

Response on EC consultation on an EU strategy for LNG and Gas Storage

30 September 2015

Question 1: Do you agree with the assessment for the above regions in terms of infrastructure development challenges and needs to allow potential access for all Member States, in particular the most vulnerable ones, to LNG supplies either directly or through neighbouring countries? Do you have any analysis or view on what an optimal level/share of LNG in a region or Member State would be from a diversification / security of supply perspective? Please answer by Member state / region

We agree on the principles, in particular for central-eastern Member States issue as a priority one. Nevertheless we recommend taking into consideration the recent decision of gas suppliers and traders to realize “North Stream 2”. The realisation of this upstream project – transporting gas to the EU-border - and the effects on the security of supply situation should be investigated.

In general it is difficult for end consumers to exercise fact based analyses about all regions. Therefore we are asking the EC to provide cost benefit analyses for all realistic options. The process must be as transparent as possible in order to estimate the cost effects a solution might have.

IFIEC cannot indicate nor estimate what an optimal share of LNG is. As stated before, every region needs a customized solution depending on the critical assets that are available:

- Network Connections to neighbouring countries;
- Storages;
- LNG;
- Demand Side Management potential.

For every region the most cost efficient solution must be found.

Question 2: Do you have any analysis (cost/benefit) that helps identify the most cost-efficient options for demand reduction or infrastructure development and use, either through better interconnections to existing LNG terminals and/or new LNG infrastructure for the most vulnerable Member States? What, in your view, are reasons, circumstances to (dis)favour new LNG investments in new locations as opposed to pipeline investments to connect existing LNG terminals to those new markets?

In general, having an LNG infrastructure provides an ability to switch to a variety of sources where pipeline infrastructure is more fixed. It depends on the access to the different infrastructures for the market players, to what extent the infrastructures can and will contribute to security of supply and efficient costs. In this regard, exempting infrastructure

projects (interconnectors, terminals, storage) form Third Party Access regulation is not a contribution and should be restricted where possible.

The Ministry of Economics and Energy (BMWi) in Germany recently published a study on the costs of strategic storages for security of supply situations¹. The following table shows the costs associated with strategic storages for different scenarios.

	WGV (TWh)	Covered scenarios	Costs/year Mio euros	% price increase residential customer related to gross price Working price 5 ct/kWh)
SR 1	35	30 % filling level + Extreme cold	379	0.6
SR 2	61	30 % filling level + Outage + Extreme cold 30 % filling level + Permanent cold	593	0.9
SR 3	88	Conflict + Extreme cold Conflict + 30 % filling level Outage + 30 % filling level + Permanent cold	814	1.2
SRB	110	Conflict + Extreme cold Conflict + 30 % filling level Outage + 30 % filling level + Permanent cold	1,041	1.5
SR4	183.5	Conflict + Extreme cold Conflict + 30 % filling level Conflict + 30 % filling level + Permanent cold Conflict + 30 % filling level + Extreme cold Conflict + Permanent cold Outage + 30 % filling level + Permanent cold	1,584	2.4

Evaluated costs for strategic storages in Germany (Source: Heiko Lohmann / Energate Gasmarkt)

The main characteristic of strategic storage solutions is that of an 'insurance'. Even without a crisis, costs have to be paid by the end consumers, while at the same time the normal storage market is artificially shrunk.

In the German example above, SR1 represents a small strategic storage solution, with costs of 379 Mio. €/year. In 20 years those costs will add up to 7.580 Mio. €. Assuming that there will be no scenario as assumed, the end user will have paid 7.580 Mio. €. We fear that those costs might also be passed to industrial end consumers, where they are the first ones to be cut off in gas crisis situations and for that reason cannot benefit the strategic storage at all. It gets even worse, when national rules foresee no compensations in case industrial end users have to shut down.

In order to avoid that kind of situations and to move to a more cost effective and market based solution, we are advocating for a European System on Demand Side Management in gas crisis situations:

Description of a possible Demand Side Management System:

¹ <http://www.bmwi.de/DE/Mediathek/publikationen,did=716502.html>

- There should be a yearly request from the national TSOs or a European wide request from ENTSOG to industrial end consumers to present offers - and bids - on their demand side potential;
- Industrial end consumers, who are willing to join on a voluntary basis, can provide offers purely based on working prices;
- After the request, all TSOs have a demand side management list for SoS situations;
- The list is only activated, if the “regular” market fails to supply the required demand. This could e.g. be the case, if the TSO asks for balancing energy, but does not get any offers from the usual market participants;
- The list could be defined as the last market based measure before moving to non-market-based measures;
- The other users who can continue to use gas pay the price the TSO paid for purchasing this balancing energy (so the system still could run under the normal rules of the balancing network code).

