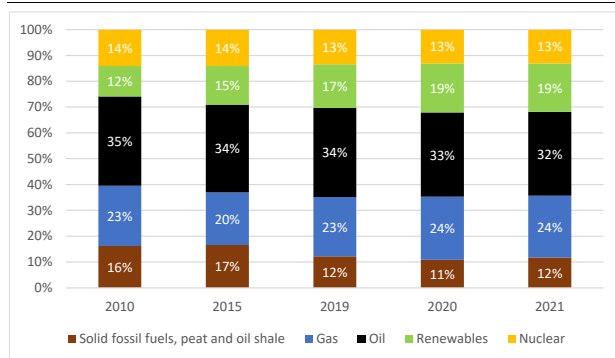


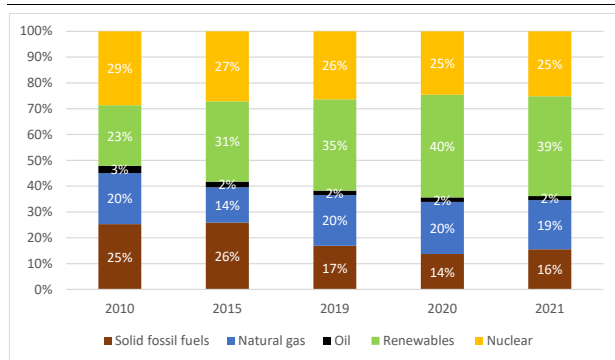
Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

Saving energy

1. Key energy savings measures

The REPowerEU Plan includes an ‘**EU Save Energy Communication**¹’ with simple and immediate behavioural changes we can all make to save energy ahead of critical winter months, while reducing energy bills. Among the main actions taken to save energy are:

- March 2023: political agreement to **increase EU-wide binding energy efficiency from 9% to 11.7% by 2030**² (38% for final energy consumption; 40.5% for primary energy consumption).
- **Gas demand in households reduced** by 15% in 2022 compared to 2019-2021,

¹ COM(2022)240

² Compared to the 2020 Reference Scenario

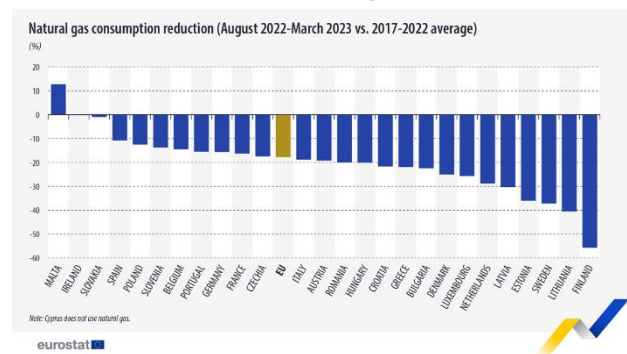
largely due to energy efficient home improvements, switching to cheaper, cleaner fuel like solar, and behavioural changes.

- The Commission is preparing a **Heat Pump Action Plan** by end 2023.

2. Gas Demand Reduction

Since the adoption of the Regulation (³), the EU has been successful in reducing its gas demand by 18% from August 2022 to March 2023, compared to the previous 5 years’ average over that same period, which corresponds to 53 bcm of gas. Most Member States achieved the 15% target.

Graph 3: Natural Gas Consumption Reduction



Source: Eurostat

Diversification of energy supplies

1. Key actions

EU dependence on Russian gas decreased at a faster pace than expected in 2022, demonstrating positive results within the context of REPowerEU. Since the beginning of the war Russian gas imports have fallen by 57% to 80 billion cubic meters in 2022 (vs. 150.2 bcm in 2021). In January this year, Russian gas imports by pipeline were well below 10% of total EU imports. While Russian LNG imports have increased over the year 2022 from 13.5 bcm in 2021 to 19 bcm in 2022, this is rather modest as compared to the reduction in pipeline imports.

LNG has played a central role in our diversification success, with our LNG imports rising from 68 bcm in 2021 to 118 bcm in 2022.

³ Regulation (EU) 2022/1369 of the Council of 5 August 2022.

In the first three months of 2023, the EU imported 30 bcm of LNG of which 6 bcm or 19% came from the Russian Federation.

