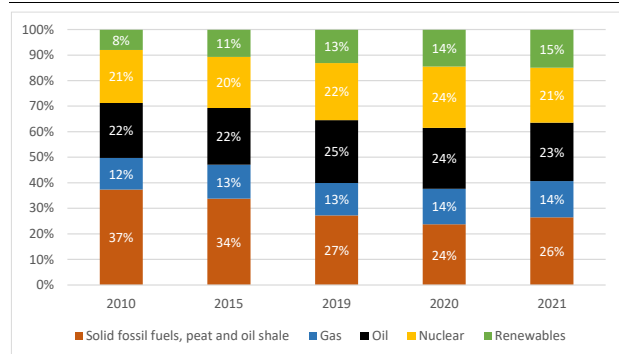


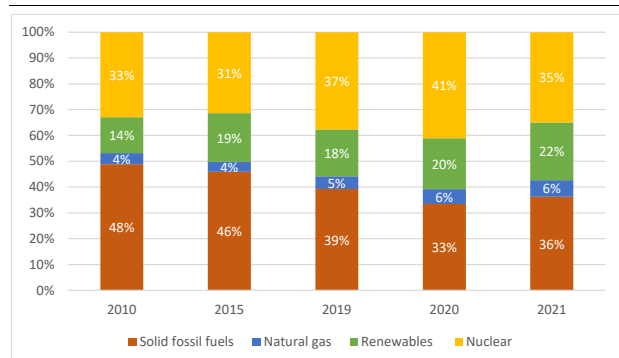
Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

Saving energy

1. Key energy savings measures

In line with the **Save Energy Communication and the Recovery and Resilience Plan (RRP)**, Bulgaria includes measures such as subsidies for promoting energy efficiency in industry and public sector, while continuing the programme for the renovation and promotion of energy efficiency measures in residential and public buildings.

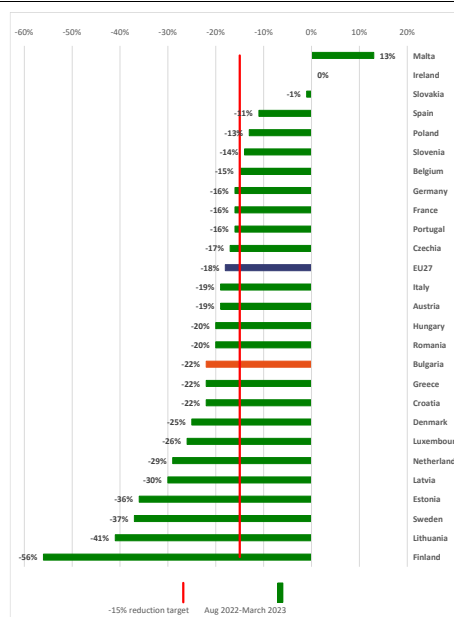
- Financial support for the installation of about 10,000 “best in class” solar PV and solar-thermal collectors on residential single-family houses, replacing the existing inefficient fossil-fuel based systems.
- The RRP targets the renovation of about 3.6 million m² of residential buildings and

1.4 million m² of non-residential buildings as well the renovation of the new construction of about 200 educational facilities.

2. Gas Demand Reduction

Bulgaria has reduced its gas consumption by **22%** in the period **August 2022–March 2023**, above the decrease achieved at EU level (18%) and surpassing the 15% voluntary gas demand reduction agreed at the EU level ⁽¹⁾.

Graph 3: Natural gas demand reduction (August 2022–March 2023)



(1) Cyprus does not use natural gas

Source: Eurostat, DG ENER calculations

Diversification of energy supplies

1. Key actions

Import dependency from Russian gas was **80%** in 2021 (equalling 2.6 bcm).

In **April 2022**, Gazprom stopped its natural gas exports towards Bulgaria.

Diversification efforts with gas supplies coming through LNG from Greece and through pipelines from Azerbaijan.

⁽¹⁾ Regulation (EU) 2022/1369 of the Council of 5 August 2022.

2. Gas Infrastructure Developments

Gazprom, the main single gas supplier to the national incumbent Bulgargaz, stopped supplying gas in April 2022. The cut-off from Russian gas was substituted by short-term contracts for LNG deliveries via the **Revythousa LNG terminal** in Greece. The **IGB gas interconnector between Greece and Bulgaria** (Zagora), identified by the EU as a Project of Common Interest, started operations in October 2022. This enabled Bulgaria to receive the full volumes of contracted supplies from Azerbaijan (1 bcm/year, covering roughly 30% of domestic consumption). The project promoters have decided to build a compressor station in Komotini (Greece) with allow for connecting LNG terminal in Alexandroupolis (project on 4th PCI list) with IGB and upgrading the IGB from 3 bcm/y to 5 bcm/y. On 1 February 2023, Bulgaria and Serbia announced the start of construction works on the natural gas pipeline **connecting Bulgaria and Serbia in Kostinbrod**, with a capacity of 1.8 bcm/year expected to be operational by mid-2023. Bulgaria and North Macedonia signed an interconnection agreement, for an increase of 182 mcm per year, for the Kjustendil/Zhidilovo point in November 2022 ⁽²⁾. Bulgaria is considering a new gas interconnection between Petrich and Strumica in North Macedonia (in March 2023, it was still an intention).

