Non-paper on Emergency Gas Market Interventions

1. Current challenges in gas markets: high prices and security of supply

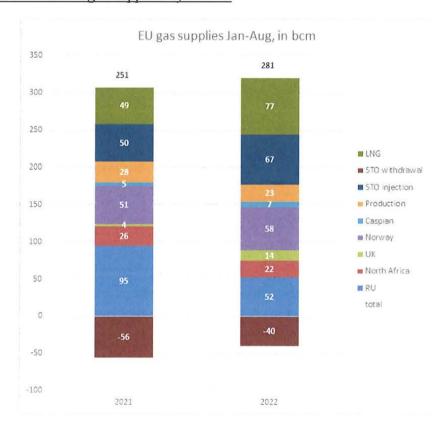
Russia's invasion of Ukraine and its manipulation of gas supplies to Europe have exacerbated the tightening of the supply-demand balance in European and global gas markets already underway since mid-2021.

Russia's actions have cast uncertainty on future supplies to Europe and pushed prices up to record high levels. In particular, Russia has announced policy measures when prices were decreasing, unilaterally changed contractual terms by demanding payments in roubles, stopped supplies to more than a dozen of Member States and as of June 2022, decreased shipments via Nord Stream 1.

The total Russian gas supplies to the European Union have sharply declined by 39 bcm (-37%) over Jan-Aug 2022. This is solely due to the sharp decline in Russian pipeline supplies, which fell by 43 bcm (-45%) between January and August 2022. At the same time, Liquified Natural Gas (LNG) imports from Russia have increased.

With active outreach to suppliers and high prices in Europe, Europe has been able to secure natural gas with a record high level of LNG imports (+28 bcm, +56%) and by the maximisation of pipeline supplies from other sources (+17 bcm, +20%). These developments have made it possible to replace around 43bcm of Russian pipeline gas in the period January – August 2022.

Figure 1 – EU natural gas supplies by source



Gazprom's latest decision to cut supplies through North Stream 1, combined with a decrease in electricity generation from other sources in Europe, have once again increased supply concerns and put upward pressure on gas prices. Wholesale gas prices hit record levels by the end of August¹, to stabilise at a level just below 200 EUR/MWh.

High gas prices impact the cost of electricity and of heating and negatively affects the EU industry's global competitiveness. The use of gas is equally important across these three sectors, but the situation is very different from one Member State to another.

Europe has become the primary destination for LNG inflows due primarily to high European prices. At the same time, LNG demand growth in the Asia-Pacific market has decelerated, due to high spot prices, mild temperatures and continued Covid related economic restrictions in China. This is reflected in the significant spread between the Dutch Title Transfer Facility - TTF and Asian prices.

The protracted high gas price situation is resulting in record high energy bills for consumers, both households and companies. The situation is expected to remain challenging for the rest of 2022 and well into the winter of 2023-24, as fixed price contracts signed before the crisis are expiring and new higher prices are offered by suppliers. There is widespread concern about the impact of high energy prices on the cost of living for households, inflation, and on the competitiveness of European industry.

The economic context requires a rapid and coordinated EU-wide response to address high gas prices and prevent lasting social and economic damage combining demand and supply side measures.

2. Elements for an emergency gas market intervention

An EU coordinated intervention can be more impactful and mitigate the risk of heterogeneous national measures that may endanger security of supply and undermine the functioning of the internal market.

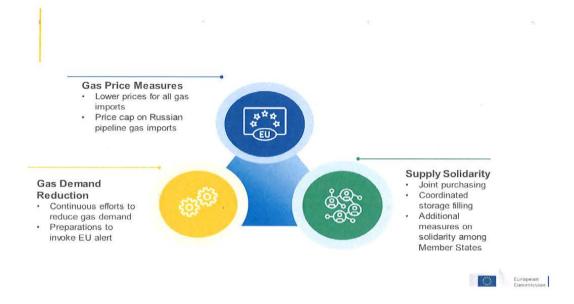
EU intervention on gas prices should achieve the following objectives:

- 1) Limit the influence on Europe's gas market of Russia's manipulation of pipeline supplies to Europe and reduce the gas export revenues for Russia;
- 2) Bring down the high price paid by European customers for imported gas supplies due to the exceptional market conditions;
- 3) Ensure a better functioning of wholesale energy commodity markets, thereby mitigating excessive price volatility not determined by supply-demand fundamentals.