The Commission has worked on **strengthening relations with international** partners and approaching more reliable, non-Russian, suppliers to secure supplies of gas and LNG, and incrementally hydrogen as its infrastructure in the EU matures.

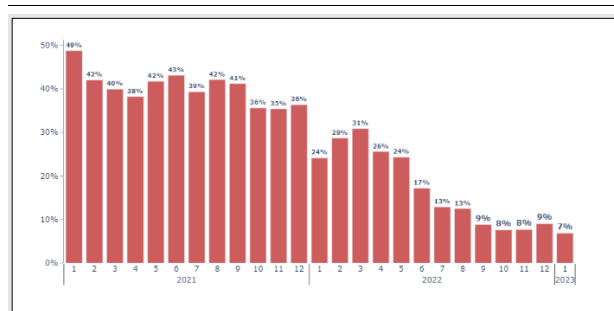
In 2022, the **United States became the major LNG supplier to the EU** by delivering approximately 50 bcm⁴ in 2022, which is 30 bcm more than in 2021. The EU-U.S. Task Force will continue to work on keeping a high level of U.S. LNG supplies to Europe in 2023 of at least 50 bcm.

On **LNG imports**, those from the United States, Qatar, Nigeria and other sources of LNG increased from 51.1 bcm to 89.9 bcm in 2022. While US represents approximately 50 bcm, a large number of smaller volumes are coming from across the globe, such as Trinidad and Tobago, Angola or Malaysia. On 15 June 2022, the Commission signed the tri-lateral Memorandum of Understanding (MoU) between Israel, Egypt and the EU on cooperation related to trade, transport and export of natural gas to the EU.

On **pipeline supplies**, the EU continues engagement with suppliers such as Norway, Algeria and Azerbaijan to maintain high level of supplies. Norway reaffirmed its intention to maintain its current record level supplies to Europe. Flows from Norway increased by 10 bcm in 2022 to 90 bcm, making Norway the EU's largest gas supplier. On 18 July 2022 a MoU was signed by Azerbaijan on a Strategic Partnership in the Field of Energy. Work also continues on engaging with partners on additional export gas potential and volumes, such as in Africa, the Middle East, and Latin America.

⁴ DG ENER – Key energy indicators.

Graph 4: **Share of Russian pipeline gas in total EU as imports**



Sources: JRC based on ETSO-G Transparency Platform

2. Gas Infrastructure Developments

In line with the REPowerEU Plan, **Member States took significant actions to optimise existing infrastructure** by for example putting into operation or upgrading cross-border interconnections allowing gas to flow to where it is needed⁵.

Europe is expected to add 45 bcm of LNG import capacity by the end of 2024. To accompany the increase of LNG supply to Europe, addressing at the same time the infrastructure bottlenecks, and to compensate the loss of Russian volumes, European Member States made major investments to develop new LNG terminals, notably by renting or buying Floating Storage Units. In total, we count around close to **15 new projects of LNG terminals** in France⁶, Italy⁷, Netherlands⁸, Germany⁹, Finland and Greece¹⁰

⁵ The interconnection between Poland and Lithuania was put into operation allowing Poland to import gas from the Klaipeda LNG terminal in Lithuania and the interconnector between Latvia and Lithuania was upgraded; the strategic Baltic Pipe project officially opened in Poland, allowing gas to flow from the North Sea to Poland via Denmark; the gas interconnector between Poland and Slovakia was made ready to begin commercial operations, enabling Norwegian gas and LNG from Poland to reach Central and Eastern Europe; the interconnector between Greece and Bulgaria began operation in 2022 and construction works started for the interconnector between Bulgaria-Serbia.

⁶ The French terminal of Le Havre is expected to be operational in September 2023.

⁷ Italy will commission one FSRU in 2023.

