



KlimaInnovation

How to act?

Assessing the EU's options for emergency measures to reduce gas prices

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How to act? Assessing the EU's options for emergency measures to reduce gas prices

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EXECUTIVE SUMMARY

Gas prices in Europe have reached historic highs in the wake of the Russian invasion of Ukraine, as a result of reduced gas imports from Russia which had previously comprised around 40% of European gas demand. To mitigate the devastating effects of these prices on households and industry, the EU is now considering different emergency options to address the high prices and scarcity of gas.

In the medium term (i.e., post-2025) we expect prices to come down as non-Russian import capacity and global LNG availability will be sufficient to meet demand. The proposed measures are therefore temporary and targeted at reducing prices until the market rebalances.

This paper considers the short-term implications of the main proposals currently being considered by the European Commission and Member States according to the following criteria:

- 1) **Ensures security of gas supply:** the measure ensures that sufficient gas is delivered to Europe and enough gas is saved to ensure security of supply
- 2) **Reduction in consumer bills:** the measure has the intended effect of reducing gas prices in a meaningful way for consumers
- 3) **Enables efficient allocation of gas:** under the measure, scarce gas is allocated to consumers in an economically efficient manner (e.g., gas reaches the consumers that most need it)
- 4) **Low fiscal burden:** the costs of the measure do not excessively burden Member States
- 5) **Ease of implementation:** the measure can be implemented quickly and efficiently

All proposals which directly intervene in wholesale gas prices risk reducing supply below an economically acceptable level. Moreover, removing price signals as an allocation mechanism for scarcity raises difficult questions on how to efficiently allocate gas. Notwithstanding which option is agreed upon, given the extraordinary situation facing European energy buyers and consumers and the risks to security of gas supply, the European Council should apply a mandatory obligation on Member States to achieve at least 15% savings in gas consumption, and in turn place downwards pressure on gas prices. This can be done by triggering the “security of supply” provision in the voluntary gas saving programme that was adopted by the European Council earlier in 2022.

Direct subsidies to consumers, for example through a combination of one-off payments and block tariffs, appear to be the most effective mechanism to reduce gas prices for consumers while also being relatively easy and quick to implement. However, this option is highly contingent on raising sufficient funds at the EU level to finance it, which is politically challenging, and has potential substantial flow-on fiscal effects by pushing up sovereign risk and in turn borrowing costs.

Compared to a cap on wholesale gas prices or establishing a new LNG index, creating an entity to act as a single buyer of gas for the EU may be relatively effective at reducing gas prices for consumers without risking security of supply. Notably, setting up such an entity is administratively and politically complex and would likely take at least several months to implement. If it were targeted towards support filling storages from Summer 2023 onwards, it could contribute to security of gas supply for the following winter, without introducing any allocation-related risks.

In contrast, the Iberian model of capping the cost of gas in power generation is relatively simple to implement and effective in reducing power prices but is significantly more limited in scope, as it does not reduce the cost of gas for other purposes. The measure risks further increasing the wholesale price of gas by incentivising higher use of gas in the power sector.

Overview assessment of options

	1. Maintain wholesale gas market and cap consumer prices through tariffs	2. Apply a price cap to European wholesale gas markets	3. Establish a new LNG-based index to complement the TTF index	4. Establish a single buyer to procure gas on behalf of all European buyers	5. Iberian model: cap the price of gas used in power generation
Ensures security of supply	 <p>Avoids diluting price signals, ensuring security of supply</p>	 <p>Trade-off between setting cap high enough to secure supply and incentivising demand reduction</p>	 <p>LNG index can be set at high enough level to attract sufficient supply of LNG to Europe</p>	 <p>Procurement price needs to be globally competitive and challenging to assess required supply</p>	 <p>Incentivises higher use of gas in power sector and risks of power exports to non-EU countries</p>
Reduction in consumer bills	 <p>Households protected from high prices, necessary to ensure industry is also covered adequately</p>	 <p>If cap is set high enough to attract supply potential cost reductions for consumers are eroded</p>	 <p>LNG likely to maintain a premium to TTF to incentivise getting LNG from offshore</p>	 <p>Centralising purchasing power will likely lead to lower prices although Europe will still need to outbid other regions</p>	 <p>Reduces power prices, but does not decrease price of gas for other sectors (may even increase price due to higher overall demand)</p>
Enables Efficient allocation of gas	 <p>Price signal preserved as allocation mechanism</p>	 <p>In absence of price signal a centralised mechanism is required to allocate gas</p>	 <p>If the LNG index converges towards TTF, then buyers continue to secure volumes based on willingness to pay</p>	 <p>If targeted only towards filling gas storages next Spring, allocation during heating season can remain market-based</p>	 <p>Inefficient use of scarce gas in highly interconnected European power market and reduces gas available for other purposes</p>
Low fiscal burden	 <p>Requires substantial additional funds at EU level and risks reducing fiscal space and increasing borrowing costs</p>	 <p>No direct fiscal burden</p>	 <p>No direct fiscal burden</p>	 <p>No direct fiscal burden beyond setting up single buyer entity</p>	 <p>Will need to be funded by new levy/tax or EU-level funds</p>
Ease of implementation	 <p>Very politically challenging to raise required funds</p>	 <p>Challenging in setting cap high enough to attract global LNG, dynamically adapting gas savings target</p>	 <p>Index could be established relatively quickly but legislative action likely required to compel companies to use it</p>	 <p>Complex in terms of administration and governance, will likely take months to set up</p>	 <p>Relatively simple and quick to implement</p>

