

EU Emergency Intervention in the Electricity Market

How the EU Commission Wants to Mitigate the Impact of High Energy Prices

Svenja Schwind, Götz Reichert and Jan S. Voßwinkel



© shutterstock_Viktollio

To ease the pressure of exploding energy prices on European consumers, the EU Commission proposes temporary “emergency interventions” focusing on electricity markets to generate revenues for relief measures. Their effectiveness is key to retain economic and social stability in the upcoming winter. In this respect, the EU needs to balance trade-offs between the main objectives of EU energy policy – security of supply, affordability and sustainability of energy – as well as to preserve the benefits of the EU internal energy market.

Key Propositions

- ▶ **Electricity Demand Reduction:** Since even high electricity prices will not significantly reduce inflexible electricity demand in the short-term, well-designed demand reduction measures focused on peak hours can contribute to secure electricity supply and lower prices.
- ▶ **Revenue Cap (renewables, nuclear, lignite etc.):** The EU-wide cap on high market revenues generates financial resources for the short-term mitigation of negative impacts of high energy prices and also preserves the benefits of the prices-setting mechanism on EU electricity markets (“merit order”). However, to avoid further distortions of the EU internal energy market the cap must only be applied for a limited time.
- ▶ **Solidarity Contribution (coal, gas, oil, refineries):** On the hand, taxing windfall profits could decrease investments in the European energy sector. On the other hand, companies did not expect such huge profits. Therefore, the skimming of parts of the profits realised in 2022 is acceptable as a onetime emergency intervention.

Content

1	Introduction.....	3
2	EU Electricity Market Design: “Merit Order” and “Hedging”	5
2.1	Spot Markets: “Merit Order”	5
2.2	Future Markets: “Hedging”	6
3	Short-Term Interventions in the Electricity Market.....	7
3.1	Electricity Demand Reduction	7
3.1.1	Commission Proposal	7
3.1.2	cep-Assessment.....	8
3.2	Revenue Cap (Renewables, Nuclear, Lignite etc.).....	8
3.2.1	Commission Proposal	8
3.2.2	cep-Assessment.....	9
3.3	Solidarity Contribution (Coal, Gas, Oil, Refineries)	11
3.3.1	Commission Proposal	11
3.3.2	cep-Assessment.....	11
4	Conclusion	12

1 Introduction

Energy prices in the European Union have reached all-time highs in 2022. Gas prices are skyrocketing due to a sharp decline of gas deliveries from Russia and its constant threat of deliberate supply disruptions. Electricity prices have been driven up during the dry summer by reduced generation of hydro-power and nuclear power stations, the impairment of coal transport on rivers and additional electricity demand for cooling. Furthermore, high prices of gas used for power generation are also spurring electricity prices due to the electricity market design in the EU.

Exploding energy prices put severe economic pressure on private households, small and medium sized enterprises (SMEs) and the industry, threatening the economic basis and social stability of European societies. In reaction to increases of energy prices in 2021 and especially to the Russian invasion of the Ukraine in February 2022, the EU and its Member States took several actions to secure energy supplies and address rising energy prices.¹ In April 2022, the EU Agency for the Cooperation of Energy Regulators (ACER) stressed not only that “the current wholesale electricity market design ensures efficient and secure electricity supply under relatively ‘normal’ market conditions”, but also that it “is not to blame for the current energy crisis. On the contrary, the market rules in place have to some extent helped mitigate the current crisis, thus avoiding electricity curtailment or even blackouts in certain quarters. The electricity market design is, however, not designed for the ‘emergency’ situation that the EU currently finds itself in”.² In May 2022 the European Commission emphasised the importance of “these well-functioning and interconnected markets”, which enable cross-border trade of electricity between Member States, “to ensure their security of supply and reduce the overall cost of the system”, saving European consumers over 34 billion Euros in 2021³.

Subsequently, the Commission President Ursula von der Leyen highlighted the urgency of taking action by claiming that “the market system does not work”⁴ and that the “current electricity market design – based on merit order – is not doing justice to consumers anymore”⁵. On 29 August 2022, she announced that the Commission would immediately propose a short-term “emergency intervention” which would be followed later by a long-term “structural reform of the electricity market”.⁶ The “emergency intervention” should focus on measures that could be implemented fast without changing the basic functions of the electricity markets.

