

SATURDAY ENERGY TALKS OF THE CZECH EU COUNCIL PRESIDENCY: WHAT'S NEXT?

Helena Truchlá Michal Hrubý

)ecember 202

 \sim

LOOKING BACK – ENERGY SURPRISES OF 2022	2
Repetition is the Mother of Learning	2
My Precious; Gas and its Origin	2
LOOKING FOR A SOLUTION – THE TAMING OF THE SHREW	4
Choose Your Path	4
CUTTING THE BILLS FOR BOTH COMMODITIES?	4
Too Big to Fail?	8
LOOKING AT AVAILABILITY – SAVE WHAT'S LEFT	8
Step by Step	
Cut the Industry First?	9
LOOKING FOR IDEAL ENERGY POLICY – GRAND ENERGY BARGAIN	10
New Energy Policy Ideals	10
Price Cap Worth It? The Sunk Cost of Time	11
LOOKING INTO THE FUTURE – CLOSING THE GAP OF 2023	
Happy New Gas Year	12
ANYTHING TO RECOMMEND?	

=

Looking back – Energy surprises of 2022

Repetition is the Mother of Learning

The ongoing energy crisis culminated during the Czech EU Council presidency, which one could describe as "Saturday Energy Talks". There have never been so many energy ministers' gatherings as during this presidency – five Extraordinary Council Meetings on Energy and two standard Energy Council Meetings¹.

Over the previous year, 2021, Russia has begun to exert pressure on the European gas market. In the third and fourth quarters of 2021, Russia delivered much lower volumes of natural gas compared to the 2015-2020 average². After the start of the Russian invasion of Ukraine, the Russian state-owned gas company Gazprom stepped up this pressure, taking advantage of the dependency in which some EU Member States (EU MS) find themselves.

The possibility of replacing Russian gas exists through increased supplies from countries such as the USA, Norway, Algeria or Qatar³. New supplier contracts should be signed in the upcoming months. Energy savings across all sectors of the EU economy, energy-efficient solutions and the development of renewable energy sources are vital to bridging this and upcoming winters⁴.

My Precious; Gas and its Origin

EU imports 60% of its total energy consumption and 80% of its natural gas consumption⁵. In the EU, electricity is approximately 23% of our final energy consumption⁶. Table 1 details the EU electricity and energy mix in 2020.

Table 1: EU electricity and energy mix in 2020

¹ <u>https://www.consilium.europa.eu/en/meetings/calendar/</u>

² <u>https://www.bruegel.org/dataset/european-natural-gas-imports</u>

³ https://www.consilium.europa.eu/en/infographics/eu-gas-supply/

⁴ <u>https://www.iea.org/news/how-the-european-union-can-avoid-natural-gas-shortages-in-2023</u>

⁵ <u>https://www.acer.europa.eu/gas-factsheet</u>

⁶ https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-3b.html

EU electricity

Ξ

Nuclear energy	24.5%	Oil and petroleum	34.5%
Natural gas	20.1%	Natural gas	23.7%
Other fossil fuels	15.5%	Renewable energy	17.4%
Wind	14.3%	Nuclear energy	12.7%
Hydro	13.5%	Solid fossil fuels	11.5%
Biofuels	5.8%	Others	0.2%
Solar	5.1%		
Others	1.2%		

From the major primary energy sources, the EU's dependency on Russian imports equaled 39% for natural gas, 45% for solid fossil fuels, and 23% for petroleum products in 2020. Overall, the EU depended on Russia for almost 25% of all its energy needs⁹. According to current weekly statistics, Russia's share of EU natural gas imports is now only around 9%¹⁰. Based on data from Eurostat, monthly Russian imports of natural gas in September were about 5% of the total¹¹.

We saw wild and unprecedented natural gas and electricity prices spikes in the summer of 2022 – most notably at the end of August. Because of the market

⁸https://ec.europa.eu/eurostat/databrowser/view/NRG_BAL_S_custom_1946578/bookmark/table?lang=en& bookmarkId=8760d5fb-bdbe-4cfe-9b79-c0dc3eaafe8f

⁷https://ec.europa.eu/eurostat/databrowser/view/NRG_BAL_C_custom_1970141/bookmark/table?lang=en& bookmarkId=d9edf51f-af56-42e2-a7f5-c8debed97494

⁹<u>https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=EU_energy_mix_and_import_dependency#</u> <u>EU_energy_dependency_on_Russia</u>

 ¹⁰ <u>https://www.bruegel.org/dataset/european-natural-gas-imports</u>
¹¹ <u>https://ec.europa.eu/eurostat/databrowser/view/NRG_TI_GASM/default/table?lang=en&category=nrg.nrg_uant.nrg_quantm.nrg_t_m.nrg_ti_m</u>

design in the electricity market, the rise in the price of natural gas was a leading cause of rising electricity prices¹².