1. MAINTAIN THE WHOLESALE GAS MARKET AND PROVIDE DIRECT SUPPORT TO CONSUMERS

DESCRIPTION

Current high gas prices reflect scarcity of gas in the market. The price acts as an allocation mechanism, distributing gas to those buyers with the highest ability and willingness to pay. If this principle is upheld, some of the adverse effects of current high gas prices could be mitigated by i) offering direct financial support to consumers through a combination of one-off payments and block tariffs, (e.g., up to 70-80% of demand compared to the previous year such as the recent German proposal) and ii) implementing demand response measures, including market-based demand response auctions.

To raise the substantial additional financial support required for this option, the EU would need to implement additional measures such as joint issuance of debt by the EU, repurposing of unallocated money from the EU recovery fund, and/or adopting additional uniform windfall profit taxes on energy companies across the EU, which are likely to be challenging politically to agree upon.



Ensures security of gas supply

- This proposal avoids diluting wholesale gas price signals, which to date have substantially reduced gas demand, and directs gas to consumers with the greatest willingness to pay. It therefore can play an important role in maintaining security of gas supply and allocative efficiency across Europe.
- This proposal prices gas at a level that is sufficient to attract LNG cargoes from competing buyers, e.g., in Asia; high LNG prices are causing demand destruction amongst Asian buyers, which makes additional volumes available for European buyers.
- The proposal incentivises consumers to reduce their gas consumption; however, this effect is more limited than if price signals are fully preserved, likely leading to overall lower reductions in gas demand.



Reduction in consumer bills

- Consumers are protected from high wholesale prices while still being encouraged to reduce consumption relative to historical demand.
- Requires a mechanism to support industry since block tariffs do not necessarily work as well for the sector. Industrial gas demand fluctuates more than in households, making it harder to determine an accurate level of 'base demand' that is supported by the tariff.



Enables efficient allocation of gas

- By retaining price signals as an allocation mechanism, contentious political or administrative means to allocate scarce gas amongst different buyers and Member States can be avoided. Such centrally administered allocation of gas can lead to significant economic costs due to inefficiencies in comparison with price-driven allocation.



Low fiscal burden

- Requires massive additional funds at EU level – depending on the price of gas over the winter, the estimated cost of the measure is between EUR 240-549 billion if the price of gas is capped at 50

EUR/MWh from October 2022 until March 2023.¹ As gas prices will remain elevated beyond the coming winter, this figure would increase depending on how long the prices remain capped.

- These funds can potentially be raised in form of a joint issuance of debt by the EU and the potential repurposing of up to EUR 610 billion in remaining funds from the Next Generation EU fund², to subsidise gas prices until the gas market returns closer to levels in winter 2021/22. Member States with high credit costs (e.g. Poland) or with a high public debt ratios (e.g. France and Italy) can hardly afford such massive financial compensation on their own. However, massive additional compensation measures also reduce the long-term financial room to manoeuvre for future policies.
- Europe will still pay very high wholesale prices while importing almost all of its gas, i.e., the money is still flowing out of the EU's economic zone. There are significant macroeconomic risks to consider by increasing the indebtedness of the EU or its Member States such as a flow-on increase in borrowing costs or decrease in the value of the Euro (as has been seen recently in the United Kingdom).



