EU Commission proposal for joint gas purchasing, price caps and collective allocation of gas: an assessment
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Executive Summary

The European gas crisis has led to pressure from several EU Member States to put in place wholesale price caps. In October 2022 the EU Commission proposed a series of measures including: a framework for wholesale gas price caps; joint purchasing of gas; calculation of a European LNG price benchmark by the European energy regulator, ACER; and default rules for the collective allocation of gas between Member States in the event of an emergency. The framework for gas price caps was insufficiently detailed for those Member States wanting a price cap so the Commission was pressured to publish more detailed proposals on a wholesale gas price cap in November 2022. There was no final agreement on any of the proposals at the 24 November meeting of energy ministers so discussion will continue at the next meeting on 13 December.

The price cap proposals are set to cap the TTF front month price (M+1) at €275/MWh so long as there is a differential between the TTF spot price and European LNG prices of at least €58/MWh, and if the TTF price were to be above that level for the preceding 10 days. Wholesale price caps will make it more difficult to balance supply and demand until more LNG supply becomes available; will likely benefit richer households more than poor ones; will benefit energy inefficient companies more than efficient ones; may reduce competition within wholesale gas markets making it likely prices will remain higher for longer; and could jeopardise security of supply if less gas flows to the EU, or by harming intra-EU gas flows. Wholesale price caps also increase the likelihood that, and need for, administrative allocation of gas, that is, rationing. The Commission’s November proposals attempt to mitigate, but not entirely prevent, these harms by enabling the suspension of the price cap mechanism if security of supply, financial stability or intra-EU gas flows are adversely impacted. Member States in favour of price caps fear that the November 2022 proposals mean the measure will never be implemented.

The proposals for joint purchasing of gas are impractical and irrelevant given that Europe already has an effective and liquid wholesale market mechanism which aggregates demand and enables market participants to access competitive gas supplies. The requirement for ACER to act as a Price Reporting Agency is bizarre and a misuse of resources as it adds no value to the current market functioning. Default rules on collective allocation of gas are more useful, but the details need refinement.

The time spent on discussing gas price caps and the October and November proposals has a real opportunity cost for European energy markets. The proposals do nothing to solve the fundamental problem underlying price increases, namely the severe curtailment of Russian gas supplies. Time would be better spent on measures which reduce gas demand or supporting those who suffer most from high gas prices. Alternatives to wholesale price caps include targeted cash subsidies to those most affected and least able to cope with the high gas prices; retail price caps for a given volume of gas so that richer households with higher consumption do not benefit more than poorer low consumption households; EU wide financial burden sharing to take account of the disparities in ability to pay high gas prices between wealthier and poorer Member States; capital loans to enable investment in energy efficiency or renewable energy measures over the next year before winter 2023-24; investment in energy storage measures to reduce the need to rely on gas generation to balance electricity markets. All of these measures would be more cost effective, and more consistent with the EU’s long-term net zero goals, than the price cap proposals.

It remains unclear whether all the proposals will be rejected at the December meeting as some Member States have threatened to vote down the whole package if they do not include acceptable price caps. Alternatively, the non-price cap proposals may be accepted without agreement on price caps. The worst outcome for European gas consumers would be if a price cap mechanism was agreed without the Commission’s November proposals’ safeguards or that the price cap is significantly lower than the Commission’s figure.
Introduction

Europe is facing a grave energy crisis caused by the almost total curtailment of Russian pipeline gas supplies. This has resulted in eye-watering increases in gas and electricity prices causing severe economic pain for households and businesses alike. Consequently, the EU Commission and national governments have been developing a variety of policy responses to deal with the crisis. These have the potential to impact fundamentally the way the EU gas market works. To date EU level intervention has been limited in terms of impact on gas markets. The REPowerEU Communication in May 2022\(^1\) was a declaration of intent to eliminate the EU’s reliance on Russian gas completely by 2027 and gave an indication of how this could be achieved. The amendment to the Security of Supply Regulation\(^2\) setting targets for gas storage levels, and the new Regulation on coordinated gas demand-reduction\(^3\) did not fundamentally impact the workings of the EU gas market. Rather the storage targets set an additional requirement on market participants which complements long standing ones protecting vulnerable customers. The gas demand reduction regulation is largely exhortatory with a compulsory backstop, and can be seen as reinforcing the way the market works, that is demand reduction as a response to a massive supply shock. By contrast the new proposals\(^4\) \(^5\) look to change the way that gas supplies are purchased, set the price for what Member States pay to their neighbours when importing gas in an emergency, and impose wholesale price caps.

This paper will assess the EU proposals in terms of their likely effectiveness in helping solve the current crisis. It will look at whether the proposals are workable, whether they address the underlying problem, and their acceptability to different stakeholders, such as governments, market participants and consumers. It will not address issues such as the wider EU gas market design. It is worth noting that the current market framework has been very successful in responding to a massive supply shock. New supplies, mainly LNG, have been attracted from different sources, and gas demand has reduced so that the market has not (yet) faced physical shortages. The situation has been helped by mild weather but at the time of writing wholesale gas prices have fallen significantly since the start of the crisis.\(^6\) This is not the end of the crisis by any means but any proposals to change the way the market works must be assessed to see if they would weaken these market responses. Supply is expected to remain tight, especially for winter 2023-24, which means that prices may well rise again and price volatility is likely to continue. If a price cap makes it more difficult for supply and demand to balance, it could make matters worse.

The momentum for a more interventionist approach is driven by the incredibly high prices seen recently and the impact these are having on all gas consumers. One argument runs that it is a truism that markets always balance supply and demand, but the resulting high prices mean it is vital to look at other ways to set prices. The other argument is that intervention such as price caps may not be ideal but there is not a workable alternative. Both arguments are flawed. The first ignores the fact that not all markets do successfully balance physical supply and demand. Both the California Electricity Crisis of 2000-1\(^7\) and the natural gas shortages in the North and Mid-West US in 1977\(^8\) \(^9\) showed that

\(^1\) European Commission (2022) REPowerEU Plan. 18 May 2022
\(^3\) Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas
\(^4\) EU Commission (2022). Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. 18 October 2022
\(^5\) EU Commission (2022). Establishing a Market Correction Mechanism to protect citizens and the economy against excessively high prices. 22 November 2022
\(^6\) Financial Times. ‘The end of Europe’s energy crisis is in sight.’ 27 October 2022
\(^7\) US Energy Information Administration. ‘Subsequent Events California’s Energy Crisis’ Website accessed 18 November 2022
\(^8\) MacAvoy, P. W. (2000). The Natural Gas Market: Sixty years of regulation and deregulation. Yale University Press. See pages 12 to 16 on Wellhead Price Regulation, which was a form of wholesale price cap
malfunctioning markets do not balance supply and demand. Instead, poorly designed price caps helped create or exacerbate supply shortages. California suffered black outs in 2000 whilst the 1977 crisis caused the closure of schools and industry across several states. Moreover, the argument underestimates the complexity of balancing supply and demand across hundreds of suppliers and millions of consumers, something which the ‘invisible hand’ of a well-functioning market does rather well.

The counterfactual is rationing by allocation which would require judgement as to which consumers can reduce demand at lowest cost to themselves, and then applying such a rationing system across entire economies. Civil servants based in government ministries simply do not have access to the information necessary to make such decisions. As the recent fall in wholesale prices shows, the aggregation of millions of individual decisions via the EU gas market framework is balancing supply and demand effectively, albeit at a much higher price. It is allocation by price which is the real issue. Well designed and functioning markets balance supply and demand based on who can pay. But this may not be in line with society’s wishes or economic need. Using price alone the millionaire will be able to continue to heat his swimming pool but the single parent with three children will not be able to heat her home or cook meals for her children.10

The second argument recognizes that the issue is how to ensure an equitable allocation of scarce gas resources, but wrongly concludes that price caps are the better way to do it. To be credible, this argument requires a better examination of the alternatives, such as the use of targeted subsidies, similar to the way governments supported the economy during the COVID 19 crisis. It is notable that the EU has not done such an analysis, as there is no impact assessment of the current proposals, and nor have the proposals been subject to wider consultation. However, an argument that ‘something must be done’ even if it leads to poorer outcomes is reminiscent of mediaeval doctors using leeches to bleed their feverish patients. At the time both doctors and patients thought it would help, and indeed it may have even brought short term relief. But it did not solve the underlying problem and indeed ultimately weakened the patient further. As this paper shows there are numerous problems with the Commission’s proposals, which treat the symptoms but not the cause of the crisis.

The new EU Commission proposals.

The EU Commission announced its proposals on 18 October, describing them as a means to ‘to address high gas prices in the EU and ensure security of supply this winter.’11 Further pressure from the EU Council led to the Commission publishing a detailed price cap proposal, a ‘market correction mechanism,’ on 22 November 2022.12 This followed many months of wrangling among EU Member States as to how to best deal with the energy crisis. Natural gas supplies from Russia had deliberately not been sanctioned by the EU in response to Russia’s illegal invasion of Ukraine on 24February 2022, just as Russian natural gas supplies had not been sanctioned in 2014 following Russia’s illegal annexation of Crimea. The progressive reduction in Russian gas flows since Q4 2021 meant that wholesale prices had more than doubled by the start of 2022, before spiking to an all-time high in August 2022. Fifteen Member States, including large gas consumers such as France, Italy and Spain, pushed for a gas price cap in September 2022.13 There was resistance from other Member States, notably

10 One of the ironies of a price cap is that it also has the potential to widen the equality gap between the sexes as it will help wealthier Europeans more than poorer ones. Men in the EU tend to be wealthier than women, and more single parent households are headed by women than men.
11 EU Commission Press Release (2022). ‘Commission makes additional proposals to fight high energy prices and ensure security of supply.’ 18 October
Germany and the Netherlands, and the Commission itself was wary of such proposals, pointing out that wholesale price caps could actually harm security of supply. Nonetheless the Commission tabled its formal proposals for a Regulation on 18 October – ‘Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks’ – hereinafter referred to as the October proposals. Criticism by Member States of the lack of detail on the price cap mechanism in the October proposals led to the publication of the proposals for a Regulation ‘Establishing a Market Correction Mechanism to protect citizens and the economy against excessively high prices’ on 22 November – hereinafter referred to as the November proposals.

