
Decarbonising for competitiveness: four ways to reduce European energy prices

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Executive summary

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ENERGY PRICES ARE HIGHER

THE TRANSITION TO CLEAN,

HOWEVER, THE ONGOING ENERGY TRANSITION

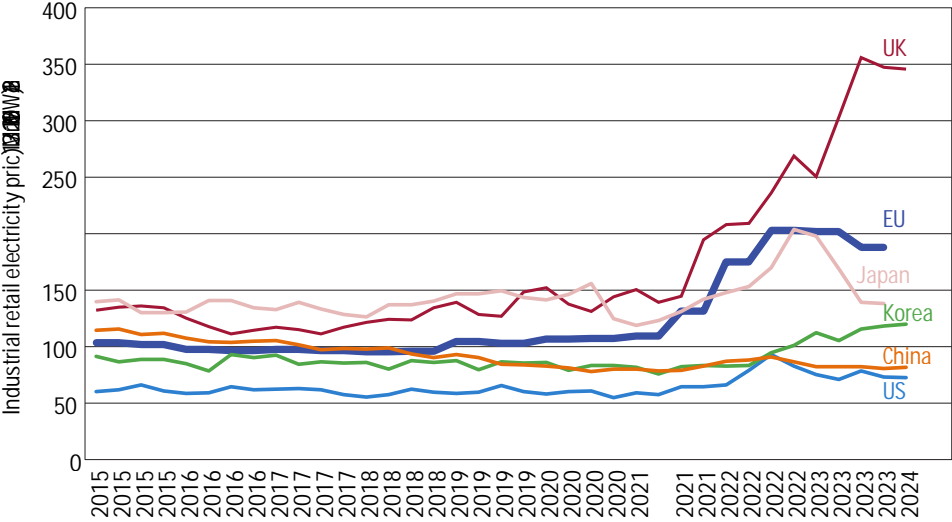
AS THE ENERGY TRANSITION

Policy Brief



1 The high cost of energy in Europe

Figure 1: Europe pays more for electricity than its competitors



Source: Bruegel based on Chief Economist Team/DG ENER/European Commission, based on Eurostat (EU), Energy Information Administration (US), Department for Energy Security and Net Zero (UK), International Energy Agency (Japan and Korea), CEIC (China). Note: European Central Bank conversion rates.

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1 Based on Eurostat and the US Energy Information Administration.
2 Some large energy consumers trade directly on wholesale markets.

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Figure 2: The cost of producing and supplying electricity accounts for approximately half of final household electricity bills

Source: Bruegel based on Eurostat. Note: The component breakdown on the left side is based on 2023 Eurostat data. The list of sub-components is non-exhaustive and each contribution to the main components (ie the size of the boxes) is an indicative approximation.

2 The EU-US energy cost gap

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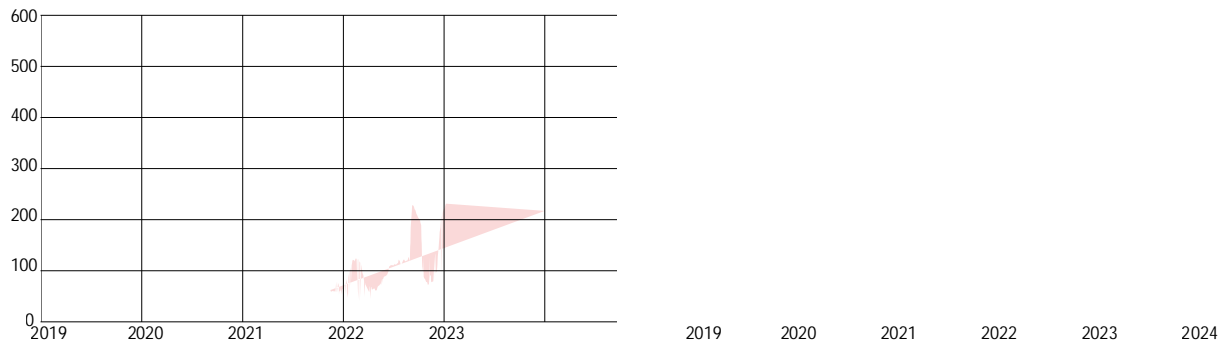
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³ See Victoria Zaretskaya, 'Global trade in liquefied natural gas continued to grow in 2023', [Bruegel](#)

