V4 FISCAL RESPONSE TO THE ENERGY CRISIS

V4ETTP Working paper

AMO
September 2023

V4 FISCAL RESPONSE TO THE ENERGY CRISIS

AMO
2023

Supported by the International Visegrad Fund

Project lead: Borbála Takácsné Tóth (REKK)

E-mail: borbala.toth@rekk.hu

Lead authors: Oldřich Sklenář (AMO)

Contributors: Agata Loskot-Strachota (OSW), Veronika Oravcova (SFPA), Péter Kotek (REKK), Borbála Takácsné Tóth (REKK)

September 2023

Disclaimer: The opinions expressed in this paper are the sole responsibility of the authors and do not necessarily represent the views of the institutions that they work with.

EXECUTIVE SUMMARY

In the past two years, the energy markets have experienced the biggest fluctuations in the last few decades, leading to an unprecedented period of record-breaking prices. Prices of some commodities rose more than tenfold compared to the long-term average.

The high gas and electricity prices heavily impacted consumers on the free market and households with retail prices connected to wholesale alike. Europe witnessed numerous government interventions to the market with the intention to protect those segments that they considered most vulnerable. Well before the Russian invasion, in October 2021, the EC published a communication on 'Tackling rising energy prices: a toolbox for action and support'[1], offering a toolkit of measures for member states to ease price pressure. This included authorizing temporary deferrals of bill payments, providing direct state aid to companies, and allocating emergency support for energy-poor consumers. The V4 countries applied different tools to protect their households and consumers, partly with temporary measures and sometimes with an urgency that did not allow for a thorough impact assessment or fine tuning. The price caps and untargeted support measures had their unintended consequences, eg. the price cap on gasoline and diesel in Hungary led to increase demand and finally to shortage on gas stations. The price cap therefore had to be abolished to bring the supply and demand to balance again. Similarly in the Czech Republic the price ceiling for households was set at 100% of their electricity and gas consumption, which wasted an opportunity to motivate households to save energy.

The expenditure of the individual V4 countries to protect households and companies from the effects of the energy crisis was highest in share of GDP was about 4% in Czechia and Slovakia, and much less, between 1.5-2% in Poland and Slovakia.

This study aims to collect the fiscal and regulatory interventions to the V4 energy markets during the last two years with the intention to help us understand the intentions behind certain measures and to collect the lessons learned.

We see that the VAT reduction, was not applied by Hungary but by all other V4 countries. The retail price cap was applied by all but in a very different way: Hungary increased the price by introducing a two-tier system, while the others rather decreased the prices. As a direct consequence the demand response to the crisis was most successful in Hungary. We also saw a lack of targeted support to the most vulnerable groups in Czechia and Hungary, and more efforts but still not very poverty-related targeting in Slovakia and Poland. Windfall taxes were introduced in all countries, but we saw no evidence how these were used to finance the retail market subsidies.

The common recommendations for all V4 countries are the following points

- Priority should be given to targeted support instead of wide support measures.

[1] European Commission (2021): Tackling rising energy prices: a toolbox for action and support

- The protective measures taken should be in line with the low-carbon transformation and EU emission targets.
- Structural support for increasing resilience is desirable (energy saving programs, strengthening energy self-sufficiency, etc.)

TABLE OF CONTENTS

Introduction 1
1 Causes of the crisis 2
  1.1 Pre-war development 2
  1.2 Development after the Russian Aggression in Ukraine 5
2 Measures at the European level 8
3 Measures at the national level in V4 countries 10
  3.1 Czech Republic 11
  3.2 Hungary 15
  3.3 Poland 19
  3.4 Slovakia 21
4 4. Policy Recommendations 25
  4.1 Policy recommendations for V4 in general 25
  4.2 Policy Recommendations for the Czech Republic 25
  4.3 Policy Recommendations for Hungary 25
  4.4 Policy Recommendations for Poland 26
  4.5 Policy Recommendations for Slovakia 26

INTRODUCTION

The V4 Energy Think Tank Platform (V4ETTP) was founded in 2018 by four representative think tanks, aiming to facilitate coordinated regional energy-related and policy-oriented research and analysis building on the expertise of each member institution in the field of energy studies. Within the framework of this cooperation, four regional policy papers are typically published each year which provide the backdrop for stakeholder workshops to discuss the policy implications of the conclusions.

The 2023 V4ETTP work plan emphasizes regional solutions to the unprecedented energy market situation caused by Russia's war in Ukraine, which of course makes the case for accelerating the energy transition. This is the first of four working papers prepared as a joint effort between research colleagues from REKK (Hungary), SFPA (Slovakia) AMO (Czechia), and OSW (Poland). It was presented for discussion among representative V4 experts from government, academia, and industry associations at a workshop held on 14 September 2023 in Budapest, titled, *"The Visegrad Four countries' responses to the energy crisis"*.

The energy crisis affecting Europe in recent years has had a significant impact on national economies, including the Visegrád Group, the lives of their inhabitants, and the competitiveness of their industry.

Because this was an unprecedented situation, no government was prepared to offer an effective solution or had the "right" answers to the tough questions and challenges they were facing. The responses among individual states differed, taking into account their capabilities and specific conditions.

This paper is structured as follows: First, an overview of the causes of the energy crisis. Second, an overview of measures enacted to reduce the impact of the energy crisis at the European level. Third, an overview of measures at the national level with emphasis on **fiscal and organisational measures**. The last chapter provides general policy recommendations and recommendations for each Visegrád country.

1 CAUSES OF THE CRISIS

In the past two years, the energy markets have experienced the biggest fluctuations in the last few decades, leading to an unprecedented period of record breaking prices. Prices of some commodities rose more than tenfold compared to the long-term average. The following chapter focuses on the root causes of this situation.

1.1 PRE-WAR DEVELOPMENT

The main factors that contributed to the rise in energy prices in the pre-war period were:

- Exceptionally rapid global economic recovery after the previous COVID-19 recession and weaker-than-expected increase in supply.

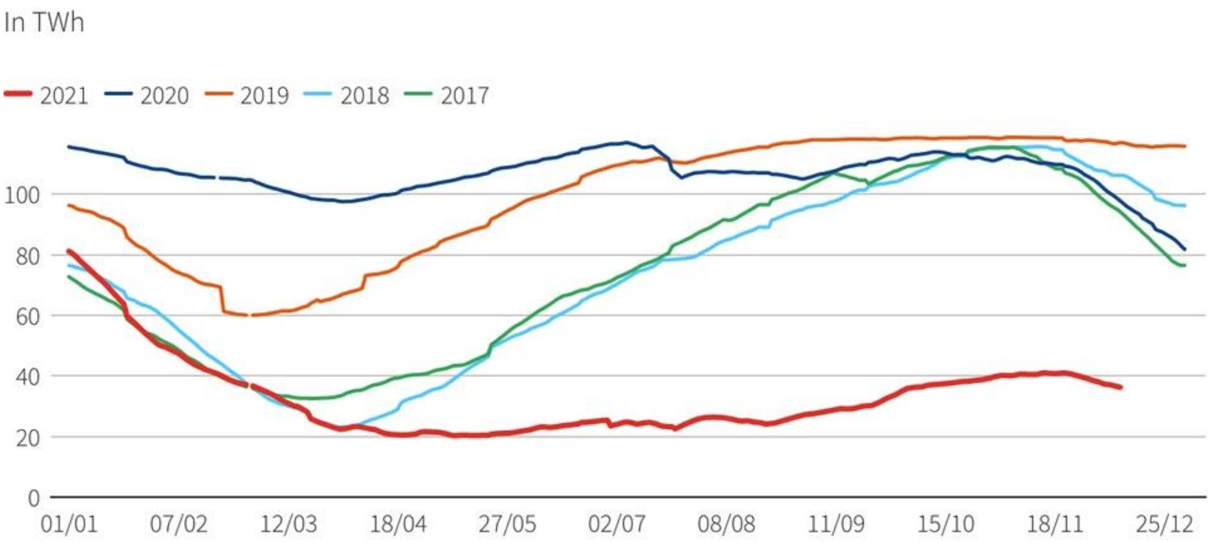
The post-pandemic economic growth in 2021 was the fastest post-recession pace in 80 years.[2] This pushed up natural gas consumption in key markets by 8% year-on-year and coal consumption by 11%. This resulted in a tenfold year-on-year natural gas price spike in Europe and Asia. The global price of coal also spiked fivefold year-on-year. This fed directly into the high electricity prices.

- Russian manipulation of gas storage and flows.