The Commission was hoping for speedy approval of the measures, saying that price caps could be in place by this winter. EU member states remain bitterly divided on the measures however. In the lead up to the fourth extraordinary meeting of Energy Ministers on 24 November, some described the Commission’s November proposals for a market correction mechanism as a ‘joke’.

The Commission’s October proposals consist of three main elements, not all of which relate to price caps. These are:

- **Joint purchasing of gas**: aggregation of EU gas demand and ‘joint gas purchasing to negotiate better prices and reduce the risk of Member States outbidding each other on the global market.’ This is a development of the voluntary Energy Platform established in April 2022.

- **Price caps and benchmarks**: creating a new LNG pricing benchmark by March 2023; ‘proposing a price correction mechanism to establish a dynamic price limit for transactions on the TTF’; and a ‘temporary collar or band-width to prevent extreme price spikes in derivatives markets’.

- **Collective gas allocation**: default solidarity rules between Member States in the case of supply shortages and a ‘proposal to create a mechanism for gas allocation for Member States affected by a regional or Union gas supply emergency’.

Other measures include rules on LNG terminals’ and storage facilities’ transparency and secondary booking, and on pipeline congestion.

The November proposals included details on the level of the price cap, when it would come into effect and when it would be suspended, and other measures designed to ensure that a price cap did not harm security of gas supply in the EU. It followed the logic of the framework for a price correction mechanism in the October proposals but made the details more explicit.

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15 EU Commission (2022). Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. 18 October
16 EU Commission (2022). Proposal for a COUNCIL REGULATION Establishing a market correction mechanism to protect citizens and the economy against excessively high prices. 22 November
17 Euractiv (2022). ‘Gas price cap ready ‘this winter’ if countries agree, says EU energy chief.’ 28 October
18 Financial Times (2022). “EU gas price cap ‘agreement’ starts unravelling.” 8 November
19 Financial Times (2022). ‘Brussels faces revolt over energy crisis plan unless it revises gas cap. Several EU countries threatern to veto wider package after ‘heated’ emergency meeting.’ 24 November
20 EU Commission Press Release (2022). ‘Commission makes additional proposals to fight high energy prices and ensure security of supply.’ 18 October
21 EU Energy Platform. Website accessed 18 November 2022
22 EU Commission Press Release (2022). ‘Commission makes additional proposals to fight high energy prices and ensure security of supply.’ 18 October
There was no agreement on the price cap at the 24 November meeting, so the Czech Presidency proposed stripping out the clauses relating to price caps in the October proposals in order that agreement could be reached on the other measures such as LNG benchmarks and joint purchasing of gas. According to the Council press release it ‘agrees on substance of new measures on joint purchases of gas and a solidarity mechanism.’ However, a number of Member States are threatening to veto the whole package. Further discussion will now be held at the next extraordinary energy council meeting on 13 December. It is therefore not clear if there will be agreement on any measures, on a comprehensive package including a price cap, or just on the non-price cap measures.

**Joint purchasing of gas**

This is covered in Chapter II Better Coordination of Gas Purchases - Section 1 Coordination of gas purchase in the Union, and Section 2 ‘Joint tenders and demand aggregation’, Articles 1 to 11 inclusive of the October proposals.

There are two parts to the process – demand aggregation which is compulsory and joint purchasing which is voluntary.

As a first step companies which intend to buy or trade gas above a volume of 5 TWh (approximately 0.45 Bcm) are required to inform the European Commission of their intention to sign either a Memorandum of Understanding (MoU) or a gas supply contract, at least six weeks before they sign the agreement. The companies must tell the Commission the identity of the contract partners, the dates for the contract and the volumes. If the Commission believes that such a contract will have a negative impact on the functioning of joint purchasing, the internal gas market or on security of supply, the Commission may recommend that the relevant Member State takes steps to prevent a negative impact.

To facilitate demand aggregation and joint purchasing, the Commission will establish an ad hoc Steering Board within six weeks of the Regulation coming into force. Each Member State will have one representative, with one from the Commission who will also chair the Board. The Board will decide its own rules by qualified majority. Representatives of the Energy Community Contracting Parties may participate ‘on all matters of mutual importance.’ The Board helps the Commission assess the impact of gas supply contracts and MoUs notified to the Commission, as well as any joint purchasing.

The main task of aggregating demand will be contracted to a service provider by the Commission via a public procurement procedure. It is the Commission which determines the contract with the service provider including key issues such as currencies to be used, payment terms and liabilities in any joint purchasing. The selection criteria include experience in running tendering or auction processes for gas.

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25 Financial Times (2022). ‘Brussels faces revolt over energy crisis plan unless it revises gas cap. Several EU countries threaten to veto wider package after ‘heated’ emergency meeting.’ 24 November
26 EU Commission (2022). Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. 18 October
27 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Article 3. Transparency and information exchange
28 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Article 4. Ad hoc Steering Board
29 A qualified majority is reached if two conditions are simultaneously met: 55% of member states vote in favour - in practice this means 15 out of 27; and the proposal is supported by member states representing at least 65% of the total EU population. [https://www.consilium.europa.eu/en/council-eu/voting-system/qualified-majority/](https://www.consilium.europa.eu/en/council-eu/voting-system/qualified-majority/)
30 Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Georgia, Moldova, Montenegro, Serbia and Ukraine. [https://www.energy-community.org/aboutus/whoweare.html](https://www.energy-community.org/aboutus/whoweare.html)
31 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Article 5. Temporary service contract with a service provider.
natural gas across different geographies and time periods, for associated services such as transportation, and in developing IT tools to ‘aggregate demand from multiple participants’ and matching it with supply.\(^{32}\)

The service provider itself cannot be part of a ‘vertical integrated undertaking active in the production or supply of natural gas’ within the EU or Energy Community.\(^{33}\) It cannot be owned or controlled by anyone subject to sanctions imposed as a result of Russia’s invasion of Ukraine, by anyone acting on behalf of the Russian government or anyone based in Russia. The service provider also cannot make any funds or economic resources available to anyone subject to sanctions imposed as a result of Russia’s invasion of Ukraine, to anyone acting on behalf of the Russian government or anyone in Russia.\(^{34}\)

The service provider will ‘aggregate the demand of natural gas undertakings and undertakings consuming gas’ using a ‘Joint Purchasing IT tool’.\(^{35}\) It will then ‘seek offers from natural gas suppliers or producers to match the aggregated demand’\(^{36}\) using the Joint Purchasing IT Tool. It will also ‘allocate access rights to supply’.\(^{37}\) Gas supplies from Russia entering via defined list of entry points are excluded,\(^{38}\) as are supplies associated with companies under sanction or which are connected to the Russian government or based in Russia.\(^{39}\)

Participation in joint purchasing is voluntary. The regulation simply says that gas companies participating in the demand aggregation organized by the service provider ‘may coordinate elements of the conditions of the purchase contract or use joint purchase contracts in order to achieve better conditions with their suppliers, provided they comply with Union law, including Union competition law.’\(^{40}\) However, all natural gas companies in the EU must participate in the demand aggregation process organized by the service provider ‘as one of the possible means to meet the (storage) filling targets’\(^{41}\) in the recently agreed amendment to the security of supply regulation.\(^{42}\) Companies in Member States with underground gas storage have to participate with volumes equivalent to 15 per cent of the gas required to meet the 90 per cent filling target, or 15 per cent of the target relevant for Member States without underground storage.\(^{43}\)

The justification for such an approach has been to make better use of the European’s purchasing power as a major gas importer, and also to prevent EU companies or Member States outbidding each other and thereby driving up the price of gas imports. However, not only is the logic behind the joint purchasing platform flawed, but the mechanism itself is impractical.

**Problems with the joint purchasing proposals**

The most obvious problem is that whilst participation in the demand aggregation mechanism is mandatory, it is only voluntary in terms of joint purchasing. It is therefore not at all clear how much gas,
if any, will be bought via the mechanism. Given the practical difficulties in making such a mechanism work, as discussed below, it is likely that any participation will be minimal. Even if the participation is at the maximum possible prescribed by the demand aggregation – namely 15 per cent of 90 per cent of storage or about 13.5 Bcm\textsuperscript{44} – this is a relatively small volume when compared to either total EU annual gas consumption of over 400 Bcm or the quantity of gas traded on the TTF in a year (approximately 4900 Bcm).\textsuperscript{45} As such, it is hardly likely to have much impact.

Secondly, there are clearly going to be tensions between Member States and the Commission. Energy is an area of shared competence between the Commission and Member States under Article 4 of the Treaty for the Functioning of the European Union.\textsuperscript{46} According to the European Union website: “Shared competence” means that both the EU and its Member States may adopt legally binding acts in the area concerned. However, the Member States can do so only where the EU has not exercised its competence or has explicitly ceased to do so.\textsuperscript{47} This means that energy has always been a sensitive topic where Member States are wary of handing too much power to the Commission. The Commission has tried to take account of this by establishing the ad hoc Steering Board. However, this has a very limited role in the joint purchasing framework as all the decisions in the structure and awarding of the service provider contract are made by the Commission without any further involvement or oversight by Member States (for example via a delegated act). This represents a major power grab by the Commission as terms such as pricing of gas and the allocation of the gas bought under joint purchasing using the service provider are ultimately in the hands of the Commission.

In creating the service provider role, and in particular the Joint Purchasing IT tool, the proposals effectively re-invent the wheel by trying to recreate the functions that the internal wholesale gas market already provides very effectively. It is worth remembering that it is the market which has sourced sufficient new supplies to replace most Russian gas supplies in the past eight months. It is also the wholesale market which has ensured that consumers have also played their part by reducing demand. The Commission’s policy responses have yet to have much concrete effect with the possible exception of the new storage regulations. However, it is difficult to know how much of this has been the result of government targets, and how much the recognition by market players that supply this winter could be very tight as the major source of flexible supply which Europe has relied upon in past winters, Russian gas, will no longer be available. The Commission, under considerable pressure from several Member States, is now proposing to partially replace a market which it has successfully created after 30 years of effort,\textsuperscript{48} with a central planning approach which sets prices administratively, and as a consequence may also have to allocate gas administratively (see below). Although much is made of how the service provider must have experience in tendering for gas supplies, at the end of the day it will be the service provider which determines how much gas will be bought and how it will be allocated. It will also have to decide how much EU companies pay for the gas. For example, it will have to decide who bears the costs for additional flexibility if some of the buyers want it but not others.