Figure 3: EU wholesale gas prices are approximately five times higher than in the US

Source: Bruegel based on Bloomberg. Note: US wholesale is the Henry Hub month-ahead price and EU wholesale is the Title Transfer Facility month-ahead price. They are the benchmark wholesale prices in the US and the EU, respectively.

Figure 4: Average EU wholesale electricity prices are higher than US equivalents, though some EU regions are cheaper than some US regions



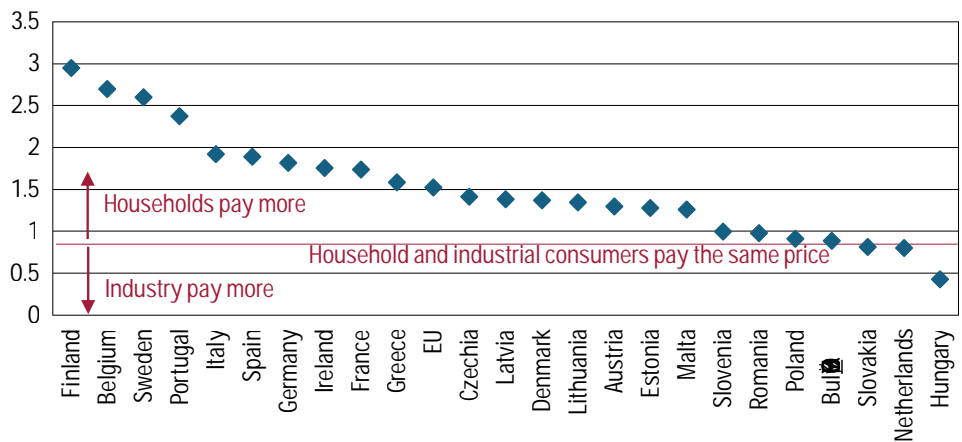
Source: Bruegel based on EIA and energy-charts.info. Note: In panel A, in the US, PJM West, Southern California, the Mass Hub in New England, the Indiana Hub and ERCOT North price were selected to calculate the mean. For the EU, Germany, France, Spain, Italy and Poland were selected. In Panel B, plotted data is the California 'NP15 EZ Gen DA LMP Peak' node and for Sweden, the SE1 price zone.

3 How the green transition could change energy costs

3.1 The short term

Figure 6: Household/industry final electricity price ratio, 2023

Household / industry final electricity price ratio, S2 2023



Source: Bruegel based on Eurostat. Note: From the Eurostat database, consumption band DC was selected for households and the consumption band IF was selected for industry.