Tackling high gas prices can only be achieved as part of an integrated and coordinated intervention that also includes gas demand reduction and supply solidarity. The full effect of such measures can only be achieved through their combination. The stronger the intervention on gas prices, the greater the need for demand reduction and supply solidarity.

From 346 EUR/MWh on the 26th of August 2022, prices reached 185 EUR/MWh on the 23rd of September

Any EU integrated and coordinated intervention should be based on a set of principles: concrete potential to mitigate price levels and high volatility; capacity to be implemented quickly on a temporary basis; ability to minimise adverse impacts on gas demand, security of supply and the functioning of the internal market.



Price measures, if taken in isolation, risk increasing demand rather than addressing the underlying scarcity. Without strengthened solidarity arrangements, severe and sudden supply disruptions would pose asymmetric risks to the security of supply within the EU.

Demand reduction efforts

According to the latest Eurostat data, up to July, gas consumption diminished in the range of 10% compared to the average in the previous 5 years. Some demand reduction is thanks to energy savings, mild temperatures and process optimisation. However, some is due to the suspension or decrease of industrial processes in energy intensive sectors, linked to the high energy prices, with an important impact on the European economy and supply chains. Demand reduction efforts are sustained by the coordinated framework adopted by the Council on 26 July 2022 for the current winter². This gas demand reduction regulation provides for the possible activation of an EU Alert in case of a severe supply shock and will need to continue into the next storage filling season.

Cross-border supply solidarity

Thanks to the common storage policy, EU average storage level reached 86.7% on 23 September 2022, with notable differences across the EU, about 15% above last year's levels.

² To support this work, a pilot project with interested Member States could test the operational feasibility of multi-country demand-reduction measures aimed at aggregating offers and demands in less than 48 hours in case of emergency.

The next storage filling period (1 April 2023 - 31 October 2023) could see a more constrained gas supply than 2022. Reaching the target of 90% next winter will require extra effort in terms of solidarity among Member States.

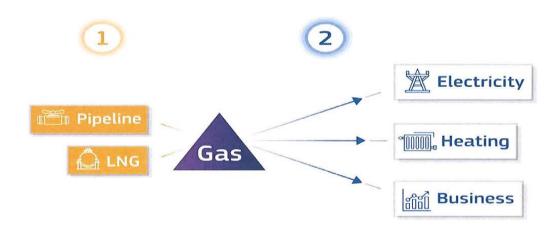
Joint purchasing would strengthen EU solidarity in purchasing and distribution of gas by helping to deliver equal access across EU Member States to new or additional gas sources and reducing the risk of outbidding. It would also help smaller companies and industrial companies to pool their demand to contract LNG cargos and help to structure LNG supply to their demand. There is a need for Member States to rally behind the Platform and bring their companies to take part in joint purchasing.

A stronger coordination of joint purchasing for storage filling across Europe could be established, using the Energy Platform endowed with the necessary legal tools to enable it. A storage target filling trajectory until the winter 2023-2024 would be needed to ensure a stable and smooth injection season.

In parallel, in order to address possible supply disruptions, solidarity measures could be made mandatory in order to ensure that all Member States have access to the gas needed to serve protected customers and critical industries. This would require a reinforced security of supply and solidarity framework for the case of a gas emergency to ensure support for those that will be most impacted.

To alleviate the impact of the crisis, Member States should continue to implement measures from the Toolbox to protect energy consumers in a targeted way. In particular, Member States can apply retail price regulation and limit retail prices also for gas, if they wish so, for households in need of support, including vulnerable households, and for SMEs.