\textsuperscript{44} Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. Explanatory Memorandum, page 3.
\textsuperscript{46} Consolidated version of the Treaty on the Functioning of the European Union PART ONE – PRINCIPLES TITLE I - CATEGORIES AND AREAS OF UNION COMPETENCE Article 4
\textsuperscript{47} EU Commission (2016). FAQ EU competences and Commission powers. Website accessed 18 November 2022
\textsuperscript{48} The first directives aimed at establishing a single European market for gas and electricity were passed in 1998 (gas) and 1996 (electricity)
Reinventing the wheel of demand aggregation

The proposals appear to misunderstand what the current EU wholesale gas market is and how it performs. The TTF\(^\text{49}\) is a deep and liquid traded market, consisting of multiple buyers and sellers trading on a number of different platforms including both exchanges and over the counter (OTC). TTF acts as the market benchmark for European gas precisely because so many companies trade so much gas there, and so doing this has the effect of aggregating demand from multiple players, across different geographies and time horizons. This is what the Commission hopes the yet-to-be-developed Joint Purchasing IT Tool will achieve. TTF based trading already effectively represents the purchasing power of the EU (plus the UK which is closely connected) as a major gas consumer. Analysis by the International Energy Agency (IEA),\(^\text{50}\) the Agency for Cooperation of Energy Regulators (ACER)\(^\text{51}\) and the Oxford Institute for Energy Studies,\(^\text{52}\) shows how the European gas market has evolved and has been able to attract cargoes of LNG when LNG prices are less attractive to suppliers elsewhere. The existence of a large market where LNG cargoes can be easily sold without distorting market prices is a major reason for this. All European gas consumers already benefit from this.

One of the rationales for the joint purchasing platform is to ‘help smaller Member States in particular, which are in a less favourable situation as buyers.’\(^\text{53}\) However smaller buyers already benefit from demand aggregation in the current market as the price for gas is based on the overall supply-demand balance, and most gas supply in Europe is now priced with reference to hub traded prices, with TTF far and away the most traded hub. Other hubs tend to price off TTF. The minimum trading and contract sizes available on the exchanges are much smaller than buying LNG cargoes, making it easier for smaller companies to access supplies from a wider range of sources, as well as enabling owners of large cargoes to ‘virtually’ break the cargo into smaller parcels which can be more easily sold using standardised trading contracts. The Commission appears to be trying to recreate the role of current LNG aggregators such as trading houses, oil and gas companies, or European utilities which have signed long term LNG purchase contracts with LNG producers such as Cheniere in the US. The aggregators then sell the LNG into the TTF or bilaterally to customers in Europe, acting in the way that all wholesalers do in any market, namely acting as the buffer between large scale production and end consumer demand.

The proposals exclude companies which are involved in gas production or supply in the EU from being the service provider. Using such a company would give it a huge advantage over its rivals, not least knowing the commercial strategies of its competitors. However, these are precisely the companies which have the expertise which the Commission specifies is required of the service provider. For example, the service provider will need to be expert in transportation services, in order to ensure the

\(^{49}\) The Title Transfer Facility, TTF, is the balancing point in the Netherlands. Under the entry exit system adopted by the EU, all market zones must have a virtual balancing point at which suppliers of gas must ensure their inputs into the network at entry points must balance with the offtakes from the system at exit points. Balancing points are virtual because gas does not flow via a single physical point; instead, the network operators ensure that the physical flows of gas within the network balance supply and demand, whilst the virtual balancing point is an accounting point through which all network users must balance their supplies and offtakes. This enables a liquid traded market as all buyers and sellers are concentrated in ‘hub’. It also means gas trading can be financial without the need for physical settlement. The TTF was established in 2003 as one of the first virtual trading points in the Eurozone, which made it attractive to gas market participants to manage their trading risk as the wider EU gas market liberalized from 2009 onwards. The TTF overtook the National Balancing Point (NBP) in Great Britain, established in 1996, as the most traded hub in 2016. Although the NBP remains an important trading hub, the TTF has become the main reference price for trading in the EU as there is no foreign exchange risk for Eurozone countries.

\(^{50}\) For example, the Gas Market Reports, published annually and quarterly. https://www.iea.org/fuels-and-technologies/gas-monitoring-data


\(^{52}\) See, for example, Patrick Heather’s studies on European gas hubs https://www.oxfordenergy.org/authors/patrick-heather/

\(^{53}\) Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. Explanatory Memorandum page 2.

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gas is moved from where it arrives in Europe to where the buyers want it. Large market participants have their own logistics departments which are responsible for booking and paying for capacity in regas terminals, gas pipelines and gas storage at the lowest cost, for making nominations to the Transmission System Operators and Gas Storage Operators for flows of gas on a daily basis, and ensuring that those nominations match consumers’ demand so that the gas system is in physical balance and that the companies using the gas infrastructure do not face imbalance charges. The service provider will need to master not only the European gas network codes which govern these operations, but all the national rules, as well as have contractual relationships with the various infrastructure operators.

EU gas companies have all the legal, commercial and risk management expertise needed to ensure that their customers’ needs are met. It is not clear how the Joint Purchasing IT Tool or the service provider will deal with issues such as take or pay, ship or pay, liabilities, credit requirements or force majeure, in addition to the very sensitive task of deciding who pays for the gas and who receives gas. The proposed users of the joint purchasing mechanism will all have different risk profiles and appetites, be based in different legal jurisdictions, and have different volume and delivery schedule requirements. It is not credible that the service provider will be able to demonstrate the necessary expertise within the time frame envisaged by the Commission, even if it was allowed access to existing gas companies’ expertise.

**Competition law issues**

Article 11 which allows the gas companies to form a Gas Purchasing Consortium is very unclear on how the gas companies, instead of the service provider, could act as the contracting party. Analysis of EU competition law on joint purchasing agreements is beyond the scope and competence of this paper. The Explanatory Memorandum hints at the potential complexity of the issue by noting that EU Commission Guidelines ‘state that combined market shares below 15 per cent in the purchasing and selling market(s) are indicative of a lack of market power, a combined market share above that threshold in one or both markets does not automatically indicate that the joint purchasing arrangement is likely to give rise to restrictive effects on competition.’ It further notes that ‘A joint purchasing arrangement which does not fall within that safe harbour requires an assessment of its effects on the market, involving factors such as possible countervailing power of strong suppliers and the necessary governance and information-exchange arrangements to ensure continued competition on downstream markets, against the background of the current exceptional market circumstances.’ The Regulation does not grant companies any exemptions from competition law or the need for a competition law assessment. Instead, it assures companies that ‘The Commission stands ready to accompany companies in the design of such a consortium and to rapidly issue a decision.’

Agreeing joint ventures between a number of gas companies is also likely to be time consuming, the urgency of the gas crises notwithstanding. Although the gas companies will have all the experience which the service provider may lack, they will still have to reach an agreement on issues such as commercial liabilities and so on.

**Wholesale gas market price caps**

These are covered in Chapter III – Measures to prevent excessive gas prices and excessive intraday volatility in energy derivative markets of the October proposals in Section 3 on the market correction

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54 See https://www.entsog.eu/network-codes-and-guidelines
55 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Explanatory Memorandum page 12
56 Ibid. Explanatory Memorandum page 12
57 Ibid. Explanatory Memorandum page 13
mechanism. Detailed proposals on the market correction mechanism are in the November proposals.59

There is little detail in the October proposal on how a gas price cap would work. The price cap is called a ‘market correction mechanism’.60 The October proposal would allow the EU Council to implement a ‘temporary mechanism to limit episodes of excessive gas prices’ 61 based on a proposal by the Commission. The price cap would be immediately suspended by the Council if the reasons for it were no longer valid or ‘if unintended market disturbances occur, negatively affecting security of supply and intra-EU flows.’62 The price cap is also only in force as long as the Regulation itself is in force,63 which is only for one year,64 although this can be prolonged following a review before 1 October 2023.65

This lack of detail on the price cap in the October proposals led to the Council requesting the Commission to put forward the November proposals on how the market correction mechanism would work in more detail. At this stage it is uncertain what the final form of any price cap will be. The October proposals provide a framework which can be adapted to a range of price cap mechanisms – it essentially sets out a governing framework. The November proposals set out a price cap which would conform with this framework. However, neither the October proposals framework nor the November proposals mechanism are acceptable to a significant bloc of Member States. The analysis below looks at both the general concept of price caps within the October proposals framework, and the detail of the November proposals. The Commission has tried to put in safeguards in the November proposals which, to some extent, address the problems of a price cap. The analysis below addresses these aspects where relevant.

The main elements of the November proposals are as follows:

- From 1 January 2023 a price cap of €275/MWh will apply to front month TTF derivative orders if
  - the front month TTF derivative price has exceeded €275/MWh for two weeks AND
  - the difference between EEX TTF European Gas Spot Index and the average of the S&P Global Daily Spot Mediterranean Marker and the Daily Spot North-West Europe Marker LNG price assessments is more than €58/MWh.66
- The price cap is deactivated if the difference between the TTF spot price and the average LNG price is no longer met during 10 consecutive trading days.67
- The Commission can suspend the price cap at any time if the price cap negatively impacts security of supply, financial stability or intra-EU gas flows, based on monitoring by the European Securities and Market Authority (ESMA), the European Central Bank (ECB), the Agency for Coordination of Energy Regulators (ACER), or the European Network of Gas Transmission Operators Gas (ENTSOG).58
• Member States are required to notify the Commission of measures they will take to ensure that gas and electricity demand does not increase as a result of the price cap. The Commission can suspend the price cap if the price cap means that gas savings targets are not met or gas consumption increases.69
• The Commission must assess if the price cap takes into account other market prices such as S&P Global’s price assessments for Henry Hub in the US or the Joint Japan Korea Marker (JKM) for LNG in Asia.70
• The Commission must assess if the price cap will affect the validity of existing gas supply contracts, including long-term gas supply contracts.71
• The price cap regulation will apply for one year from its entry into force. The Commission will review the price cap regulation by 1 November 2023 at the latest and may propose that the regulation be prolonged.72

In the October proposals the price cap would apply to transactions at the TTF but there would also be prices at other hubs within the EU that ‘may be linked to the corrected TTF spot price via a dynamic price corridor.’ The proposals then list criteria which the price cap must meet. It is worth quoting these in full.73 The price cap should:

- be without prejudice to over-the-counter gas trades;
- not jeopardise the Union’s security of gas supply;
- depend on progress made in implementing the gas savings target;
- not lead to an overall increase in gas consumption;
- be designed in such a manner that it will not prevent market-based intra-EU flows of gas;
- not affect the stability and orderly functioning of energy derivative markets; and
- take into account the gas market prices in the different organised market places across the Union.