Looking for a Solution – The Taming of the Shrew

Choose Your Path

The EU MS are legally bounded to achieve climate neutrality by the Climate Law¹³. There is, however, no binding pathway for the energy mix to use. It remains up to each country to choose the energy sources – usually allowed by the geographical conditions or given by the path dependency on previous national energy policy¹⁴.

Yet, in the medium term, each EU MS must follow its National Energy and Climate Plan for the 2021-2030 period, which came as an obligation given the comprehensive, integrated climate and energy policy revised in 2018¹⁵. A draft of its update will be sent to the Commission in 2023. The agreed-upon amendments via the Fit for 55 package¹⁶ and the REPowerEU plan¹⁷ will shape the draft. The main goal is to boost the EU's energy resilience and step out of the Russian energy chess game.

Cutting the Bills for Both Commodities?

Since the first energy price increase in 2021, governments reacted differently to the unprecedented energy crisis. Bruegel¹⁸ divides the policy interventions into four main categories:

1. Gas supply diversification (such as new gas supply deals and gas infrastructure development).

Ξ

¹⁷ <u>https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en</u>

¹²<u>https://iea.blob.core.windows.net/assets/660c2410-218c-4145-9348-c782e185dcdf/ElectricityMarketReport-July2022.pdf</u>

¹³ <u>https://climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en</u>

¹⁴ <u>https://www.europarl.europa.eu/factsheets/en/sheet/68/energy-policy-general-principles</u>

¹⁵ Ibid.

¹⁶ <u>https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/</u>

¹⁸ <u>https://www.bruegel.org/dataset/national-energy-policy-responses-energy-crisis</u>

- 2. Tapping into short-term alternative energy sources (such as coal ramp-up, nuclear closure postponements, and investment acceleration).
- 3. Fostering energy savings and efficiency.
- 4. Accelerating the roll-out of renewable energies and clean-tech solutions.

The EU produced policy actions that should protect households and industries from the worst consequences of the energy crisis¹⁹. Next to the immediate support that could have been taken without any legislative change, vast support for businesses was done thanks to a Temporary Crisis Framework²⁰. That allowed each government to use flexibility under the State Aid rules to support the

Most policies tackle the issue of both natural gas and electricity demand and supply. Natural gas profoundly affects the electricity market in these months. The economic model of "merit order" shows that because of the inelastic supply curve and marginal costs of electricity producers, the currently needed source with the most expensive variable costs sets the electricity price on the market. In times of soaring natural gas prices, natural gas-fired power plants have the highest variable costs and, therefore, set the price. Although this model is only descriptive, "marginal pricing" resembles a similar approach used on trading platforms. economy, hence creating a price ceiling for monthly bills of businesses, but also to compensate for extra costs due to the energy crisis or support the energy utilities with liquidity injections.

To allow for such fiscal expenditures, the EU adopted a regulation to collect windfall taxes from "inframarginal" electricity producers and solidarity

contributions from fossil fuel companies²¹. Moreover, the EU agreed on the way to "correct" the wholesale natural gas market²². A price cap can be activated on the TTF virtual marketplace that would disable gas trades if the price is unjustifiably high. Table 2 pinpoints selected EU policy actions which navigate the

¹⁹ <u>https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply/#EU</u>

²⁰ <u>https://ec.europa.eu/commission/presscorner/detail/en/statement 22 1949</u>

²¹ <u>https://ec.europa.eu/commission/presscorner/detail/en/ip 22 5489</u>

²² https://ec.europa.eu/commission/presscorner/detail/en/ip 22 7065

MS through the energy crisis. A solidarity mechanism between the MS and a faster permitting for renewable energy projects were also the last additions to the new policy actions in 2022.