¹ European Commission (2022), Communication COM(2021) 660 of 12 October 2021, Tackling rising energy prices: a toolbox for action and support. European Commission (2022), Communication COM(2022) 108 of 8 March 2022, REPowerEU: Joint European Action for more affordable, secure and sustainable energy; see Reichert, G. / Schwind, S. / Menner, M. (2022), REPowerEU: Struggling for EU Energy Sovereignty, [cepAdhoc 4/2022](#). European Commission (2022), Communication COM(2022) 230 of 18 May 2022, REPowerEU Plan; see Menner, M. / Schwind, S. (2022), [cepAktuell of 19 May 2022](#). Regulation (EU) 2022/1032 of 29 June 2022 amending Regulation (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage. Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas; see Reichert, G. (2022), [cepAktuell of 22 July 2022](#).

² ACER (2022), ACER’s Final Assessment of the EU Wholesale Electricity Market Design [[ACER Assessment Wholesale Electricity Market Design](#)], p. 2.

³ European Commission (2022), Communication COM(2022) 236 of 18 May 2022, Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design, p. 4.

⁴ Ursula von der Leyen, [Speech to the European Parliament of 8 June 2022](#).

⁵ Ursula von der Leyen, [2022 State of the Union Address of 14 September 2022](#).

⁶ Ursula von der Leyen, [Keynote speech by President von der Leyen at the Bled Strategic Forum of 29 August 2022](#).

In the meantime, several Member States – including Germany⁷ – have already implemented or are currently considering further interventions into energy markets to mitigate high prices.⁸ Faced with incoherent national measures which could lead to the fragmentation of the European internal energy market, the Member States emphasised “the need for coordinated European action”⁹ at an extraordinary meeting of the Energy Council on 9 September 2022.¹⁰

Consequently, the European Commission proposed on 14 September 2022 a Council Regulation for an “emergency intervention to address high energy prices”¹¹ via “exceptional, targeted and time-limited measures”¹² mainly focussing on electricity markets. Given that the proposed regulation is based on the EU emergency competence pursuant to Art. 122 TFEU to adopt legislative measures “if severe difficulties arise in the supply of certain products, notably in the area of energy”, the Member States could decide on the proposal by qualified majority and without the participation of the European Parliament already at the extraordinary Energy Council meeting on 30 September 2022.¹³

This cepAdhoc provides a brief overview and assessment of the main proposed intervention measures. To that end, we will first sketch out the basic features and functions of the current EU electricity market design and to which extend electricity prices are coupled to gas prices (“merit order”). On this basis, the proposed measures are outlined and assessed: (1) a reduction of electricity demand, (2) a cap of the high market revenue realised by electricity generation with renewable energies (“renewables”), nuclear energy and lignite, and (3) a “solidarity contribution” of the coal, gas, oil and refinery sector. The estimated 142 billion Euros generated by the market revenue cap (117 billion Euros) and the solidarity contribution (25 billion Euros)¹⁴ are to be redistributed by the Member States to support energy consumers and finance investments in renewables, energy efficiency etc. The EU and its Member States are faced with the challenge of swiftly mitigating the negative impacts of exploding energy prices on European energy consumers, balancing trade-offs between the main objectives of EU energy policy¹⁵ – security of supply, affordability and sustainability of energy – as well as ensuring the functioning of the EU internal energy market. Therefore, we focus on the questions whether the proposals are suitable in the short-term for (1) mitigating the impacts of high energy prices on European households and companies while also (2) providing incentives for electricity demand reduction and (3) preserving the long-term benefits of the EU electricity market design.

⁷ Bundesregierung (2022), [Results of the Coalition Committee of 3 September 2022](#), pp. 2 et seq.: “If the electricity market measures currently under discussion in Europe cannot be agreed and implemented in a timely manner, the German government will implement these adjustments to the electricity market design itself to ease the burden on consumers.”

⁸ Sgaravatti, G. / Tagliapietra, S. / Zachmann, G. (2022), National policies to shield consumers from rising energy prices, Bruegel Datasets, [Update of 10 August 2022](#).

⁹ Council of the EU (2022), Extraordinary Meeting of the Energy Council on 9 September 2022, [Presidency Summary](#).