The Commission has concerns about the way the price cap would impact the functioning of the internal gas market, hence the long list of criteria. The Commission has published its concerns in two non-papers which were leaked earlier this year, one on gas price caps in general,74 and one on price caps for gas used in electricity generation.75 Both papers correctly identify several problems with price caps. In the October proposals there is no detail on how such problems would be overcome, or how the criteria would be assessed or by whom. The Commission has tried to address these in the November proposals by making it clear that any adverse impact on security of supply, financial stability or intra-EU gas flows would lead to the suspension of the price cap. There remains significant disagreement between the proponents of a price cap and those, such as the Commission, who are wary of them. Even in the Commission’s November proposals there would be a significant change to how gas markets would work with a variety of consequences both foreseen (supply shortages, the need for allocation by rationing) and unforeseen (the reaction of Europe’s gas suppliers.)

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69 Article 3 (6)
70 Article (2)e
71 Article (2)f
72 Article (6)
73 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Article 23
Wholesale price caps make it more difficult to balance supply and demand

An understanding of how market balance supply and demand, and the problems posed by a price cap appears to be sorely lacking in much of the discussion. The problem with a price cap is that it addresses the symptom – high prices - rather than the cause, the massive supply shock to both the European and global LNG market caused by the reduction in Russian gas flows. A price cap will do nothing to incentivize demand reduction or more supply to rebalance the market. Alternative supplies of LNG to Europe have already been maximised, and a price cap could cause serious harm. Instead, the question of how to react to the gas crisis should be divided into two parts. Firstly, how to ensure that supply is incentivized and that gas supplies are used efficiently (minimising wastage or unnecessary use whenever gas is consumed) and effectively (in those sectors which cannot reduce their gas use below certain levels or cannot switch to alternatives). To date the EU wholesale gas market has done a good job of this, as more supply has been attracted to the market, and demand reduction is in evidence. Some of this is because of innovation and efficiencies in the industrial sector. For example, Saint-Gobain has decided to heat its warehouses less and provide warmer clothing for its staff instead. Renault has opted to lessen the time it keeps paint hot in its paint shop. Some of the change is a result of fuel switching, for example using diesel fired boilers. However some of the demand reduction is as a result of mothballing or closure of energy intensive plant, or reduction in output which is of more concern to the long-term future of European industry.

Analysis by Anouk Honoré (OIES) shows how the impact of high gas prices on industrial output has been mixed. Manufacturing accounts for 90 per cent of industrial gas demand. Overall manufacturing output has been remarkably resilient in the last few months, remaining at about the same level. However, certain energy intensive sectors such as chemicals have been more affected. This shows that some sectors are better able to cope with the high gas prices than others, albeit not cost free.

Figure 1: EU 27 Industrial gas demand and manufacturing output

![Figure 1: EU 27 Industrial gas demand and manufacturing output](Image)

Source: Eurostat, Honoré (OIES)

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76 Begg, D., Fischer, S. and Dornbusch (2005) 'Economics.' McGraw Hill 8th Edition Chapter 3 on demand, supply and the market with a focus on pages 38 to 42. Further analysis of the factors influencing supply and demand decisions can be found in Chapters 4 to 6 inclusive.


78 Financial Times (2022). ‘Will the energy crisis crush European industry?’ 19 October 2022

79 Financial Times (2022). ‘Will the energy crisis crush European industry?’

80 Financial Times (2022). ‘Will the energy crisis crush European industry?’
Thanks to a combination of more supply and active demand reduction, along with a helping hand from much milder weather than normal at this time of year, the TTF front month gas prices have fallen from a high of €339.20/MWh on 26 August 2022 to €114.80 on 8 November 2022. The following chart shows how prices have evolved in $/MMBtu. However there remains the risk that prices could rise again if there is a cold winter or increased competition for LNG supplies from Asian markets.

Figure 2: EU and UK wholesale market prices

The second question the EU needs to decide is how to support gas consumers during the crisis. A less economically harmful way would be to provide subsidies to groups, such as vulnerable or poor households, or industry which risks going out of business before matters return to normal. ACER rated such an approach as the least interventionist and least likely to alter the current market framework when assessing price caps in the electricity market. By contrast it rated price capping as one of the most interventionist. The same logic also applies to gas markets. Whilst subsidies still have the effect of distorting the market by giving subsidised groups more money to buy gas, which has the effect of increasing demand compared to what it would otherwise be, the distortion is limited to those consumers receiving the subsidies. A price cap affects all market participants, suppliers and consumers. By affecting both sides of the equation a price cap inevitably makes it harder to balance supply and demand. It also potentially increases the costs to governments if they have to compensate market players for the difference between the price cap and the ‘real’ market price.


82 ACER’s Final Assessment of the EU Wholesale Electricity Market Design April 2022, Figure 29. Spectrum of possible structural-interventionist measures relevant for the EU electricity market (non-exhaustive) page 54.
For example, the Spanish government has capped the wholesale market price that power generators pay for their gas. Not only has this increased gas demand both in absolute terms and compared to other markets, which will increase gas prices, but the Spanish government must make up the difference between the two prices. Part of the increase in Spanish gas fired generation has been driven by increased exports to France which has suffered from low nuclear and hydro electricity generation. However, the price cap on gas used in Spanish electricity generation has made gas fired Spanish electricity more attractive to French electricity importers. Consequently, the Spanish government is effectively subsidising French electricity consumers. For example, the Spanish government has capped the wholesale market price that power generators pay for their gas. Not only has this increased gas demand both in absolute terms and compared to other markets, which will increase gas prices, but the Spanish government must make up the difference between the two prices. Part of the increase in Spanish gas fired generation has been driven by increased exports to France which has suffered from low nuclear and hydro electricity generation. However, the price cap on gas used in Spanish electricity generation has made gas fired Spanish electricity more attractive to French electricity importers. Consequently, the Spanish government is effectively subsidising French electricity consumers.

**Figure 3: EU 27 and UK gas demand**

The greater the volume of demand which benefits from the price cap, the larger liability faced by governments if they have to compensate suppliers in order to attract gas to the market. Moreover, this liability is leveraged, as the price cap has the effect of increasing demand relative to what it would otherwise be. In the short term, where the ability of producers to supply more gas is constrained because of the time it takes to build new LNG plants, this increases the price at which supply and demand balance, and therefore increases the gap between the price cap and the market price.

**Price caps benefit the wealthier and energy inefficient more**

Ironically a wholesale price cap may harm those most impacted by the current high prices. A price cap applied on a €/MWh basis benefits those who consume more gas, such as rich individuals in large houses with swimming pools, or inefficient factories. As such a price cap is socially regressive by effectively subsidising richer households more than poorer ones in cash terms. Price caps will put pressure on government budgets if governments need to pay external suppliers more than the wholesale price cap to attract more LNG to prevent physical shortages. This, in turn, could put pressure on government social spending which often forms a larger part of poorer households’ incomes. If the result is a reduction in social spending, poorer households may find themselves worse off, even if they benefit from lower energy prices.

In the business sector those companies which have invested in energy efficiency or have switched to renewable energy will benefit less from their investment than they otherwise would compared to their less efficient competitors. The latter are shielded from the normal market price but have also benefitted from not spending on energy efficiency measures. Efficient companies are hence put at a competitive disadvantage compared to their less efficient competitors. A price cap cannot distinguish between those companies which can reduce their gas demand at lower cost, (see the examples quoted above) and those for whom there is little alternative other than reducing output or closing factories. As the current

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83 I am grateful to Dr Anouk Honoré’s research on this point

The contents of this paper are the author’s sole responsibility. They do not necessarily represent the views of the Oxford Institute for Energy Studies or any of its Members.
crisis is caused by a supply shock, and it will take time for more LNG supply to come on stream, the burden will be on demand reduction in the next two years to balance supply and demand. Imagine a scenario where two companies have different costs for reducing gas demand. For Company A the cost of reducing its gas demand is equivalent to €150/MWh; for the Company B the cost is €200/MWh. If the price cap is set at €149/MWh neither company will reduce demand. At a price cap of €160/MWh, Company A will be incentivized to reduce demand – if enough companies are in this position this could help reduce the wholesale market price below the price cap, benefitting both Company A and Company B but still at a level where Company A is incentivized to reduce demand (i.e. above €150/MWh.) The challenge facing those setting the price cap is that they cannot know all the economic variables of the many different companies and cannot therefore deliver energy efficiency savings as effectively as a well-functioning market.

**Challenges of where to set the cap**

There is also the question of where to set the price cap when competing with other countries for LNG supply. The lower it is set, the more distortive the effect, for example by making Europe less attractive to LNG supplies. Europe has benefitted so far from LNG being diverted away from China, South Asia, and Japan, South Korea and Taiwan (JKT).

**Figure 4: Global LNG imports**

![Figure 4: Global LNG imports](image)

Source: Kpler, Fulwood (OIES)

If there is a cold winter in China, as has happened in the past, China’s demand for LNG cargoes could increase. If the price cap is set too low it makes it easy for China to buy at just above the price cap, thereby benefitting from the price cap itself (as effectively Europe declines to compete for LNG supply) whilst at the same time European consumers do not receive the gas. The Commission has tried to address this in the November proposals by setting the condition of a €58/MWh differential between the capped TTF and the price assessment for LNG delivered to North-West Europe or the Mediterranean.
However, as discussed in more detail below in the section on LNG Benchmarks, the trade in LNG in Europe is not very liquid. For this reason, many LNG cargoes are traded with some reference to TTF prices, and in this case the problem will remain if capped TTF prices are insufficient to attract LNG.

