Monitoring the energy situation in the EU: December 2022

This infographic aims to provide an overview of some of the most important energy indicators. It is purely for information purposes and subject to change. Figures on page one are based on market data (gas and oil prices) or data supplied by market actors (LNG capacity and gas storage rates). Figures on page 2 are based on the latest publicly available Eurostat data. Mostly, these data are available retrospectively, usually on an annualised basis, and therefore do not always reflect the latest state-of-play following the Russian invasion of Ukraine in 2022.

Gas price in the EU
Title Transfer Facility (€ per megawatt-hour)

The Dutch Title Transfer Facility (TTF) is the leading European benchmark price for gas. It refers to transfers of gas at the TTF Virtual Trading Point, operated by Gasunie Transport Services, responsible for the management, operation and development of the gas transport system in the Netherlands. The data source is Trading Economics. EU natural gas futures on the TTF exchange stood at €137.71 per megawatt-hour on 1 December 2022 – an increase of 25.4 % compared to December 2021, but well down from the 2022 high of €339.20.

Oil price in the EU
Brent Crude oil (US$ per barrel)

Brent Crude is a major benchmark price for purchases of oil worldwide. Brent Crude oil is drilled out from the North Sea, but oil production from Europe, Africa and the Middle East flowing West tends to be priced relative to this benchmark. Prices are given in Trading Economics and are intended to provide reference only. The graph presents five years of daily data. Brent Crude rose to US$86.88 per barrel on 1 December 2022 – an increase of 18.6 % compared to December 2021, but well down from the 2022 high of US$123.48.

LNG capacity per Member State
Billion m³, October 2022

LNG is natural gas cooled down to below -160 degrees Celsius to be transported in a liquid state, so that it can be flexibly imported from a wide range of supply countries. Data are published by Gas Infrastructure Europe. The map provides information on LNG terminals in the EU, both operational and planned, while the bar chart shows the total potential capacity in billion m³. There are 11 EU Member States currently with operational LNG terminals, which have a total annual capacity of 169 billion m³, accounting for around 42 % of gas imports to the EU in 2020.

Gas storage
Available storage capacity (Twh) and filling rate

The map shows the maximum available gas storage capacity in the EU expressed in terawatt-hours (Twh). A terawatt-hour is a unit of energy equal to outputting one trillion watts for one hour. The bar chart shows the gas storage filling rate, or the percentage of available storage that has been used to store gas. Data come from European Network of Transmission System Operators for Gas (ENTSOG). In the EU, the maximum available storage is 1 157.9 Twh, with total energy stored of 1 106.3 Twh, giving a filling rate of 95.5 % overall. Filling rates of 14 Member States equal or exceed 90 %. The Netherlands and Slovakia filled their storage capacities by 87 %, Hungary by 81 % and Latvia by 56 %. Non-listed EU Member States do not have gas storage facilities.
Electricity prices for household and non-household consumers

€ per kWh, first half of 2022.

Electricity prices include the basic price, as well as transmission, system services, distribution and other services. Prices include all taxes, levies and VAT. ‘Household’ covers medium-sized consumers with annual consumption of between 2 500 kWh and 5 000 kWh. ‘Non-household’ refers to medium-sized consumers with annual consumption of between 500 MWh and 2 000 MWh. The average EU price for households in the first half of 2022 was €0.2525 per kWh. The price without taxes (energy, supply and network taxes) was €0.1932 per kWh. For non-household consumers, €0.222 per kWh was the EU average price (or €0.1602 per kWh, without taxes).

Final energy consumption by sector

Million tonnes of oil equivalent (MTOE)

Final energy consumption covers the energy consumption of end-users, such as industry, transport, households, services and agriculture. It excludes the consumption of the energy sector itself and losses occurring during transformation and distribution of energy. ‘Other sectors’ refers to commercial and public services.

Share of energy from renewable sources

%, 2020

Renewable energy sources include wind, solar, hydro and tidal power, geothermal energy, ambient heat, biofuels and the renewable part of waste. The bar chart shows the share of renewable sources and the line chart shows the type of service.

EU energy import dependency from Russia

Million tonnes

The EU’s total import of mineral fuels (fossil fuels, oil and gas) indicator shows the monthly volume of imports (in million tonnes) from main partner countries. The bar chart shows the change in imports from partners between February and August 2022. While imports from Russia have decreased by 8.3 million tonnes, Russia was nevertheless the EU’s leading source of fossil fuel imports in 2022.

Data sources: Gas price in the EU; Oil price in the EU; LNG capacity per Member State; Gas storage capacity; Electricity prices for household and non-household consumers; Final energy consumption by sector; Energy import dependency from Russia (Eurostat Comext); Share of energy from renewable sources.

Country codes: Belgium (BE), Bulgaria (BG), Czechia (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE).

This document is prepared for, and addressed to, the Members and staff of the European Parliament as background material to assist them in their parliamentary work. The content of the document is the sole responsibility of its author(s) and any opinions expressed herein should not be taken to represent an official position of the Parliament. Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy. © European Union, 2022.