3. Measures to address high prices of imported gas and alleviate impact on citizens and business



The current high gas prices are driven by global excess demand over supply and Russia's weaponisation of gas rather than the functioning of the EU internal gas market. The measures envisaged should therefore address the root causes and distinguish between pipeline gas and LNG.

Higher prices on global gas markets as a consequence of the war are providing significant and exceptional rents for suppliers of gas selling at prices well beyond their marginal cost of production, while heavily impacting our economy.

A wholesale price cap on all intra-EU exchanges would, inter alia, require replacing the market by a centrally administered system for allocating and rationing gas as well as for financing the difference between the cap price and the global market price (see annex).

a. Lowering prices for all imports of pipeline gas

In Jan-Aug 2022 67% of all imported gas to the EU was pipeline (154 bcm) and 33% was LNG (77 bcm). While the capacity to reroute pipeline gas differs across suppliers (including via LNG), the vast majority of the pipeline gas cannot be rerouted.

The EU should engage with reliable supply partners to achieve, within a reasonable timeframe, a common understanding to reduce prices whilst safeguarding security of supply and developing stable long-term energy partnerships through the energy tansition.

While a mutually agreed approach with trusted partners is the preferred option, the key objective for the EU is to ensure lower prices for EU consumers already this winter. The EU should therefore be ready to introduce measures to limit prices.

b. Lowering prices for LNG

The importance of LNG imports for European security of supply has dramatically increased in the last year. Europe has been able to attract more LNG supplies due to the high prices it has paid.

Figure 5: Monthly LNG imports from the US into the EU (and cumulative volume)

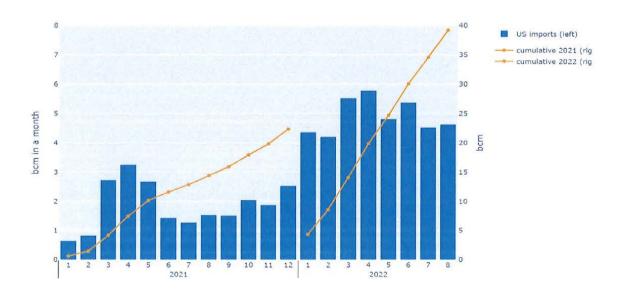
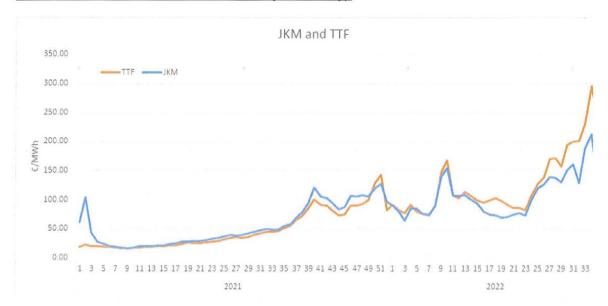


Figure 3: Weekly price differentials between Asian and European benchmarks (Japan Korea Marker and the Dutch Title Transfer Facility)



Prices will remain an important factor in attracting LNG supplies. Spot LNG prices are usually higher than those of pipeline gas under long term contracts given the costs of transportation, liquefaction and regasification.

Europe's LNG needs are expected to outpace world supply capacity additions in 2022. In order to diversify away from Russian natural gas while ensuring its security of supply, the EU would need to continue attracting 130-140 bcm of LNG next year while maximising its pipeline gas imports, i.e. close as much as possible to the maximum LNG regasification capacity.

At the same time, too high prices well beyond suppliers' production costs are already putting unsustainable economic, social and fiscal burdens. This calls for **engaging with the EU's reliable LNG supply partners for a mutually beneficial relationship over the longer term**. The EU's energy platform could be mobilised to that effect. This should result in achieving, within a reasonable time frame, a common understanding on reduced prices which also safeguard security of supply. 60% of the net growth in global LNG trade through 2025 will have Europe as its destination, according to the International Energy Agency's estimate.