Ease of implementation

- Arguably the biggest challenge to implement this measure is at the political level, due to the conflict of interest between countries with unused LNG capacity (e.g. Spain and France) and those where LNG import capacity is fully utilized and demand destruction sets the price (e.g. Germany and the Netherlands). Therefore, it would require a European-level approach based on the principle of solidarity to implement it, which seems politically elusive.
- Compared to other proposed measures, this proposal avoids impacting long-term contracts for gas procurement, which represent around 50% of gas consumption in Europe. This avoids putting at risk volumes already contracted under long-term contracts, e.g. if contracts are reopened or cargos are diverted.
- The lack of need for centralised allocation of supply would speed up implementation, and one-off payments to consumers are relatively straightforward to implement, however the implementation of block tariffs by retailers (with the associated support measures in place between states and retailers) are likely administratively complex and unlikely to be in place for winter 2022/23³.
- It is still unclear how much funds individual Member States would be able to raise to fund such block tariffs, but if an approach to raise funds were to be agreed at the European level, plausible mechanisms exist to allocate funds across Member States, taking into consideration existing domestically funded programmes⁴.

¹ Assumes the block tariff applies to 70% of 2021 demand (compared on a month-by-month basis), a price cap at 50 EUR/MWh. The low end of the range assumes a gas price of 173 EUR/MWh in line with current future prices (as of 13.10.2022) and the high end of the range assumes a gas price of 332 EUR/MWh in line with the peak gas price reached in 2022.

² Of the EUR 723.8 billion in the fund, EUR 112.9 billion have been disbursed.

https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/disbursements.html?lang=en

³ The German Government's Expert Commission on Gas has advised that block tariffs cannot be implemented in Germany until March 2023.

⁴ For example, calculate MS's gas consumption cost at an assumed gas price of $x > 100$ EUR/MWh (should be a high price otherwise intervention not needed), subtract funds of already announced national programs (like Germany's Gaspreibremse) and allocate funds pro-rata.

2. APPLY A PRICE CAP TO EUROPEAN WHOLESALE GAS MARKETS

DESCRIPTION

The European Commission would apply a wholesale gas price cap to gas purchased or sold within the EU on all markets. The mechanism to apply this cap could be, for example, capping the TSO imbalance price.⁵ Under this proposal, strong gas savings targets would need to be made mandatory for Member States, as gas demand in Europe is currently only around 10% lower than normal in response to the high price of gas, and reducing the price of gas will increase incentives to use gas, risking a supply-demand imbalance.



Ensures security of gas supply

- In order to avoid the risk of suppliers selling to other markets, the cap would need to be set at a price that is still competitive with buyers in Asian markets. If the cap is set too low, it creates the risk that buyers cannot secure enough cargoes to meet demand, and security of supply is compromised. To mitigate this risk, a floating cap could be considered, which ensures European buyers can outcompete the next marginal LNG buyer.⁶
- The high global LNG prices caused by increased European demand for LNG have caused demand destruction in competing regions, notably Asia. The introduction of a price cap in Europe could pressure global LNG prices to move downwards again, triggering higher gas demand in Asia, and reducing the volumes of gas Europe can secure.
- As the gas price will no longer reflect the supply-demand balance, this measure creates the risk that gas demand increases, thus reversing the ~10% reduction in gas consumption that energy consumers have made in response to high wholesale gas prices. Ensuring security of gas supply under these conditions would require Member States to implement mandatory gas demand reduction measures.⁷
- Alternatively, a variant to enhance security of supply would be to allow buyers to purchase additional volumes of LNG at market prices, but this carries with it a substantial risk of undermining the wholesale price cap, as sellers might seek to divert volumes to the more lucrative market.



Reduction in consumer bills

- A wholesale gas market price cap would reduce the cost of gas for all buyers within the European Union, as it would effectively de-link the price of gas consumed within the EU from the marginal price of gas currently reflected at the TTF.
- To be effective, such a cap would need to be applied to both over-the-counter (OTC) and exchange transactions to avoid creating incentives for sellers to circumvent the price cap.

