

EXPLANATORY MEMORANDUM FOR EUROPEAN UNION LEGISLATION AND DOCUMENTS

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REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS: Energy prices and costs in Europe

Submitted by the Department for Business, Energy and Industrial Strategy on 29 January 2019

SUBJECT MATTER

1. The Energy prices and costs in Europe report (herein ‘the report’) follows on from the European Commission’s previous reports on energy prices and costs in 2014 and 2016.¹ Along with the accompanying staff working document, it presents detailed data and analyses of trends in energy (electricity, gas and oil products) prices and costs for households and industry in the EU as a whole, in Member States, and in EU trading partners. It also examines data on energy taxation, revenues, and subsidies. Using this analysis, it makes assessments on competition and the producer/consumer relationships in energy markets; the impact on fuel poverty, industrial competitiveness, and the efficiency of energy market design; and the efficacy of subsidy regimes, the consequences for national budgets, and the needs for investment. The report is also accompanied by two external studies by Trinomics and the Centre for European Policy Studies/Ecofys which were used to inform its final findings.
2. There is a significant volume of information in the report and its accompanying documents, but the main findings can be summarised as follows (all figures expressed in nominal terms):
 - a. **EU wholesale electricity prices show convergence since 2008.** This convergence (an indication of more efficient markets) is attributed to increasing market coupling and interconnectors. While not specifically covered in the main report, the longer accompanying staff working document states that the UK observed the highest wholesale electricity prices in Europe during most of 2016-2018, which is attributed to the UK’s ‘significant import needs and the Climate Change Levy’ (in reference to the Carbon Price Support, which adds to the cost of electricity generation from fossil fuels). Current levels of interconnection between the UK and mainland Europe typically limit the extent to which wholesale electricity prices between the two regions can converge.
 - b. **EU average wholesale electricity prices are higher than the US, Canada and Russia, but lower than China, Japan, Brazil and Turkey.** While increasing renewable energy penetration generally lowers prices in spot markets, overall EU electricity price trends are still dominated by coal and gas prices. The EU, as fossil fuel importers, are still highly reliant on globally set

¹ The full series of reports, including the latest iteration, are available online at: <https://ec.europa.eu/energy/en/data-analysis/energy-prices-and-costs>.

coal and gas prices and so are vulnerable to international price trends. By contrast, the US, Canada and Russia rely on indigenous hydro and fossil fuel resources.

- c. **In 2017 EU household electricity retail prices decreased for the first time since 2008. UK prices are around the median for the EU 28.** This fall is partly due to lower fossil fuel prices in this period, but also a halt to increasing network and tax price components in the EU as a whole. Levies were held stable by falling unit costs for renewables investments. Taxes and levies make up 40% of the average EU electricity price (note this compares with 22% for UK prices based on the latest Ofgem data).² A higher energy component (driven by higher wholesale costs) in the UK is offset by lower tax and network components.
- d. **EU industrial electricity retail prices have been falling since 2015. UK prices were among the highest in the EU in 2017.** The decline in average EU prices has been due to a lower energy component.³ Industry in a number of Member States is also often exempt from, or pays lower, electricity taxes and levies, and lower network costs⁴ than households. Higher industrial electricity prices in the UK are driven by relatively higher wholesale and network costs compared with the prices paid by industries in several other EU countries. The network cost differential is driven in part because in some EU countries, such as Germany, large industry receives exemptions on certain network charges (with the costs passed on to other consumers).
- e. **EU wholesale gas prices have converged since 2015, and oil-indexation is becoming less common.** This convergence reflects falling oil prices, the decreasing role of oil-indexation, and, in some cases, the diversification of supply sources. While oil-indexation is becoming less common in the European market, it continues to play an important role in certain regions, such as the Mediterranean, Southeast Europe, and the Baltics. The close relationship between the gas market and the wider energy system will also continue to drive some correlation between gas and oil prices.
- f. **EU average wholesale gas prices are higher than Canada, Russia, and the US, but generally lower than in other G20 economies.** Major gas producing economies will typically have lower prices, while those countries solely or largely relying on LNG imports will have the highest prices (e.g. China, Japan, and Korea).
- g. **EU household gas retail prices have risen since 2008 while industrial prices have fallen. The UK had among the lowest gas prices in the EU for both households and industrial users in 2017.**⁵ Retail gas prices remain largely determined by movements in wholesale prices. However, network charges are on divergent trajectories for different gas consumers, having increased for households and medium industrial consumers, and decreased

² Ofgem's energy bill breakdown, based on financial reporting by the six largest energy suppliers. Available online at: <https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/understand-your-gas-and-electricity-bills>.