Advantages of a Demand Side Management System:

- The regular market is undistorted as long as possible;
- The potential of Demand Side Management becomes visible. This information could also be used in the stress test and may also help to reduce more cost inefficient solutions;
- TSOs know upfront, which consumers can be voluntary switched off;
- In longer crisis situations, demand side management from industrial consumers has the potential to bridge the time gap to the next solution, e.g. LNG to arrive at European terminals;
- The costs only occur in case of a crisis. No crisis, no costs at all. It is the other way around with storage solutions. If there is no crisis the end consumers would still have to pay the insurance fee anyway;
- The administrative costs are negligible;
- Legal security for the TSOs upfront;
- The system is in line with the existing rules of the Network Code on Balancing;
- The system has the potential for voluntary solidarity between Members States.

Evaluations on the demand side potential from industrial end users have shown, that there might be sufficient demand side potential at a price level of approx. 500 €/MWh. For the example from the table above this would mean, that in case of scenario SR1 the costs are 1.267 Mio. €, but just in case SR1 actually occurs. No gas crisis, no costs at all. Assuming that the scenario will occur once every 20 years, the costs for strategic storages would be 7.580 Mio. € compared to 1.267 Mio. € for demand side management measures. Cost parity will be reached, if SR1 occurs 6 times in 20 years or if the working price for demand side management measures is around 3000 €/MWh.

This might not in all situations be the case, however, LNG, storages und measures for demand side management should be benchmarked upfront with regard to cost efficiency. This was also outcome of the 27th Madrid Forum debate on the issue. In the conclusions² the

² <https://ec.europa.eu/energy/sites/ener/files/documents/27th%20MF%20Conclusions%20Final%20Publication.pdf>

following is stated: “Demand side response should get the same attention as one of the cost efficient ways to ensure security of supply.”

Question 3: Do you think, in addition to the already existing TEN-E Regulation, any further EU action is needed in this regard? Do you think the use of LNG gas and existing LNG infrastructure could be improved e.g. by better storage possibilities, better network cooperation of TSOs or other measures? Please give examples

We always promote a stronger cooperation between TSOs. In our view, the Internal Energy Market in natural gas suffers from a lack of transparency, hindering the efficient allocation of resources and risk hedging. Although there have been good achievements in some areas, there are still obstacles which are decelerating the overall process. One main obstacle in this sense is transparency. Six years after the establishment of the European Union's Third Energy Package, key areas of the network operations are still black boxes for end consumers. IFIEC believes that having real transparency in place is a key element to boost market integration and competition in a cost efficient way.

A striking example is the combination of national network development plans and the EU Ten Year Network Development Plan (TYNDP). While network users normally have a good knowledge about their own national network development plan, they do not have a real European overview. National network development plans tend to be written in the domestic language, not in English. The TYNDP does not really close the gap here. It is more a helicopter view, presenting which gas demand in the future is expected to come from which source. Normally, all used projections for the future “promote” a raising gas demand, while the reality checks afterwards prove those projections to be wrong³. Therefore, we strongly promote an increased cooperation between the TSOs and NRAs. The end users need much more transparency on all planned network investments per region and all over Europe and their related costs. This transparency could be provided over the existing ENTSOG Transparency Platform in a detailed and user friendly manner.

Regarding storages, we like to refer to the CEER paper “*CEER Final Vision for Regulatory Arrangements for the Gas Storage Market*”⁴, which addresses in our view the relevant aspects for the storage markets.

Question 4: What in your view explains the low use rates in some regions? Given uncertainties over future gas demand, how would you assess the risk of stranded assets and lock-in effects (and the risk of diverting investments from low carbon technologies such as renewables and delaying a true change in energy systems) and weigh those against risks to gas security and resilience? What options exist in your view to reduce and/or address the risk of stranded assets?