Whatever the price cap level, at higher levels it may still be too high for certain consumer groups. For example, a price cap which sets the level at twice the level gas prices were before the crisis will still be unaffordable for low-income households, even if it is much lower than the market-based price. The price cap thereby falls between two stools - neither helping those who need it most, whilst still adversely affecting the market mechanism.

**Price caps may weaken competition and require rationing**

Setting a price cap may also weaken incentives to compete in the wholesale gas market. Utilities may be tempted to simply buy at the price cap rather than shop around for cheaper gas, particularly if they sell gas to their customers on a pass-through basis. A price cap could undermine competition in a similar way to informal price fixing cartels. Price fixing is against EU law as it undermines competition and harms consumers. However, price fixing does not have to be in the form of explicit agreements to set an agreed market price. Instead, tacit collusion relies on an informal understanding that suppliers will sell at a given price, by, for example, following the pricing of a lead company. The Commission states that: ‘All agreements and exchanges of information between you and your competitors that reduce your strategic uncertainty in the market (around your production costs, turnover, capacity, marketing plans, etc.) can be seen as anti-competitive.’\(^{84}\) (Italics added). In this context a price cap would function in the same way as suppliers exchanging information about their proposed selling prices or following the pricing of a lead company. All suppliers would know that the acceptable price in the market was the price cap. In a tight supply market, such as the one that currently exists, there would be no need to sell gas at a lower price as suppliers will know there is plenty of demand at the price cap level. Therefore, it would make sense for suppliers to maximise their profits by selling at the price cap, rather than compete. This paper is not suggesting that suppliers would act illegally, but the price cap would reduce ‘strategic uncertainty’ for suppliers by enabling exchange of pricing information. This could result in gas prices falling less quickly than they otherwise would as additional supplies become available. The Commission explicitly recognises this problem in the November proposals and requires that ‘ACER and competition authorities should observe the gas and energy derivatives markets particularly carefully during the activation of the market correction mechanism.’\(^{85}\) The price cap can be suspended if it ‘prevents market-based intra-EU flows of gas according to ACER monitoring data.’\(^{86}\)

The issue of price caps has been on the agenda for several months and yet the detail of how a price cap would work has yet to be developed, let alone agreed. It is therefore hard to see how a workable mechanism (if one exists) will be in place to make much of a difference this winter. It is also highly likely that the price cap would require the administrative allocation of gas to consumers in parallel to the price cap itself. By definition, demand at the price cap would exceed supply whenever the price cap is below the normal market clearing price. More consumers would be able or willing to pay for gas at the price cap, so governments would have to decide how to share the available gas supply. Governments would face the challenge of designing a rationing system which was politically acceptable and enforceable. The Commission tried to address this issue in the November proposals by requiring the suspension of the price cap if ‘prevents market-based intra-EU flows of gas according to ACER monitoring data.’\(^{87}\) If TTF prices again reach €275/MWh it is an indication that the market is facing severe challenges in

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\(^{84}\) European Commission. *Competition rules in the EU. Illegal contracts and agreements*. Website accessed 18\(^{th}\) November 2022.

\(^{85}\) Proposal for a COUNCIL REGULATION Establishing a market correction mechanism to protect citizens and the economy against excessively high prices. Recital 18.

\(^{86}\) Ibid. Article 5 (2)(c).

\(^{87}\) Ibid. Article 5 (2)(c).
balancing supply and demand, making it all the more likely that some form of rationing would be required or that the price cap would have to be suspended.

**Can a price cap be made to work?**

Revisiting the October’s proposals criteria for a price cap, it is hard to see how a cap could be made to work.

**Be without prejudice to over-the-counter gas trades.** If only the TTF front month derivative exchange traded price is capped, the obvious solution will be for trade to migrate to the over the counter (OTC) part of the market or bilateral contracts, especially if suppliers or consumers offering gas back to the market are willing to sell at non capped OTC prices. Essentially this text creates the equivalent of a ‘black market’ if it encourages trading simply to move to OTC markets or bilateral trades, which in turn will undermine the price cap on the TTF at exchanges.

**Not jeopardise the Union’s security of gas supply.** Depending on the level of the price cap it could reduce either supply or demand reduction at the margin, thereby jeopardising security of supply. As noted above, some form of rationing is likely also to be required in parallel to a price cap.

**Depend on progress made in implementing the gas savings target.** Several countries have introduced measures to reduce gas demand, for example setting heating and cooling temperature limits in public buildings (Spain) or banning heating of municipal swimming pools (Germany). Such administrative measures are important but would need to be increased considerably if price incentives to reduce demand were blunted by a price cap. It is impossible for civil servants to implement realistic energy savings across all sectors of the economy as they cannot know the marginal cost of reduction for different consumers. A functioning price mechanism is a much more efficient way of doing this, as it enables every participant to make a judgment based on their own economics.

**Not lead to an overall increase in gas consumption.** The Spanish example quoted above shows that this is a real risk.

**Be designed in such a manner that it will not prevent market-based intra-EU flows of gas.** The current gas market is explicitly designed so that gas flows from low prices to high price areas as price is used as the indicator of where gas is needed the most. For example, discounts between the landed LNG price at Europe’s regas terminals and TTF indicates that the overall European market needs more gas but there is insufficient infrastructure to move LNG from where it is received to where it is needed. In the case of a TTF only price cap, local market shortages in different national markets will show up as higher prices at the local hub. Local hub prices will increase until supply and demand balance both in the relevant local market and across all the other local markets. In this case the TTF price cap becomes less relevant, but gas will continue to flow to where it is needed (or valued most). Alternatively, some form of linkage between the TTF and local hubs will prevent this mechanism from working so the decision on intra-EU gas flows will have to be taken on an administrative basis. EU Commission officials will in effect decide which market receives what quantity of gas so that overall supply and demand balance in the EU.

**Not affect the stability and orderly functioning of energy derivative markets.** It is hard to see how a price cap will not affect derivative markets. As their name implies derivatives are priced off an underlying commodity, in this case the TTF. Derivative prices and trading are based on expectations of how the TTF price will evolve. Currently this is based on expectations of market fundamentals. The moment the price cap is announced, derivatives will need to be repriced which affects the stability of the energy derivative markets. Those on the wrong side of the equation will
understandably look at every means possible to void the contract, thereby undermining the markets’ orderly functioning as well.

**Take into account the gas market prices in the different organised marketplaces across the Union.** It is not clear what this means. But as explained above, interfering with the TTF price will have knock on effects on the other hub prices as well.

The Commission’s November proposals address the points above in more detail by requiring the Commission to assess the impact of the price cap on the criteria above. However, there is still considerable scope for interpretation by the Commission. This could mean that, in practice, the price cap is rarely, if ever, implemented. Of course, this is one of the major sources of discontent amongst those Member States in favour of a price cap. Although the November proposals aim to reduce the damage that price caps could cause, they do not solve all the problems.

Focus on gas price caps has the unfortunate opportunity cost of preventing time being spent on better alternatives, such as a common EU approach on energy subsidies, along with burden sharing given that some EU member states have much higher GDP per capita than others but gas prices are the same for all. Germany opposes price caps, but also has opposed some form of burden sharing and has been criticised the most for its generous energy subsidy package. The case against price caps is a strong one, but that is not the same as saying nothing must be done to alleviate the burdens on at least some of the EU’s gas consumers.

**Intra-day price caps and floors.**

These are covered in Chapter III – Measures to prevent excessive gas prices and excessive intra-day volatility in energy derivative markets of the October proposals in Section 1 on a temporary intra-day tool to manage excess volatility in energy derivatives markets.

The proposed regulation requires that trading venues have mechanisms in place by 31 January 2023 which set upper and lower price boundaries for intra-day trading of front month energy related commodity derivatives in order to prevent excessive price movements within the trading day – the intra-day volatility management mechanism. The upper and lower price boundaries will be set based on a reference price which will be the opening price at the start of the day, and then updated based on the last observed market price at regular intervals during the day. Price boundaries may be an absolute value or a percentage of the reference price and will be updated at regular intervals during the day. The Commission may impose additional conditions via an implementing act. Under this procedure a committee which contains representatives of EU Member States must be consulted by the Commission. Implementation of the intra-day mechanism will be overseen by national regulators and the European Securities and Markets Authority (ESMA), which will also have a coordinating role.

This proposal may be helpful in addressing some of the problems in the traded markets caused by the very high prices. Energy companies have found it more difficult to hedge their risks as a result of the large price swings in European gas and electricity markets. At the start of the current crisis the European Federation of Energy Traders called for intervention in the form of ‘time-limited emergency liquidity support to ensure that wholesale gas and power markets continued to function.’ The proposal will go

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88 Financial Times (2022). ‘Germany rejects push for fresh EU borrowing to battle energy crisis.’ 30 October
89 EU Commission (2022). Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks 18 October
90 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Article 15. Intra-day volatility management mechanism.
91 Article 15. Intra-day volatility management.
some way to preventing liquidity problems by limiting the size of price swings and hence margin calls. The downside is that such price caps and floors make it more difficult to trade as trades cannot take place outside the cap and floor, and therefore fewer trades take place. In turn this will limit liquidity and efficient price discovery. This could result in trade moving away from the exchanges to the OTC market or even to bilateral trading which is more opaque and favours larger players. 94

However, it will not eliminate all volatility in the market as it only applies to front month trading, as opposed to other traded products – for example, within day, day ahead, balance of month, quarterly and so on. It is also possible that local balancing markets could see large price swings at times of distress (e.g. physical gas shortages). It is not clear why the Commission proposals focussed only on front month intra-day trading. More in-depth analysis of the problems the Commission is trying to solve would be helpful. Moreover, it is not clear if it would be desirable to extend any price caps and floors to shorter term trading as these prices act as very useful ‘canaries in the coal mine’ indicating potential physical shortages which market participants can address either by increasing supply or reducing demand. Market based balancing is a key foundation of the current architecture of the gas market and careful thought would be required before changing how this worked.