¹⁰ Council of the EU (2022), [Extraordinary Meeting of the Energy Council on 9 September 2022](#).

¹¹ European Commission (2022), Proposal COM(2022) 473 of 14 September 2022 for a Council Regulation on an emergency intervention to address high energy prices [“Emergency Intervention Regulation (Proposal)”].

¹² Emergency Intervention Regulation, Art. 1 sentence 1.

¹³ Council of the EU (2022), [Extraordinary Meeting of the Energy Council on 30 September 2022](#).

¹⁴ European Commission (2022) Questions and Answers on emergency intervention to address high energy prices, p. 2.

¹⁵ Treaty on the Functioning of the European Union (TFEU), Art. 194 paragraph 1. See also European Commission (2007), Communication COM(2007) 1 of 10 January 2007, An Energy Policy for Europe; Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. S. (2014), Die Klima- und Energiepolitik der EU, [cepKompas](#), p. 49 et seq.

2 EU Electricity Market Design: “Merit Order” and “Hedging”

The skyrocketing gas prices do not only lead to increased costs of households for heating or of certain industrial processes, but also to all-time high electricity prices. This coupling of gas and electricity prices is rooted in the specific nature of electricity and the resulting functions electricity markets have to fulfil.¹⁶ Electricity is a mostly a non-storable commodity which needs to be produced when used. Furthermore, electricity is generated with different technologies – burning fossil fuels like coal, gas or oil; using nuclear power, transforming renewables energy of wind, sun, waves etc. – with distinctly different characteristics, flexibilities and costs. To secure electricity supply at low costs, the EU internal electricity market offers different options for trading electricity in the short-, medium and long-term. While electricity spot markets in the form of “day-ahead-markets” or “intra-day markets” enable the short-term purchase of electricity to match immediate demand, future markets – either organised as electricity exchanges or bilaterally between companies “over the counter” (OTC) – allow for the mid- and long-term hedging of economic risks due to the high volatility of energy prices.

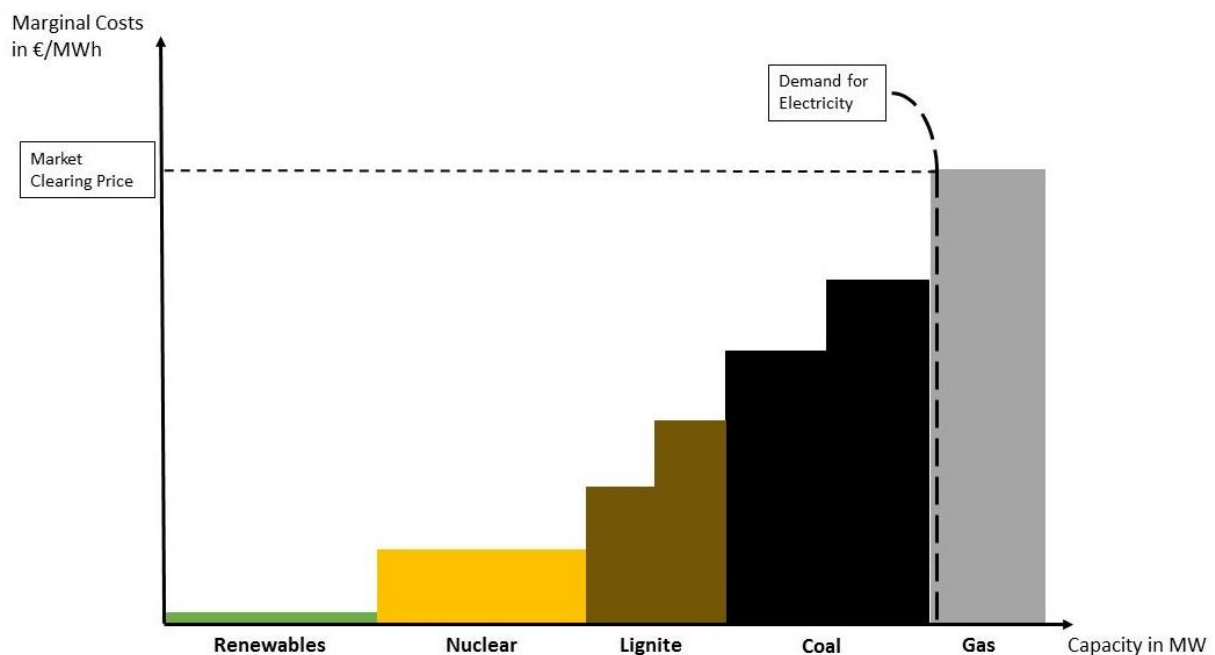
2.1 Spot Markets: “Merit Order”

