.2.2.1 EU Actions

In addition to the direct costs which European industrial undertakings have to bear for their $CO_2$ emissions and the acquisition of EU-ETS allowances ("direct emission costs"), the **EU Emissions Trading System (EU-ETS)** gives rise to a further regulatory cost burden that is passed on to them via **higher electricity prices from electricity producers** that are subject to EU-ETS obligations ("indirect emission costs"). Since 2013, in line with the EU State Aid Guidelines on the Emissions Trading System[54], Member States are allowed to pay a compensation for these indirect emission costs to those sectors that are electricity-intensive and face international competition. This "electricity price compensation" aims at preventing electricity-intensive industries and the associated $CO_2$ emissions from being relocated outside the EU to third countries with weaker climate protection regimes and higher emissions (**"carbon leakage"**), which would lead to an overall rise in global $CO_2$ emissions with harmful consequences for the climate.

The Commission considers the adoption of amendments to the EU Emissions Trading System State Aid Guidelines which would **enlarge the list of sectors eligible for an electricity price compensation** to reflect their increased risk of carbon leakage, 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.[55]

Furthermore, the Commission will shortly be consulting Member States on the needs for and scope of a new, self-standing "Temporary Crisis Framework".[56] Under such a Temporary Crisis Framework State aid to energy-intensive consumers could be granted to compensate for part of their increase in energy costs due to the price shock since the Russian invasion.[57]

#### 2.2.2.2 cep-Assessment

The combined effect of high energy prices and potentially rising carbon prices of the EU-ETS has aggravated concerns regarding the exposure of electricity-intensive industries to the risk of carbon leakage, particularly those which are exposed to fierce competition on international markets and which are unable to pass these indirect costs through to consumers ("price takers"). Therefore, **it is crucial that companies in sector significantly at risk of carbon leakage are eligible to receive electricity price compensation to preserve their international competitiveness and to reduce global $CO_2$ emissions**.[58]

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[53] Bofinger, P. (2022), Hohe Inflation bei Energiepreisen: Die Regierung ist gefragt – nicht die Notenbank, Handelsblatt of 1 March 2022.

[54] EU Commission (2020), Communication– Guidelines on certain State aid measures in the context of the system for greenhouse gas emission allowance trading post-2021, 2020/C 317/04, OJ C 317 of 25 September 2020, pp. 5–19. See generally Bonn, M. / Reichert, G. / Voßwinkel, J. S. (2019), Reform der Strompreiskompensation, cep**Study** May 2019.

[55] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 3.

[56] Ibid.

[57] Ibid.

[58] Bonn, M. / Reichert, G. / Voßwinkel, J. S. (2019), Reform der Strompreiskompensation, cep**Study** May 2019.

### 2.2.3 Supporting Undertakings in Difficulty

#### 2.2.3.1 EU Actions

Based on the EU State Aid Guidelines for Undertakings in Difficulty,[59] Member States can offer **temporary relief for companies facing liquidity needs due to the current high energy prices, regardless of their size**. The aid can be granted in the form of liquidity support (loans or guarantees) for a maximum duration of six months for large undertakings in difficulty, or for small and medium size enterprises (SMEs), up to 18 months. In addition, under the Temporary Crisis Framework envisaged by the Commission liquidity support for all undertakings directly or indirectly affected by the currently high energy prices could be granted.[60]

#### 2.2.3.2 cep-Assessment

**The provision of temporary liquidity support is important to avoid insolvencies of otherwise solvent companies.** This is particularly relevant in the current situation where energy prices have risen exceptionally and there is a high level of uncertainty about future prices. As it is more difficult for SMEs to raise funds on the financial markets, it is justified that their support takes longer than support for larger companies.

### 2.2.4 Taxing "Windfall Profits"

#### 2.2.4.1 EU Actions

Due to the design of the EU electricity market ("merit order"), **high gas prices also lead to rising electricity prices for consumers ("contagion effect") and therefore, as an unintended consequence, also to unexpected high rents ("windfall profits") for electricity producers**.[61]

**To finance support measures, the Commission states that Member States can consider temporary tax measures on windfall profits.** Such measures should be technologically neutral, not be retroactive, allow electricity producers to cover their costs and protect long-term market and carbon price signals. The Commission has published detailed guidelines regarding the conditions such tax measures should fulfil.[62]

#### 2.2.4.2 cep-Assessment

Skimming the high rents of electricity producers by taxing windfalls profits in order to finance support measures is a **profound public intervention**. Hence, the Commission is rightly laying down clear rules for a predefined limited period of time for Member States applying this measure. Revenues from fiscal measures on high rents of electricity producers should not be used to reduce tariffs for the same reasons as public interventions in price setting.

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[59] EU Commission (2014), Communication – Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, 2014/C 249/01, OJ C 249 of 31 July 2014, pp. 1–28.

[60] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 3.