Although Gazprom complied with its long-term contractual obligations, it limited short-term sales and did not replenish its warehouse stocks on European territory to the level of previous years. This was immensely profitable for Gazprom.[3]

[2] World Bank (2021): Global Recovery Strong but Uneven as Many Developing Countries Struggle with the Pandemic's Lasting Effects
[3] Statista (2023): Operating profit of Gazprom from 2011 to 2021, 2023

FIGURE 1: GAZPROM NATURAL GAS RESERVES IN EU TERRITORY



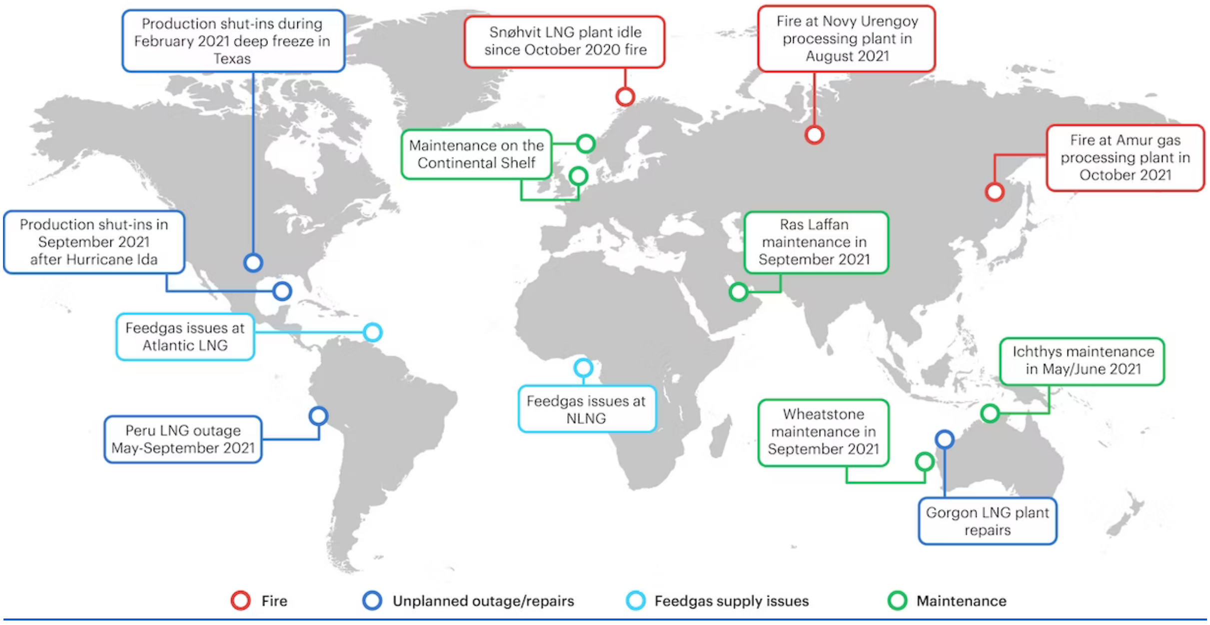
Source: Reuters

Other factors:

- Cold and long winter in the Northern Hemisphere 2020/2021 heating season.
- Declining investments in fossil infrastructure in recent years has not been offset by renewables and the associated transition to low-carbon energy.
- Planned maintenance work that was postponed during the COVID-19 pandemic forced some generation assets to go offline.
- Unplanned shutdowns of fossil fuel infrastructure due to operational accidents (for example, the fires at the Snøhvit LNG plant in Norway or the Novy Urengoy and Amur gas processing plants in Russia) or extreme weather events (production shut-ins during deep freeze in Texas or in Mexican Gulf after hurricane Ida).[4]

[4] IEA (2021): [What is behind soaring energy prices and what happens next?]

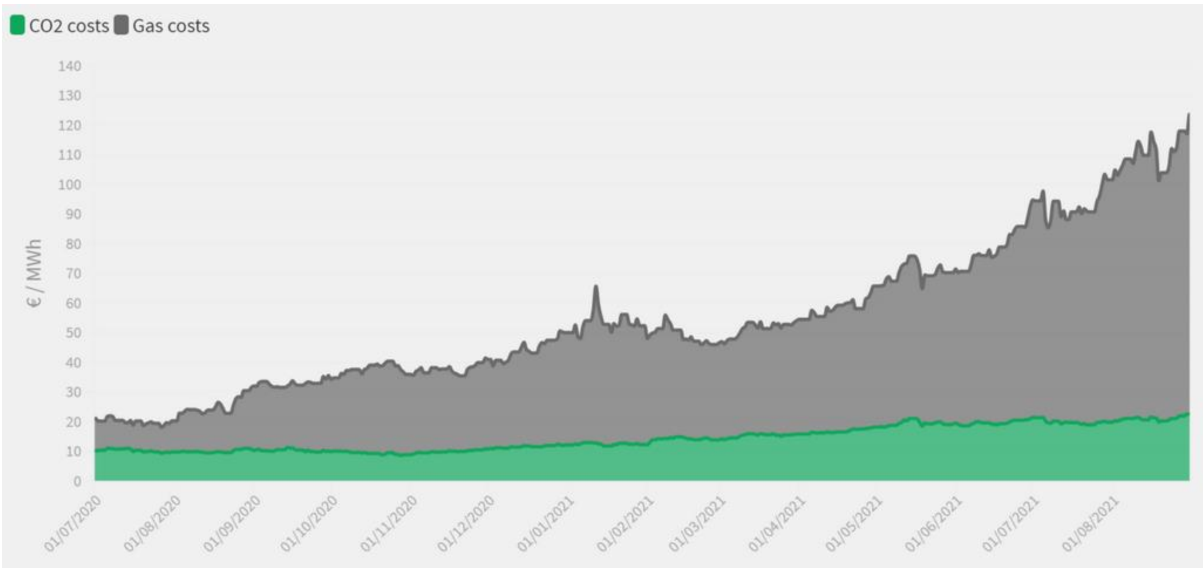
FIGURE 2: KEY MAINTENANCE WORKS AND UNPLANNED OUTAGES IN 2021



Source: IEA

Compared to the previously mentioned factors, the price of emission allowances played only a minor role.

FIGURE 3: FOSSIL GAS COSTS VS. CARBON COSTS FOR EU ELECTRICITY GENERATION

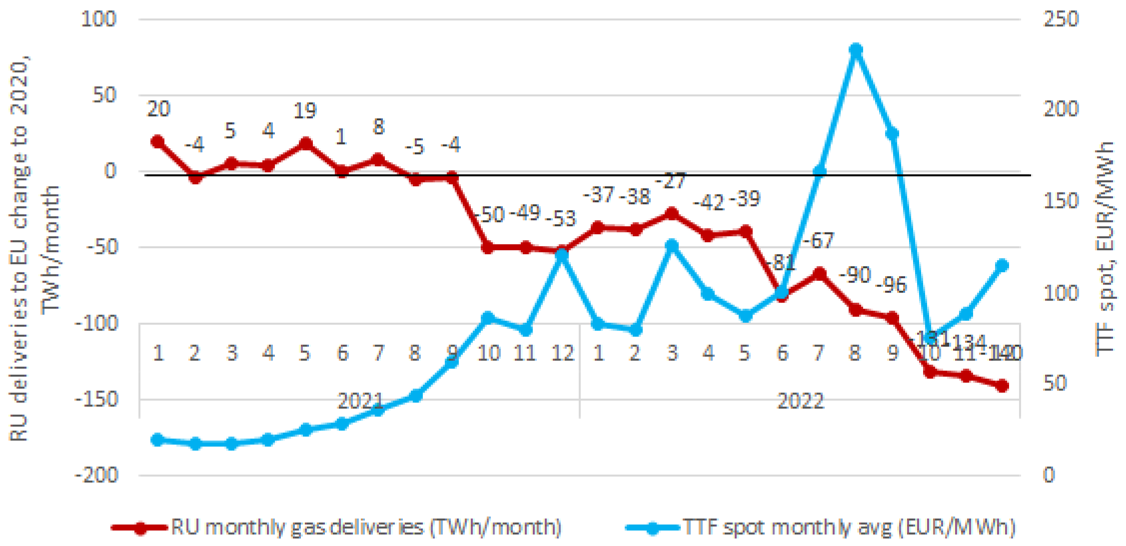


Source: EMBER

1.2 DEVELOPMENT AFTER THE RUSSIAN AGGRESSION IN UKRAINE

After the start of the full-scale Russian invasion of Ukraine, the supply of Russian gas gradually started to decrease. From mid-2022 onwards, supplies fell to a fraction of the previous year's levels.