⁵ EPICO, “What to cap? Emergency Interventions in the European Electricity and Gas Market”, (September 2022)

⁶ This could be, for example, establishing a cap which is pegged to the Asian JKM LNG index, plus a nominal amount to ensure volumes are secured by European buyers.

⁷ For example in accordance with the Council Regulation on Coordinated Demand Reduction Measures for Gas, which was adopted in July this year. The Regulation provides for Member States to use best efforts to reduce their gas demand by 15% compared to their average consumption in the past five years, between 1 August 2022 and 31 March 2023, with measures of their own choice. However, this reduction goal is not mandatory yet.

- While the cap would reduce prices for end users, it would naturally be limited by the price being bid by the next marginal buyer of LNG globally, namely Asian buyers. Therefore, this limits the effectiveness of the cap in reducing consumer bills.



Enables efficient allocation of gas

- Removing price signals as an allocation mechanism raises difficult questions on how to allocate likely scarce gas supplies. Assuming the EU gas savings target of 15% is made mandatory, such a target is static and set at an aggregate level and could not move dynamically to align with available gas supplies.
- In the absence of a price signal, there is a risk that gas demand exceeds available supply. This requires a process to centrally administer gas volumes among end users which will be politically challenging within Member States.
- For example, Member States would need to align on a European order of priority for which industries need to curtail in which countries, before others. They would also need to establish detailed quotas on which gas Member States (particularly landlocked ones) get from which source, given that there is no more price signal within Europe to clear the market. Both of these would be very politically challenging to agree upon.



Low fiscal burden

- No direct fiscal burden through this measure.



Ease of implementation

- Such a cap could be applied by the European Council through a Regulation, which limits the price at which gas may be traded on European exchanges or by European-domiciled buyers.
- The risks in implementation are not directly related to the application of the cap, but rather how to deal with its consequences, i.e. setting the cap price to attract global LNG cargoes, dynamically adapting the gas savings target to maintain a supply-demand balance, and allocating gas among end users in the event of gas shortages that the cap induces.

3. ESTABLISH A NEW LNG-BASED INDEX TO COMPLEMENT THE TTF INDEX

DESCRIPTION

Establish a separate index reflecting the average of prices for all LNG cargoes delivered to the EU, which reflects the marginal cost of bidding for LNG above other buyers. This contrasts with the TTF which reflects not only the marginal cost of LNG, but additionally scarcity pricing amongst European consumers of gas in North-West Europe and regasification capacity constraints in Germany and the Netherlands. The new index would therefore, according to a European Commission non-paper, “limit the current negative effect on price formation due to infrastructure bottlenecks...and bring prices closer to the world market level.”⁸ Such a measure would need to be designed in a way that compels traders to use the index for procurement of LNG from overseas.

Ensures security of gas supply

- An LNG index would reflect the willingness to pay of buyers to attract LNG cargoes to Europe, ensuring security of supply. This assumes that the LNG index is not subject to a price cap and is allowed to float in line with market supply-demand dynamics.
- Some long-term contracts, which regulate around 50% of gas procured in Europe, have ‘reopener’ provisions that can be triggered by a change in the agreed pricing index, putting already contracted volumes at risk.⁹ Furthermore, many long-term LNG contracts often take place outside EU jurisdiction, creating the risk that cargoes are diverted if the cap is implemented.

Reduction in consumer bills

- In principle this measure could reduce the prices paid for pipe gas which are settled against TTF by shifting LNG trade to a lower-priced index. The spread between LNG cargoes reaching North-West Europe and the TTF benchmark reached a record - \$19.255 /MMBtu in August.¹⁰ Therefore the measure could at best reduce gas prices by around 16%, based on recent trends.
- However, TTF prices would still need to incentivize getting LNG from offshore. As a result, buyers would bid up TTF in order to attract volumes into the North-West Europe pipeline network, thereby requiring the TTF to maintain a premium to the new LNG index, eroding any savings from pricing the LNG volumes using the LNG index.
- Buyers using an LNG index will also face the same competitive pressures to secure LNG on the global market as TTF. It is likely that the marginal price setter globally will be the level of demand destruction in Asia¹¹, rather than the cost of LNG supply from the USA, which would likely limit the benefits of establishing the LNG index. The index would also be more subject to global market movements than the TTF, so if Chinese demand picks up again, for example, a European LNG price index would need to increase further from current levels in order to secure supply.
- An LNG price would not represent the entire mix of European supply, which would allow other supply (Norway, North Africa, Azerbaijan, domestic production) to be priced lower when LNG is more expensive (which is usually the case). But this could at the same time disincentivize non-LNG

⁸ DG ENER, “Non-Paper on Emergency Gas Market Measures”, (September 2022)

⁹ European Federation of Energy Traders,

<https://efet.org/files/documents/221006%20GC%20PP%20Gas%20Price%20Caps%20FINAL.pdf>

¹⁰ Spark Commodities’ front-month Northwest Europe (NWE) LNG basis, which assesses the difference between physical cargoes delivered ex-ship (DES) to import terminals and the TTF benchmark.