On a day-ahead-market electricity is traded needed to serve demand for the upcoming day and based on the marginal costs of electricity generation, i.e. the costs incurred for the last megawatt-hour (MWh) produced. For this purpose, the electricity-generating power plants are ranked according to their marginal costs starting with the deployment of the least-cost plant (“merit order”, see figure 1). Consequently, demand can always be served by the lowest price possible at a given time and the overall costs of electricity generation are minimised. In accordance with the “merit order principle”, the power plant with the highest marginal costs sets the price for the whole market (“market clearing price”). All consumers pay the same price and hence all energy generators receive the same price. Consequently, electricity generators have an incentive to invest in power plants with lower marginal costs – such as typically renewables, nuclear or lignite (“inframarginal technologies”) – to increase their revenues. If especially in peak times electricity demand cannot be served by renewables, nuclear, lignite and hard coal combined, electricity generated by gas sets the market clearing price. Therefore, the electricity price is – in this case – coupled to the gas price. However, the market-clearing prices fluctuate continuously throughout the day – depending on whether energy demand is high or low or if there is, e.g., sufficient supply of renewable energy due to favourable weather conditions.¹⁷

¹⁶ For the following see Ströbele, W. / Pfaffenberger, W. / Heuterkes, M. (2013), *Energiewirtschaft – Einführung in Theorie und Politik*, pp. 249 et seq.

¹⁷ Bonn, M. / Heitmann, N. / Nader, N. / Reichert, G. / Voßwinkel, J. S. (2014), *Die Klima- und Energiepolitik der EU – Stand und Perspektiven*, [cepKompass](#), p. 69.

Fig. 1: Stylized Merit Order Curve with Gas Setting the Market Clearing Price¹⁸



Source: cep

2.2 Future Markets: “Hedging”

However, the merit order principle is only applied in short-term spot markets, which are not mandatory to use. An energy generator can also sell its electricity production a long time beforehand on future markets where prices can vary depending on the individual contract.¹⁹ This so called “bilateral trade” is an option for consumers and producers for hedging against price spikes. As price developments in the future are uncertain an energy generator and energy consumer, e.g. an electricity-intensive company, can agree on a certain price per MWh and to smooth out their financial flows. Hedging through long-term bilateral contracts – e.g. multi-year power purchase agreements – can also secure long-term financing for renewable producers as the price is set long into the future.²⁰

¹⁸ For simplification, oil is not included in the figure.

¹⁹ Ströbele, W. / Pfaffenberger, W. / Heuterkes, M. (2013), *Energiewirtschaft – Einführung in Theorie und Politik*, p. 71.

²⁰ [ACER Assessment Wholesale Electricity Market Design](#), p. 37

3 Short-Term Interventions in the Electricity Market

Several Member States have already introduced measures to mitigate the impacts of high gas prices.²¹ Spain and Portugal have implemented a maximum price for gas starting at 40 €/MWh and increasing to 50€/MWh within a year. Gas generators are subsidised to compensate for the difference between the price cap and the actual price.²² By subsidising the gas price, the marginal price in the electricity market is lowered, which lowers the market clearing price and thus also electricity prices. Furthermore, Spain, Italy, Greece and other Member States introduced an excess profit tax for energy companies.²³

As national measures bear the risk of undermining the EU internal energy market and the security of supply across the EU, the Commission is calling for a “rapid and coordinated” EU-wide response.²⁴ The Commission’s proposal for a Council Regulation for an “emergency intervention” addressing high energy prices²⁵ focuses on the electricity market and comprises mainly three short-term measures.