FIGURE 4: MONTHLY RUSSIAN DELIVERIES TO EU AND TTF PRICE, 2020



Source: REKK

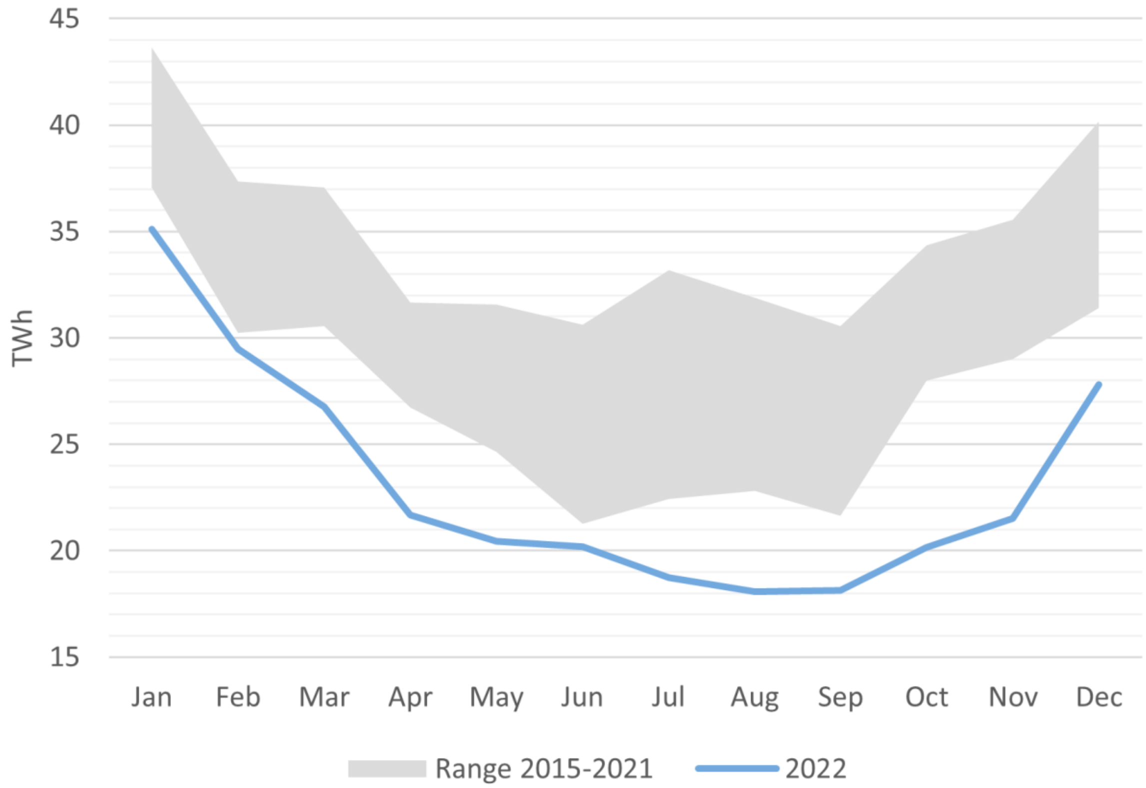
As recently as 2021, Russian natural gas accounted for 44% of EU imports, compared to 28% for oil and 52% for solid fossil fuels (mainly coal).[5] The simultaneous reduction in the supply of these commodities has been reflected in their market prices, shown in Figure 4.

The high gas prices were transmitted into electricity prices. The outages of French nuclear power plants also contributed to this. France, the largest European exporter of electricity for many years, found itself in a situation where it had to import electricity for the first time since 1980.

Due to the low production of nuclear power plants, additional natural gas resources were needed to cover the gap in supply. Given the pricing (merit order) mechanism, the operationally expensive gas power plants then determined the resulting price on the electricity market.

[5] Bruegel (2023): European natural gas imports

FIGURE 5: PRODUCTION OF FRENCH NUCLEAR POWER PLANTS



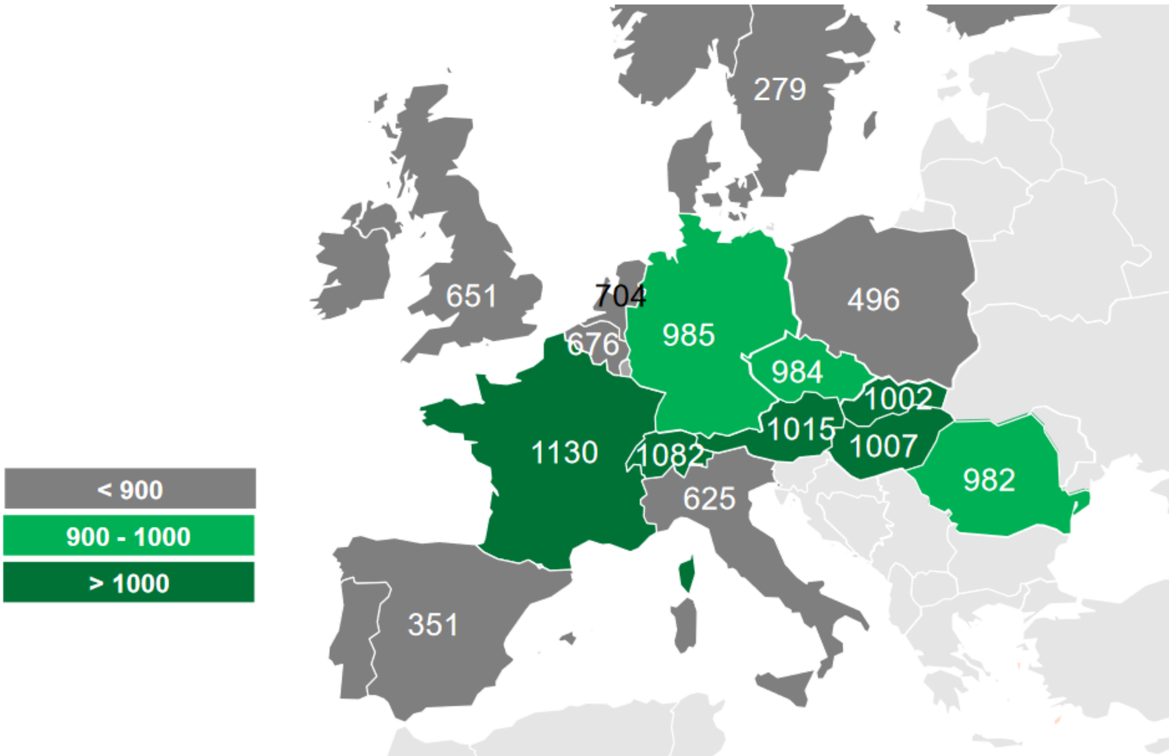
Source: ICIS

Another negative factor affecting electricity prices was the drought that hit a large swathe of Europe. This reduced the flow of many rivers, which complicated the cooling systems for coal and nuclear blocks. In addition, hydropower production and the transportation of imported coal via inland waterway to German power plants was also affected.

These problems extended throughout the European electricity market, also affecting the V4 countries (see Figure 6). At the end of August 2021, 1 MWh of electricity on the European Energy Exchange was sold for less than 90 EUR, a year later the price surpassed 1,000 EUR. The intraday price record was also broken when the price of electricity rose by more than 100 EUR in 24 hours for the first time in history, only to rise by another 340 EUR a few days later, reflecting the extreme volatility of the period.