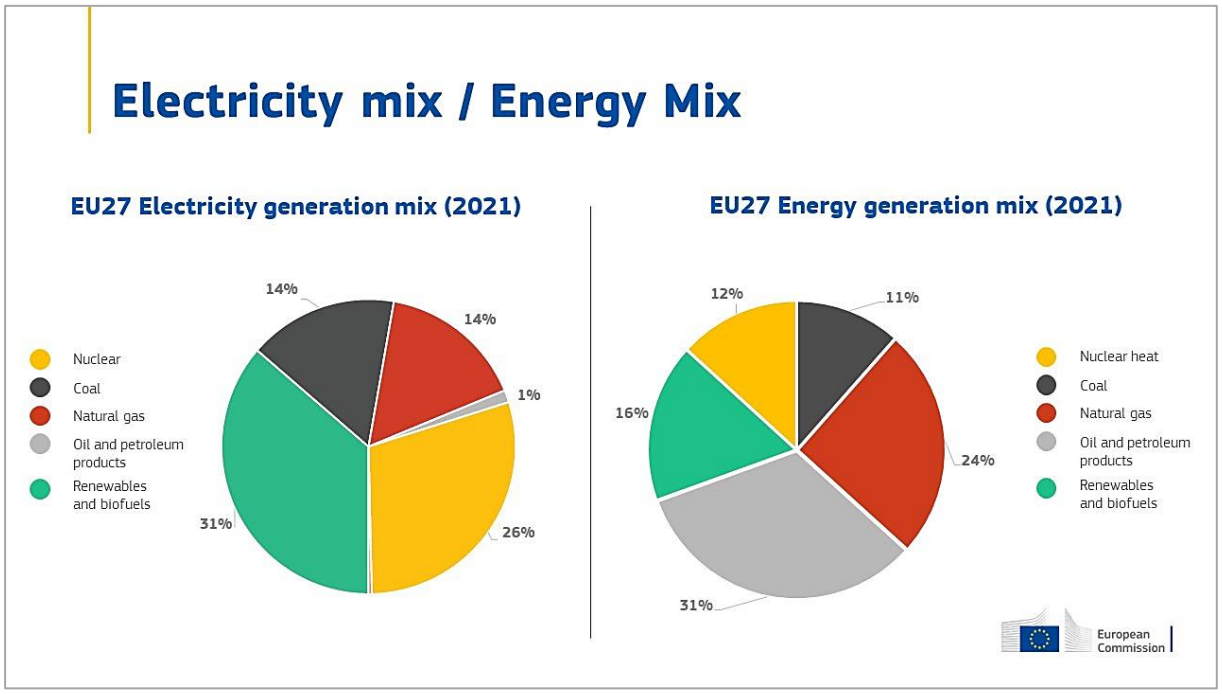
[61] IEA (2022), 10-Point Plan, p. 7.

[62] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, Annex 2: Guidance on the application of infra-marginal profit fiscal measures.

## 2.3 Sustainable Energy: Decarbonising by Boosting Renewables

The EU wants to reduce its greenhouse gas emissions by 2050 to net zero ("climate neutrality") and by 2030 to 55% compared to 1990 levels (EU 2030 climate target). To achieve this EU2030 climate target, in July 2021 the Commission proposed to overhaul the EU climate and energy legislation (**"Fit for 55" climate package**), including the **Renewable Energy Directive**[63]. Accordingly, the **share of renewable energy in overall EU energy consumption shall increase to 40% by 2030**. Now the Commission urges the Member States **to accelerate the deployment of renewables** in order to phase-out fossil fuels in the energy mix (**Figure 6**) and decarbonise the economy.

**Figure 6: EU Energy Mix (2021)**




Source: EU Commission[64]

### 2.3.1 Rolling-out Solar, Wind and Heat Pumps

#### 2.3.1.1 EU Actions

The Commission announced to present in June 2022 a **strategy 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 and propose measures to accelerate the roll-out.[65] Furthermore, the Commission wants to help further develop the value chain for solar and wind energy and for heat pumps to boost the EU's competitiveness and tackle strategic dependencies. If necessary to

[63] EU Commission (2021), Proposal COM(2021) 557 of 14 July 2021 for a Directive amending Directive (EU) 2018/2001, Regulation EU 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources; see Schwind, S. / Reichert, G. (2022), Fit for 55: Renewable Energies, cep**PolicyBrief** 01/2022.

[64] EU Commission (2022), Ursula von der Leyen, Presentation on REPowerEU, Informal Meeting of Heads of State or Government, Versailles, 10 March 2022.

[65] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU, p. 8.

crowd-in sufficient private investment, measures will include channelling EU financing to next-generation technologies, mobilising InvestEU or Member States' financial support.[66]

#### 2.3.1.2 cep-Assessment

While decarbonising the economy is essential and the final solution, **the roll-out and increased deployment of renewables is a long-term endeavour which will not make a substantial contribution to the efforts of the EU to become less dependent on Russian gas in the short-term**.

