TIGF

Our references: TIGF/DDC/TER/2015/117

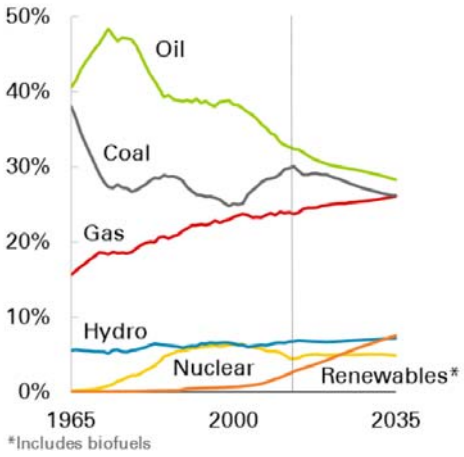
Pau September 30th

Consultation on an EU strategy for liquefied natural gas and gas storage

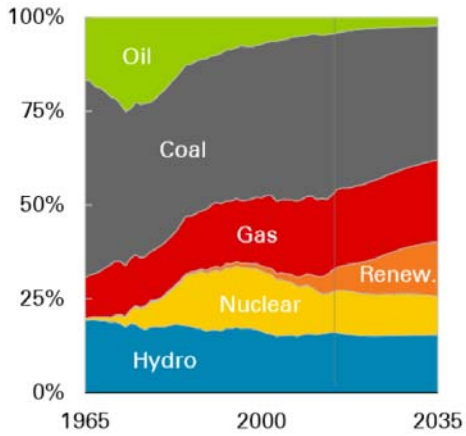
TIGF contribution

***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?*

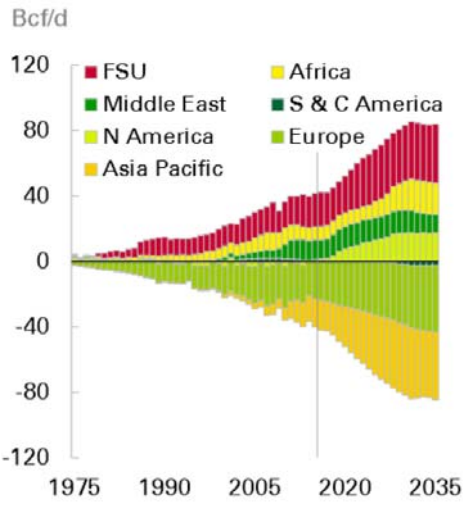
The gas market share among primary energy sources should increase by 1.9% per year by 2035:



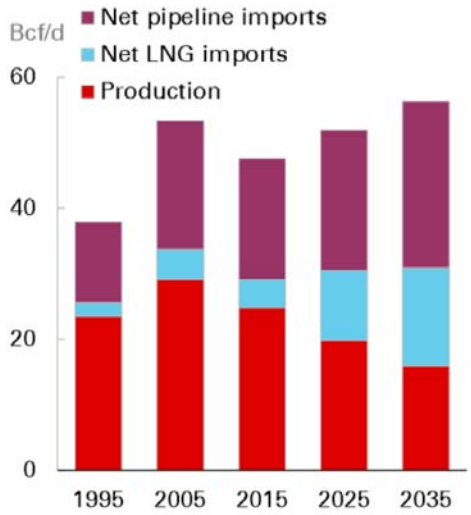
Gas plays an important role in the global electricity production market (about 20%):



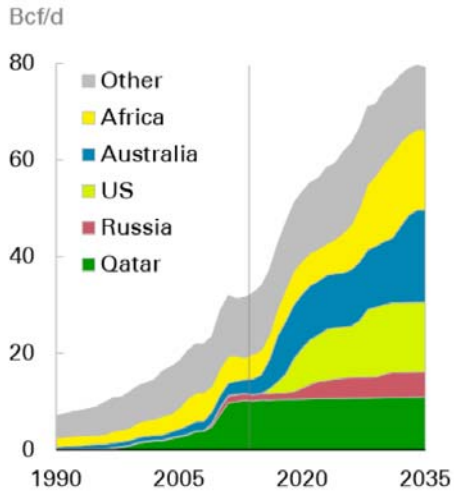
With the fall in local production (2% per year), Europe will have to import even more gas (+20 Bcf/d by 2035):