3.1 Electricity Demand Reduction

3.1.1 Commission Proposal

The Commission proposes two electricity demand reduction targets for the Member States. Firstly, a mandatory demand reduction of at least 5% must be achieved during peak hours.²⁶ Peak hours are times during the day with the highest electricity demand (“peak demand”) and consequently the highest market clearing prices.²⁷ The Member State must identify upfront a number of peak hours corresponding to at least 10% of all hours during a month.²⁸

Secondly, the Member States “should seek to implement measures” to reduce the total gross electricity consumption²⁹ by 10% compared to the average gross electricity consumption in the corresponding months of the reference period.³⁰ The reference period refers to 1 November to 31 March of the five preceding years. The first reference period is therefore 1 November 2017 to 31 March 2018.³¹

The Member States are free to choose the measures for achieving the demand reduction targets. The Commission stresses that the measures should be market-based³² and do not “unduly” distort competition or the functioning of the internal electricity markets³³. This could be achieved by financial compensation paid by the Member States if electricity during peak hours is not consumed.³⁴

²¹ Sgaravatti, G. / Tagliapietra, S. / Zachmann, G. (2022), National policies to shield consumers from rising energy prices, Bruegel Datasets, [Update of 10 August 2022](#).

²² Tagesschau of 2 May 2022, [Spanien und Portugal deckeln Gaspreis](#).

²³ Wissenschaftliche Dienste des Deutschen Bundestags (2022), Sachstand WD 4-3000-074/22, [Übergewinnsteuern in Europa – Neue Regelungen und Pläne für die Abschöpfung von Übergewinnen](#).

²⁴ Emergency Intervention Regulation (Proposal), p. 2 et seq.

²⁵ European Commission (2022), Proposal COM2022) 473 of 14 September 2022 for a Council Regulation on an emergency intervention to address high energy prices [“Emergency Intervention Regulation (Proposal)”].

²⁶ Ibid., Art. 4 paragraph 2.

²⁷ Ibid., Art. 2 paragraph 4.

²⁸ Ibid., Art. 4 paragraph 1.

²⁹ Ibid., Art. 2 paragraph 2: “Gross electricity consumption” refers to the “overall supply of electricity for activities in the territory of a Member State”.

³⁰ Ibid., Art. 3.

³¹ Ibid., Art. 2 paragraph 3.

³² Ibid., Art. 5 paragraph 1 a.

³³ Ibid., Art. 5 paragraph 1 c.

³⁴ Ibid., Art. 5 paragraph 1 b.

Both reduction targets will apply from 1 December 2022, while Member States can implement them already earlier.³⁵ They will apply until 31 March 2023. By 28 February 2023 the Commission will review the measures and, if necessary, prolong them.³⁶

3.1.2 cep-Assessment

As electricity cannot be stored at a large-scale level, a higher demand than supply at one time of the day cannot be balanced by a higher supply later. Therefore, electricity prices fluctuate considerably throughout the day. A high demand is likely accompanied by high gas consumption and thus – due to the merit order principle – by high electricity prices. A reduction in demand during peak hours allows either gas to be saved, as less is needed to produce electricity, or even gas not to be used as a price-setting technology at certain times throughout the day. In this case, it can also directly support the reduction of electricity prices.

A structural problem of the electricity market is the low flexibility of demand. Most customers – both households and companies that have concluded long term contracts with constant prices – have no reason to respond to real time prices of electricity.³⁷ Hence, even a high market clearing price will not significantly lower demand. Therefore, measures are needed to lower demand in peak hours. Nevertheless, it is important to note that the Commission expects a reduction of 3.8% of gas consumption for power production or 1.2 billion cubic metres (bcm) of gas over four months.³⁸ Given that the overall gas consumption in all sectors in the EU amounted to 396 bcm in 2021³⁹, this reduction is comparably low. However, the measures mainly address lowering the electricity prices. If Member States set up an intelligent design that enables demand during some peak hours to be served without gas, electricity prices can be lowered.

Most households in the EU are not yet equipped with smart meter systems.⁴⁰ For them it is very hard to reduce electricity consumption during peak demand. Most households cannot clearly predict when peak hours are. Furthermore, national authorities can neither verify the amount reduced at peak times nor incentivise consumption reduction only at certain times of a day. In this respect, an overall reduction target can help to reduce electricity demand for households where targeted measures for certain times of a day are not possible to implement.