The energy transition is clearly and definitely going forward in Europe. Renewables and energy efficiency measures will continue to increase in a short period of time. Already, gas

³ <http://www.e3g.org/news/media-room/europes-declining-gas-demand>

⁴ http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Gas/2015/C15-GWG-119-03_CEER%20_Vision%20gas%20storage%20market_25_May_2015.pdf

demand has dropped some 25 percent the past few years to a level of 420-440 bcm/year (EU-28). Taking into consideration that there are some uncertainties with regard to the speed of transition measures, the geopolitical developments (SoS), the economic developments and limited budgets for EU- and MS-investments, again IFIEC insists in recommending and preferring the development of rather efficient flexibility tools downstream over expensive mid- and upstream investments.

Stranded costs of an LNG-terminal are different from regulated pipelines, because LNG-terminals are also used for (even global) portfolio optimization of gas suppliers. Such stranded costs, should not be paid by end consumers, but should be borne by the capacity-owners.

Question 5: The Energy Union commits the EU to meeting ambitious targets on greenhouse gas emissions, renewable energy and energy efficiency, and also to reducing its dependency on imported fossil fuels and hence exposure to price spikes. Moderating energy demand and fuel-switching to low carbon sources such as renewables, particularly in the heating and cooling sector, can be highly cost-effective solutions to such challenges, and ones that Member States will wish to consider carefully alongside decisions on LNG infrastructure. In this context, do you have any evidence on the most cost-efficient balance between these different options in different areas, including over the long term (i.e. up to 2050)?

For IFIEC Europe, energy efficiency and moderating energy demand are cost-effective solutions for the heating and cooling sector as well as for most other industrial activities, and even outside industry. Progress in this field is, however, limited to technological feasibility. In the experience of IFIEC Europe, renewables on the contrary are NOT a cost-efficient alternative for fossil fuels when it comes to reducing carbon emissions in electricity generation. Independent source estimate that a carbon price of [150€/T CO₂, IEA] is required for renewables to become less expensive than fossil fuels in this respect. There are clearly other routes to reduce carbon emissions at a much lower cost. As for energy dependency from fossil fuels, IFIEC Europe recognizes the importance of this issue, and therefore continues to underline the urgent need for Europe to invest in R&D into new energy technologies that are less carbon intensive and at the same time reduce the EU's import dependency.

Question 6: What in your view are the most critical regulatory barriers by Member States to the optimal use of and access to LNG, and what policy options do you see to overcome those barriers? Have you encountered or are you aware of any problems in accessing existing LNG terminal infrastructure, either because of regulatory provisions or as a result of company behaviour? Please describe in detail.

The most important barriers are exempting infrastructure projects (interconnectors, terminals, storage) from Third Party Access regulation, a lack of interconnection capacity and access to that capacity, and market dominance (pivotal supplier or an oligopoly of 2-3 market players).

Question 7: What do you think are the most critical commercial, including territorial restrictions and financial barriers at national and regional level to the optimal use and access to LNG?

Regulating and Competition Authorities should pay particular attention to Third Party Access issues (rights, constraints). There should be a balance between investors warranties (protection) and competitive opportunities for market players and end consumers.

Question 8: More specifically, do you consider that ongoing EU policy initiatives and/or existing legislation can adequately tackle the outstanding issues, or there is more the EU should do?

The existing regulation is sufficient, except from inter-MS enforcement and transparency⁵. Additional intervention may lead to market distortions.

Question 9: How do you see worldwide LNG markets evolving over the next decade and what effects do you expect this to have on EU gas markets? Do you expect a shift away from oil-indexed LNG contracts, and if so under what conditions?

Concerning the indexation of LNG gas prices in the future, we still expect a shift away from oil-indexed LNG contracts, at least partially replaced by gas major hubs prices (mixed or not).

Question 10: What problems if any do you see with the functioning of the international LNG market, particularly at times of stress? Are there specific actions the EU should take, in dialogue with our international partners, including in trade negotiations, to improve its functioning and/or to make the EU market more attractive as a destination for LNG? Could voluntary demand aggregation be helpful in some way?

At times of stress, a full access to a multiple number of sources is crucial. Voluntary demand aggregation is possible even today within the framework of existing regulation. Any solution must be in line with EU competition and the WTO rules.

Question 11: What technological developments do you anticipate over the medium term in the field of LNG and how do you see the market for LNG in transport developing? Is there a need for additional EU action in this area to reduce barriers to uptake, for example on technology or standards, including for quality and safety?

⁵ http://www.ifieceurope.org/fileadmin/Downloads/Gas/20150810_IE_Response_Development_of_NC_and_Guidelines_2016.pdf

For end consumers of natural gas, the receiving gas quality is a very important aspect with regard to safety, economic use (costs) and environmental aspects (CO₂, NO_x). Gas quality standards are being established as the EU is about to receive multiple sourced LNG. The prolonged work of EASEE-gas must now come to a conclusion.