### 2.3.2 Speeding-up Permitting of Renewable Projects

#### 2.3.2.1 EU Actions

The Commission criticises **overly complex and lengthy administrative procedures** as **key obstacles** for investments in renewables. To eliminate these barriers, in May 2022 the Commission plans to adopt a **recommendation on fast permitting for renewable energy projects**.[67]

Furthermore, the Commission calls on Member States to ensure that investments in renewable energy and related grid infrastructure are considered as being in the public interest and are treated according to the most favourable procedure available in their planning and permitting procedures. Member States should consider that the planning, construction and operation of plants for the production of energy from renewable sources, assets necessary for their connection to the grid and the grid itself are of **"overriding public interest"**[68].

#### 2.3.2.2 cep-Assessment

The increased deployment of renewables is hampered by regulatory barriers, e.g. complex and lengthy procedures for the issuing of permits for renewable energy projects.[69] Each regulatory barrier is a constraint for the ramp-up of renewables and thus also for all the resulting products, such as green hydrogen[70] to replace natural gas from Russia. For short-term improvements, **the Commission could support the simplification of permitting procedures by issuing non-binding guidelines**.[71]

Furthermore, classifying renewable energies and the associated grid expansion as "overriding public interest" can help to speed up the necessary deployment of renewable energies. Nevertheless, conflicts of interest must be kept in mind. Despite its contribution to climate neutrality, renewables infrastructures such as windmills are still an intervention into nature. Speeding-up respective permitting procedures by **qualifying renewable as projects of "overriding public interest" is one of the tough choices the EU is faced with at least in the short-term**. The protection of endangered species must continue to be guaranteed as good as possible. Clear indicative EU-wide criteria for species protection

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66 Ibid.

67 Ibid., p. 9.

68 "Overriding public interest" within the meaning of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [FFH Directive], Art. 6 (4) and Art. 16 (1) (c), and within the meaning of Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy [Water Framework Directive], Art. 4 (7).

69 European Court of Auditors (2019), Wind and solar power for electricity generation: significant action needed if EU targets to be met, pp. 30 et seq., recital 60.

70 Menner, M. / Reichert, G. (2020), EU Hydrogen Strategy, cep**PolicyBrief** 14/2020.

71 Schwind, S. / Reichert, G. (2022), Fit for 55: Renewables Energies, cep**PolicyBrief** 1/2022.

could help to decrease uncertainties for investors and authorities, e.g. planning uncertainties for investors caused by lawsuits which delay the realisation significantly.[72]

## 3 Conclusion and Outlook

Even if all supply-side actions outlined by the Commission could be implemented, in the short-term until the end of 2022 they would not be sufficient to replace all imports of Russian gas, i.e. 155 bcm per year. EU citizens and companies have to face the prospect of reducing energy demand considerably. According to the estimates of the Commission (**Table 2**), on the demand-side additional energy efficiency measures will be necessary even in the short-term. Consequently, the President of the Commission Ursula von der Leyen has already called on EU citizens to save energy.[73]

**Table 2: Estimated Potential for Replacement of Russian Gas**

| Focus | REPowerEU Action | Replacement of Russian Gas by End of 2022 (bcm equivalent estimate) |
|---|---|---|
| **Non-Russian Natural Gas** | LNG | 50.0 |
| | Pipeline gas | 10.0 |
| **Renewable Gas** | biomethane | 3.5 |
| | renewable hydrogen | 0.0 |
| **Homes** | energy efficiency | 4.0 |
| | energy saving, e.g. by turning down the thermostat for buildings' heating by 1°C | 10.0 |
| | Solar rooftops | 2.5 |
| **Power sector** | wind and solar | 20.0 |

Source: EU Commission[74]

Although the three **main objectives of EU energy policy – security of supply, affordability and sustainability** – can and must be **balanced in the long-term**, some **tough choices on trade-offs will have to be made in the short-term**, since the **current geopolitical development forces the EU to focus on energy security**. In any case, decisions have to be taken quickly in the struggle for European energy sovereignty. **Otherwise, the EU will not regain the ability to decide autonomously on its energy policy in a way that does not jeopardize its fundamental values and objectives in the face of hostile aggression.**

[72] Ibid., p. 9.
[73] Interview with Ursula von der Leyen, ZDF-Morgenmagazin of 9 March 2022.
[74] EU Commission (2022), Communication COM(2022) 108 of 8 March 2022, Questions and Answers on REPowerEU, p. 6.

Centrum für Europäische Politik
FREIBURG | BERLIN

**Authors:**

**Dr. Götz Reichert, LL.M. (GWU)**
Head of Division Energy | Environment | Climate | Transport
reichert@cep.eu

**Svenja Schwind**
Policy Analyst
schwind@cep.eu

**Dr. Martin Menner**
Policy Analyst
menner@cep.eu

**Centrum für Europäische Politik** FREIBURG | BERLIN
Kaiser-Joseph-Strasse 266 | 79098 Freiburg | Germany
Schiffbauerdamm 40 | 10117 Berlin | Germany
phone: + 49 761 38693-0

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