Timeline	Policy action	General description	In practical terms
Q4 2021	Toolbox for action	Guiding document for	Short- and mid-term
	and support	national governments	initiatives and action to
		to counter high	take under the existing
		energy prices	legislation
Q1 2022	Temporary Crisis	Governments are	Limited aid, sufficient
	Framework	allowed to support	liquidity cushion,
		businesses above the	additional cost
		already existing	compensation
		options from the	
		Toolbox	
02 2022	REPowerEU:	EU plan to reduce its	Set of actions and
Q2 2022			
	affordable, secure		resources to increase
	and sustainable	Russian fossil fuels,	energy resilience,
	energy for Europe	sending a clear	support for scale-up of
		political signal	renewables, increase
			energy efficiency
Q2 2022	Gas storage	Supply-side	Mandatory targets for
	regulation	intervention as an	natural gas storage
		immediate crisis	filling at a given time
		solution, security of	

²³ <u>https://www.consilium.europa.eu/en/policies/energy-prices-and-security-of-supply/#EU</u>

gas supplies and diversification

Q3 2022	Regulation on	Demand side	Coordinated action to
	coordinated	intervention to	lower the natural gas
	demand-reduction	voluntarily decrease	demand across the EU
	measures for gas	gas consumption	by at least 15%
Q4 2022	Regulation on an	Demand side	Collecting windfall
	emergency	intervention to	taxes to allow for low
	intervention to	voluntarily decrease	retail energy prices by
	address high	electricity	compensating the
	energy prices	consumption;	traders
		intervention for	Coordinated action to
		collection of windfall	lower the electricity
		incomes	demand across the EU
			by 10% (voluntarily)
			and by 5% in peak
			hours (mandatorily)

to Pooling demand for Q4 2022 Proposal of Intervention on stabilize the EU gas joint regulation purchase through platform, new LNG enhancing markets solidarity through better market design, benchmark, solidarity better coordination supply coordination default settings, the of gas purchases, and default solidarity market correction exchanges of gas rules for EU MS. mechanism across borders and

reliable price benchmarks

Too Big to Fail?

After cuts in Russian gas supply, energy utilities must find alternative sources of non-Russian gas – to buy at the spot market, set new contracts for deliveries and trade the gas, which costs them much more²⁴. However, they cannot directly pass the bill to the consumers, effectively protected by fixed contracts or temporary crisis interventions, such as end-user price ceilings. All in all, these fiscal national interventions to ease energy consumers and energy utilities have already amounted to more than EUR 700 billion since the third quarter of 2021²⁵.

Hence, another aspect of the national governments' responses was the financial injection to major energy utilities. There were signs of energy utilities collapsing if no one was going to bail out these companies. Governments in select countries decided to take over the energy utilities and nationalize them²⁶, most notably in Germany and France.

Looking at Availability – Save What's Left

Step by Step

Ξ

The European Commission²⁷, IEA²⁸, and many other institutions published action plans to reduce overall gas consumption. Only some of the proposed solutions can effectively help the EU to overcome this and the following winter. As described later, it is primarily savings of total energy consumed, energy efficient technologies and fuel switches that help immediately. New investment decisions on nuclear power plants or hydrogen utilisation come too late and only make a difference in

²⁴ <u>https://www.spglobal.com/esg/insights/european-utility-bailouts</u>

²⁵ <u>https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices</u>

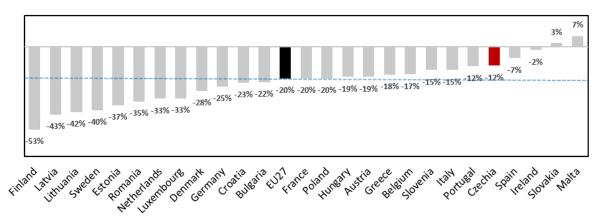
²⁶ <u>https://www.reuters.com/business/energy/eu-clears-acquisition-uniper-by-german-government-2022-12-16/</u>

²⁷ https://ec.europa.eu/commission/presscorner/detail/en/ip 22 4608

²⁸ International Energy Agency. <u>https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-</u> reliance-on-russian-natural-gas

the long term. However, recent investment decisions on LNG floating storage and regasification units were the most important ones to mitigate the immediate situation.

Although the coordinated action to lower the natural gas demand across the EU by at least 15% is underway (see Figure 1), IEA warns of a 30 bcm gap in the supply of natural gas to the EU in 2023²⁹. Compared to the EU's 150 bcm yearly import from Russia that would be entirely cut in such a scenario, this can also be considered a great race towards independence on Russian natural gas.



Natural gas consumption reduction (August-November 2022 vs. 2017-2021)

Figure 1: Natural gas consumption reduction³⁰

Cut the Industry First?

