The authors are grateful

1 Introduction

[illegible]

Figure 1: European min, max and average wholesale weekly electricity prices, €/MWh

Source: Bruegel based on Energy Charts.

[illegible]

[illegible] *give French customers the comparative advantage of the low production costs of the historical nuclear plant pool* [illegible]

[illegible]

[illegible]

[illegible]

2 See BAFA press release of 21 December 2017, 'Special compensation regulation contributes to the stabilization of the EEG levy', [illegible]

3 C/2023/1188, available at [illegible].

Figure 2: Retail electricity prices by component and user type, €/KWh, EU (2021)

Source: Bruegel based on Eurostat. Note: Firms are generally eligible for VAT refunds, and that is the case also for some renewable taxes, such as the EEG surcharge in Germany. Small firms are the Eurostat consumption band between 20 and 499 MWh, medium firms are between 2 and 19.9 GWh, and energy-intensive firms between 70 and 149.9 GWh. Households refers to the TOT_KWh Eurostat consumption band.

5 A French *trait d’union* and a German bridge too far

15 In reality the volumes sold by EDF at a regulated price are much higher. In 2022, EDF reported providing 120 TWh to alternative suppliers under ARENH and around an extra 55 TWh to households at regulated tariffs established under the French Energy Code, adding to the wholesale ARENH price capacity guarantees, transmission and marketing costs, as well as a normal rate of return on investment. Moreover, in 2022 EDF reported supplying 75 TWh at capped prices and about 25 TWh of grid losses also sold at the ARENH price (EDF, 2022, p.37).

16 See French government consultation document of 21 November 2021, ‘Projet de dispositif de protection des consommateurs d’électricité à partir du 1er janvier 2026’,

17 André Thomas, ‘Prix de l’électricité : après son accord avec l’État, EDF devra convaincre ses clients industriels’, *Ouest France*, 22 November 2023; *BFM Business*, ‘EDF va proposer des contrats adossés à des actifs nucléaires aux plus gros consommateurs’, 21 November 2023,

6 Transforming European electricity: who will pay?

[illegible]

[illegible]

[illegible]

6.1 Electricity tari□s vs general taxation

[illegible]

[illegible]

[illegible]

6.2 Industry vs households

[illegible]

22 Adding new generation capacities to the electricity grid takes a few years. erefore, increasing electricity supply in the short run requires operating existing facilities at higher capacities. Concretely, this means raising output from natural gas and coal plants. Global natural gas markets remain very tight which limits room for manoeuvre, and raising output from coal plants is limited by environmental regulation as part of the EU's ongoing phase out.

23 See *Bruegel Dataset*, 'National scal policy responses to the energy crisis', [illegible]

6.3 Taxing energy-intensive vs general industry

7 Conclusions

References

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] *Nature* [illegible]

[illegible] *Subventions-bericht des Bundes 2021 – 2024*, [illegible]

[illegible] *Bruegel Blog*, [illegible]

[illegible] *European Union JRC Science for Policy Brief*, [illegible]

[illegible] *Solar RRL*, [illegible]

[illegible] *Working Paper 305, Hans Böckler Stiftung*

[illegible] *Bruegel Analysis*, [illegible]

[illegible] *Brookings BPEA Conference draft*, [illegible]

[illegible] *Road taxation and spending in the EU*, [illegible]

[illegible] *Nature*

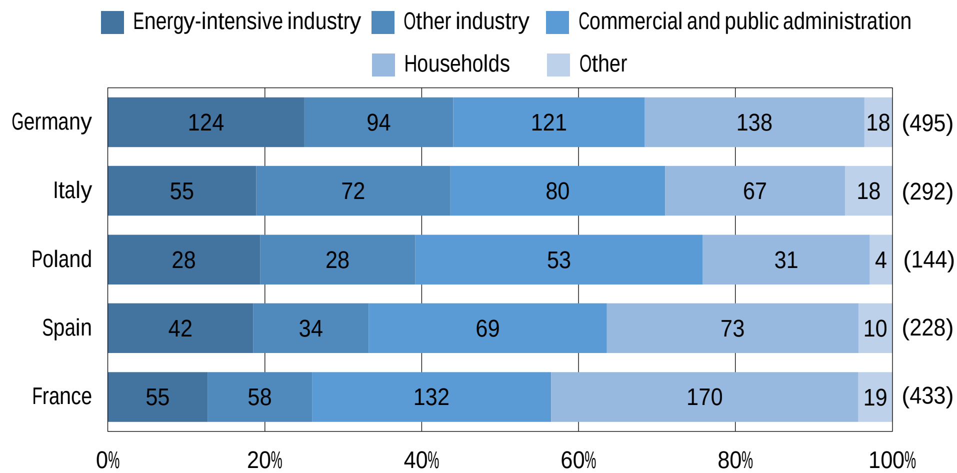
[illegible] *Bruegel Datasets*, [illegible]

[illegible]

Annex A1: Country variation in the importance of energy-intensive industries

[illegible]

Figure A1: Share of electricity consumption by consumer type, TWh, 2021 (totals)



Source: Bruegel based on Eurostat. Note: energy-intensive industry includes basic metals, chemicals, non-metallic minerals and paper and pulp.