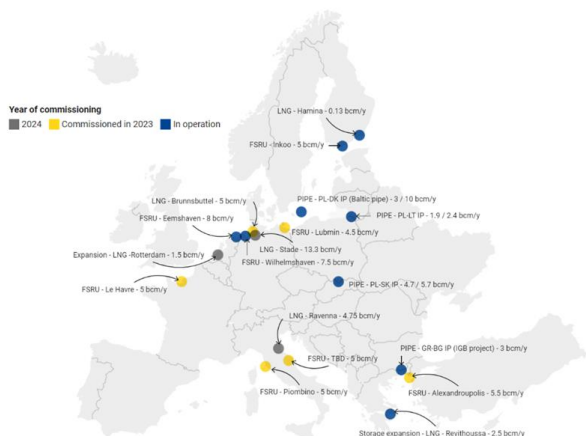
⁸ The Eemshaven import terminal in the Netherlands started operations in September 2022 and the Gate terminal has significantly increased its import capacity.

⁹ Germany commissioned 2 Federal Floating Storage and Regassification Units (FSRUs) and one privately-owned FSRU has also come online last winter. 3 more Federal FSRUs are expected to come online in 2023.

¹⁰ In Greece, the 5.5 bcm/yr Alexandroupolis FSRU is expected to start up by end-2023.

which were either recently commissioned or have upcoming commissioning dates until 2024.

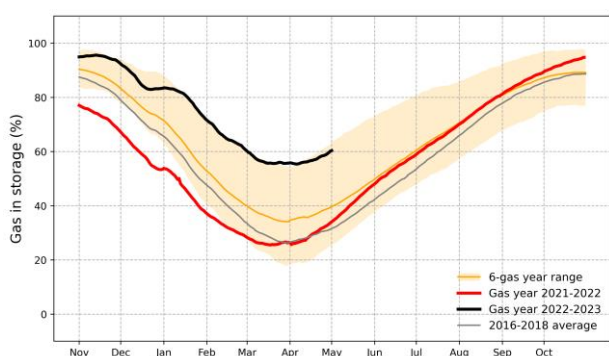
Map 1: **New EU gas infrastructure projects (2022-2024)**



Source: DG ENER

3. Gas Storage

Graph 5: **Storage levels in the EU**



Source: JRC calculation based on AGSI+ Transparency Platform, 2022

In June 2022, the **Gas Storage Regulation**¹¹ entered into force requiring Member States to fill their underground gas storage facilities to at least 80% of their capacity by 1 November 2022, rising to 90% for 2023 onwards. In November 2022, EU-wide filling level reached 95% and by January 2023, the filling level remained above 80%. The efficiency of the Gas Storage Regulation combined with the efforts made under the Gas Demand Reduction Regulation allowed the EU to leave the heating season with 56% of gas in storage, a

¹¹ COM/2022/132 final – amending Regulation (EU) 2017/1938

historic high. The Commission is to fix annually the filling trajectories for Member States with underground gas storage facilities for the year to come.

Gas storage as of 2 May 2023: 60.31% (vs. 34.21% on 2 May 2022).¹²

4. Nuclear fuel diversification

There are ongoing international dialogues with key partners on **long-term preparedness for supplies of nuclear fuel and nuclear fuel cycle services**, as Canada and the US.

Energy Platform

In April 2022, the Commission created an **EU Energy Platform**¹³, as mandated by the European Council. **Regional groups of Member States** have worked on Action Plans to identify needs and diversification of supply options within their regions. In this context, the Commission worked intensively on the means to operationalise demand aggregation and joint purchase of gas by companies. The **common gas purchasing platform “AggregateEU”**¹⁴, was launched on 25 April 2023. As of now, AggregateEU is expected to pool a volume of 21-24 bcm of gas demand for over three years for EU Member States and a number of neighbouring countries.

On Wednesday, May 10, the European Union launched its first international tender for joint gas purchases. A total of 25 international suppliers and more than 110 companies have decided to participate and intend to purchase 11.6 billion cubic meters of gas. Deliveries are expected to take place between June 2023 and May 2024.

¹² [Gas Infrastructure Europe - AGSI \(gie.eu\)](https://gic.eu)

¹³ COM(2022)549 - Council Regulation (EU) 2022/2576

¹⁴ AggregateEU is the name of the demand aggregation and joint purchasing service, operated by Prisma, the Service Provider, under the EU Energy Platform in accordance with Council Regulation 2022/2576. Its objective is to contribute to the security of supply (both in terms of volume and affordability), with a focus on LNG.