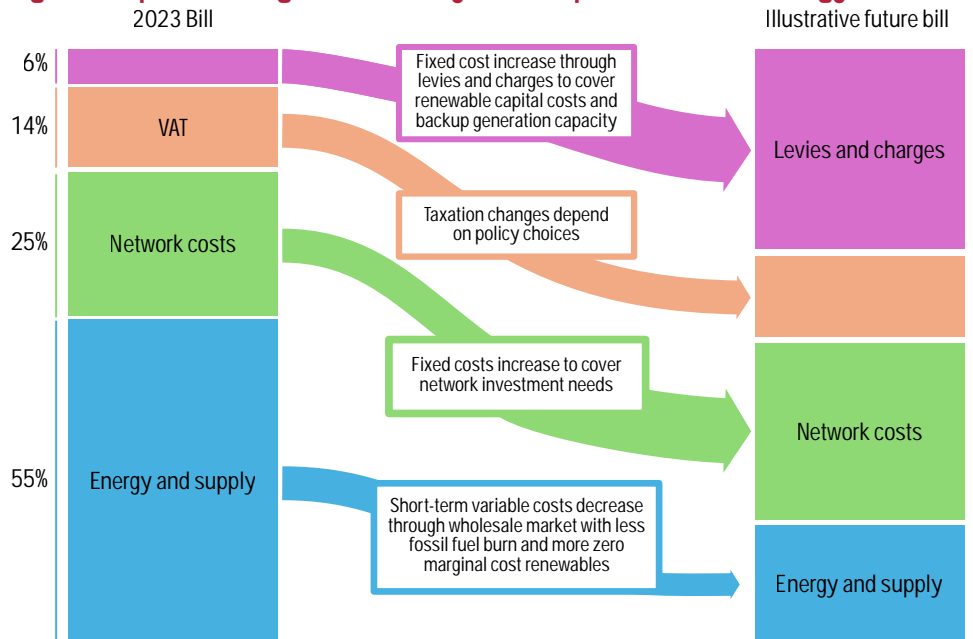
3.2 The longer term

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Figure 7: Expected changes in electricity cost components with the energy transition



3.3 Will prices come down?

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4 Policy priorities for EU energy-cost reduction

4.1 Fair allocation

exposed to international competition

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Reducing energy-system costs for one consumer segment implies increasing them for another

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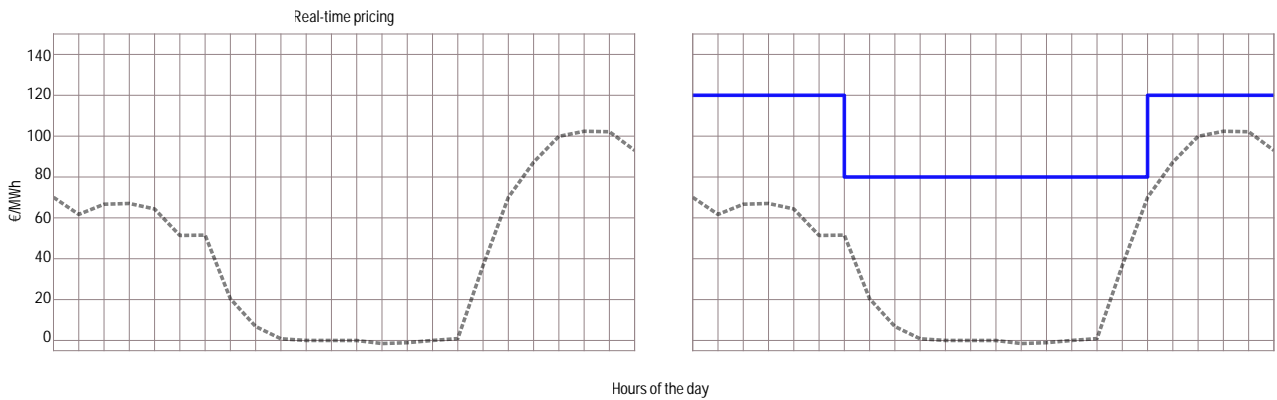
4.2 Consumer activation

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Figure 8: Illustration of dynamic consumer pricing schemes



Source: Bruegel.

4.3 Investment coordination

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4.4 System integration

The overall system cost can be minimised by deeper European electricity system integration

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6 Through the Ten Year Network Development Plans and the European Resource Adequacy Assessments carried out by the European Network of Transmission System Operators for Electricity (ENTSO-E).

Figure 9: Policy choices can impact the evolution of final consumer electricity prices

Source: Bruegel. Note: The price changes based on policy measures are illustrative and are not intended as a projection of future energy costs. Not listed is allocation of overall cost, which is a distributional policy choice that does not fundamentally change the energy system.