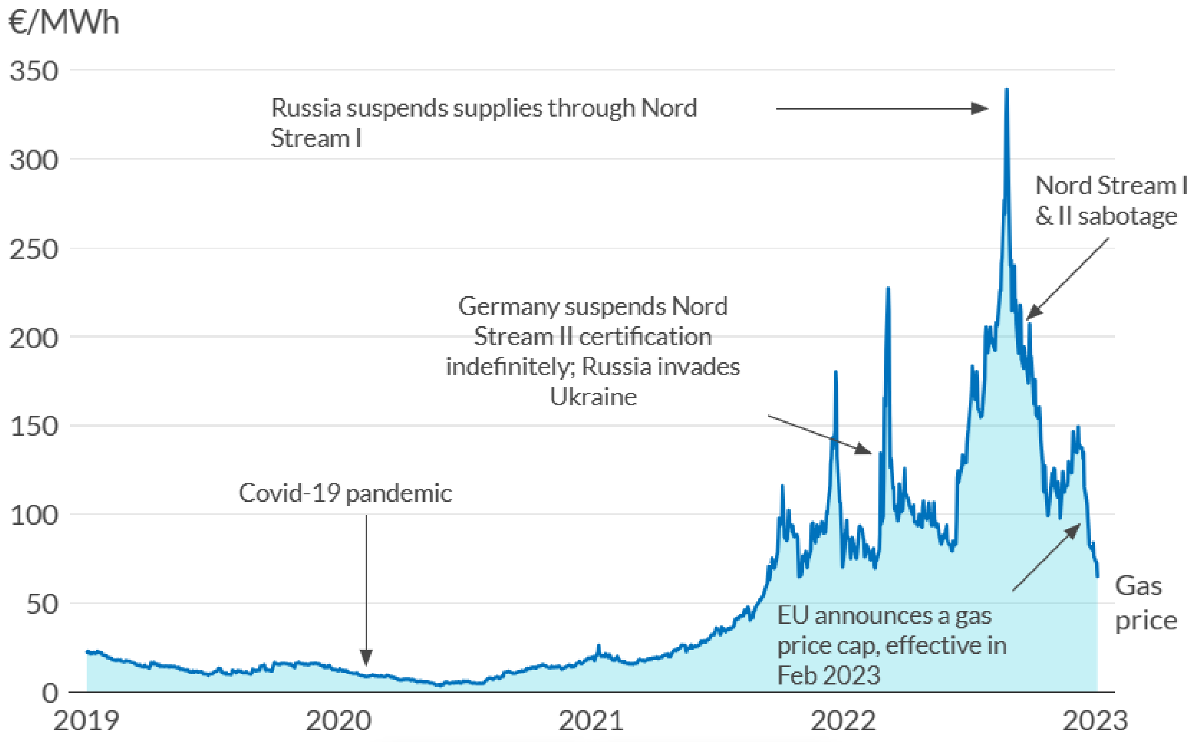
The prices of gas and electricity on the European market only started to subside when heating season demand was moderated by the relatively warm weather at the end of 2022 and, at the same time, the measures adopted at the EU level began to take effect. (see Figure 7).

FIGURE 6: WHOLESALE ELECTRICITY PRICES IN INDIVIDUAL EUROPEAN COUNTRIES IN AUGUST 2022. THE VALUES SHOWN ARE IN EUR/MWH FOR CAL-23



Source: ČEZ

FIGURE 7: DEVELOPMENT OF GAS PRICES IN THE EUROPEAN MARKET



Source: Geopolitical Intelligence Services

2 MEASURES AT THE EUROPEAN LEVEL[6]

The European Commission (EC) delivered several legislative initiatives intended to create the appropriate legislative framework for Member States (MS) to tackle the crisis and act in the areas where the EU has the competence. These include the internal energy market, energy efficiency, and improving the security of energy supply.[7]

Well before the Russian invasion, in October 2021, the EC published a communication on 'Tackling rising energy prices: a toolbox for action and support'[8], offering a toolkit of measures for member states to ease price pressure. This included authorizing temporary deferrals of bill payments, providing direct state aid to companies, and allocating emergency support for energy-poor consumers.[9]

On 23 March 2022, the EC published a proposal to amend the Security of Gas Supply Regulation, including measures to ensure gas storage in the EU, obliging EU member states to reach at least 80% of their capacity before the winter of 2022/2023 and 90% before the following winter period.[10] In parallel, the EC also published a communication on 'Security of supply and affordable energy price',[11] further clarifying the benefits and drawbacks of the different short-term policies to mitigate price spikes and prepare for the upcoming winters.

On 18 May 2022, the EC presented the REPowerEU Plan[12] intending to end EU dependence on Russian fossil fuels as soon as possible, as mentioned above, via diversification of energy sources, energy savings, and fostering renewable energy deployment.

In July 2022, the EC proposed a 'Regulation on coordinated demand reduction measures for gas',[13] with member states agreeing to reduce their gas demand by 15% compared to their average consumption in the five past years.[14]

---

[6] This chapter is mainly based on a summary provided in a study by IEEP (2023): Who took the burden of the energy crisis?

[7] European Parliament (2023): Energy policy: general principles. Fact Sheets on the European Union

[8] European Commission (2021): Tackling rising energy prices: a toolbox for action and support

[9] European Commission (2021): Energy prices: Commission presents a toolbox of measures two tackle exceptional situation and its impacts

[10] European Commission (2022): Secure gas supplies

[11] European Commission (2022): Security of supply and affordable energy prices: Options for immediate measures and preparing for next winter

[12] European Commission (2022): REPowerEU Plan

[13] European Council (2022): Council Regulation (EU) 2022/1369, 05.08.2022. On coordinated demand reduction measures for gas

[14] European Council (2022): Council adopts regulation on reducing gas demand by 15% this winter

In September 2022, the EC proposed a new emergency regulation to address high gas prices and ensure the security of winter supply by aggregation of EU demand and joint gas purchasing to negotiate better prices on the global market.[15]

The benefits of joint purchasing are based on economies of scale, but also on the fact that joint purchasing removes competition between national markets. A group of countries is always in a better bargaining position than individual countries.

For this purpose, the Central European branch of the Energy Platform for the EU was established in Prague at the end of June 2022 to manage joint purchases of gas, LNG, and hydrogen.[16] This branch unites nine EU member states (Czech Republic, Hungary, Poland, Slovakia, Austria, Germany, Croatia, Italy, and Slovenia) as well as Ukraine and Moldova.

Finally, in December 2022, after months of debate, European energy ministers agreed on a temporary market correction mechanism to protect citizens and the economy against excessively high prices.[17]

This mechanism will be automatically activated if the following "market correction event" occurs: Title Transfer Facility (TTF) month-ahead price exceeds EUR 180 per MWh for three working days and EUR 35 higher than a reference price for LNG on global markets for the same three working days.

While the mechanism is active, transactions concerning the natural gas futures above the given price limit (maximum 180 EUR per MWh) will not be allowed to take place. The described price cap came into effect in February 2023 and contributed to reducing the volatility triggered by Russia.

The EU has created a framework with these measures that enable different actors to alleviate (to an extent) the impact on those most affected by the energy crisis and help reduce dependency on Russia. In addition, the crisis sparked a debate on possible ways to reform the internal energy market, which is still ongoing.

[15] European Commission (2022): Commission makes additional proposals to fight high energy prices and ensure security of supply

[16] Czech Ministry of Industry and Trade (2022): V Praze vznikla středoevropská pobočka Energetické platformy EU pro nákup surovin

[17] European Council (2022): Council agrees on temporary mechanism to limit excessive gas prices

3 MEASURES AT THE NATIONAL LEVEL IN V4 COUNTRIES

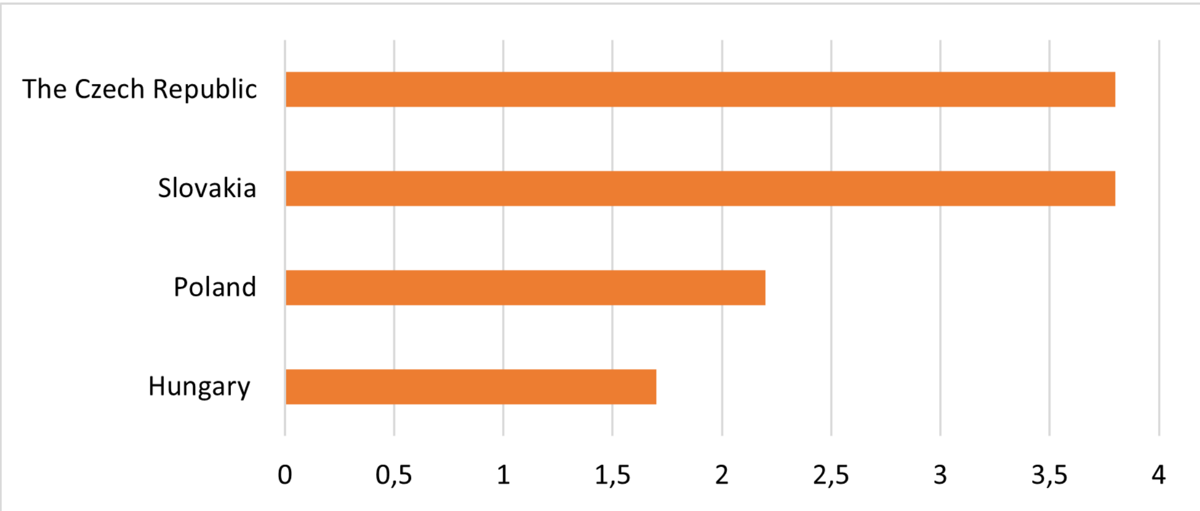
The energy crisis affected each of the V4 countries differently, depending on the cross-border interconnectivity of their energy systems (power lines, product pipelines), their foreign energy policy, consumption structure, and other factors.

