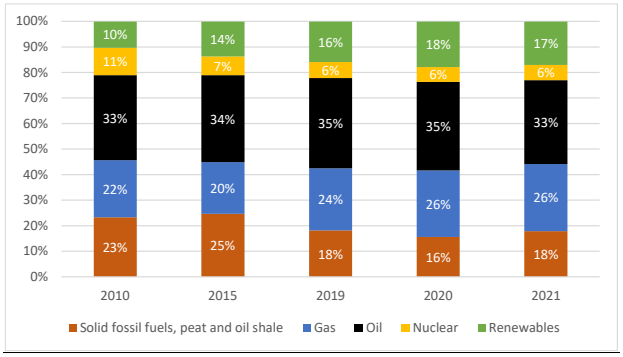
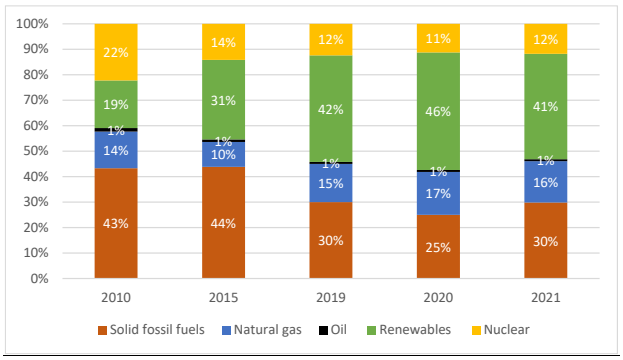
Key energy figures

Graph 1: **Energy mix**



Source: Eurostat

Graph 2: **Electricity mix**



Source: Eurostat

Saving energy

1. *Key energy savings measures*

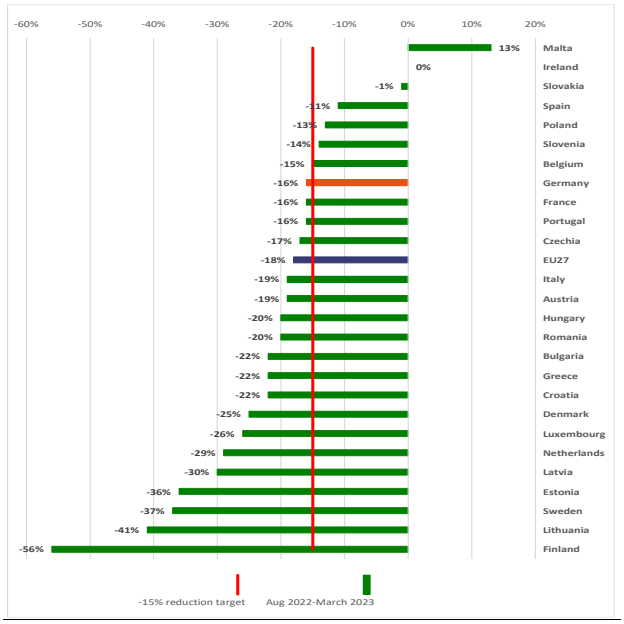
Germany is implementing energy efficiency measures to contribute to energy security further, such as:

- **Two energy conservation ordinances** (on the demand side): optimisation of heating in buildings and an obligation for companies to implement energy efficiency measures.
- **Awareness-raising campaigns** for customers launched by gas and heating suppliers.
- **Federal Support for Efficient Buildings** combines previous support programs for promoting energy efficiency and renewable energies in the building sector.

2. *Gas Demand Reduction*

Germany has reduced its gas consumption by **16%** in the period **August 2022-March 2023**, below the decrease achieved at EU level (18%) but 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 natural gas was 65% in 2021 (equalling 55 bcm).

Germany has already undergone tremendous **diversification efforts**, reducing its reliance on Russian gas to **zero** after Russia stopped delivering gas in **August 2022**.

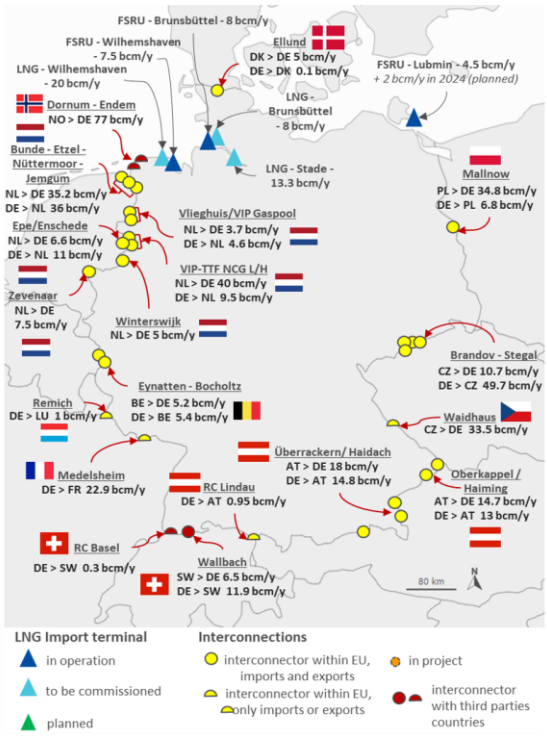
2. *Gas Infrastructure Developments*

Germany has chartered **five FSRUs** in order to replace Russian gas imports completely in the medium term. **Three are already in operation since 2022/23** (Wilhelmshaven, Brunsbüttel, and Lubmin), and three more from the end of 2023 in Stade, Lubmin, and Wilhelmshaven (expansion of

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

the existing FSRUs). In addition, three fixed LNG terminals are planned, two of which are to be ready from 2026 (Stade and Brunsbüttel). The main natural gas suppliers are currently Norway, the Netherlands, Belgium, Switzerland, and France. The latter started supplying gas in October 2022, with a maximum handover capacity of 100 GWh/day.