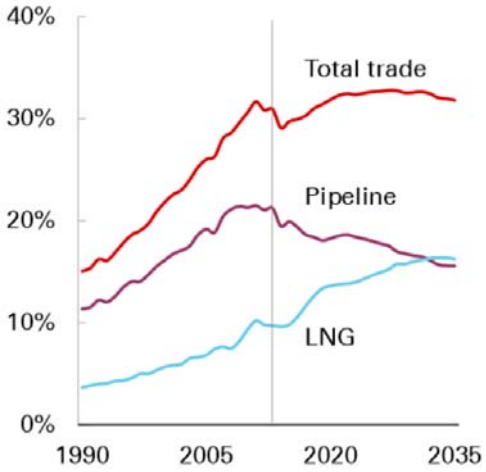
The increase in gas imports to Europe will be mainly driven by LNG (15 Bcf/d by 2035):



LNG-exporting countries with the strongest growth are far away from Europe (Australia, USA, Africa):



International gas flows will mainly become LNG flows by 2035:



- Europe will have to **import more and more gas in the form of LNG** to make up for the fall in its local production
- **LNG flows** are potentially **less regular than flows through pipelines.**
- **LNG-exporting countries** are, by definition, **further away** than the current suppliers

These factors strengthen the leading role that underground gas storage facilities have in terms of security of supply

In addition, the expected resumption of CCGTs, replacing coal-fired power plants, will require significant flexibility that only underground gas storage facilities can bring

Source of graphs: BP's World Energy Outlook 2015.

***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 countries that are far removed from the heart of the European gas transport network, such as France, market conditions no longer guarantee that storage facilities are filled since the Winter-Summer seasonal price spreads fell below storage prices (i.e. since 2010).

In fact, the intrinsic arbitrage value is the only gas storage value that determines customers' subscription strategy. System values (= costs avoided for the transport network) and insurance values (continuity of supply if an exceptional event occurs – loss of supply or exceptional cold spells) are not recognised by the market which prefers to rely on spot purchases when required. These purchases give no guarantee that the gas will arrive the day the exceptional event occurs.

This short-termist view jeopardises the storage industry, and consequently the vital role it plays in security of supply, since if storage facilities are not sufficiently filled, **their performance deteriorates in a potentially irreversible manner**. And if this under-filling is repeated, **storage operators will have to mothball or even shut sites down for economic reasons, which again will have irreversible consequences on their storage capacity.**

To rectify this problematic situation and to guarantee storage facilities are filled, the countries concerned should be able to make use of regulatory instruments:

1. **Introducing a strategic stock** to cover a **geopolitical and/or technical issue**, such as the loss of the main source of supply. Of course, this strategic stock could only be activated by the Administration and would never be accessible by the market. It could help, under the monitoring of the Administration, to safeguard the supply of gas in case of need. This strategic stock, by its very nature, should be controlled and the revenue received via an insurance premium assigned to all consumers. The complete separation of this strategic stock and the capacities proposed to the market would prevent any risks of distortion of competition between controlled and negotiated capacities.

2. **Storage obligations:** In 2013, France observed that shippers' storage subscriptions were insufficient to safeguard the security of the country's supply. To mitigate this risk, a mechanism concerning storage subscription obligations was put in place in 2014. This mechanism seems particularly well suited to the national issue:
    - It has ensured suitable filling of storage facilities and has thereby safeguarded both security of supply with gas available as close as possible to the consumer, and the sustainability of the industrial asset;
    - This mechanism has not in the least impeded the development of other flexibility sources. Reminder:
        - LNG = +930GWh/d of emission capacity over 5 years;
        - interconnections = +160GWh/d input and +130GWh/d output for 5 years;
        - Spot market = significant increase in the quantities delivered to the PEGS, with a level higher than French consumption reached since 2012.

- It has not impeded competition between storage operators, which has encouraged them to develop new more competitive offers;
- In particular, TIGF has significantly expanded its range of storage products (6 offers in 2015, compared to 2 in 2009; offer of increased speed (+35% in 6 years)). TIGF has thereby been able to provide offers in line with market expectations (quick offers)

TIGF would like to highlight the robustness of the French system, which imposes storage obligations on suppliers in return for the right to transparent and non-discriminatory access to storage infrastructure.

When faced with adverse but not exceptional weather conditions, geopolitical events (the supply crisis in Fos during the winter of 2003-2004 following the accident at the liquefaction plant in Skikda, Algeria on 19 January 2004, the crisis during the winter of 2004-2005, Russia-Ukraine crisis combined with a cold snap with peak gas consumption in 2009, an extremely cold spell in 2012 and a long winter in 2013, and new Russia-Ukraine tensions in 2014) or technical issues (restrictions on Interconnector capacities and capacities at various production facilities in the North Sea), storage facilities have provided up to 60% of domestic consumption.