Each of the governments dealt with the situation according to their capabilities. Some measures proved to be more effective than others, whether protecting vulnerable groups of consumers, tapping into the state budget, or encouraging the low-carbon transition, while conflicting with existing European or own legislation.

A full evaluation of some of the measures will only be possible after some time, given the current unavailability of statistical data.

According to Bruegel's analysis, the expenditure of the individual V4 countries to protect households and companies from the effects of the energy crisis was as follows:

FIGURE 9: FUNDING TO SHIELD HOUSEHOLDS AND FIRMS FROM THE ENERGY CRISIS, % GDP (SEP 2021 - JAN 2023)



Source: Bruegel

An overview of measures in individual V4 member states is presented in the following chapters.

3.1 CZECH REPUBLIC

3.1.1 REDUCED ENERGY TAX / VAT

On 20 October 2021 the Czechia Minister of Finance announced that in November and December electricity and gas were exempted from VAT due to extraordinary circumstances.[18] The decision was later found to be illegal for breaching the national tax code and EU law. From the perspective of the Tax Code, the criteria for an extraordinary event was not fulfilled; it does not consider energy price volatility an extraordinary event. This cost the state budget approximately CZK 5.4 billion.[19]

In the period from June to September 2022, the consumption tax on gasoline and diesel fuel was reduced by CZK 1.5 per liter. The Ministry of Finance (MoF) found that this cost the state budget 4.2 billion CZK.[20]

While the gasoline tax rate cut ended in September 2022, the government extended the cut for diesel until the end of 2023. The MoF estimated the overall impact of this measure on public finances to be 9.6 billion CZK per year.[21] This, together with the subsequent drop in fuel prices, eventually led to the decision to cancel the reduced tax earlier than planned.[22]

In June 2022, the remission of the RES fees (component of the electricity price) was announced, that entered into force in October 2022 until the end of 2023.[23]

3.1.2 RETAIL PRICE REGULATION

In June 2022, the so-called 'savings tariff' was announced as part of the government's package of measures to help compensate companies and households.[24] The savings tariff consisted of a one-time contribution for all households that have a contract with an electricity supplier. This

[18] Ministry of Finance of the Czech Republic (2021): Nulové DPH na elektrickou energii a plyn
[19] Ministry of Finance of the Czech Republic (2022): Loňské prominutí DPH z elektřiny a plynu bylo nezákonné
[20] Ministry of Finance of the Czech Republic (2022): Spotřební daň z benzínu a nafty se snižuje o 1,5 Kč na litr
[21] Ministry of Finance of the Czech Republic (2022): Vláda schválila snížení spotřební daně na naftu o 1,50 Kč na litr do konce roku 2023
[22] Goverment of the Czech Republic (2023): Vláda schválila návrh na dřívější zrušení snížené spotřební daně na naftu a ustavila Martina Dvořáka ministrem pro evropské záležitosti
[23] Ministry of Industry and Trade (2022): Úsporný tarif i odpuštění poplatků za OZE. Vláda schválila válečný balíček na pomoc firmám a domácnostem
[24] Ministry of Industry and Trade (2022): Úsporný tarif i odpuštění poplatků za OZE. Vláda schválila válečný balíček na pomoc firmám a domácnostem

contribution varied according to the specific tariff, with most households receiving CZK 3,500.[25] The full package of measures cost a total of CZK 66 billion.

In October 2022, the government approved a cap on energy prices for households and selected companies.[26] The cap for electricity was set at 5 CZK/kWh without VAT (6.05/kWh with VAT) and for gas 2.50 CZK/kWh (3.025/kWh including VAT). The price ceiling for households was set at 100% of their electricity and gas consumption, which wasted an opportunity to motivate households to save energy. The ceiling which replaced the 2023 energy-saving tariff was a considerably more costly measure, which the MoF initially estimated to be CZK 130 billion, and later revised up to CZK 200 billion.[27]

3.1.3 TRANSFERS TO VULNERABLE GROUPS

Households can use the housing allowance to cover their housing costs, including energy bills. The housing allowance is available from the Labor Office.[28] In order to receive this support several conditions must be met. However, the administrative burden was very problematic: according to research up to 70% of households that were entitled to the allowance did not apply because of it.[29]

3.1.4 WINDFALL PROFITS TAX

On November 28, 2022, the President of the Czech Republic signed a tax package that, among other things, introduced the so-called windfall tax, a tax on unexpected profits based on the parameters of the European Union regulation.[30] This temporary extraordinary tax entered into force from January 1, 2023 for a period of 3 years for exceptionally profitable companies in the fields of energy production trade, banking, petroleum and fossil fuel mining and processing. It operates as a 60% tax surcharge applied to the excess profit - determined as the difference between the tax base in 2023-2025 and the average of the tax bases over the previous 4 years (2018-2021) - which increased by 20%. The MoF expects this extra revenue going to the state budget is approximately CZK 85 billion in 2023.

Critics of the measure argue its non-systematic nature creates more uncertainty in the tax environment and it does not affect excessive profits from 2022.

---

[25] penize.cz (2022): Konečně čísla! Vláda ukázala, kolik přispěje na energie

[26] Ministry of Industry and Trade (2022): Vláda schválila zastropování cen energií. Pomůže jak domácnostem, tak firmám

[27] Ministry of Industry and Trade (2023): Vláda schválila kompenzační systém pro dodavatele za zastropované ceny energií

[28] Ministry of Labour and Social Affairs (2022): Pomoc s úhradou nákladů na bydlení, včetně nákladů na energie

[29] Hnutí DUHA (2022): Energetická chudoba a její řešení

[30] Ministry of Finance of the Czech Republic (2022): Mimořádná daň z neočekávaných zisků bude platit od 1. ledna 2023

3.1.5 BUSINESS SUPPORT

In October 2022, the Czech government approved a cap on energy prices for small and medium-sized enterprises (SMEs).[31] For SMEs connected to high voltage levels with an annual consumption between 630 and 4,200 MWh, the cap applies to 80% of the highest consumption in the last five years. The capped prices are the same for households (see above).

In December 2022, a price cap was approved for large businesses.[32] Like SMEs, the ceiling applies up to 80% of the highest monthly consumption of the last five years. This measure is intended to motivate businesses to save energy.

Entrepreneurs and SMEs can take advantage of subsidies in the Operational Program Entrepreneurship and Technology for Competitiveness, the Modernization Fund, and the ENERG program. Subsidies can be drawn on complex cost-saving projects including the reconstruction of buildings intended for business, increasing the efficiency of technological and production processes, or installations for the production of energy from renewable sources. Until the end of November 2023, for example, these entities can apply for a subsidy from the call for Photovoltaic systems with/without storage from the National Recovery Plan. Support for wind farms lasts until February 1, 2024.[33]

In December 2022, the Czech government approved the Ministry of Industry and Trade plan to mitigate increases in the price of heat for customers. Under the plan thermal energy producers would apply for the subsidy and would be obliged to transfer the full support in the form of a reduced energy unit price to customers, including households. The program is allocated 17 billion CZK.[34]

3.1.6 OTHER

After the full-scale Russian invasion of Ukraine, the Czech government approved a package abolishing road tax for passenger cars, buses, and trucks up to 12 tons and mandatory mixing of bio-components into fuels.[35] Since the bio-component is more expensive than the price of the fuels themselves, this measure should lower the final price of the fuels.

---

[31] Ministry of Industry and Trade (2022): Vláda schválila zastropování cen energií. Pomůže jak domácnostem, tak firmám

[32] Ministry of Industry and Trade (2022): Zastropování cen energií pro velké firmy pomůže udržet konkurenceschopnost českého průmyslu a celé ekonomiky

[33] Ministry of Industry and Trade (2022): Vláda schválila pomoc pro firmy. Podnikatelé mohou čerpat také z dříve vypsaných programů, navíc jim s úsporami poradí manuál

[34] Ministry of Industry and Trade (2022): Levnější teplo pro domácnosti. MPO v novém programu podpoří teplárny

[35] Ministry of Finance of the Czech Republic (2022): Senát schválil balíček opatření proti růstu cen pohonných hmot

In June 2022, the Czech government discussed a manual to serve as a guide for state administrative bodies to reduce energy consumption.[36] The manual is based on measures already adopted by the Ministry of Industry and Trade at the beginning of 2022.

