

30 September 2015

To: DG Energy
From: British Ceramic Confederation

BCC response to DG Energy consultation on an EU strategy for liquefied natural gas and gas storage

The British Ceramic Confederation (BCC) is the trade association for the UK ceramic manufacturing industry, representing the common and collective interests of all sectors of the industry. Its 100 member companies cover the full spectrum of ceramic products and comprise over 90% of the industry's manufacturing capacity.

Membership of the Confederation includes manufacturers from the following industry sectors:

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| ▪ Gift and Tableware | ▪ Floor and Wall Tiles | ▪ Sanitaryware |
| ▪ Bricks | ▪ Clay Roof Tiles | ▪ Clay Pipes |
| ▪ Refractories | ▪ Industrial Ceramics | ▪ Material Suppliers |

The UK sector (including its suppliers) employs approximately 20,000 people and generates £2 billion sales. The sector is an active exporter, particularly for industrial ceramics, refractories, clay drainage pipes, tableware and giftware.

The industry is energy-intensive (but not energy-inefficient): energy bills / taxes can be up to 30-35% of total production costs. The industry as a whole is gas-intensive, with the energy mix being around 85% gas and 15% electricity. Gas is effective for continuous high-temperature firing at >1,000°C. However, about a third of the energy spend is on electricity, and some companies use high temperature electric arc / induction firing for technical ceramics and refractories at temperatures up to 2,750°C. Access to secure and affordable energy is therefore critical to ceramic manufacturers, and businesses are reliant on secure gas supplies in maintaining productivity, business operations and for long term investment certainty.

When gas supplies run short it is the largest "unprotected" users in the UK, such as industrial users, that are disconnected first. As a high temperature, continuous firing process the physical loss of gas or electricity in an unplanned manner (i.e. without several days' notice to allow controlled cooling to take place) can cause severe damage to continuous kilns, their refractories and kiln cars; as well as loss of product being fired and any further production being suspended. This would usually require a factory shutdown for repairs, resulting in €"millions" of losses for large producers. Instantaneous responses to gas shortages by many BCC members cannot take place when supplies are low without damage to plant, risking jobs and business viability.

Threats of supply shortages also cause high price volatility, making business models uncertain and undermining investment in business operations. The UK has one of lowest gas storage capacities in Europe (just 14 days' usage, compared with 77 days in Germany and 91 days in France); as a result the UK experiences some of the most volatile gas prices in the EU. Actual supply disruption can cause immediate threats to the survival of businesses operating continuous, high temperature manufacturing processes (e.g. brick and roof tile production) and in March 2013 one of BCC's member companies was forced to temporarily shut down and lay off staff because they could not manufacture economically during this period of sustained high prices.

Even with a long term goal for transition to a low-carbon economy, gas will remain a strategic fuel for the ceramic sector. Gas storage therefore plays an integral role in providing security of supply, buffering against supply shortages, minimising price volatility and the threats posed to unprotected industrial users such as our members.

Against this background, for the specific questions you raise, we respond as follows:

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

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?

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

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?

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)?

Question 6: What in your view are the most critical regulatory barriers by Member State 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.

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?

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?

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?

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?

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?

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.

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?

Gas storage has an increasing role to play in managing supply / demand balance. UK gas security is set to decrease over the next number of years as indigenous supply diminishes; whilst demand for gas is likely to continue increasing both in the short term (to fill the gaps that will be created by the closure of oil-fired and coal-fired plant) and the long term (balance demands associated with the intermittency of renewable power generation). Cumulatively, this will result in greater peak demand fluctuations. We support the building of more gas storage.

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)?

In the UK, the current market and regulatory conditions are not delivering adequate storage and in practice are even reducing the current very limited storage.

In 2015, a number of ageing UK gas storage facilities have reduced their capacities, resulting in an overall 20% reduction in gas storage capacity for the 2015/16 and 2016/17 winter periods. Such a capacity reduction further increases risks to UK industrial users who are already amongst the most-vulnerable to supply disruptions.

Development of additional UK gas storage is not taking place, with a number of factors affecting investment decisions. Present market conditions have resulted in a lack of differential between summer and winter prices. Additionally, there has been a doubling in business rates imposed on operational gas storage facilities. These factors have significantly impacted the commercial viability of existing gas storage facilities, as well as undermining potential investment cases for further gas storage projects.

Whilst storage investment decisions are being directly affected, the wider indirect implications on unprotected vulnerable industrial users (including increased vulnerability to threat of disconnection, price volatility and uncertainty of investment) need further holistic consideration.

BCC thinks that EU and national regulatory interventions should look to support, rather than deter the development of gas storage projects which are needed to improve the security of gas supply. Such an approach may include requirements for Member States to hold a Public Service Obligation, particularly in those countries with insufficient gas storage capacity (such as we believe is the case for the UK). We are concerned that at times of crisis, gas could simply be transferred from those countries without a Public Service Obligation, potentially exacerbating the problem.

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

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?

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

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 weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

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

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?

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?

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.

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.

Please feel free to contact us if you require any further information.

Yours sincerely

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