**LNG price benchmarks**

These are covered in Chapter III – Measures to prevent excessive gas prices and excessive intra-day volatility in energy derivative markets of the October proposals in Section 2 on Tasking ACER to collect and publish objective price data.95

The Commission is concerned that currently the price of LNG imports into the EU is too influenced by hub indexed pricing which in turn is ‘highly influenced by pipeline supplies and therefore by the Russian manipulation of natural gas supplies to the EU, as well as by existing infrastructure bottlenecks.96 In order ‘to provide for stable and predictable pricing for LNG imports’, the Commission is proposing that ACER develops both an LNG price assessment and an LNG benchmark which will ‘will provide more comprehensive information to buyers and increase price transparency.’97 ACER is required to publish a daily LNG price assessment no later than 18.00 CET each day within two weeks of entry into force of the regulation.98 By 31 March 2023 it must publish a daily LNG benchmark, to be published no later than 19.00 CET each day.99 The LNG benchmark is defined as ‘the determination of a spread between the daily LNG price assessment and the daily settlement price for the TTF Gas Futures front-month contract that ICE makes available to everyone as an end of day report free of cost on its website.100

Market participants will have to provide ACER with the following information:101

- the parties to the contract, including buy/sell indicator;
- the reporting party;
- the transaction price;

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94 I am grateful to Patrick Heather for explaining this point
95 EU Commission (2022). Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. 18 October
96 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. Explanatory Memorandum page 8
97 Explanatory Memorandum page 8.
98 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. Article 18 Tasks and powers of ACER to carry out price assessments and benchmarks and Article 19 LNG price assessments and benchmark.
99 Ibid.
100 Ibid. Article 2. Definitions.
The contract quantities;  
the value of the contract;  
the arrival window for the LNG cargo;  
the terms of delivery;  
the delivery points;  
the timestamp information on all of the following:  
  o the time of placing the bid or offer;  
  o the transaction time;  
  o the time of reporting of the bid, offer or transaction;  
  o the receipt of LNG market data by ACER.

The Commission may use an implementing act on the times by when information has to be submitted to ACER, and ACER itself may issue guidance on the type of information required and how it is to be submitted.  

Problems with LNG benchmark proposals

The proposals for an LNG benchmark assessed by ACER are bizarre. Not only do they require ACER to be something it is not, namely a Price Reporting Agency, but they also represent a fundamental misunderstanding of the way the global LNG and European traded gas markets work. As such they are at best irrelevant, and at worst a major distraction from ACER's core tasks. ACER itself has said that the task will be demanding and that it was not given any additional resources to do the work.  

However, the Commission estimates that ACER will need an additional headcount of five employees at a cost of €785,000 per year.

The October proposals claim that ‘The EU’s LNG market is still emerging, and hub indexed pricing remains highly influenced by pipeline supplies and therefore by the Russian manipulation of natural gas supplies to the EU, as well as by existing infrastructure bottlenecks.’ It is not clear if the Commission really believes its analysis given its long history of trying to establish a single European gas market, or it is simply repeating what less well-informed proponents of the idea believe. Judging by the accompanying text to the November proposals, it would appear that the Commission’s energy experts do have a sound understanding of the way gas markets work. The text correctly explains the different elements of price formation in the EU, and that infrastructure bottlenecks within the EU are leading to differentials between LNG market prices and the TTF. (It also costs money to regasify LNG prior to injection into the grid, and there may be port and offloading fees.) But the text then wrongly concludes that these differentials are a sign that the TTF does not properly reflect market prices.

There are several problems with October’s proposals for a European LNG benchmark. Firstly, it regards the EU LNG and pipeline gas markets as separate. This is wrong. Pipeline gas and LNG are simply two different means of delivering gas into the European network. Once in the network the gas molecules are indistinguishable and gas of either pipeline or LNG origin is completely fungible and substitutable. The EU’s approach is clearly wrong considering that Algeria, Norway and Russia deliver gas into the EU market by both LNG and pipeline. Under the Commission’s logic the gas would be priced differently

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102 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Article 20. Provision of LNG market data to ACER  
103 Financial Times (2022), ‘Task to build new EU gas benchmark will be ‘demanding’, admits regulator’, 31 October 2022  
104 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, Legislative Financial Statement, Section 3.2.3. Estimated impact on ACER’s human resources. Page 68  
105 Ibid. Explanatory Memorandum page 8  
106 Proposal for a COUNCIL REGULATION Establishing a market correction mechanism to protect citizens and the economy against excessively high prices, Context of the proposal pages 3 to 5
depending on how it is delivered into the market. From both producers’ and consumers’ perspective the only difference is the cost of transporting the gas which impacts the producers’ profitability, and the entry point in the EU single market. The value of gas to end users however is the same whatever its origins as consumers cannot distinguish between LNG or pipeline delivered gas at the burner tip.

Secondly, it is a statement of the blindingly obvious that EU hub index pricing is impacted by pipeline supplies as such gas is a major component of the market. It is not surprising if a major source of supply (Russian pipeline gas) is reduced that TTF prices go up. This does not mean that hub indexed pricing is somehow flawed, but rather that it is reflecting the changing supply demand balance for the European market. The TTF price is set by the marginal supply and demand in the market, that is where the highest price someone is prepared to pay for gas is at a level where demand matches available gas supply. At the moment, gas consumers are prepared to pay very high prices to ensure they have continued supply which is why prices are so much higher than the usual levels at which pipeline gas or LNG is sold into the market. But as demand has reduced due to active demand reduction and mild weather, and supplies of LNG have increased, the price consumers need to pay today have decreased compared to recent peaks, although still much higher than pre-war norms.

Thirdly, it is also entirely to be expected that infrastructure bottlenecks will mean that prices are lower in some areas compared to others. This is an explicit part of the European market design which is designed so that price signals encourage gas to flow from lower priced areas to higher priced areas. It therefore properly reflects the physical reality of the networks. The Commission makes this exact point in the November proposals. The current price differentials are a sign that the market is working, not that the TTF price is flawed. For there to be one single price for all of the EU, gas would need to be able to flow physically to ensure supply and demand balance in all circumstances. This would require sufficient pipeline capacity so that gas could flow from east to west, or west to east, or north to south and south to north to cope with any form of supply disruption.

LNG regas terminals offer greater flexibility and in the last 15 years a number of new LNG import terminals have been added in North-West Europe (UK, Netherlands and France) as well as in Lithuania and Poland. The EU has made great progress in recent years to ensure gas flows more easily within the EU irrespective of its entry point. The Security of Supply Regulation requires that all pipelines between Member States be able to flow gas physically in both directions, and that Member States have sufficient import capacity to cope with disruption of their single biggest source of supply.\(^\text{107}\) Eastern and South-Eastern Europe in particular are much less vulnerable to interruptions of Russian gas supplies via Ukraine than they were in 2009 and 2014.\(^\text{108,109}\) In normal times there is a surplus of capacity both in pipelines within the EU and at certain import points, for example LNG regas terminals.\(^\text{110}\) When sufficient Russian gas is flowing into Germany and Eastern Europe, there is less need for gas to flow from other sources. Even if there is a change in balance between the quantity of Russian gas and other sources, for example more LNG landed in North-West Europe, there is usually sufficient interconnection capacity to ensure that gas flows easily to where it is needed. The combination of more than enough interconnection capacity and sufficient supply from different sources means that price differentials


\(^{108}\) See COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the short-term resilience of the European gas system Preparedness for a possible disruption of supplies from the East during the fall and winter of 2014/2015 for the original stress tests illustrating the vulnerability of the EU to gas supply disruptions.

\(^{109}\) See ENTSOG Security of Supply Simulations which model European supply and demand under a number of supply disruption scenarios. Comparison between the 2014 EU Commission Stress Tests (see Footnote 80) and the Simulations of 2017, 2020 and 2021 show how improved infrastructure has reduced the risk of supply interruptions.

\(^{110}\) ACER Wholesale Gas Market Monitoring Report 2018 Figure 9, for example

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between different points in the system are minimised.\textsuperscript{111} However, current circumstances mean that this situation no longer holds. The disruption of Russian supplies has been of such a scale that there has been a massive reorientation of gas flows within the EU. LNG import terminals have been operating at capacity with ships queuing to offload their cargoes.\textsuperscript{112} Limited interconnection capacity between the LNG import points and the relevant local hub on the one hand, and the rest of the EU on the other hand, means that price differentials have opened up between the local hubs where LNG is delivered, and the TTF, and also between the TTF and local hubs. This is to be expected as prices will be lower in areas where there is plenty of physical supply relative to local demand, and higher where this is not the case.

Figure 2 shows how the TTF was higher than both the reported North-West Europe LNG delivered ex ship price and the NBP price in the UK. But Figure 5 shows that flows to continental Europe from the UK have been maximised since March. The UK is acting as a transit for LNG delivered to its LNG terminals, and then shipped to the Netherlands and Belgium by the BBL and Interconnector pipelines respectively. Only a lack of capacity is stopping greater flows. This is in stark contrast to the previous patterns where the UK has imported gas in the winter months and exported it in the summer months. In other words, prices and flows are acting as is expected.

\textbf{Figure 5: Pipeline gas flows between the UK and the Netherlands and Belgium}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{Pipeline gas flows between the UK and the Netherlands and Belgium}
\end{figure}

Instead, the Commission appears, wrongly, to draw the conclusion that the higher TTF price is making LNG import prices higher than they should be, and hence that there needs to be a separate EU LNG benchmark. This misunderstands the role that the TTF price plays, as well as the fact that price

\textsuperscript{111} ACER Wholesale Gas Market Monitoring Report 2019 Figure 11 and ACER Wholesale Gas Market Monitoring Report 2020 Section 2.1.4. Many of the hubs illustrated in the ACER reports have limited liquidity with trading limited to shorter term balancing. They therefore tend to track the more liquid hubs such as TTF unless there are local circumstances which impact the balance of supply and demand and hence the local hub price.