[36] Ministry of Industry and Trade (2022): Vláda chce jít s úsporami energií příkladem. Projednala manuál, který poradí, jak na to

3.2 HUNGARY

3.2.1 REDUCED ENERGY TAX / VAT

There is no additional energy tax on electricity, gas, or other fuels supporting RES integration in Hungary. VAT rates were not reduced in response to the energy crisis.

3.2.2 RETAIL PRICE REGULATION

Electricity and gas prices for Hungarian households were regulated long before the energy crisis.[37] However, the costs imposed by the energy crisis forced the Hungarian government to revise the price regulation. Based on the state of emergency, Hungarian households were eligible for the capped power price for electricity usage up to 2,523 kWh per year but have to pay about double for anything beyond. The annual usage limit for gas price caps was set at 1,729 cubic meters per year, above which a price exposed to the market prices applies. These caps have been in effect since August 2022.[38]

On November 11, 2021, the Hungarian government announced that a price ceiling of €1.30 per liter on petrol and diesel.[39] Initially planned for three months, the cap was extended to July 2022.[40] Then on July 30th, 2022, Hungary changed the eligibility criteria for price-capped fuel and increased the windfall profit tax levied on the oil and gas firm MOL.[41] Under this criteria, the price-capped fuel, petrol, and diesel, was only available to privately owned vehicles, farm vehicles, and taxis, notably company-owned cars were excluded. The price cap for private vehicles ended on December 6th, 2022.[42]

On September 18th, 2022, the Hungarian government introduced the "Regulated price firewood program".[43] Within the framework of the program, firewood produced at state forestry farms could be purchased at a set price of HUF 30 thousand for up to 10 forest cubic meters per household, compared to the market price of HUF 36-38 thousand in private forestry.[44] During

[37] European Commission (2014): Country Reports - Hungary
[38] Reuters (2022): Hungary to scrap energy price caps for high usage households
[39] Financial Times (2021): Hungary to impose fuel price cap as inflation bites
[40] Cabinet Office of the Prime Minister (2022): Government to extend cap on fuel and food prices until 1 July
[41] Reuters (2022): Hungary narrows price-capped fuel scheme and raises windfall tax on MOL
[42] Index.hu (2022), Gulyás Gergely: A szankciók miatt kivezetjük a benzinárstopot
[43] kormany.hu (2022): Elindul a hatósági áras tűzifaprogram
[44] 24.hu (2022): Megszűnt a hatósági áras tűzifaprogram

the program, 170 000 households paid for a total of more than 1,253,000 cubic meters of firewood. The program was terminated on April 15, 2022.[45] According to the REKK calculation, the cost of the program was around 8.5-9 billion HUF.

3.2.3 TRANSFERS TO VULNERABLE GROUPS

At the national level, direct transfers were not provided for vulnerable groups. Municipalities provided only limited support for low-income households.

3.2.4 WINDFALL PROFITS TAX

MOL imported cheap Russian Urals crude to its refinery which was very profitable. Government decree 197/2022 (VI.4.) placed a 25% tax on its excess profits, which was increased to 40%[46] and then 95%[47]. The state revenue generated from this windfall tax is estimated to be 470-480 Bn HUF (1,2 Bn EUR).[48]

The windfall profit tax of 13% in 2022 and 10% in 2023 was introduced to electricity ancillary service providers. This is expected to result in 40 billion HUF/year in tax revenues. Since the government does not plan to increase the network tariffs for households, the increase in energy price falls on Distribution System Operators, which are compensated by revenues from the windfall tax.

The windfall tax for RES-E and waste-to-energy electricity producers (except for biomass and plants below 0,5 MW installed capacity) defined as the revenue above their feed-in revenues, is 65%.

Aside from energy companies, an excess tax was levied on airlines and pharmaceutical companies. Revenues from these excess taxes were used to support the end-user retail price regulation. Numerous other changes were introduced in the retail sector, communications, and finance, with the aim of increasing tax revenue.[49]

In May 2022, Márton Nagy, Minister for Economic Development, said that the government will raise around €2.06 billion over the next two years from new windfall taxes. While it spans many sectors of the economy, most of the revenues will come from energy sector companies (€760 million), mostly MOL.[50]

---

[45] penzcentrum.hu (2022): Megszólalt az Agrárminisztérium: idén is hatósági árat tesz a kormány a tűzifára?
[46] 279/2022 (VII.30) Government Decree
[47] 496/2022. (XII. 7.) Government Decree
[48] portfolio.hu (2022): Hatalmas különadó-emelést hirdetett ki a kormány!
[49] portfolio.hu (2022): Különadók 2022: minden, amit tudni lehet a különadókról és a várható hatásokról
[50] About Hungary (2022): Nagy: Government will raise HUF 800 billion from new windfall taxes

3.2.5 BUSINESS SUPPORT

Hungary's state support for businesses relied on European funds. The Commission approved Hungary's amendments to the support scheme increasing the maximum amount of aid to €62,000 per company in the agriculture sector, €75,000 per company in fisheries and aquaculture sectors, and €500,000 per company in all other sectors. In addition, Hungary announced a budget increase of approximately €459 million, bringing the total budget of the scheme to approximately €1.58 billion.[51] In October 2022, the Commission increased the upper threshold of support to €250,000 per company in the agriculture sector, €300,000 for fisheries, and €2,000,000 for all other sectors.[52]

In November 2022, the Government launched a Factory Rescue Programme and awarded 25 companies with 27.5 Bn HUF (~70 Mn EUR) to invest in energy efficiency. Investments are expected to bring 12,471 GWh/yr energy savings.[53]

SMEs in the tourism and processing industry received support for electricity, gas, and district heating costs from November 2022 to March 2023. Their energy costs were eligible for up to 50% of state support. Moreover, it covered a non-refundable 15% of energy efficiency investments.[54]

3.2.6 OTHER

On July 13th, 2022, the Hungarian government declared a state of emergency and adopted a 7-point plan on energy security[55], which includes the following steps:

- Domestic natural gas production will be increased to 2 billion cubic meters from the current 1.5 billion capacity.
- The government tasked Foreign Minister Péter Szijjártó with securing additional gas supply sources to reduce Hungary's energy dependence.
- An export ban on energy carriers and firewood has been implemented.
- The government will adopt measures to boost domestic lignite production.
- The Mátra (lignite-fired) power plant must be relaunched as soon as possible.
- The operation of the Paks nuclear power plant will be extended.

---

[51] European Commission (2022): State aid: Commission approves amendment to Hungarian scheme to support companies in context of Russia's invasion of Ukraine

[52] European Commission (2022): State aid: Commission prolongs and amends Temporary Crisis Framework

[53] HIPA (2022): Government Launches Factory Rescue Program

[54] vali.hu (2022): KKV Energiaköltség és Beruházás Támogatási Program 2022-2023 Pályázati felhívás összefoglaló

[55] About Hungary (2022): Breaking: Here's the Hungarian government's 7-point energy security action plan

- Those who consume above the average energy consumption level must pay the market price for their extra consumption. (mentioned earlier)

In February 2022, the Hungarian government introduced temporary price caps for six food products based on October 15 prices across all stores: granulated sugar, refined wheat flour, sunflower cooking oil, homemade pork leg, chicken breast, and 2.8% fat milk.[56] In the fall of 2022, the range of products was extended to chicken, eggs and table potatoes. These measures were terminated on June 30, 2023, at which point the government ordered mandatory store promotions, taking effect until September 30, 2023.[57]

[56] portfolio.hu (2022): Megjött a rendelet az élelmiszerár stopról, így csökken a 6 termék ára

[57] penzcentrum.hu (2023): Megjelent a rendelet a kötelező bolti akciókról: itt az érintett termékek végleges listája

3.3 POLAND

3.3.1 REDUCED ENERGY TAX / VAT

On 11 January 2022, Polish Prime Minister Mateusz Morawiecki announced the introduction of a second "anti-inflation shield", extending the tax breaks introduced in the first package; cutting VAT on food, gas, and fertilisers to 0%, on petrol and diesel to 8% (from the original 23%) and on heat to 5%.[58] The estimated impact on the state budget was PLN 6-7 billion.[59]

3.3.2 RETAIL PRICE REGULATION

On June 14, 2022, Climate Minister Anna Moskwa announced new subsidies for the coal consumed by households and housing cooperatives, intervening for the difference between the price of buying and selling coal (up to €165/ton).[60] The subsidy was then changed to a one-off payment of 3,000 zlotys (€636) to help households cover the rising cost of coal amid surging energy prices.[61]

On September 13, 2022, the government announced plans[62] to cap 2023 electricity prices at 2022 levels for the first 2 MWh consumed for all households, up to 2.6 MWh per year for families with people with disabilities, and 3 MWh for large families and farmers. A special electricity allowance[63] was also announced for households using electricity for heat pumps totalling PLN 1,000 (€208). For annual electricity consumption of more than 5 MWh, the allowance is raised to PLN 1 500 (€312). Some PLN 23 billion (€4,8 bn) has been earmarked for these measures.