Accelerating clean Energy

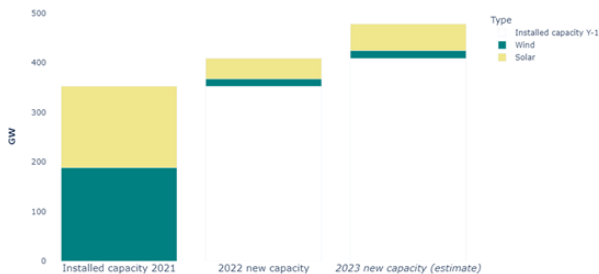
1. The EU Solar Energy Strategy

The EU Solar Energy Strategy¹⁵ aims to bring online over **320 GW of solar photovoltaic by 2025** and almost **600 GW by 2030**. According to Commission's estimations, these additional capacities could displace the consumption of 9 bcm of natural gas annually by 2027. The Strategy launched **3 flagship initiatives**: the **European Solar Rooftops Initiative**, an EU **large-scale skills partnership**, and the **EU Solar PV Industry Alliance**.

2. Other initiatives

The **Recommendation and guidance on speeding up renewable energy and grids permit-granting procedures** includes actions that the Member States can take already in the existing legislative framework to accelerate and simplify permitting.

Graph 6: **Installed capacity of wind and solar power (in gigawatt)**



(1) In 2022, 56 GW of wind (15GW) and solar (41GW) capacity have been installed, which represents an 16% increase from 2021 and an annual saving of 11 bcm of gas equivalent.

(2) In 2023, new installed capacity estimated at 69 GW, which would represent an 17% increase from 2022 and an annual saving of 13 bcm of gas equivalent

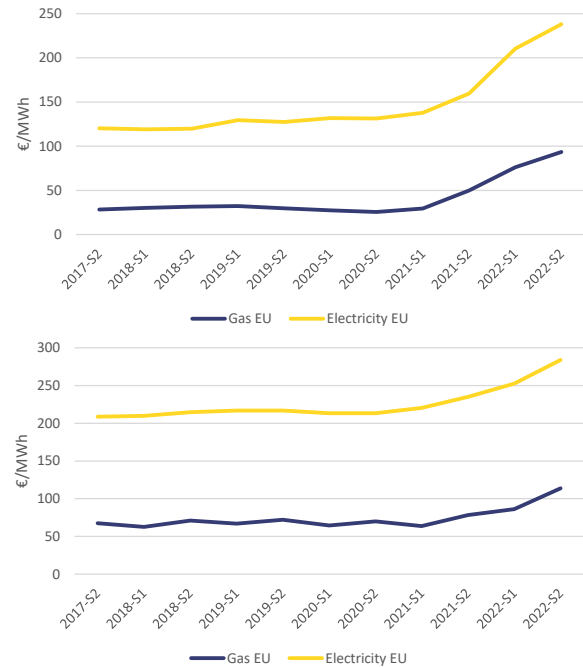
Source: Eurostat, WindEurope, Solar Power Europe

Upscaling the use of renewable hydrogen, ammonia and other derivatives will also accelerate the decarbonisation of our energy system and greatly reduce EU dependence on Russian fossil fuels.

¹⁵ COM(2022)221 - SWD(2022)148

Energy price developments

Graph 7: **EU's energy retail prices for industry (top) and households (bottom)**



(1) On electricity, the band consumption is for DC households and ID for industry

(2) On gas, the band consumption is D2 for households and I4 for industry

Source: Eurostat

Recovery and Resilience Facility (RRF) and REPowerEU Chapters

To rapidly phase out the EU's dependence on Russian fossil fuels, accelerate the clean energy transition and to achieve the REPowerEU objectives, the Commission decided to strengthen **the Recovery and resilience facility (RRF)** as the main vehicle to channel EU funding. As a result, more than **EUR 270 billion** are available for Member States under the RRF for the REPowerEU chapters. This includes:

- **EUR 225 billions of loans**
- An additional **EUR 20 billions of grants** (made available through REPowerEU).

On 1 March 2023, the **REPowerEU Regulation**¹⁶ entered into force. Member States are now expected to complement their Recovery and Resilience Plans with REPowerEU chapters.

¹⁶ Regulation (EU) 2023/435