\textsuperscript{112} Reuters (2022). ‘Dozens of LNG-laden ships queue off Europe’s coasts unable to unload.’ 18 October.
differentials are a reflection of the fundamentals, not a distortion. The TTF represents the supply-demand balance for all of the EU, as it is the benchmark hub where market participants trade to hedge their risks even if the gas they are buying and selling is physically delivered to other markets. It is important to note that TTF has a dual function – the physical balancing hub for the Dutch network, and the benchmark hub for the EU. In its latter function it is more of a financial traded market which buyers and sellers trust as a reliable benchmark because so many market participants trade there, and volumes, churn and liquidity are sufficient for reliable price formation. This has also made it easier for LNG spot cargoes to be sold into the EU market, and for discussion about its suitability as global price benchmark prior to the current crisis.\(^{113}\) \(^{114}\) TTF trades can be settled by the physical delivery of gas on the Dutch network but, in practice, only a very small percentage of trades will be settled this way – for example, if buyer and seller agree that the gas is to be delivered in the Dutch gas network. For most other participants physical gas is delivered at other points in the wider European network. Where necessary market participants will agree premia or discounts to the TTF price to account of the cost of delivering the physical gas to the relevant market.

It is therefore hard to see how the Commission’s proposals will help the situation. A separate LNG benchmark will not alleviate the infrastructure bottlenecks which are causing differentials between prices where LNG is landed and the broader market. Establishing a separate LNG price will not lower TTF or other hub prices as it is not the TTF which is pulling up LNG prices. If the LNG benchmark is taken up by industry players, it will simply divide the market resulting in less liquidity and reliable price formation at the TTF. However, it is unlikely that LNG market participants will prefer the new benchmark as it will be based on a much smaller and less liquid North-West Europe LNG market, making it harder for participants to trade. Traders and analysts argue that the TTF does reflect the true price of gas on the open market. ‘The physical LNG market is extremely illiquid; you’re lucky if there are a handful of trades in a week. By contrast, there are thousands of trades a day in TTF. There’s nothing structural that suggests a new LNG benchmark is cheaper or better to price gas’, according to Neil Fleming, Head of Global Pricing and Analysis at Argus, a leading price reporting agency.\(^{115}\) At best, therefore, the new LNG price assessment and benchmark will be a waste of ACER’s resources, and at worst it will undermine the very benchmark, the TTF, which has enabled the EU to attract LNG to replace Russian gas.

**Solidarity mechanisms - collective allocation of gas.**

This is covered in Chapter IV of the October proposals – Measures for the case of a gas emergency, covering Articles 25 to 32.

The Commission has proposed that normal operation of the gas market would effectively be suspended if a Union wide or regional gas emergency is declared. A price setting and gas allocation mechanism would be put in place if the Council adopts a decision based on a proposal by the Commission with the aim of ensuring that ‘access to available sources of gas is adequately shared between Member States’\(^{116}\). However there are no further details as to how this would work. As such it is not clear what value this adds as the Commission already has the power to propose new legislation whenever it wants.

The proposals do update the existing Security of Supply Regulation’s rules on solidarity amongst Member States in the event of an emergency. These require that Member States supply gas to their...

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\(^{115}\) Financial Times (2022). ‘Task to build new EU gas benchmark will be ‘demanding’, admits regulator’, 31st October

\(^{116}\) Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Article 25. Proposal for an allocation mechanism
neighbours if requested by a Member State unable to supply its customers. A number of the new proposals make sense in an emergency situation.

- Under the current rules, Member States are meant to help other Member States if the latter cannot supply ‘solidarity protected customers’ which essentially means domestic customers. The new proposals now add gas required to generate electricity up to the volumes set out in Annex 1. This reflects the critical role that gas fired generation plays in many Member States’ energy mix.

- The proposals also aim to tighten the rules on demand reduction by ‘protected customers’ which includes small and medium enterprises as well as domestic customers. Member States are empowered to reduce ‘non-essential consumption’ of such customers so long as the proposed Regulation is in force. This ensures gas is being used as efficiently as possible.

- The Commission also strengthens the current rules which prevent ‘undue restrictions of cross-border gas flows or of access to gas infrastructure, or measures endangering gas supply in another Member State.’ The current rules allow Member States to argue against a Commission request to remove undue restrictions. The new proposals simply require the Member States to comply with the rules and give no room for discussion. This reflects the urgency of an emergency, although it does give more power to the Commission, and lessens the room for independent action by the Member States.

- The current solidarity rules only apply to Member States which are directly connected to each other. The new proposals extend this to Member States which have LNG terminals which are not directly connected ‘provided the necessary infrastructure is available to transport the gas to the requesting Member State.’

The Commission has also proposed default rules and procedures for solidarity measures if Member States have not already reached an agreement on how solidarity will work. The Commission found that only 6 out of 40 required agreements were in place, despite the legal obligation that they were agreed by 1 December 2018. The requesting Member State should indicate how much gas it needs, where it should be delivered and when. Responding Member States must say how much gas they will provide and how much of this comes from strategic stocks or demand curtailment in their own market. Most importantly the default rules set out how much the requesting Member State should pay for the gas. This should not exceed ‘reasonable costs’ and should include the price of gas in the

117 Regulation (EU) 2017/1938 Article 13
118 Regulation (EU) 2017/1938 Article 2 and Article 13
119 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Article 27. Extension of solidarity protection to critical gas volumes for electricity security of supply.
120 ANNEX to the Proposal for a Council Regulation Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks, 18 October 2022
121 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Article 28. Demand reduction measures concerning protected customers, 18 October 2022
122 Article 29. Safeguards for cross-border flows.
123 Article 30. Temporary extension of solidarity obligations to Member States with LNG facilities.
124 Article 31 Default rules for solidarity measures.
125 Article 32 Procedure for solidarity measures in the absence of a solidarity agreement.
127 Regulation (EU) 2017/1938 Article 13 (10)
128 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks. Article 32. Procedure for solidarity measures in the absence of a solidarity agreement, 18 October 2022

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Member State supplying the gas, and the costs of transport and storage to the delivery point in the
requesting Member State.\textsuperscript{129} Overall the proposals add clarity to how the solidarity mechanism should
work in the event of an emergency, and therefore make it more likely that the mechanisms will work.

However, unless otherwise agreed, the price of the gas will be based on the ‘average market price in
the providing Member State during the 30 days preceding the request for solidarity; or the corresponding
average market price at the closest accessible exchange virtual trading point, or at an agreed hub over
the last month.’\textsuperscript{130} This is potentially problematic. In the event that a Member State cannot supply its
own solidarity protected customers and therefore has to make a solidarity request, it is likely that the
overall European gas market will be extremely tight. The prices at the different hubs will reflect this.
Much depends on the timing of the emergency – if it occurs suddenly prices in the requesting and
neighbouring Member States would be expected to increase rapidly in the run up to the solidarity
request as gas flows from lower priced areas to higher priced ones. By using a price based on the
previous 30 days, the proposals are effectively creating a subsidy from the responding Member State(s)
to the requesting Member State. The former will have had to pay the higher prices prevailing
immediately before the request to meet their own demand, and after the request to meet the solidarity
request. But the price they will be paid will be lower because it is averaged over the previous 30 days
including periods when there was not an emergency. Such an approach is likely to lead to argument
between Member States.

**Other measures**

The proposals also include measures to ‘enhance the use of LNG terminals and pipelines.’\textsuperscript{131} This is
covered in Chapter II. Section 3. Articles 12 to 14.

**Transparency and secondary booking platforms for LNG terminals and storage facilities**

LNG terminal and storage facility operators will be required to set up secondary booking platforms within
two months of the regulation entering into force.\textsuperscript{132} The booking platforms must be ‘transparent and
non-discriminatory’ and can be on an individual or regional basis. The proposals also include the
establishment of an LNG Transparency Platform and a Storage Transparency Platform within two
months of the entry into force of the regulation.\textsuperscript{133} LNG terminals which have been granted exemptions
from full regulated third-party access (under Articles 22 and 36 of the Second and Third Gas Directives
respectively) will have to publish tariffs within one month of entry into force.\textsuperscript{134}

According to the Commission, these proposals bring forward amendments already proposed in the Gas
Regulation of the Hydrogen and Gas Market Decarbonisation Package proposed in December 2021.
Whilst this is true there is little detail as to why the changes are needed. For example, the Impact
Assessment for the Hydrogen and Gas Decarbonisation Package asserts that ‘Some barriers to access
LNG terminals persist, such as lack of transparency in tariff setting, capacity availability and allocation
procedures’ without explaining what these barriers are.\textsuperscript{135} Moreover the Commission states that the
reasons for the proposals are a means of enabling the import of renewable and low carbon gases. It is,
however, vague as to how this would be achieved, simply stating that ‘Addressing the residual barriers

\textsuperscript{129} Article 31 Default rules for solidarity measures
\textsuperscript{130} Article 31 (3)
\textsuperscript{131} Ibid. Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges
of gas across borders and reliable price benchmarks. Chapter II. Section 3. Articles 12 to 14.
\textsuperscript{132} Ibid. Article 12. Secondary capacity booking platform for LNG and storage facilities users
\textsuperscript{133} Ibid. Article 13. Transparency platform for LNG and storage facilities.
\textsuperscript{134} Ibid. Article 13 (2).
\textsuperscript{135} Commission Staff Working Document. Impact Assessment Report. Part 1. SWD (2021) 455 final. 15\textsuperscript{th} December. Section
2.2.1.5 Page 19.

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regarding access to LNG terminals could open the way to importing renewable and low carbon gases from abroad. Italics added. Whilst improved transparency and ease of capacity trading are generally to be welcomed, it should be noted that both LNG terminals and storage facilities have been subject to transparency and capacity regulation since 2009. LNG terminals which have exemptions are usually subject to bespoke regimes which include measures to ensure that capacity is not hoarded. In the absence of a specifically defined problem, it is hard to assess how much of a difference the proposals will make. Whilst there has been congestion at LNG terminals, this would appear to be because the terminals are operating at full capacity, not as a result of market inefficiencies. But there will be an opportunity cost, namely the time required for facility operators and regulators to develop, implement and oversee the new rules. This at a time when there are plenty of other things to do which may have more of a positive impact on the supply crisis.

