

HOW MANY TONS OF COAL DOES EUROPE NEED FOR ENERGY STORAGE



How much hard coal does the EU use in 2023? The 2023 hard coal consumption of the EU is estimated to have reached 128 million tonnes, 42% less than 6 years ago. Production of hard coal in the EU has decreased almost continuously from 1990, more consistently than consumption. In 2023, the EU production was 50 million tonnes, 82% less than the 277 million tonnes of 1990.



How secure is the EU's coal supply? When the EU has an indigenous source of coal, supply security is self-evident. However, when coal is imported, supply is supported by a competitive market and a well-developed infrastructure. The EU's share of global non-renewable energy reserves and resources is rather small, at less than 3%.



Is coal a major energy source in Europe? Coal's share in Europe's primary energy consumption has fallen to just 10 percent over the last few decades. Although, one of the most widely utilized energy sources in Europe over the past century, growing climate change awareness has led to many countries adopting coal exit strategies.



Which countries consume the most hard coal in the EU? Poland (42%) and Germany (23%) together accounted for almost two thirds of the total hard coal consumption of the EU in 2023, followed by Italy, France, the Netherlands, Czechia and Spain (each between 3% and 6%). Figure 2 presents the hard coal consumption of the EU from 2018 to 2023 by Member State.



How much hard coal does Poland produce? Poland produced 48 million tonnes of hard coal (97% of the total EU production) and Czechia produced 1.4 million tonnes (3%). Compared to 2012, which was the last peak in the EU hard coal production (106 million tonnes), in 2023 Poland decreased its production by 39% and Czechia by 88%.

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How much coal is produced globally? According to the IEA, world coal production reached 7.6 billion tonnes in 2020, including 6.7 billion tonnes of hard coal and 0.6 billion tonnes of lignite. The production of hard coal amounted to 5.7 billion tonnes, with 5.1 billion tonnes being steam coal (primarily used for electricity generation) and 1.0 billion tonnes being coking coal (used for iron and steelmaking).



Coal has been used for residential heating for centuries. In the middle of the last century, coal use for residential heating was widespread. Today, coal burning for heat in most ???



When will coal be replaced in the industrial sector? And what might different regional trajectories mean on a global level? Using the latest data, Coal 2024 presents recent trends and a three-year forecast for coal demand, ???



In September, coal production was 392.98 million metric tons (13.1 million metric tons per day), compared with an average of 12.71 million metric tons per day so far this year. For comparison, the United States consumed ???

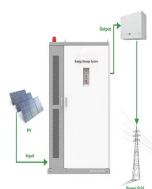


According to the International Energy Agency (IEA), coal consumption hit another new record last year???8.77 billion metric tons???due to soaring coal use by China and India. Global coal demand is expected to grow ???

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If this does not happen the coal plants will not come back online. If all the plants do operate and run at 65% of their 13.5 GW capacity, it would result in 60 TWh of additional coal power generation in 2023. This equates to 14% of ???



The world's supply of primary energy, excluding non-commercial biofuels, totalled 21 billion tonnes of coal equivalent (Gtce) in 2022. Coal, with a 27% share, ranked second after oil as one of the major sources of primary energy. Global ???



In 2013, electric power generators consumed 858 million tons of coal, accounting for 93% of all coal consumed in the United States and 39% of electric power generation. Two-thirds of the coal (67%) was shipped either ???



The number of countries announcing pledges to achieve net zero emissions over the coming decades continues to grow. But the pledges by governments to date ??? even if fully achieved ??? fall well short of what is ???



In the interactive chart here we see coal production by country. This has been converted into primary energy equivalents (i.e., terawatt-hours of energy) for comparability across our other data on energy. Note that this measures coal ???

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While coal remains a primary fuel in the European energy mix, the transition to cleaner forms of energy and innovative technologies, such as carbon capture and storage, is imperative to meet the EU's commitment to reduce CO₂ emissions ???



The EU produces large parts of its energy domestically, with about 41 percent from renewables and 31 percent from nuclear in 2021, and the rest mostly from solid fuels like hard coal and lignite, and some from natural gas ???