The TTF benchmark has been used historically as a proxy for both pipeline and LNG. However, the TTF's representativeness as a proxy for market conditions across the EU has been decreasing. Prices for LNG in parts of the EU with spare LNG regasification capacity have begun to display significant discounts compared to TTF prices currently reflecting the infrastructure limitations in the North-Western European pipeline network. Given the lack of alternative, more representative indexes, the persisting use of the TTF as the key benchmark for price formation means that such local factors end up pushing up the prices of LNG transactions for the whole of the EU.

Therefore, a new transactions-based LNG benchmark, based on objectively verifiable price assessments for cargo deliveries, would provide a valuable reference point for market participants to be used on a voluntary basis. The complementary benchmark would limit the current negative effect on price formation due to infrastructure bottlenecks and is thus expected to bring prices closer to the world market level. The

Commission has already initiated work with ACER, the Agency for Cooperation of Energy Regulators, which is well-placed to serve as a data hub thanks to the data they already collect in the framework of REMIT, the Regulation on Wholesale Energy Market Integrity and Transparency. The new benchmark would be available to market actors in advance of the storage filling and winter season.

c. Putting a price cap on Russian gas

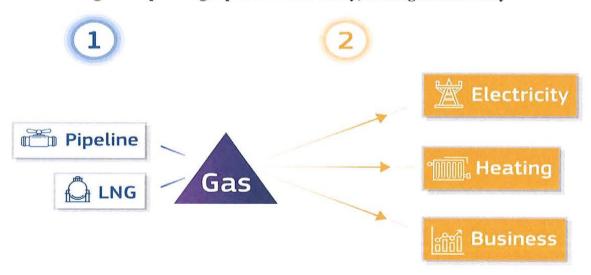
Russia has proven not to be a reliable supplier. While currently supplying only 9% of the EU imports - down from 40% - it still benefits from high prices.

Setting a maximum price on imports of natural gas from Russia would limit the price at which its gas would enter the EU. The imposition of a price cap on imports of Russian gas would lower Russia's revenues and its ability to finance the war in Ukraine. Any import of Russian gas priced above this threshold would be deemed unlawful. The cap should be set at a level that, while clearly below current intra-EU wholesale values, would meet the Russian break-even price plus a mark-up in line with historical price levels.

Russia's ability to divert its pipeline natural gas production if it decides not to ship gas to Europe as a retaliation measure is negligible. While it would entail significant costs to Russia, this possibility cannot be discarded. In the event of a full Russian disruption, the EU as a whole could cope with a winter with average temperatures thanks to its storage targets and the demand reduction plan adopted in July. Any security of supply concerns for specific Member States that are currently dependent on Russian gas need to be jointly addressed in full solidarity.

Any price limit would only apply to the import transactions, leaving importers of pipeline natural gas free to sell the gas they have acquired inside the internal market. The measure would therefore maintain the possibility for prices inside the EU to reflect scarcity and for gas to flow inside the internal market without any price intervention.

4. Buffering the impact of gas prices on electricity, heating and industry



Natural gas has several uses throughout the economy: it is used for heating, for electricity generation and in industry. Since the autumn of 2021, Member States have taken various measures to buffer the impact of surging gas prices on households and companies.

The EU has taken several enabling measures to that effect:

- <u>Industry:</u> A Temporary State aid Crisis Framework is allowing specific support to the industry. An adapted version of this Framework following a survey of Member States' needs will be adopted mid-October.
- <u>Heating:</u> Several Member States have implemented measures from the toolbox to
 protect energy consumers. The existing Gas Directive allows for temporary measures
 of regulated prices below cost. Member States can apply retail price regulation, if they
 wish so, for households in need of support, including vulnerable households, and for
 SMEs.
- Electricity: A number of Member States have taken measures to mitigate rising electricity prices or mitigate their impact. On 14 September, the Commission adopted a proposal for an emergency intervention to decouple electricity prices from gas pricing by setting a cap on the revenues of infra-marginal technologies and by redistributing these revenues to consumers so as to reduce prices paid. In addition, the proposal sets a solidarity contribution on the extraordinary profits earned by fossil extraction industries. The proposal also confirms the possibility for Member States to apply retail price regulation, if they wish so, for households in need of support, including vulnerable households, and extending this for SMEs. The Commission has approved specific measures put in place by some Member States aiming to subsidise gas prices for electricity generation, such as in Spain and Portugal. It has also approved a specific scheme in Greece in line with the above-mentioned EU proposal for an EU regulation on an emergency intervention.