3.2 Revenue Cap (Renewables, Nuclear, Lignite etc.)

3.2.1 Commission Proposal

By setting an ex-post cap on revenues per MWh, the Commission proposes to limit the revenue of electricity generators with low marginal costs such as renewables nuclear and lignite, but also crude oil and other oil used for electricity generation.⁴¹ Due to the merit order principle those generators are able to yield high revenues on the spot markets. The proposed limit amounts to 180 €/MWh and covers all market timeframes – including both spot markets and forward markets. It is applied at the moment

³⁵ Ibid., Art. 20 paragraph 2.

³⁶ Ibid., Art. 19 paragraph 1.

³⁷ Cramton, P. / Ockenfels, A. / Stoft, S. (2013), Capacity market Fundamentals, Economics of Energy & Environmental Policy 2(2) (2013), pp. 27–46.

³⁸ Emergency Intervention Regulation (Proposal), p. 5.

³⁹ Statista (2022), [Natural gas consumption in the European Union from 1998 to 2021](#).

⁴⁰ Umweltbundesamt (2021), Erkenntnisse zu Umweltwirkungen von Smart Metern, Climate Change 34/2021, p. 14.

⁴¹ Emergency Intervention Regulation (Proposal), Art. 7 paragraph 1.

a transaction is settled or, if this is not possible, thereafter.⁴² Demonstration projects or plants that are subsidised by certain support schemes and whose prices are therefore already capped are excluded.⁴³

The EU-wide uniform revenue cap would not impair the functioning of the internal electricity market. Since the revenue cap is applied after the market clearing price has been determined, the price signal remains intact to incentivise demand reduction and cross-border trading is not affected.⁴⁴

The Commission stresses the importance of not negatively affecting investment decisions for renewable energy generation. 180 €/MWh are “consistently and significantly” above average market price expectations. Hence, the cap “should not impair” the investment in new inframarginal technologies.⁴⁵

Member States are free to choose the mechanism for collecting their surpluses. The additional public budget must be used to finance measures which relieve final electricity consumers, including wholesale as well as companies and households. This could be in the form of direct income support for households. Furthermore, the promotion of investments into decarbonisation technologies, renewables and energy efficiency is also possible.⁴⁶

Another potential measure to relieve final electricity consumers is the reduction of electricity prices by regulating tariffs. The Commission defines several conditions that must be met in order for Member States to set electricity prices below cost. These include that the reduced electricity price only applies to a limited amount of consumption, leaving an incentive to reduce demand. Furthermore, the suppliers need to be reimbursed for supplying electricity below costs.⁴⁷ The Member States are also allowed to limit the electricity price for small and medium enterprises under certain conditions. The limited electricity cost must not exceed 80% of the highest annual consumption over the last 5 years. This should also keep an incentive for demand reduction.⁴⁸

The revenue limit will apply from 1 December 2022 until 31 March 2023, while Member States can introduce them already earlier.⁴⁹ By 28 February 2023 the Commission will review the measures and, if necessary, prolong them. This includes the level of the revenue cap, which can be amended as well as the application to producers.⁵⁰

3.2.2 cep-Assessment

In the current situation, electricity generators with “inframarginal” production costs can achieve prices and thus revenues on the spot market that are much higher than their expectations when they entered the market. Meanwhile companies and households all over Europe suffer from high electricity bills. Several Member States have already implemented or at least plan to implement a variety of different measures to capture a part of these “unexpected profits”. Given this exceptional emergency situation, an EU-wide uniform cap can ensure a level playing field across the EU as electricity generators are not burdened differently.

⁴² Ibid., Art. 6 paragraph 1–3.

⁴³ Ibid., Art. 7 paragraph 2.

⁴⁴ Ibid., p. 6.

⁴⁵ Ibid., p. 6.

⁴⁶ Ibid., Art. 9 paragraph 1 and 3.

⁴⁷ Ibid., Art. 12.

⁴⁸ Ibid., Art. 11 paragraph 1.

⁴⁹ Ibid., Art. 20 paragraph 2.

⁵⁰ Ibid., Art. 19 paragraph 1.

