CAN Europe's contribution to the consultation on a EU strategy for liquefied natural gas and gas storage

29 September 2015

- Question 4: 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 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?

The risk of stranded assets and lock-in effects is indeed very high if the potential of renewables, and energy efficiency and savings is not fully taken into account. Indeed, much of the existing gas import infrastructure in the European Union, especially for liquefied natural gas, is currently not being used to its full capacity, and reducing demand and replacing gas with renewable energy sources will greatly lower the need for LNG and gas storage.

Energy efficiency and savings are often underestimated in the projections used for large-scale infrastructure planning such as projections by ENTSO-E and ENTSO-G, and those used for Projects of Common Interest (PCIs) funding allocation. For example, the gas demand projections used by the Commission to allocate funding for gas infrastructure projects under the Connecting Europe Facility are 30% higher than the Commission's reference scenario for gas demand by 2030, and 72% higher than projections if a 30% energy savings target is met[1].

The European Commission's own projections [2] point towards a reduced gas consumption by 2030 (-0.9% a year between 2010 and 2020 and -0.2% a year between 2020 and 2030). In addition, taking full advantage of the cost-effective potential for energy savings would reduce primary energy consumption by 40%[3], thereby further decreasing gas demand.

[1] E3G, 2014, Energy Security and the Connecting Europe Facility, September 2014.
[2] European Commission, 2013, EU Energy, transport and GHG emissions trends to 2050 reference scenario 2013.
[3] Fraunhofer ISI et al, 2014, Study for the European Commission evaluating the current

Furthermore, an unabated use of gas would not enable the European Union to meet its medium and long-term decarbonisation objectives. In order to stop the earth's climate from spinning out of control, most of the world's fossil-fuel reserves – coal and oil, but also gas – must remain in the ground. Cutting greenhouse gas emissions at the scale and speed needed to prevent the worst effects of climate change requires significantly improving energy efficiency and switching to 100% renewables as fast as possible.

Gas can serve as a short- to medium-term "bridging" fuel, until renewable energy becomes more dominant and, eventually, our energy system is fully based on renewables. The role of gas, however, has to be strictly limited so that it will not block the low-carbon transition.

- *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)?*

A cost-optimal approach, as currently investigated by the European Commission in the framework of the upcoming EU Heating and Cooling strategy, has got its merits, but it may not lead to the best choice for the general interest unless the prevailing biased market conditions (e.g. persisting fossil fuel subsidies, lack of carbon pricing in non-ETS sectors, regulated prices, and barriers for new entrants in the heat sector in competition with incumbent utilities) are corrected.

Also, current economic models used for policy-making should be refined so as to fully capture the combined economic potential of energy efficiency, and renewable heating and cooling in the building stock.

Where energy efficiency improvements are shown to be more cost-effective, considering also their role in driving jobs and economic growth, increasing energy security and reducing climate change, these should be prioritised.

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energy efficiency policy framework in the EU and providing orientation on policy options for realising the cost-effective energy efficiency/saving potential until 2020 and beyond.

Research by Fraunhofer ISI has shown that by realising the cost-effective potential for energy savings, final energy demand could be reduced by 38% by 2030 compared to PRIMES 2007 projections[4]. The potential is highest in the buildings sector.

Any cost-optimal approach should also be applied bearing the 2050 horizon in mind, and taking into account lock-in effects of investments outside the 'no-regrets options', i.e. renewables and energy efficiency, but also smarter energy infrastructure.

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[4] Fraunhofer ISI et al (2014) Study for the European Commission evaluating the current energy efficiency policy framework in the EU and providing orientation on policy options for realising the cost-effective energy efficiency/saving potential until 2020 and beyond.