Based on Member States' experience, the Commission stands ready to discuss the development of a temporary EU framework to limit the influence of high gas prices on electricity price formation. One option could be to cap the price of gas in electricity generation at a level that helps bring down electricity prices without leading to overall increased gas consumption. The cost differential between the capped and market prices would be borne by the electricity system within the Member States, building on the emergency intervention in the electricity market proposed on 14 September.

5. Better functioning of wholesale energy commodity markets

Throughout the ongoing energy crisis, concerns have emerged around the drivers of high and extremely volatile gas prices, which cannot be fully explained by the evolution of aggregate supply and demand.

a- Better adapted financial market regulation

Well-functioning financial markets are critical to ensure well-functioning markets for energy. Financial markets allow for operators to hedge their operations and trade gas to serve the demand in an efficient way at any given time.

The high price volatility observed in EU energy markets in the past months has triggered concerns over potential misconduct or market manipulation. In the energy sector REMIT ensures continuous market monitoring. Under this legislation ACER analyses data on wholesale energy trading and regulatory authorities could launch procedures, including sanctions, if there is a REMIT framework breach (market manipulation).

The Commission is working with ACER to investigate any potentially harmful market practices and can investigate any possible abuse of market power under competition rules. The findings of this work may lead to proposals for strengthening the existing market monitoring framework and increase market oversight.

In the current context of gas scarcity driving prices up with very high volatility³, attention has also focused on market functioning in highly stressed conditions. The Commission has asked ESMA to investigate why circuit breakers have not been triggered more often in the course of the current energy crisis. The Commission recommends targeted and temporary actions, including circuit breakers to allow energy exchanges to interrupt trading in case of significant price movements. ESMA shall also explore whether the rules on circuit breakers need to be aligned across the Union. Moreover, the Commission invites ESMA to consider a more harmonised approach to limit price volatility and thereby to enable trading venues to more decisively manage intraday pricing spikes affecting energy markets.

b-Easing liquidity stress

The Commission is preparing, based on input from the ESMA, the EBA, the European Banking Authority, and the Single Supervisory Mechanism - SSM, amendments to the rules applicable to collateral used for margin calls in energy derivative markets, so as to allow other assets than cash to be used as collateral. In addition, EBA, in cooperation with ESMA and the SSM is assessing how banks currently provide collateral transformation services and explores ways to facilitate the provision of guarantees by banks offering clearing services.

Related to liquidity, the Commission's **State aid Temporary Crisis Framework** adopted in March 2022, as amended in July 2022, enables Member States to provide loans and guarantees to cover liquidity needs also derived from these activities. The Commission will ensure that these provisions remain adequate in light of the highly volatile market situation and continue to enable Member States to provide necessary and proportionate support to their economy, including by means of State guarantees. In this context, the Commission already launched a survey on 14 September 2022 to seek Member State views, which it will take into account before deciding on next steps and will propose a **revised framework by mid-October**.

³ As an example, prices of wholesale gas in Europe moved from 346 EUR/MWh on the 26th of August to 214 EUR/MWh on the 2nd of September. https://www.theice.com/products/27996665/Dutch-TTF-Gas-Futures/data

6. The clean energy emergency

Higher energy prices, reflecting scarcity relative to demand, are a key incentive to reduce consumption and invest in transition. Demand must fall overall. At the same time, however, households facing difficulties should be supported during this energy crisis. Member States are taking measures to this end and the EU will continue to enable these.

Industry, especially energy intensive sectors, will be affected permanently rather than temporarily. Their structural answer lies in innovation and new technologies, particularly renewable energies like hydrogen, wind power, solar energy. Europe has already taken the right path here, and now it must resolutely continue it, including with targeted support to businesses. The incentive for companies to drive this clean energy transformation is currently particularly high.