On the spot market, the revenue cap does only apply in times in which the market clearing price is above 180 €/MWh, which is mostly the case when gas is the price-setting “marginal technology”. Since the cap only takes effect after the market price has been determined, it has no influence on the price formation. Preserving the price signal remains important, as high prices indicate scarcity and provide an incentive to reduce electricity consumption. The spot market will continue to function as before, as the market mechanism is maintained intact and the merit order will remain unchanged. It is therefore not expected that the revenue cap will lead to a shortage of supply. Furthermore, the cheapest plants have still an incentive to provide their supply first. The advantage of the merit order – that the demand can always be served by the lowest price possible at a given time – remains intact. At the same time, Member States are able to generate public revenues which can be used to master the energy crisis.

As the revenue cap also applies on bilateral trade, it does not matter where electricity is traded. As it only applies to revenues above 180 €/MWh, it does not skim revenues from contracts with lower prices that have been concluded several years ago. Companies may have agreed on long-term contracts when electricity prices were low. The companies are not currently facing the high price of electricity, consequently there is also no revenue to be skimmed by electricity generators. As the cap is expected to end in March 2023, it will probably have no significant influence on the pricing of long-term contracts. However, the Commission is considering prolonging the cap and possibly amending it. If the revenue limit remains in place for a longer time, it could have an influence on the price formation of long-term contracts: When companies know that the electricity generators cannot keep any revenue above 180 €/MWh, they have no incentive to pay more and an electricity generator has no incentive to demand more as he has to give up everything above 180 €/MWh. As long-term contracts are usually concluded for a period longer than the suggested four months, a significant impact on the prices is not expected. However, if the revenue cap is prolonged this could become an issue.

As the cap is still above the market clearing price of the previous year, it should not hamper investments into the deployment of renewables. Furthermore, the public revenue – among other measures – should be used to support the expansion of renewables. This is important as in the short-term demand reduction is essential. In the medium and long term, however, the energy crises cannot be mastered without significant investments in renewable energies.

Nevertheless, the revenue cap should only be implemented for a limited time. An extended application of the measure could lead to more distortions in the electricity market, as price formation on future markets could be influenced and artificially lowered. Investments in renewables are inhibited if uncertainties about their profitability increase, e.g. by the possibility that the cap will be extended indefinitely and that it could be further tightened. Therefore, the revenue cap should – as is currently planned – only be established for a limited period of time.

Allowing the Member States to artificially lower electricity prices by regulating tariffs counteracts the target of saving energy and conflicts with the objectives to secure energy supply and decarbonise the energy system. Combating the negative effects of high electricity prices should be the task of social policy. Instead of keeping the electricity prices artificially low by way of state regulation, the negative impacts of high electricity costs for households should be mitigated by direct income support.

However, given enormous challenges for European households and industries at the moment, several Member States have already introduced measures to lower electricity prices. Uniform requirements across the EU can minimise the risks associated with price reductions. As the Commission proposal

only allows to abate a limited amount of the consumption, there is still an incentive to save electricity. A reimbursement for the energy suppliers is necessary to avoid restricting the supply on the electricity market. Otherwise, depending on the price cap, there could be a risk that it is no longer profitable for suppliers to provide electricity.

3.3 Solidarity Contribution (Coal, Gas, Oil, Refineries)

3.3.1 Commission Proposal

Activities in the coal, gas, oil and refinery sector are exempted from the revenue limit. Nevertheless, those companies must pay a “solidarity contribution”. It refers to “surplus profits” made in 2022,⁵¹ i.e. the taxable profits calculated according to the respective tax law of the Member States in 2022. If there is an increase in the taxable profits by 20% or more compared to the three preceding years, the solidarity contribution is raised.⁵² The rate is at least 33% and additional to the regular taxes.⁵³ Some Member States did already install different measures comparable to the planned solidarity contribution.⁵⁴ If their implemented rate is higher than 33%, they can continue to apply the higher rate.⁵⁵

The solidarity contribution must be used to mitigate the effects of the high energy prices. It could be used, *inter alia*, to provide financial support to vulnerable households or to finance measures to reduce energy consumption. It could also be used to support projects that foster energy autonomy of the EU, especially cross-border projects.⁵⁶

3.3.2 cep-Assessment

Since the solidarity contribution is levied retroactively, companies cannot evade the contribution. As it applies to the profits in 2022, there is no risk of a supply reduction by fossil fuel companies and has no influence on the prices currently displayed on the market. In the long run, however, a contribution calculated based on excess profits could decrease the security of investment for companies in the EU. These would price in for the future the possibility that they could be burdened with additional levies within the EU. Overall, the attractiveness to invest in the EU may decrease.⁵⁷ This could not only apply to the fossil fuel companies concerned, but also send unwanted signals to other sectors.