The current regulatory framework has therefore ensured security of supply at national level, but also to our European neighbours, including Spain to whom transit has always been maintained using the gas held in storage facilities.

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

The top priority must be to guarantee that high fill levels are maintained in storage facilities so that they continue to perform well. That would enable storage facilities to play their full part in securing the supply.

The second priority is to preserve storage operators' economic stability so that they can continue investing to improve their tool's performance and provide an innovative business product which fits the market's expectations.

Current market conditions do not satisfy these two key factors for success, in that seasonal price spreads, which are the only real driver of storage subscriptions, are less than the costs of storage.

As has already been shown, the intrinsic arbitrage value is in fact the only value accorded by the market to storage. There are a number of solutions which would ensure storage's other values (system and insurance) are recognised:

- Mandatory reserves;
- Reduced transport prices to the PITS;
- Bigger penalties for imbalances.

Each Member State of the European Union should be left free to choose which solution(s) would be most effective in resolving the problem of securing the national supply. Indeed, each country faces its own particular situation, particularly in terms of infrastructure development within the gas market. We feel therefore that a harmonised solution at the European level would not be suitable.

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?*

There is no single level which would suit all Member States. There is no "one size fits all" solution. Each Member State should conduct its own individual analysis.

The level of storage which would be sufficient to ensure security of supply for a Member State must be assessed by comparing gas consumption (local demand + exports) with gas supply (interconnections, LNG terminals and storage) within that State, based on winter/2% peak demand.

Next, that theoretical level needs to be compared with existing capacity within the Member State:

- If the theoretical level is higher than existing capacity, the Member State must be able to encourage the development of new infrastructure;
- If the theoretical level is lower than existing capacity, excess capacity must be accessible to players in neighbouring markets, to maintain a high fill level in storage facilities and ensure they continue to perform well.

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

The TEN-E Regulation is a key starting point for work to develop a true European energy market which is well interconnected and enjoys greater security of supply.

If that TEN-E Regulation is to realise its full potential, then the European Union must act to ensure that European storage infrastructures continue to play their major role in securing supply:

- By guaranteeing a high fill level of storage facilities at the start of the winter;
- By encouraging the development of their technical performance.

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

Within the context of decarbonising the European energy mix, gas remains a fuel for the future. That should lead the European Union to encourage the development of the gas market and defend optimal use of the existing infrastructure.

As has already been shown, the current market situation does not make it possible to guarantee optimal use of the storage infrastructure across all Member States; it would be best to leave each Member State free to establish a balanced regulatory framework to make the best use of storage over the longer term. **In fact, storage, and more specifically investment in facilities, is a long process and requires a long-term commitment from operators within a sufficiently stable regulatory framework.**

Any definition of storage capacity requirements must be based on a long-term view of the gas market, and consistent with installation development timeframes. To take one example: the latest development of aquifer storage capacity on the Lussagnet site required a 6-year-long administrative order process to obtain permission for an increase in volume. The actual work to increase the volume took a further 11 years. All in all, it therefore took nearly 20 years from the decision to increase the volume to the completion of the work.

Moreover, acceptance constraints – particularly on environmental issues – have become increasingly restrictive, and will do little to encourage the development of new installations in the future. Recent experiences in France (Salins des Landes) and Spain (Castor) provide a good illustration of the development difficulties encountered with an installation of this kind.

Management of an industrial tool of this kind, which is part of a long-term vision for national infrastructure design, cannot therefore be based on short-term, transient events.

Within the context of a highly volatile world gas market, such as we have experienced over recent years (the emergence of shale gas in the United States, the Fukushima accident, the economic crisis, the shutdown of production sites in countries where security has deteriorated etc.), **it would not be in anyone's interest to pursue a reduction in French storage capacity.**

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

The French regulatory framework could be improved on two levels:

- Charges for transport to the PITS could be reduced, or even done away with, to recognise the value of the storage system;
- Operational constraints which hinder the storage capacity trading process (particularly the single date imposed on the two operators for rights trading) restrict the operators' ability to offer innovative products over timeframes which match market expectations.

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?*

The European Union must remain vigilant, ensuring that national initiatives on the regulation of underground natural gas storage activities abide by the fundamental principles of the 994/2010 regulations.

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?*

As we have already said, TIGF recommends that the European Union incorporate elements into its network price code which emphasise the value of the storage system. The price of transport to the PITS should be particularly be dealt with.

But conversely, TIGF feels that storage prices cannot be dealt with at the European level, since the role played by storage in terms of the security of supply will depend on the individual situation within each Member State.

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.*

No comment.

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.*

No comment.