The current energy crisis calls for an emergency boosting of renewable energy and energy efficiency technologies and their market deployment.

Annex

A wholesale cap on gas market prices

Establishing a wholesale gas price cap applicable to all exchanges on the gas market (encompassing EU hubs, over-the-counter or exchange transactions and both LNG and pipeline supplies traded within the EU), would mean that the price cap would not only intervene in contractual relationships with third-country importers but would also limit the pricing of intra-EU transactions.

Price differentials inside the EU currently ensure the flow of gas across Member States. These cross-border flows have played a vital role in allowing the Member States already affected by supply disruptions to confront the situation by attracting gas from other Member States where it is available.

When the price cap level is hit, it means, by definition, that there is more demand for gas than available supply. As the cap is likely to be hit in multiple Member States at the same time, there would be no market incentive to ensure cross border flows through price differentials. In a context of scarcity, there is a risk that prices would be pushed to the cap so that it becomes the price floor.

For such measure to work, in the absence of such price differentials, there would be a need to:

- Create an entity to replace the market and to take over many tasks of the transmission system operators to distribute gas across Member States. In the absence of market-based flows, alternative mechanisms would have to be found to allocate and ship scarce gas supplies between different Member States and consumer categories.
- 2. Introduce a significantly more drastic demand reduction framework, including curtailment, to address the increase in demand due to a lower price.
- 3. Find significant financial resources to attract gas to Europe if the global gas prices would be higher than the cap (it would require a central coordination and compensation framework).
- 4. Design and establish proper monitoring and enforcement systems.

Deciding on gas flows administratively is without precedent in Europe and there is currently no body at EU level, equivalent to TSOs at national level, which has this experience and technical capability to undertake this task. Consumption patterns change from day to day and from hour to hour, which requires suppliers' portfolios to be readjusted on a continuous basis. Under market conditions, this readjustment takes place in the form of commercial transaction (day-ahead, intra-day, balancing, etc. transaction). Engaging in such a measure would require an upfront political decision on the method to allocate gas to Member States and the criteria to be used.

Establishing the appropriate level for the cap would be a challenging exercise due to internal and global market dynamics and entailing risks from the point of view of security of supply.

Furthermore, the risk of triggering supply disruptions from third-countries supplies is higher for a generalised wholesale price cap than it is for a price cap on the imports of pipeline gas.

Table 1: Gas imports from various infrastructure sources in the EU

мсм	LNG*	Norway	RUSSIA	ALGERIA AND LIBYA	UK	Azerbaijan
2015	28,247	76,310	134,201	28,659	13,151	0
2016	31,074	73,456	153,926	37,458	9,520	0
2017	41,531	78,049	173,272	36,528	11,049	0
2018	44,877	77,035	173,839	36,688	7,838	0
2019	81,552	76,914	174,678	26,059	8,757	0
2020	74,145	78,974	143,298	24,570	10,302	11
2021	74,009	79,239	139,083	36,889	7,763	8,079
2021 Jan-Aug	49,196	51,135	96,344	25,521	3,830	4,787
2022 Jan-Aug	77,794	58,344	53,447	22,122	15,730	7,258

LNG includes gas from USA, Russia, Norway and Algeria

Figure 1 - Russian weaponisation of gas supply - TTF vs Russian threats and gas cuts