Overall, however, companies are currently earning huge profits, which they did not expect. The generated public budget can be used to support to ease the burden of high prices for energy consumers or the expansion of renewables. As it is planned as a temporary contribution and only part of the profits generated, a onetime skimming of the profits seems acceptable.

⁵¹ Ibid., Art. 13 paragraph 1.

⁵² Ibid., Art. 14.

⁵³ Ibid., Art. 15.

⁵⁴ Ibid., Art. 13 paragraph 2.

⁵⁵ Ibid., p. 19.

⁵⁶ Ibid., Art. 16.

⁵⁷ Fuest, C. (2022), Acht Gründe, warum eine Übergewinnsteuer keine gute Idee ist, ifo Standpunkt Nr. 237.

4 Conclusion

The current energy crisis is characterised by the shortage of energy supplies and exploding energy prices. It puts severe pressure on private households and companies alike, threatening the economic basis and social stability of European societies and requiring immediate and coordinated action on the EU level. The EU and its Member States are faced with the challenge of swiftly mitigating the negative impacts of exploding energy prices on European energy consumers, balancing trade-offs between security of supply, affordability and sustainability of energy as well as ensuring the functioning of the EU internal energy market. In this respect, the proposed measures must be suitable for swiftly mitigating the impacts of high energy prices on European households and companies while also providing incentives for electricity demand reduction and preserving the benefits of the EU electricity market design.

(1) Mitigating the Impacts of High Energy Prices on Households and Companies

Even with all three emergency measures implemented, electricity prices cannot be lowered to pre-crisis price-levels in the near future. Nevertheless, the proposed measures contribute to mitigating the impacts of high gas and electricity prices in the short-term. If Member States set up well-designed measures to reduce electricity demand focused on peak hours, also electricity prices can be lowered. Since the public budget generated by the revenue cap and the solidarity contribution must be used, at least in part, to support households and companies, this can also cushion the impact of soaring gas and electricity prices.

(2) Providing Incentives for Electricity Demand Reduction

The proposed measures provide both a direct incentive to save electricity – e.g. an obligation to reduce demand at peak times – and also an indirect incentive: Since the revenue cap is applied after the market clearing price has been determined, the price signal of the electricity market is preserved. As high electricity prices indicate scarcity of supply, they provide an incentive to reduce electricity consumption.

(3) Preserving the Benefits of the EU Electricity Market Design

In contrast to what the public statements of the Commission President might suggest, these short-term emergency measures do not yet represent a structural change in the EU electricity market design. Its fundamental functions – particularly the price-setting mechanism pursuant to the merit order – along with the resulting benefits will remain intact. Accordingly, the revenue cap in particular should only be introduced for a limited period of time in order to alleviate the immediate challenges of securing energy supply and mitigating the impact of high energy prices during the upcoming winter 2022/2023. However, an extended application of the measures could lead to more distortions in the electricity market. Investments in renewables would be inhibited if uncertainties about their profitability increase, e.g. by the possibility that the cap would be extended indefinitely and that it could be further tightened.



Authors:

Dr. Götz Reichert, LL.M. (GWU)

Head of Department

Energy | Environment | Climate | Transport

reichert@cep.eu

Svenja Schwind

Policy Analyst

schwind@cep.eu

Prof. Dr. Jan S. Voßwinkel

Scientific Advisor

Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen (HfWU)

vosswinkel@cep.eu

Centrum für Europäische Politik FREIBURG | BERLIN

Kaiser-Joseph-Strasse 266 | D-79098 Freiburg | Germany

Schiffbauerdamm 40 | D-10117 Berlin | Germany

phone: + 49 761 38693-0

The **Centrum für Europäische Politik** FREIBURG | BERLIN,
the **Centre de Politique Européenne** PARIS and
the **Centro Politiche Europee** ROMA form
the **Centres for European Policy Network** FREIBURG | BERLIN | PARIS | ROMA.

The Centres for European Policy Network analyses and assesses the policy of the European Union independently of individual or political interests, in alignment with the policy of integration and according to the principles of a free, market-based system.