Question 12: Do you think there are any sustainability issues specific to LNG that should be explored as part of this strategy? What would be the environmental costs and benefits of alternative solutions to LNG? Please provide evidence in support your views.

Policy makers still promote natural gas as the preferred hydrocarbon source due to its carbon cleaner status.

Question 13: What opportunities or challenges do the supply projections for different sources, in particular LNG and pipeline gas and low carbon indigenous sources, present for the use of gas storage / for gas storage operators?

With a constant declining gas consumption, we see less need for seasonal storages, which could be seen also at the summer winter spread from the recent years.

A challenge with different LNG-sources is the handling of the different gas qualities.

Question 14: Are, in your view, current market and regulatory conditions adequate to ensure that storages can fully play their role in addressing supply disruptions or other unforeseen events (e.g. extreme cold spells)?

This may differ from country to country, or from region to region. Regarding storages we would like to refer to the CEER paper "*CEER Final Vision for Regulatory Arrangements for the Gas Storage Market*"⁶, which addresses in our view the relevant aspects for the storage market.

Question 15: As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?

As a precondition, it must be clear that SoS needs of gas storage must be paid by those customers who will benefit. As far as market based instruments are now concerned, more than ensuring some minimum reserves in gas storage, and considering that LNG availability is uncertain in emergency crisis conditions, we insist again to push to quickly develop gas demand side response as a low-investment, non-regret and efficient market based solution.

⁶ http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Gas/2015/C15-GWG-119-03_CEER%20_Vision%20gas%20storage%20market_25_May_2015.pdf

Question 16: Do you have any analysis or view on what an optimal level/share of storage in a Member State or region would be? What kind of initiatives, if any, do you consider necessary in terms of infrastructure development in relation to storage?

The optimal situation is where the Member State and its region have the fullest analytical and practical understanding of the optimal level/share of storage needed in order to comply with SoS requirements and efficient market prices.

Question 17: Do you think, in addition to the existing TEN-E Regulation, any further EU action is needed in this regard?

We would support to strengthen ACER by adding more legislative and enforcement powers when it comes to cross boarder issues. Additionally, an accelerated implementation of the 3rd Energy Package is still needed.

Question 18: Given uncertainties over future gas demand, how would you assess the risk of stranded assets (and hence unnecessary costs), lock-in effects, the risk of diverting investments from low carbon technologies such as renewables, delaying a transition in energy systems and how would you and weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

Short term and long term supply-demand balance for natural gas is very well understood by market participants. IFIEC is not in the position to evaluate the risk for such stranded assets. Concerning current stranded assets discussions, industrial end consumers are not willing to pay for transport tariff exemptions for storage users. Investors in storages and storage capacity must bear the risk as they also profit from the rewards.

Question 19: What do you think are the most critical regulatory barriers to the optimal use of storage in a regional setting?

An optimal use of storage requires full implementation of the 3rd Energy Regulation Package, realizing non-discriminatory third party access on a level playing field, preventing hoarding.

Question 20: Do you think ongoing initiatives and existing legislation can tackle the remaining outstanding issues or is there more the EU could do? Do initiatives need to include additional issues further to the ones described here?

Clearly no, as we detailed previously:

- Increase transparency;
- Increase powers to ACER;
- Speed up implementation 3rd energy package.

Question 21: Do you consider EU-level rules necessary to define specific tariff regimes for storage only or should such assessment be made rather on a national level in view of available measures able to meet the objective of secure gas supply?

We oppose cross subsidization of storages by industrial consumers. Member States will seek best practice with regard to secure gas supply. In this respect, established national regimes should be shared and interlinked with the neighbouring Member States, ACER and the EC for compatibility with the *acquis communautaire*. If additional rules are necessary, they should be developed at EU-level.

Question 22: Have you ever encountered, or are you aware of, difficulties in accessing storage facilities? Has this concerned off-site or on-site storage facilities? Please describe the nature of the difficulties in detail.

IFIEC has no relevant examples available.

Question 23: Have you ever encountered, or are you aware of, difficulties related to feeding LNG gas from the storage site back into the gas network? If so please describe the nature of these difficulties (regulatory provisions, company behaviour, technical problems) in detail.

IFIEC has no relevant examples available.