Map 1: **LNG terminals and interconnectors**



Source: DG ENER

3. *Gas Storage*

Germany operates around 40 underground storage facilities managed by 27 storage operators, with a total capacity of around 25.2 bcm, representing around 25% of its total yearly demand.

Germany fulfilled its gas storage obligations last winter, reaching 99.21% by 1 November 2022 (almost 20 percentage points above its legal obligation[2]), and ended the heating season with a storage filled at 67.28% by 2 May 2023.

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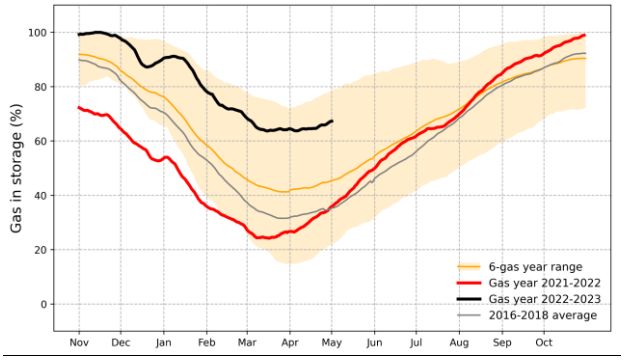
(2) Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage.

Graph 4: **Storage levels in Germany**



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

4. *Nuclear fuel diversification*

As of April 2023, Germany is no longer producing any electricity from nuclear power plants.

Energy Platform

Regional Group of reference: Central and Eastern Europe, North West Europe

National companies participating to the Industrial Advisory Group: E.ON SE, European Energy Exchange AG (EEX), RWE AG, Uniper, VNG AG

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.

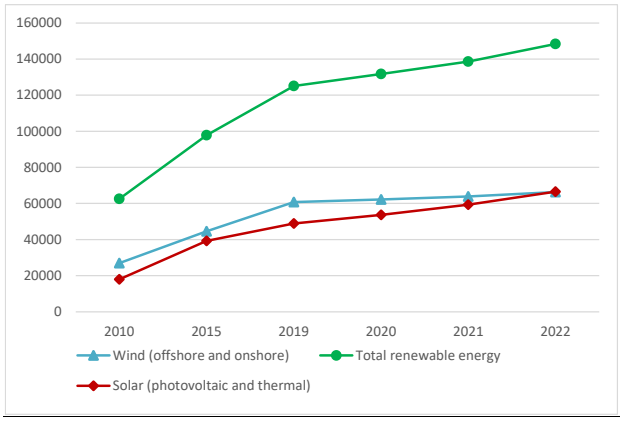
Accelerating clean energy

1. *Installed Renewable Capacity*

In **2022**, Germany installed around 9.8 GW of renewable capacity, bringing the total to **148 GW** (vs. 138 GW in 2021).

In 2022, the annual growth rate of installed renewables power capacity rose to **7%** compared to only 5% in 2021.

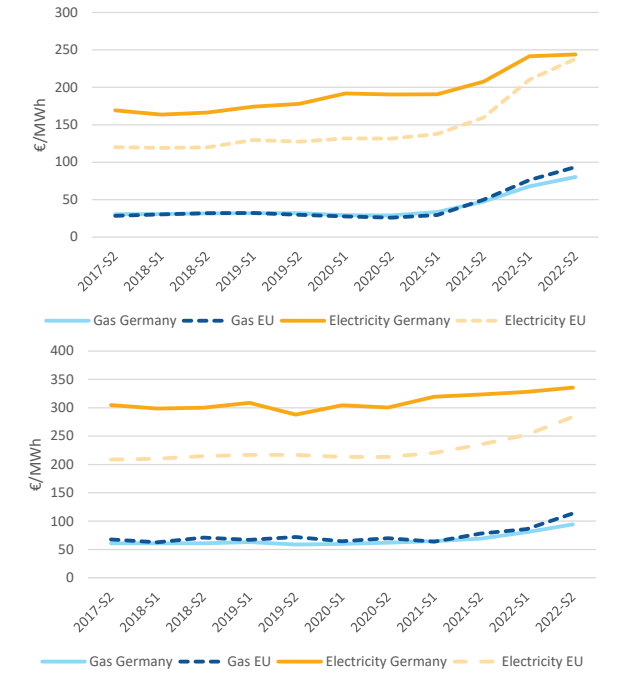
Graph 5: **Installed solar and wind power capacity (in megawatt)**



(1) The renewable power capacity data reflects the capacity installed and connected at the end of the calendar year.
(2) In 2022, Germany installed 9.8 GW of wind power capacity (vs. 6.8 GW in 2021)
(3) In 2022, Germany installed 7.1 GW of solar power capacity (vs. 5.7 GW in 2021).
Source: IRENA, RE Capacity statistics, 2023

Energy price developments

Graph 6: **Germany'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 28.03 billion in grants** (updated, representing approximately 0.8% of 2021 GDP). **No loan requested**
- **Adoption date by Council: 13 July 2021**
- **The first payment request** (EUR 3.974 billion) is in preparation, expected for July 2023
- **First annual RRF event with stakeholders** planned for Q2 2023.
- **Climate target:** 42%