Map A7.1: **Cross-border interconnections**



Source: DG ENER

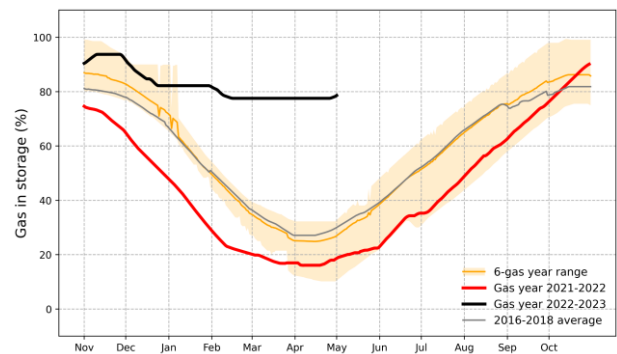
⁽²⁾ <https://ceenergynews.com/oil-gas/bulgaria-and-north-macedonia-sign-interconnection-agreement/>

3. Gas Storage

Bulgaria operates one underground storage facility in Chiren with a total capacity of 0.59 bcm, representing around 23% of its total yearly demand.

Bulgaria fulfilled its gas storage obligations last winter, reaching 91.53% by 1 November 2022 (more than 10 percentage points above its legal obligation³), and ended the heating season with a filling gas storage at 78.60% by 2 May 2023.

Graph 4: **Storage levels in Bulgaria**



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

4. Nuclear fuel diversification

The nuclear fuel diversification process is **well advanced**. Bulgaria's VVER-1000 Kozloduy nuclear power plant has recently signed a contract with Westinghouse Sweden for an alternative supply of nuclear fuel for Unit 5, which should be in use as of mid-2024. Another recently signed contract with Framatome envisages delivery of Russian-designed fuel produced by France's Framatome under a licence.

Energy Platform

Regional Group of reference: South East Europe

National companies participating to the Industrial Advisory Group: None

⁽³⁾ Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage.

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.

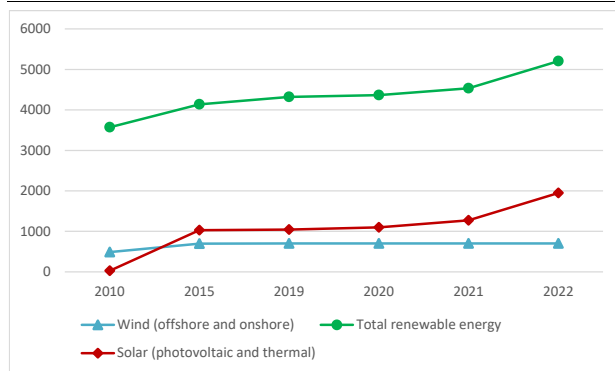
Accelerating clean energy

1. Installed Renewable Capacity

In **2022**, Bulgaria installed around 0.6 GW of renewable capacity, bringing the total to **5.2 GW**.

In **2022**, the annual growth rate of installed renewables power capacity rose to **15%**, compared to only 4% in 2021.

Graph 5: Installed solar and wind power capacity (in megawatt)

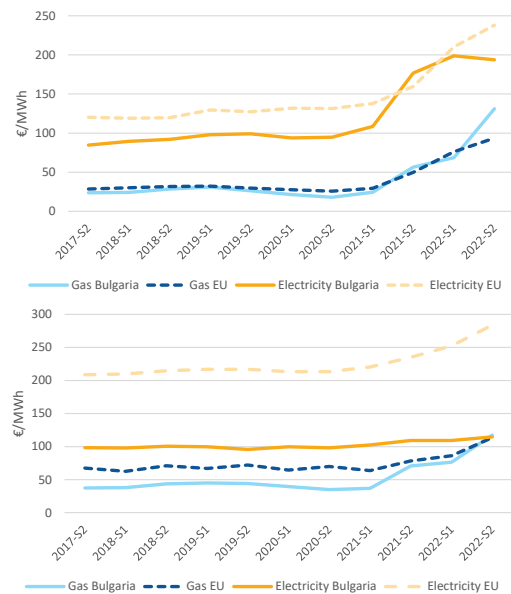


- (1) The renewable power capacity data reflects the capacity installed and connected at the end of the calendar year.
- (2) In 2022, Bulgaria installed 0 GW of **wind power** capacity (vs. 0 GW in 2021)
- (3) In 2022, Bulgaria installed 0.67 GW of **solar power** capacity (vs. 0.17 GW in 2021).

Source: IRENA, RE Capacity statistics, 2023

Energy price developments

Graph 6: Bulgaria'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 Plan (RRP)

- **EUR 5.69 billion in grants** (updated, representing approximately 8% of 2021 GDP). **No loan requested**
- **Adoption date by Council: 4 May 2022.**
- **The first high-level quarterly meeting** and technical mission took place on 14-16 November and **the first annual RRF event with stakeholders took place** on 15 November 2022.
- **The first payment** was disbursed on 16 December 2022 (EUR 1.37 billion).
- **Climate target: 59%**