³ The cost to energy suppliers of purchasing and supplying energy.

⁴ The cost of transporting electricity from supply source to final customers.

⁵ The household chart appears to be missing UK data, but separate data collated by Eurostat shows that UK household gas prices in 2017 were the second cheapest in the EU15.

for large industrial consumers. EU industrial gas retail prices are higher than the US, Canada, China and Turkey but lower than Japan and Brazil.

- h. **The EU imported €266bn (approximately £240bn)⁶ of fossil fuels in 2017 and is vulnerable to rising global fossil fuel prices.** Volatile global factors coupled with exchange rate developments (markets denominated in US dollars) add to price uncertainty in global fossil fuel markets. EU commission modelling shows an average oil price of US\$70/barrel (approximately £63/barrel) in 2018 would reduce EU GDP by 0.4% in 2018 and 2019 compared to what would otherwise be expected if oil prices had stayed at 2017 levels (\$54/barrel). It would also increase 2018 inflation by 0.6 percentage points. The rising oil price is the main cause of the 26% increase in the cost of imports since 2016 with oil responsible for 68% of the total import bill in 2017, gas for 28%, and hard coal for 4%.
- i. **Household energy costs as a share of household income vary significantly across Europe with the UK around or below the EU average depending on metric.** Northern and western Europeans spend an average 4-8% of household income on energy, compared to central and eastern who pay 10-15%. In 2017 around 19% of lower middle-income households in the EU could not keep their home adequately warm, but this also varies significantly across Member States, from 2% in Finland, to 60% in Bulgaria, The UK was below the EU average, at around 15%.
- j. **EU industrial energy costs as a share of production costs have fallen between 2008 and 2015 for the majority of sectors studied. EU energy intensity is lower than China and Turkey, and comparable to the US.** The aggregated energy cost of all the sectors studied declined by 8% from 2010-2015. This was not the case for all sectors, for example, aluminium industry energy costs increased and represented 40% of total production costs in 2017. EU energy intensity did fall, however, in steel, refineries, paper and transport. It increased in cement, grain products, milling and chemicals.
- k. **In 2016 EU Member States collected €280bn (£252bn) in energy taxes, and energy subsidies amounted to €169bn (£152bn). The UK is presented as the largest subsidiser of fossil fuels €12bn (£11bn) in 2018.** Energy taxes accounted for 4.7% of the total tax revenue of all Member States. For the analysis of subsidies, the analysis is based on an OECD definition, which includes 'items such as regulated prices and *all tax reductions* [...] irrespective of having been qualified as state aid'. The energy sector has been the main beneficiary of energy subsidies in the EU receiving 60% of subsidies in 2016, followed by the residential sector (14%), energy intensive industries (10%), and transport (8%). Renewable energy subsidies made up 45% of the total (€76bn or £68bn) with 32% (€55bn or £50bn) estimated to fossil fuel subsidies, albeit this is lower than outside the EU. While not explicitly stated in the report, the high level of fossil fuel subsidy attributed to the UK largely reflects: reduced excise duties for red diesel, the reduced rate of VAT on household heating fuels, Winter Fuel Payments, the hydrocarbon oils duty, and Climate Change Levy exemptions for businesses.

⁶ The report only provides figures in Euros (or dollars when referencing oil). All sterling figures have been estimated by BEIS.

8. While the focus is on EU prices, the report also includes an analysis of energy prices paid in EU trading partners.

SUBSIDIARITY

9. The report respects the principles of subsidiarity and proportionality as governed by Protocol (No 2) of the EU Treaty on the Functioning of the European Union.

POLICY IMPLICATIONS (including Exit implications where appropriate)