In November 2022, the government signed the Law on Emergency Measures to Curb Electricity Prices and Support Certain Consumers in 2023.[64] In 2023, it froze gas prices, setting the maximum gas price at PLN 200 per MWh and the distribution fee rates are frozen. The rate covers customers who currently benefit from tariff protection. It also prepared an act introducing a guaranteed "maximum" electricity price, which will be used by energy sellers to settle accounts with eligible customers. The maximum price for households is set at PLN 693 per MWh for consumers with consumption above the limits; the maximum price for other eligible consumers is set at PLN 785 per MWh.

The new law also stipulates that if between October the 1st, 2022 and December 31st, 2023, a customer reduces consumption by at least 10% compared to the period October 1st, 2021-

---

[58] gov.pl (2022): We are doing all we can to keep prices lower and fight raging inflation, says Polish Prime Minister

[59] Polish Press Agency (2022): Polish gov't launches second anti-inflation package

[60] Reuters (2022): Poland to subsidise coal for households as shortages hit

[61] Reuters (2022): Poland to give households one-off payment to offset rising coal prices

[62] Reuters (2022): Poland to freeze electricity prices for households in 2023

[63] Dignity News (2022): Government adopted a bill to freeze electricity prices

[64] gov.pl (2022): Minister Anna Moskwa: 2022 r. to rok wsparcia dla mieszkańców Polski. Rząd skutecznie walczy z konsekwencjami „putinflacji" i ze wzrostem cen energii

December 31st, 2022, the seller must offer a 10% discount on the cost of electricity from the period October 2022-December 2023. Electricity companies also receive compensation for electricity price freezes and discounts.[65]

On 17 January 2023, the government adopted a bill introducing a retroactive heat price cap to pay households that experienced price increases above 40% before 30 September 2022.[66] The maximum price of heat supply includes all cost components in a given district heating system, including those related to the generation and transmission of heat.

3.3.3 TRANSFERS TO VULNERABLE GROUPS

On 22 October 2021, Climate Minister Michał Kurtyka submitted a bill[67] aimed at shielding the most vulnerable 20% of households from the spike in energy prices. The measure extends the number of beneficiaries for energy bills allowances by 6 months.

On 13 January 2023, the government introduced a new VAT refund[68] for households with an average monthly income that does not exceed PLN 2100 in a single-person household or PLN 1500 in a multi-person household (approximately 300,000 households).

3.3.4 WINDFALL TAX

In July 2023, the government adopted an amendment to the Electricity Consumer Protection Act which envisages a higher energy consumption limit and frozen electricity prices. According to the statement, the government wants large coal companies to share excess profits and partially subsidize electricity prices for citizens and vulnerable entities. Polish coal mining and trading companies will pay a so-called solidarity fee, or a 33% windfall tax on excess profits in 2022, defined as revenues that exceed 120 percent of average earnings obtained over the previous four years.[69]

3.3.5 BUSINESS SUPPORT

On 11 October 2022, Prime Minister Mateusz Morawiecki laid out a detailed plan to raise the consumption limit qualifying for the electricity price cap. The cap was set at PLN 785 per MWh (€163.6/MWh or €0.16/kWh) for SMEs, schools, nurseries, hospitals, social cooperatives, and associations. For all private and public companies it applied to 90% of consumption. The price

[65] China CEE Institute (2022): Poland social briefing: The actions of the Polish government in the face of the energy crisis
[66] gov.pl (2023): Rząd jeszcze mocniej chroni odbiorców ciepła przed nadmiernym wzrostem cen
[67] gov.pl (2021): Minister klimatu i środowiska Michał Kurtyka skierował do prac rządu projekt ustawy wprowadzający dodatki dla odbiorcy wrażliwego
[68] gov.pl (2023): Dostępny jest wzór wniosku na zwrot VAT dla gospodarstw domowych ogrzewających się gazem
[69] The First News (2023): Coal companies to pay windfall tax on 2022 excess profit

caps should operate from December 2022 to December 2023. The measure is financed by the windfall tax on electricity producers and the state budget.[70]

3.3.6 OTHER

The government supports the electrification of heating. In April 2022, it launched a new program "My Heat" with a budget of €130 million financed by the National Fund for Environmental Protection and Water Management. 'My Heat' promotes heat pumps through a non-returnable subsidy of 30-45% of the eligible investment costs, which is expected to be between €1,500 to €4,500 depending on the equipment purchased. Unlike the "Clean Air" coal-fired furnace replacement program (between September 2019 and February 2021, around 18% chose heat pumps) and the thermo-insulation relief program before it, this is the first program devoted solely to investments in heat pumps.[71]

3.4 SLOVAKIA

3.4.1 REDUCED ENERGY TAX / VAT

When it comes to reducing VAT, proposals by the opposition parties and also the ruling SaS party for reducing VAT to 8% and decreasing excise duty on diesel and petrol were both discarded after parliamentary debate. This decision distinguishes the country as one of two EU member states (alongside Malta) that did not reduced energy taxes or VAT.[72]

3.4.2 RETAIL PRICE REGULATION

From the beginning of the energy crisis, high prices and especially means of compensation have been widely discussed in the Slovak media and among politicians, with calls for the government to mitigate the impact of rising energy bills. None of the measures are directly aimed at greening the energy sector, but alleviating the pressure of rising costs for businesses and households. The cost of increased gas and electricity prices subsidized by the state was projected to be 3.5 billion EUR, but the final calculation is not available. For households, price rises were indirectly controlled through governmental agreements with energy providers, fixing the electricity price until 2024.[73]

Compensation for high prices was already a topic of debate, even before the onset of the full-scale war in Ukraine, and before the Commission issued proposals for substituting Russian energy sources within the REPowerEU initiative. In February 2020 the finance minister, economy

[70] Business Insider (2022): Maksymalna cena prądu dla firm i gospodarstw domowych. Morawiecki ogłosił szczegóły

[71] International Trade Administration (2022): Poland Electric Power

[72] Pravda.sk (2022): Spotrebná daň získala opozíciu

[73] Energie-portal.sk (2022): Who and from what will pay the "guaranteed" energy prices? The state has only two options

minister, and Slovak Power Holding – a Slovenské elektrárne shareholder – signed a Memorandum of Understanding for an excess profit tax on nuclear electricity production and trading. Despite being political rivals, the two ministers reached an agreement guaranteeing a stable electricity price for all households (61.21 EUR per MWh) excluding VAT until 2024.[74] In November 2022, the government approved two decisions under "general economic interest" to ensure the safety, regularity, quality, and price of electricity supplies for Slovak households. In practice, this modified the legislative framework enough for the introduction of the memorandum and set out electricity supply conditions, which were also approved by the European Commission.[75]

In December 2022 the government agreed on a mechanism for financial compensation in response to higher energy bills. It focused on the slow and inefficient response to help three groups: households, municipalities, and businesses. Under the final agreement, €360 million was earmarked for industry, including €40 million for 120 energy-intensive enterprises and €200 million for public administration bodies. The compensations amounts to 80% of eligible costs, calculated as the difference between the purchase price and the ceiling price (€199 /MWh for electricity and €99 /MWh for gas).

However, economic experts recommended a price cap guaranteeing 80% of the price while allowing 20% to be determined by the market. This approach would incentivize lower household energy consumption.[76] The government decision was criticised for distorting the market,[77] negatively affecting corporate investment, and targeting all households regardless indiscriminately. Only half of households are willing to save energy by using efficient appliances or alternative energy sources,[78] and there are remarkable voter differences in energy savings efforts.[79]

Another issue raised in the energy price discussions was how best to compensate for the high living costs since across the board compensation is not a viable long-term solution and well-targeted measures were needed. However, to accomplish this, policymakers first need to agree on how to define the most vulnerable groups. By the end of the year, the government debated the materials drafted by the Regulatory Office for Network Industries including a definition of

---

[74] Ministry of Finance of the SR (2022): Memorandum of understanding on the implementation of extraordinary measures to mitigate the effect of higher electricity prices on selected groups of consumers
[75] Energie-portal.sk (2022): Hirman has a new energy price plan. No agreement has been reached with Slovenské elektrárne
[76] Iness (2023): Energetická kríza zďaleka nekončí
[77] TASR, Analysis (2022): Household electricity price ceiling will have negative effects as well
[78] Forbes, Survey (2023): Higher energy prices have affected 90 percent of households
[79] Denník N, Survey (2022): Smer and Republika voters fear costly energy most but still want to boycott energy saving

energy poverty[80] and proposed several financial, legislative, and supportive measures for addressing the issue.