¹¹ the price at which oil-fired power generation becomes more attractive than LNG-fired generation.

suppliers from maximising production and deliveries to Europe and increase Europe's reliance on more costly LNG.

- A variant to enhance the impact of this proposal on consumer bills would be to cap the LNG index at a price that is oriented towards the cost of demand switching/destruction in other world regions like Asia. However, there is significant risk that less volumes come to Europe if the limit is not calibrated correctly, and if long-term contracts are excluded from this cap, then the cap will only impact half of the potential LNG volumes.

Enables efficient allocation of gas

- Assuming that the LNG index and TTF index converge, there is little risk of misallocation of gas supplies, as buyers will continue to exercise market power and purchase cargoes in accordance with their willingness to pay. This is however a moot point if the index does not have its intended effect on consumer gas prices.

Low fiscal burden

- No direct fiscal burden through this measure.

Ease of implementation

- While a new index could be established relatively quickly as similar prices already exist, its effectiveness depends on the market adopting it for pricing purposes, which would take time, if market participants accept it at all. Many of the companies participating in the LNG market sit outside the EU's jurisdiction and can trade using any kind of pricing mechanism that they prefer, and compelling companies within the EU to use a new LNG index would likely require legislative intervention.¹²
- Additionally, if volumes under long-term contracts are excluded to avoid the above difficulties, the LNG index would only affect a smaller share of traded volumes, thus reducing the benefit of this measure to consumers.

¹² European LNG indexes already exist, but they are not commonly used, because traders prefer to use indexes which are established (e.g. most long-term contracts are indexed to Henry Hub, oil or JKM), as they are more fungible, allow for hedging, etc. Very few companies actually participate in this market compared to the TTF, and the size of even an individual cargo is a high barrier to entry that would keep most firms out of the market, not to mention the complexity of a global marketplace.

4. ESTABLISH A SINGLE BUYER TO PROCURE GAS ON BEHALF OF ALL EUROPEAN BUYERS

DESCRIPTION

The European Commission would set up a new entity with powers to procure gas (inc. LNG) on behalf of all EU Member States and utilities, at lower prices than currently available, but high enough to attract LNG cargoes. Such a model would require legislative intervention to compel companies to purchase volumes through the single buyer, as the voluntary platform established by the European Commission this year has so far not succeeded in bringing a critical mass of buyers on board.

As per a framework suggested by the Centre for Economic Policy Research¹³, such a 'buyers' cartel' could be set up in the following way. The cartel would purchase gas for its clients (public and private companies) according to pre-specified demand bids for specific time intervals (e.g. monthly). The maximum price at which the cartel can purchase gas is determined by national 'voting' in which Member States' votes are weighted by the amount of gas they purchase through the cartel. The cartel then sets up a daily 'market' price at which it delivers gas to its clients. The model could be tested in advance of the Summer 2023 gas storage filling season, to avoid risks associated with security of supply and allocation amongst users during Winter 2023/24.

Ensures security of gas supply

- There is a risk that the single buyer will not be able to secure enough volumes to satisfy demand, since the single buyer will need to assess the level of demand across Europe and as there will be fewer incentives for buyers to conserve gas demand.
- Stringent restrictions on the maximum price at which the cartel can buy gas may be uncompetitive with prices offered by competing regions, leaving the cartel unable to purchase sufficient supply unless the price at which it can secure gas is uncapped.
- If the proposal is to be used as a test model during the Summer 2023 gas storage filling season, it can contribute to security of gas supply during Winter 2023/24. For example, auctions could be run in several rounds with successively higher cut off/maximum prices.