Highlighted in the EU Save Gas for Safe Winter plan³¹, households and critical social services are "protected consumers" under the existing EU security of supply rules. They will not be cut from natural gas supplies if member states can save gas elsewhere in their economies. National crisis plans then set different consumer groups and the order in which they would be cut from gas supplies – industry and businesses being the first sector to be affected³². No one, however, wants to risk

²⁹ <u>https://www.iea.org/reports/how-to-avoid-gas-shortages-in-the-european-union-in-2023</u>

³⁰ <u>https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20221220-3</u>

³¹ <u>https://ec.europa.eu/commission/presscorner/detail/en/QANDA 22 4609</u>

³² <u>https://energy.ec.europa.eu/topics/energy-security/secure-gas-supplies_en</u>

curtailment of industrial production in already harsh economic conditions and risk the issue of rising unemployment.

In 2020, the industry consumed approximately 27% of all the EU gas consumption. The chemical and petrochemical sector was responsible for approximately 10% of the total gas consumption – i.e., around 40 bcm (compared to the gap we might face next year, 30 bcm)³³. Interestingly, the manufacturing of chemicals, iron and steel, cement and lime, paper, and glass is estimated to have the potential to reduce gas consumption by up to 25% in the short-to-medium term without reducing production34 – increasing energy efficiency, partial electrification of selected processes, waste heat recovery, or others.

Looking for Ideal Energy Policy – Grand Energy Bargain

New Energy Policy Ideals

Ξ

The public and private sectors had significant expectations for the EU to cope with the energy crisis. The most important task was, however, to stay united and not let individual interests supersede the EU-level interests. It was crucial to namely bring all available supply-side flexibility into play and reduce the energy demand where possible – which, so far, has been delivered quite successfully.

The joint gas purchase mechanism could ease the gas price next spring, which might otherwise be increased by uncoordinated overbidding. Moreover, the governments could pool money for compensating the most vulnerable households and industries, creating a new type of EU-level energy crisis fund³⁵.

 ³³https://ec.europa.eu/eurostat/databrowser/explore/all/envir?lang=en&subtheme=nrg.nrg_quant.nrg_quant
a.nrg_cb&display=list&sort=category&extractionId=NRG_CB_GAS_custom_4229506
³⁴https://climact.com/wp-content/uploads/2022/05/Opportunities-to-get-EU-industry-off-natural-gas-

³⁴<u>https://climact.com/wp-content/uploads/2022/05/Opportunities-to-get-EU-industry-off-natural-gas-</u> <u>quickly.pdf</u>

³⁵ <u>https://www.bruegel.org/blog-post/does-european-union-need-energy-crisis-fund</u>

The energy negotiations and councils lead to a new perspective on how to keep the EU energy market working – a grand energy bargain³⁶ needed on the EU level, which would eventually lead the market towards the best possible outcome of this energy dimension of Russia-induced war – and at the same time, keeping Europe on track of its long-term climate goals.

Price Cap Worth It? The Sunk Cost of Time

From all the crisis responses, the proposal to cap TTF³⁷ gas contracts cost the policymakers the most time. However, the currently agreed proposal is rather a market correction mechanism. A "correction break" might be only a once-in-a-year event (or not). Energy prices can remain very high even if no break is needed in the following months.

As argued by the commodity exchange operator³⁸, selected think tanks³⁹, university representatives⁴⁰ or energy market consulting companies⁴¹, capping wholesale gas prices could disable the market from clearing itself. Gas supplies to the EU could be threatened if the market cap was too low and gas shipped elsewhere. Alternatively, most traders could switch to over-the-counter deals with no price ceiling. In any case, the end-user price of natural gas would remain the same. It is not the EU market correction mechanism but the individual national interventions, including the Czech one, which set the end-user prices.

³⁹ <u>https://www.bruegel.org/blog-post/cap-or-not-cap-deal-europe-needs-energy-prices</u>

⁴⁰<u>https://www.linkedin.com/posts/lionhirth_eu2022cz-activity-7010683753190539264-</u> BTwB?utm_source=share&utm_medium=member_desktop

 ³⁶ <u>https://www.bruegel.org/comment/grand-energy-bargain-europe-needs-defeat-putin</u>
³⁷ Title Transfer Facility.