3.4.3 TRANSFERS TO VULNERABLE GROUPS

In May 2022 a new anti-inflation package worth €1 billion was proposed by former Finance Minister Igor Matovič.[81] The measures include a one-time €100 per child subsidy, bigger tax breaks for families with children, and larger child allowances. For the most vulnerable groups of residents affected by high inflation, the government proposed earlier payment of the 13th pension.[82] The package would be partially financed by higher taxes including a windfall tax on Slovnaft (see below). The package was approved by the Slovak Parliament for the second time after a previous veto by President Čaputová.[83]

3.4.4 WINDFALL PROFITS TAX

Conversely, the government introduced multiple "windfall" taxes to boost the state budget. In December 2022 the MPs approved[84] a windfall tax targeting the electricity sector (covering 90% of excess income, to be defined and further specified by the government regulation), applicable from December 1, 2022, to December 31, 2024.[85] Another temporary windfall tax of 55% targeting fossil fuel companies—particularly those dealing with Russian oil– was introduced in March 2023, and then raised to 70%.

While this tax, affecting mainly Slovnaft, a Slovak refinery, applies broadly to revenues (even those not directly linked to the oil price spike), the intent is clear, although the design distorts investment decisions.[86] The MPs argued 70% is, "The aim of the proposed legislation is, - in accordance with the adoption of Council Regulation (EU) 2022/1854 on emergency intervention to address high energy prices from October 6, 2022-, to restore the adjustment of the tax period and the amount of the contribution rate according to the original government proposal of this law, as far as it is a reasonable assumption that the unfavorable situation will continue in 2023."[87] As a result, Slovnaft paid a record tax of €625 million on its profit of more than €1 billion.[88]

---

[80] Regulatory Office for Network Industries (2022): ÚRSO opens public consultation on draft concept for consumer protection against energy poverty

[81] Euractiv (2022): New Slovak anti-inflation package sails through parliament with far-right help

[82] Ministerstvo práce, sociálnych vecí a rodiny Slovenskej republiky (2022): Vláda aj parlament schválili vyplatenie 13. dôchodku už v júli

[83] Český Rozhlas, Kamila Pešeková (2022): Slovenský parlament prolomil veto prezidentky Čaputové k protiinflačnímu balíčku, spory v koalici se prohlubují

[84] National Council of the SR (2022): Voting

[85] Euractiv (2022): Slovak Government Adopts Windfall Tax on Electricity Producers

[86] International Monetary Fund (2022): Taxing Windfall Profits in the Energy Sector

[87] National Council of the SR (2023): Voting

[88] Sme (2023): Four hundred million from Slovnaft was a low estimate. The refinery paid much more

The debate on the taxation of Slovnaft was connected to the processing of Russian oil. Although seaborne oil imports were subject to EU sanctions,[89] Slovakia, Hungary, and the Czech Republic were awarded an exemption and could continue buying Russian crude oil supplied via the Druzhba pipeline until the end of 2023. The main argument for the sanctions opt-out came from the Slovnaft refinery, which asserted it would need more time to adapt the processing technology for a different type of oil.[90] The Ministry of Economy argued that Slovakia would suffer greatly with any sudden cut of the supply of Russian oil[91] and requested a three-year transition period to strengthen the Adria pipeline (connecting Slovakia and Croatia gaining access to the Omišalj terminal) and modify storage tanks at an estimated cost of approximately €160 million. Although the Adria pipeline to Slovakia was completed in 2015 and the Slovnaft refinery started testing other grades of oil in 2016,[92] the refinery has not been able to substitute for Russian oil. However, the company announced it expects to process around 30 – 40 % from Arabic countries and the Caspian Sea in 2023.

3.4.5 BUSINESS SUPPORT

As mentioned above, business support is part of the approved mechanism for financial compensation of high energy bills. The maximum subsidy is €500,000 per month per enterprise and €200,000 per month for public administration bodies.[93] The Ministry of Economy introduced several means of covering 37% - 54% of the electricity and gas price increases, 43% on average. The compensation is covered by state revenues and the reallocation of EU funds.

[89] European Commission (2022): Russia's war on Ukraine: EU adopts sixth package of sanctions against Russia

[90] Euractiv (2022): Business as usual for Slovakia as EU oil embargo comes into effect

[91] Ministry of Economy of the SR (2022): Slovensko podporuje ďalšie sankcie proti Rusku, požaduje iba prechodné obdobie pri rope

[92] SITA (2016): Slovnaft sa chystá testovať inú než ruskú ropu, 2016,

[93] Ministry of Economy of the SR (2022): DOTÁCIE NA ENERGIE,

44. POLICY RECOMMENDATIONS

4.1 POLICY RECOMMENDATIONS FOR V4 IN GENERAL

The common recommendations for all V4 countries are the following points:

- Priority should be given to targeted support instead of wide support measures.
- The protective measures taken should be in line with the low-carbon transformation and EU emission targets.
- Structural support for increasing resilience is desirable (energy saving programs, strengthening energy self-sufficiency, etc.)

4.2 POLICY RECOMMENDATIONS FOR THE CZECH REPUBLIC

- Measures should be linked to the condition of achieving energy savings.
- Efforts should be made to target support for vulnerable consumer groups.
- The aim of the measures should be linked to the low-carbon transformation, i.e. instead of regulating the prices of fossil fuels, it should be aimed at regulating the prices of electricity.
- Continued support for existing energy-saving programs that address the causes of energy poverty, more narrowly targeted to achieve greater efficiency in the use of resources. At the same time, the protection of neglected consumer groups (e.g. tenants in rental housing) should be promoted, including alternative business models (e.g. heat as a service, etc.).

4.3 POLICY RECOMMENDATIONS FOR HUNGARY

- Policy actions in Hungary did not target vulnerable groups but all consumers. The retail price regulation proved very costly for budget revenues. We advise to gradually replace the current retail price regulation with another price regime that
    - reflects the real price of energy to consumers;
    - shields the consumers from short-term price spikes on the wholesale energy market;
    - allows the traders, TSOs, DSOs, and other network operators to safely operate, maintain, and upgrade their system to ensure secure operation of energy networks.

- The end-user price regulation created huge losses for various market participants. Ad-hoc government payoffs and grants used to ensure the operation of the energy networks would be unnecessary if end-user prices reflected the real costs of energy.
- The Hungarian government did not reduce the VAT on energy products. As proposed by the Commission toolbox, tax reduction for vulnerable households should be considered.
- Windfall taxes should only be supported if they are not extended over the crisis period and do not hurt the day-to-day operation of the companies.
- Targeted energy efficiency programs can reduce energy consumption and consequently the energy bill of households. State support for energy efficiency investments may help to increase the rate of renovations in households and other buildings.

4.4 POLICY RECOMMENDATIONS FOR POLAND

- Proposed measures to mitigate the impact of the energy crisis should focus on promoting resilience to energy price fluctuations, i.e. promoting energy savings or fuel savings in transport, rather than promoting consumption of fossil fuels.
- Similarly, from a long-term perspective, it is advisable to address structural changes aimed at supporting the achievement of climate goals, such as building thermal insulation, reducing industrial consumption, promoting renewable energy sources, etc.

4.5 POLICY RECOMMENDATIONS FOR SLOVAKIA

- Address the primary challenges posed by both the energy crisis and initiatives like Fit for 55. This involves utilising financial resources from both the state budget and EU funding to facilitate grid access, renovate buildings, enhance renewable energy capacities, foster the development of energy communities, and more. These efforts can be funded by the revenues generated through taxes imposed on energy companies.
- Implementation of a structured price cap mechanism for energy prices which could guarantee a certain percentage of consumption at a regulated price while allowing the rest to be determined by the market.
- Restructuring the windfall tax to ensure it doesn't disproportionately impact industries and their investment decisions. This can also take into consideration reducing the VAT.