Reduction in consumer bills

- This proposal would potentially enable European buyers to procure gas - in aggregate - at a lower cost than is currently the case, as competition between European Member States bidding up the gas price is removed. This however may give rise to an allocation issue (refer to following criterion).
- It is not clear that centralising buying power will have a significant effect on prices, as Europe will still need to compete with and outbid other regions for supply. The current price premium held by TTF is not only due to scarcity pricing amongst buyers, but also due to a lack of regasification capacity in North-West Europe. As more regasification capacity comes online, the TTF price will converge to what is needed to secure gas ahead of Asian buyers, e.g. at JKM, in any case.
- While this proposal can place downwards pressure on prices as gas storages are filled, scarcity bidding by buyers upon withdrawal could push prices up again and erode benefits to end

¹³ Cramton, Peter, Axel Ockenfels, and Steven Stoft, "An EU gas-purchasing cartel framework", (May 2020)

consumers. Further regulatory intervention would likely be required to address these second-order consequences.¹⁴



Enables efficient allocation of gas

- A single buyer model is premised on the ability of the cartel to secure the volumes of gas that national buyers have requested. However, in the current environment of scarce LNG supply globally, there is the risk that the single buyer cannot secure enough supply to meet demand, which necessitates a mechanism to efficiently allocate gas among competing buyers. This in turn introduces the issue of which consumers should have priority over others, which is politically challenging to address.
- Establishing a single buyer, which does not have the means to assess demand on a real-time basis, also limits the ability of participating firms to adjust their purchases in reaction to short-term market changes. For example, a given utility may not have enough gas to meet its needs in the event of unexpectedly high demand or may have too much gas for its needs if demand is unexpectedly low.
- These risks could be mitigated if the single buyer model is targeted at filling up gas storages during Summer 2023, since it will not impact supply-demand dynamics during the peak gas consumption season in Winter 2023/24.



Low fiscal burden

- This proposal does not entail substantial costs beyond what is needed to set up the single buyer entity.
- Given the entity will be purchasing significant volumes of gas on the market, it would likely require some form of capitalization/guarantees to manage the sellers' or exchanges' counterparty risks. These would need to be funded up front, potentially through fiscal measures.



Ease of implementation

- A single buyer entity would need to be incorporated as a separate legal entity and be subject to robust governance arrangements involving all European Member States. For this reason, it would take a matter of months, if not longer, to work through and manage allocation issues among buyers in different Member States. The number of diverse political views on the current range of options at the European level suggests adopting this model may just 'kick the can down the road'.
- Changing the counterparty for sellers under existing long-term contracts would likely cause buyers to breach the terms of the contracts and give rise to substantial legal risks, which will be borne by buyers. Moreover, it may give sellers grounds to terminate existing long-term contracts, so it is likely such a cap could only apply in relation to volumes procured under new LTCs or volumes purchased on the spot market.

¹⁴ For example, if price caps are implemented on storage withdrawals, a mechanism would be required to manage any allocation-related risks that arise as demand outstrips supply. Consideration should also be given to avoid the owners of gas storage facilities capturing the benefits of the proposal through arbitrage.

5. THE IBERIAN MODEL: CAP THE PRICE OF GAS USED IN POWER GENERATION

DESCRIPTION

Cap the price of gas used in power generation. Gas plant owners still pay the uncapped wholesale price for gas but can only bid into the power market as if their gas would have cost the price set by the cap. Generators then need to be compensated. In Iberia, where this approach has been taken and approved by the European Commission earlier this year, funds to compensate generators are raised via a levy on power consumers and the use of congestion rents. The Commission approved the approach as it “keeps competition distortions to a minimum and avoids possible negative impacts on the functioning of spot and forward electricity markets.”¹⁵

Ensures security of gas supply

- Decreases the price of gas-fired power in Europe, which will likely incentivise exports to countries outside the EU, such as the United Kingdom and Norway. Unless constraints are placed on exports outside the EU, this potentially encourages higher use of gas in the power sector.
- Additionally, a price cap that causes the short-run price of gas to fall below that of coal will likely drive up gas consumption in Germany, increase German power exports to Poland and reduce coal-fired generation there.
- Although not directly related to gas savings, by bringing down the marginal cost of power, this measure will dampen the price signal needed to encourage saving power.