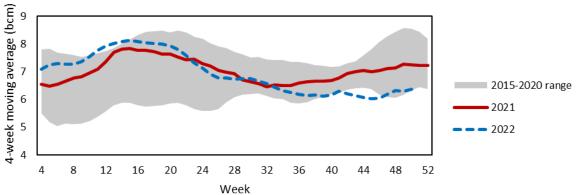
³⁸<u>https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/121622-ice-warns-of-risk-to-ttf-gas-market-viability-if-price-cap-imposed-report</u>

⁴¹ https://timera-energy.com/making-sense-of-european-energy-intervention/

Looking into the Future – Closing the Gap of 2023

Happy New Gas Year

In the most recent publication, IEA points out that the EU could face a supply gap in 2023⁴². As Figure 2 highlights, the recent EU natural gas imports are very low compared to the previous years, which also raises concerns.



Weekly EU natural gas imports

Figure 2: Weekly EU natural gas imports43

Closing the gap encompasses two phases – first, countries need to involve the elements already in motion – new renewables, fuel switching, energy efficiency, heat pumps or biomethane facilities, and recovery in hydropower and nuclear energy. Second, more vigorous efforts and policy incentives to push further the necessary actions are needed; a gap of around 30 bcm is expected in a worst-case scenario, compared to a 400 bcm yearly consumption. Four key demand reduction policy actions to close the gap are⁴⁴:

 Improvements in energy efficiency – mainly focusing on home renovations and efficient appliance sales, looking at public sector and public lighting, as well as industry savings.

⁴² <u>https://www.iea.org/reports/how-to-avoid-gas-shortages-in-the-european-union-in-2023</u>

⁴³ https://www.bruegel.org/dataset/european-natural-gas-imports

⁴⁴ <u>https://www.iea.org/reports/how-to-avoid-gas-shortages-in-the-european-union-in-2023</u>

- Deployment of renewable energy reducing permitting timelines, increasing investor confidence, integration, and distribution system support.
- Behavioural change among consumers adjusting heating controls, smart meters for consumers, the default setting of more energy saving.
- 4) Electrification of heat incentivising heat pump purchase, energy tax favourable to electrification, industrial electrification.

Anything to Recommend?

Ξ

The Russia-induced war is not over, and neither is the energy war. The EU policymakers and national governments should increase communication activities and counter the negative consequences of high energy prices on consumers.

Governments could prepare themselves for the EU-level energy crisis fund discussion and amendments to the existing financing tools. Although the market correction mechanism has been agreed upon, high energy prices will prevail, and economies will still bear high costs in the upcoming months and years.

The national governments should aim for a targeted financial approach to support low-income households and industries hit the hardest. One option would be to cover the upfront costs to households or to offer cheap loans to companies to apply solutions for higher energy savings, energy-efficient tools and renovations, or fuel switching.

The 2023 and 2024 winters might be more challenging as the EU will try to phase out the remaining Russian natural gas and search for new suppliers. The EU policy representatives should prioritise the IEA's warnings with the highest priority.

The Czech EU Council presidency has done an amazing job keeping the EU united during the energy crisis and voting on the major legislative pieces, and should continue to transfer its insights and know-how to the upcoming Swedish EU Council presidency.

About the authors

Helena has been a senior analyst for the Czech Interests in the EU project and an analyst in STEM Institute for Empirical Research since April 2022. Previously, she gained experience at Hospodářské noviny and Aktuálně.cz, where she focused on European affairs, German politics and the future of Czech and European energy. She studied economics and political science in Brno, Berlin, Bordeaux and Edinburgh, and holds a master's degree from the Masaryk University in Brno.

Michal has a Master's degree in Economics from Škoda Auto University and is currently pursuing a Master's degree in Mineral Raw Materials at the VSB Technical University of Ostrava. His research focuses on green economics, decarbonisation of heavy industries, and transport. He regularly contributes to renowned Czech media outlets. As part of EUROPEUM's climate team, Michal contributes to our efforts to base the public debate on relevant facts and information and to connect with and inform various stakeholders about the developments in the EU legislation.

EUROPEUM

EUROPEUM Institute for European Policy is a non-profit, non-political and independent think tank focusing on European integration and cohesion. EUROPEUM contributes to the strengthening of democracy, security, stability, freedom and solidarity across Europe and to the active participation of the Czech Republic in the European Union. EUROPEUM conducts original research, organises public events and educational activities and formulates new views and recommendations to improve domestic and European policies.





Co-funded by the Citizens, Equality, Rights and Values Programme (CERV)