10. On 23 June 2016, the UK voted to leave the EU. On 29 March 2017, the Government triggered Article 50 of the TEU to begin the process of exit. Until 29 March 2019, the UK remains a full member of the EU and all the rights and obligations of EU membership remain in force. During this period, the Government will also continue to negotiate, implement, and apply EU legislation.
11. The government recognises the importance to businesses and households of having access to an affordable, secure and sustainable supply of energy. The UK's exit from the EU will not alter the fact that our energy system is resilient and secure and draws on supplies from a number of sources. The UK will remain physically linked to the EU post-exit through interconnectors, which bring significant benefits including security of energy supply and lower consumer bills.
12. The report does not make any new policy proposals but highlights the need to protect vulnerable households and to ensure industry is not disadvantaged and driven away in the process of the EU's energy transition and delivery of its Paris Climate Agreement commitments.
13. The UK Government is committed to maintaining energy security and decarbonising the energy system in the most cost-effective way. On 15 November 2018, Business, Energy and Industrial Strategy Secretary Greg Clark announced his four guiding principles to reduce costs, improve system efficiencies and promote market-based competition and innovation. These principles are:
 - The Market principle – we must wherever possible use market mechanisms that take full advantage of innovation and competition.
 - The Insurance principle – given intrinsic uncertainty about the future, Government must be prepared to intervene to provide insurance and preserve optionality.
 - The Agility principle – energy regulation must be agile and responsive if it is to reap the great opportunities of the smart, digital economy.
 - The “no free-riding” principle: all consumers must pay their fair share of system costs.
14. More details will be set out through a detailed White Paper this year.
15. The Government has invested around £3 million over 3 years for the Big Energy Saving Network to help around 350,000 vulnerable and low-income consumers get the best energy deal, funding support by community and voluntary organisations to help them take action to switch and save. In addition, elements of the current Energy Company Obligation are designed to improve the energy efficiency of low-

income and vulnerable households, and the Warm Home Discount provides around 2 million vulnerable households with £140 off their electricity bills.

16. The government is also committed to minimising energy costs for businesses, to ensure our economy remains strong and competitive. We recognise that the UK's industrial electricity costs are currently higher than those of our competitors. The government has taken steps to reduce the cumulative impact of energy and climate change policies on industrial electricity prices for key Energy Intensive Industries in sectors such as steel, plastics, cement and chemicals. This includes a package of relief for EIs worth over £855 million since 2013. In addition, £315 million is being provided for an Industrial Energy Transformation Fund to support industrial energy efficiency and decarbonisation projects to bring energy costs down for vital industries.
17. As regards fossil fuel subsidies, the UK has specific tax reliefs for production, such as field allowances to reflect the different operating costs of North Sea oil and gas fields, and domestic energy consumption, such as the 5% reduced rate of VAT on energy used by residential consumers, or for particular products and sectors. Unlike the Commission's report, we do not consider these to be fossil fuel subsidies. All UK tax measures are publicly available through Budget statements and other material published by the Government.
18. Concerning the report's conclusions on regulated prices, the Government is committed to ensuring a well-functioning market economy as the best way to deliver prosperity and security. Since liberalisation began in the late 1980s this approach has delivered competition and lower prices. In their 2016 report the Competition and Markets Authority (CMA), however, found that domestic customers were paying £1.4bn a year on average more than they would do if the market was more competitive. The CMA found that there was a two-tier market in operation, where people who frequently change their deals do well, but loyal customers pay higher prices. The CMA put in place a package of measures designed to improve competition, which are currently being designed, trialled and implemented. In the meantime, the CMA put in place price protection in the form of a safeguard tariff for 4 million customers with prepayment meters from April 2017. Ofgem then extended the safeguard tariff in February 2018 to one million vulnerable customers who receive the Warm Home Discount.
19. Less active customers, not eligible for these tariffs continued to lose out. Many of these customers tend to be low income households that are more disengaged, and therefore more likely to lose out from uncompetitive pricing in the two-tier market. In July 2018 Parliament approved Government legislation that requires Ofgem to put in place a temporary cap covering 11 million households on poor value standard variable and default tariffs. The cap came into force on 1 January 2019, and it is designed to protect consumers, whilst ensuring incentives remain for suppliers to compete, and that efficient suppliers can finance their supply activities.
20. In Northern Ireland (where energy operates separately from mainland UK) there is a small gas market of only around 240,000 gas consumers. There is limited gas supply competition at domestic customer level, with only one or two suppliers in some gas licence areas. Price control measures have therefore provided protection for these consumers.

CONSULTATION

21. There has been no consultation with outside bodies in relation to these documents as there will be no effect on UK businesses, society or the community sector.

IMPACT ASSESSMENT

22. The report does not contain proposals for legislation; therefore, an impact assessment is not required.

FINANCIAL IMPLICATIONS

23. There are no financial implications resulting from these documents

TIMETABLE

24. The report does not contain proposals for legislation; therefore, a timetable is not required.

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THE RT HON CLAIRE PERRY MP
Minister of State