Reduction in consumer bills

- The cost of gas for power generation falls, which in turn reduces power prices, as gas is often the price-setting technology in many European power markets.
- Does not reduce the price of gas available for other economic sectors. If anything, this will lead to an increase in overall gas demand and therefore price. This may be a good measure for countries that can import more gas, like Spain, but could exacerbate the scarcity issue in markets that cannot (e.g., Germany or the Netherlands).

Enables efficient allocation of gas

- As per above, a cap on the price of gas for power generation potentially encourages higher use of gas in the power sector, which would adversely distort the allocation of gas to other economic sectors.
- Inefficient use of scarce gas in a highly interconnected European power market, e.g., German gas plants will likely replace coal in Eastern Europe where gas would not have been an alternative, this was also the case with limited interconnection in Spain.

Low fiscal burden

- Still introduces a wide gap between the price needed to pay to acquire supply and what consumers pay. If the difference is funded through a new levy or taxation, as is done in Iberia, this offsets the price-saving impact of the measure. Otherwise, the funds would need to be raised at either Member State or EU level.

¹⁵ European Commission, “State aid: Commission approves Spanish and Portuguese measure to lower electricity prices amid energy crisis”, (8 June 2022)



Ease of implementation

- Unlike options which interfere with wholesale gas market indices, this option does not raise any legal issues regarding long-term contracts, as subsidies would be provided to gas consumers (gas power plants) outside of existing contractual arrangements.
- It is however in direct contradiction with the cap on inframarginal producers in power markets because it will reduce the marginal cost of power in most markets and thus reduce the same revenues that the inframarginal cap is designed to capture.

CONCLUSIONS

All available short-term options to directly intervene in gas wholesale prices (Options #2 to #5) come with significant risk of reducing supply below an economically acceptable level for Member States and difficult allocation issues if price signals are removed.

All measures (Options #1-5) should in any case require the European Union to implement mandatory gas saving measures to mitigate the 'rebound effect' of reducing gas prices and increasing gas consumption. This can be achieved through triggering the 'security of supply' provision in the voluntary gas saving programme that was adopted by the European Council earlier in 2022. Consideration should be given to regularly re-assess the 15% reduction figure to ensure the level of gas savings is sufficient to mitigate this risk.

The most effective option assessed to reduce consumer prices is by raising additional funds to fund direct payments to consumers, combined with raising additional funding to fund block tariffs combined with mandatory savings targets for Member States (Option #1). This would however be extremely costly, and most likely require issuance of joint EU debt in addition to repurposing of unallocated money from the EU recovery fund, which is politically very challenging. This would in turn have a significant fiscal impact which would increase the perception of sovereign risk (as has recently been experienced in the United Kingdom) and so its consequences may therefore potentially not be politically acceptable.

An LNG Index could be developed in parallel (Option #3) but is likely to have limited impact and potentially adverse impacts if it gives sellers with long-term contracts grounds to terminate existing long-term contracts. Furthermore, bidding by buyers within North-West Europe to get gas into the network means that an LNG Index will not necessarily remain priced lower than TTF and may in fact converge to a similar price. Moreover, its longer-term effects will likely be limited as new regasification capacity becomes available in North-West Europe over the next years.

Over the medium-term and even relatively short-term for example as a test case to fill storages before winter 23/24, a central buyer model that covers a large share, but not all European demand may be a feasible option. This is because it takes advantage of using Europe's purchasing power while maintaining some market-based elements. However, it faces considerable governance challenges setting it up and risks breaching long-term contracts, thereby exacerbating security of supply issues.

A straight cap on wholesale prices across Europe (Option #2) doesn't seem to be the best option at this point in time of the political discussion. It creates uncertainty regarding security of supply – either by setting the price too low to attract global LNG supplies, or by increasing incentives to consume gas and thereby inducing supply shortages. For a wholesale price cap to become the preferred option politically challenging questions would need to be resolved first on how to implement a centralised administered allocation of gas amongst consumers and reliable mandatory demand reduction mechanisms to maintain a supply-demand balance, which is challenging to do in the absence of a price signal.

A cap on the price of gas used for power generation (Option #5) only deals with the effect of gas prices on power prices, and therefore does not impact the underlying wholesale gas price. However, it could be brought forward relatively easily. The side effects observed in Iberia are somewhat diminished if it is implemented EU-wide.

In any of the above cases, members states and their buyers can continue to attempt to negotiate price corridors with main suppliers like Norway, the USA, and Algeria.

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