**Congestion management procedures on pipelines**

The proposals also contain amendments to congestion management procedures on pipelines within the EU. Transmission System Operators (TSOs) will have to offer ‘underutilized capacity’ which is defined as booked capacity which has been used or offered to other users for less than 80 per cent of the time over the previous 30 days. TSOs will monitor capacity utilization and inform network users when capacity is going to be withdrawn from them and offered for sale in the monthly, daily and within day capacity auctions. The amount of capacity withdrawn and then offered for resale is the difference between the average utilization of the preceding month, and 80 per cent of the firm capacity which has been booked for a duration of longer than one month. So, if a network user has 100 MWh/day of capacity booked, but only uses 70 per cent of it in September, in October the TSO will withdraw 10 MWh of capacity from the network user, leaving it only a total of 90 MWh/day available for use. If the withdrawn capacity is successfully sold in the auctions, it is withdrawn from the original holder who may continue to use it on an interruptible basis.

There are a number of practical problems with this proposal. Firstly, the calculation takes no account of the difference in utilization between months. This variation can be very hard to predict, especially in the so-called shoulder months (e.g. the transition from winter to spring or autumn to winter) when early cold or late cold snaps, or warmer than expected weather for the time of year, can make a big difference to gas flows. Utilities who book capacity on a long-term basis will usually book it to enable them to meet expected gas flows, but the uncertainty of precise flows each month can inevitably lead to more or less utilization than expected. Moreover, using the average utilization for a month which is on average warmer or colder than the following month could mean too much capacity being withdrawn or not enough if following the logic of the proposals.

Secondly, the proposals increase the risk for network users of booking long term capacity. It is not clear how capacity which is withdrawn is paid for, but the network users run the risk of being required to continue to pay for firm capacity which they will only be able to use on an interruptible basis. This will incentivize network users to book less firm capacity at a time when TSOs are already concerned that there has been a decline in long term bookings of capacity, which reduces the certainty of their regulated revenues. This, in turn, can lead to volatile tariffs for network users. Network users may mitigate the risk of capacity withdrawal by offering capacity for sale to other users if they do not need it, as offered capacity does not count towards underutilization. However, it is not clear what the timing of such offers must be. From a network user perspective, the answer is to offer it as late as possible to avoid having insufficient capacity when they need it. This implies a within day or possibly a day ahead offer. This

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136 Ibid.
137 Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Article 14. More effective use of transmission capacities. 18 October 2022
seems to run counter to the Commission’s thinking which is analysing capacity utilization on a monthly basis.

Until the details of this proposal are clarified, the risk remains that either the Commission will want capacity to be offered earlier, thereby undermining the rationale for long term capacity booking, or network users will offer it on a late basis, which questions the utility of the proposals if the Commission is concerned about longer term capacity hoarding. It should be noted that current capacity rules require TSOs to keep offering for sale any un-booked capacity via auctions right up to and including the gas day itself. TSOs can also offer interruptible capacity as soon as all firm capacity is sold out\(^\text{138}\) or oversell firm capacity (oversubscription and buyback),\(^\text{139}\) as well as applying firm day ahead use-it-or-lose-it mechanisms.\(^\text{140}\) Transparency of flows and capacity bookings enable network users to see if there is any spare capacity available, and thereby make best use of the system.

The problems with the proposal stem from the lack of any analysis of any current potential congestion problems. In the Explanatory Memorandum the Commission merely states that the new rules ‘could’ accelerate the marketing of unused long-term capacities.\(^\text{141}\) There is no analysis of pipeline congestion at the moment, although the Commission is understandably concerned that changes in gas flow directions may create problems. Diversification of supply sources away from Russian are changing the gas flow patterns in the EU. Therefore, the routes from LNG terminals to consumption centres may become more relevant than the currently predominant east-west direction of pipeline flows. However, such changes in gas flows may lead to congestion (contractual and physical) of the existing pipelines and the EU LNG terminals.\(^\text{142}\) It is understandable that there may be physical congestion, as discussed above in the section on price caps. Obviously, the only way to solve physical congestion is to build more capacity, and the proposals do not address this point. However, it would be very easy to examine if there is a contractual congestion problem by looking at the physical flows on the system and comparing this to capacity bookings. This information is easily available from the ENTSOG Transparency Platform.\(^\text{143}\)

There also appears to be a misunderstanding of the way the current system of congestion management works. The Commission states that: ‘The existing congestion management measures for pipelines foresee “use-it-or-lose-it” procedures, which take at least six months before they show effect. Moreover, an administratively burdensome procedure to be performed by the National Regulatory Authority in the relevant Member States is necessary.’\(^\text{144}\) This ignores how contractual congestion can be, and usually is, avoided using rolling firm capacity auctions, interruptible capacity, oversubscription and buyback of firm capacity, and firm day ahead use it or lose it. The rules to which the Commission refers\(^\text{145}\) were designed for persistent capacity hoarding over a long period of time, that is, as a long-term backstop. Continuous capacity auctions, oversubscription and buyback, and interruptible capacity were designed to deal with the time frame the Commission appears to have in mind in the current proposals. Capacity hoarding was a potential problem when the Congestion Management Guidelines were first introduced a decade ago as the full effects of the introduction of regulated third party access rules for capacity and


\(^{140}\) Ibid. Section 2.2.3

\(^{141}\) Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Explanatory Memorandum page 5

\(^{142}\) Ibid.

\(^{143}\) ENTSOG Transparency Platform

\(^{144}\) Proposal for a COUNCIL REGULATION Enhancing solidarity through better coordination of gas purchases, exchanges of gas across borders and reliable price benchmarks Explanatory Memorandum page 5

congestion management had not yet been felt. Since then, capacity hoarding has not been an issue as there is little point paying for capacity you do not intend to use if others can use it via one of the different congestion management mechanisms. It is not clear if there is a problem that needs solving, how the proposed remedy would work, or how the proposed remedy would fit with current arrangements.

Conclusions

The European Commission is under intense pressure from the Member States and the MEPs to do something about high gas prices. It is in an unenviable position as any serious analysis of the gas market would show that it is working exactly as would be expected given the massive disruption to supply. It is also very hard to argue that a market is working well and as it was designed to work if the result is suffering for European businesses and consumers. Judging by the various communications and proposals by the Commission, it knows this, but has been pressured to present something that might assuage demand for something to be done, whilst at the same time it has tried to safeguard market functioning. The word is that the proposals have been dictated top down by the Commission President, Ursula van der Leyen with the backing of the EU Council President, Charles Michel. This has failed to satisfy those pushing for a price cap, as they, probably rightly, understand that the intention of the current proposal is for the price cap to be implemented rarely, if ever.

The October and November proposals will do little to ameliorate the current crisis. Proposals on price caps, joint purchasing of gas and LNG benchmarks are irrelevant at best and harmful at worst. Price caps will make it more difficult to balance supply and demand until more LNG supply becomes available; will likely benefit richer households more than poor ones; will benefit energy inefficient companies more than efficient ones; may reduce competition within wholesale gas markets making it likely prices will remain higher for longer; and could jeopardise security of supply if less gas flows to the EU, or by harming intra-EU gas flows. Wholesale price caps also increase the likelihood of and need for administrative allocation of gas, that is, rationing. Proposals to put in place default rules on solidarity between Member States are more useful, although there are problems with some of the detail. Proposals on increased transparency and secondary capacity booking for LNG terminals and storage facilities could be helpful at the margin, but it is not clear there is a pressing problem that needs solving. Proposals on congestion management for pipelines do not seem to take account of the current framework, and could have adverse impacts on capacity booking behaviour, without having a positive impact on gas flows.

The time spent arguing on the October and November proposals has a very real opportunity cost in terms of EU energy policy. The current gas supply crisis could, and should, provide a boost to the EU’s efforts to decarbonize via greater use of renewables, and improved energy efficiency. The Commission has published many increased targets in this regard, for example as part of the REPowerEU Communication. But a lot more work is required to ensure that these targets can be met, in terms of effective market design and financial support for new technologies such as electricity storage. Policy makers’ time would be far better spent on such efforts. Measures which distort the gas market, such as price caps which increase demand and discourage supply, should be avoided. Politicians would be far better advised to spend their time on agreeing how European solidarity could be effectively used to support viable industries at risk of closure whilst gas prices are high in the short term, or vulnerable consumers, in those countries with fewer financial resources. Alternatives to wholesale price caps include targeted cash subsidies to those most affected and least able to cope with the high gas prices; retail price caps for a given volume of gas so that richer households with higher consumption do not benefit more than poorer low consumption households; EU wide financial burden sharing to take account of the disparities in ability to pay high gas prices between wealthier and poorer Member States; capital loans to enable investment in energy efficiency or renewable energy measures over the next
year before winter 2023-24.\textsuperscript{146} Investment in energy storage measures to reduce the need to rely on gas generation to balance electricity markets.\textsuperscript{147} All of these measures would be more cost effective, and more consistent with the EU’s long-term net zero goals than the price cap proposals.

It is not yet clear what the final outcome will be. One scenario is that no agreement can be reached, and both the October and November proposals fail. The only real loss in this case would be the default rules on solidarity mechanisms between Member States, although these require further work. A second scenario is that the October proposals without the price cap are agreed. This would have marginal impact on the gas markets but be mostly irrelevant. The most worrying scenario would be agreement on a price cap without the Commission’s safety mechanisms or at a much lower level as this would trigger the problems outlined in this paper. In this case expect further proposals to try and mitigate the damage. Whatever is agreed, policy makers should bear in mind the words of Edward Whymper, the British mountaineer who was part of the first successful ascent of the Matterhorn. ‘Do nothing in haste; look well to each step; and from the beginning think what may be the end.’\textsuperscript{148}

\textsuperscript{146} For example, replacing old inefficient gas boilers with newer more efficient ones, or investing in either solar thermal or solar PV. However, many households and companies may not have the spare cash to invest in such measures because of the energy crisis – government loans could bridge the gap.

\textsuperscript{147} Utility scale batteries, local batteries, demand response and thermal storage using electricity are all means of balancing intermittent renewable electricity generation with demand and will be increasingly needed as the grid decarbonizes. Investment in such measures now thus represents a no regret measure.

\textsuperscript{148} Whymper, E. (1871). ‘Scrambles amongst the Alps in the Years 1860-69’