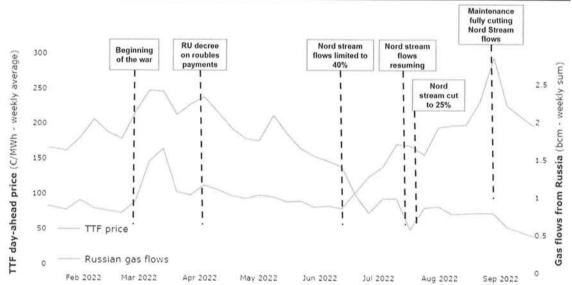


Figure 2: Evolution of natural gas prices during the crisis

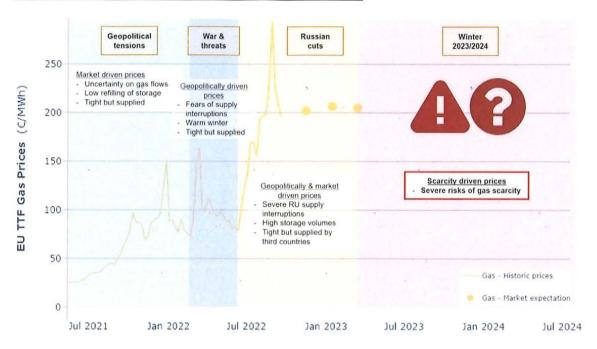


Figure 3: relation between storage filling and gas prices

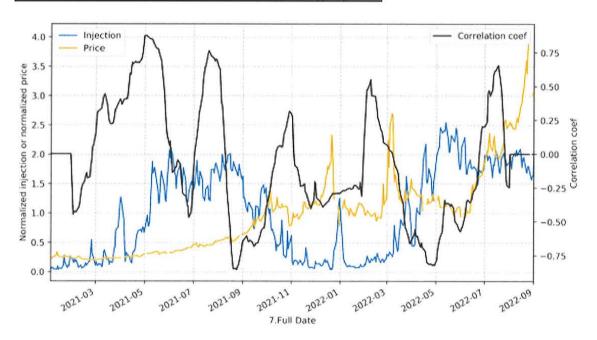


Figure 4 Year-to-date (Jan-Aug) imports of LNG to the EU



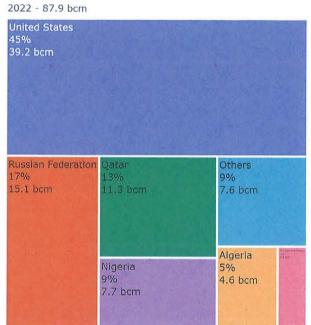


Figure 5 – Natural gas use in the EU

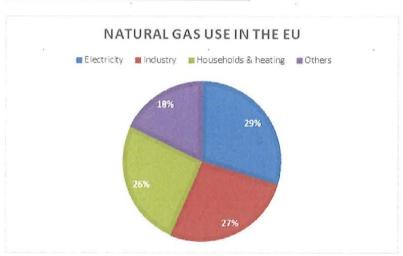


Table 2: Savings per month compared to previous 5y average

Compared to 5y avg (%)	2022-05	2022-06	2022-07
European Union	-13,2%	-7,6%	-10,7%
Belgium	-15,6%	-8,4%	-9,6%
Bulgaria	-5,1%	-7,9%	-1,4%
Czechia	-19,3%	-11,5%	-19,2%
Denmark	-18,5%	-6,1%	-11,6%

Germany	-24,9%	-21,2%	-20,2%
Estonia	-16,1%	-12,2%	-34,5%
Ireland	-0,6%	1,3%	30,8%
Greece	21,5%	14,2%	12,8%
Spain	-0,2%	10,9%	8,8%
France	-13,6%	-3,1%	-4,2%
Croatia	-26,9%	-17,5%	-11,2%
Italy	-2,1%	0,5%	-4,9%
Cyprus			
Latvia	-45,9%	-67,3%	-67,1%
Lithuania	-18,8%	0,2%	-23,9%
Luxembourg	-32,7%	-30,8%	-34,5%
Hungary	-17,9%	-7,7%	-8,8%
Malta	-2,0%	11,0%	11,1%
Netherlands	-22,8%	-16,4%	-27,7%
Austria	-7,5%	-8,2%	-17,8%
Poland	-8,3%	-6,9%	-14,1%
Portugal	-0,5%	-11,2%	-10,5%
Romania	-5,3%	-18,2%	-36,1%
Slovenia	-11,6%	-2,1%	-6,9%
Slovakia	-26,1%	14,0%	-2,4%
Finland	-45,7%	-64,5%	-33,2%
Sweden	8,3%	6,7%	14,7%