

Warsaw, 12.10.2015

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

### **Executive summary – Polish recommendations for LNG & storage strategy**

#### *Policy recommendations:*

1. An integrated EU energy market requires that all Member States have direct access to LNG supplies from outside of EU. The priority of the EU activity in the development of key pipeline infrastructure projects should be to provide incentives for the development of most effective routes of supplying LNG to the EU Member States.
2. The European Commission should play a facilitating role in establishing instruments such as voluntary demand aggregation. These instruments should improve the bargaining power towards external gas suppliers, both in terms of:
  - obtaining more favorable price of gas through contracting larger quantities thereof, as well as
  - obtaining more flexible supply conditions, including increased volumes or accelerated shipments in the event of disruption of supplies from other sources.
3. All available predictions suggest significant growth of the global market and rapid increase of the LNG volumes available in the years to come. The European Union should support the construction, upgrade and maintenance of new LNG facilities

(especially in Member States/regions suffering from insufficient diversification options), as well as increasing use of the existing ones. That assistance could come in a form of regulatory incentives (ex. enabling entry tariffs discounts) or individually-tailored support schemes helping to cap operational costs/risks of new terminals.

4. Underground gas storages play critical role in Member States' security of supply policies. Member States should maintain the prerogatives of establishing non-market based measures in order to provide the minimum security of physical supplies for at least protected consumers according to their national conditions and minimum level of security of supply.
5. Security of supply requires for the EU to take action on guaranteeing that free cross – border capacities are available on the EU market for the supplies of gas to countries suffering from disturbances in crisis situation. It is important that these actions also ensure that gas can be freely transmitted throughout the EU internal borders if stored outside of disruption zones.
6. The strategy should trigger a discussion on innovative use of LNG, storages and other available tools to:
  - improve resilience of the Member States during potential gas supply disruptions (ex. by increasing the volumes of natural gas available on the EU market through combined use of additional LNG imports, increased volume of stored gas and/or flexible import contracts);
  - Both maximize the benefits from price variations, as well as reduce gas prices and import costs for consumers, through increased competition between different third country's suppliers;

# Polish recommendations for LNG & storage strategy

## Introduction

Poland welcomes and supports the European Commission's initiative towards establishing LNG & storage strategy for the European Union. Gas currently plays a key role in the EU energy system. It will remain a significant energy source on the Europe's path to a low carbon economy in the upcoming decades. The flexibility of LNG deliveries is the answer to possible short-term supply disruptions as well as medium-term decline in the EU indigenous gas production from conventional sources and the global character of LNG market makes it more responsive to trends on the global energy market than the pipeline gas. That is why it is necessary to facilitate the access to LNG in all Member States.

Full implementation of third energy package is a prerequisite of the completion of internal energy market with a coherent LNG strategy supporting market integration. The EU's actions regarding LNG & storage strategy should be focused on identifying and eliminating barriers in two main fields which are inhibiting the development and usage of LNG capacities in Europe:

- Accessibility of LNG to Member States,
- Free flow of LNG within the EU.

The EU solidarity requires that all Member States have access to LNG capacities. An important objective for the EU is to create conditions enabling LNG to be price-competitive with gas imported *via* pipelines. A number of actions could be undertaken on the EU level based on the existing legislation, however a new policy framework for LNG could be developed building on the results of the current review. The external dimension of the energy policy should play a key role in developing the EU LNG policy. The inclusion of LNG – related agenda in the bilateral dialogue with third countries, i.a. existing and new LNG exporters should be a priority for the EU in the upcoming decade.

Finally the LNG supplies will continue to play crucial role in diversifying the energy supplies and increasing the level of energy security in Member States. These supplies need to be integrated into the a comprehensive storage strategy which will take into account the role of

gas storage and non-market SoS measures in Member States still highly vulnerable to supply disruptions.

## **LNG IN THE EU TODAY**

- 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 neighboring 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.**
- 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?**
- 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.**
- 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?**
- 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)?**

Having in mind an advanced process of energy market integration it is necessary to look from the wider perspective on the issues connected with security of supply. The priorities for the development of infrastructure should be established based on both the pan-European and regional analysis. **A solely regional approach may prevent the full integration of the EU energy market and limit the accessibility of LNG for significant West-East flows in the UE.** While the construction of regional infrastructures is on the right track, additional consideration needs to be given to the development of **cross – regional pipelines**. The Central European example shows that the new interconnectors in the BEMIP and North – South corridor will significantly increase the security of supply of Central European Member States. The transmission capacities that would link this part of the EU with the Western European gas hubs are, however, still insufficient. As the EU is to focus on finalizing the construction of necessary gas infrastructure, a coordinated approach toward closer integration with the **Energy Community** countries needs to be worked out as soon as possible.

No simple indicator of the share of LNG on national markets that guarantees security of supply may be established. Instead of seeking for an indicator or aiming at fixed LNG-shares in the markets, the Commission should rather strive to enable all regions/Member States to benefit from the rapidly growing global LNG potentials. Currently, LNG capacities in some regions by far exceed the demand, while in other regions access to LNG imports is largely limited. By its LNG strategy, the EC should try to level-up the chances of the EU regions/Member States to compete for gas on global LNG market. That should entail providing favorable conditions to LNG-projects in the regions with no or limited LNG access (tariff discounts, regulatory incentives, tailor-made support schemes).

**The approach to LNG levels in national energy mixes, especially for the most dependent regions and Member States, should rather be based on the needs of increasing competitiveness on the market and decreasing price for the consumers.** The EU should work closely with Member States in order to strengthen the role of LNG on national markets

in order to provide alternative to the traditional pipeline import, especially in the regions where export of gas from 3<sup>rd</sup> countries is not based solely on market conditions.

The EU should strive for ensuring the 3 source concept, which is a one of the “market health” metric in the new Gas Target Model (GTM). A **strategy that would combine LNG import with pipeline supplies and indigenous gas production would be the most effective tool of creating a flexible and competitive gas market in the EU**. The EU concerted action in support of the construction of efficient infrastructure is a *sine qua non* condition for allowing the Member States to take full stock of this strategy. The **Energy Union governance system** might be the right instrument to monitor the development of this strategy.

Poland encourages the European Commission to prepare an **analysis showing the infrastructural barriers and bottlenecks** which pose an obstacle for the free flow of gas imported to the EU by existing LNG terminals. It should allow to identify the needs for the development of infrastructure both as far as pipelines and storage facilities are concerned. Such an analysis could facilitate the investments decision based on the most cost-effective options.

**The TEN-E program** proved to be a successful tool in designating the priorities of LNG infrastructure development in the EU. The projects which have already been chosen as Projects of Common Interest (PCI) together with the ongoing work on the new lists of PCIs should continue to be endorsed *via* a concerted EU action linking the financial EU support with the simplification of permit granting procedures.

The EU needs an efficient tool of **exchange of information and coordination of both trade and transmission of gas throughout the EU infrastructures**. Improved gas market reporting embracing data aggregation on the regional level that would provide for price and other contractual conditions benchmarks, including on LNG deliveries, would strengthen the EU gas recipients in the negotiations with external gas suppliers and allow to bring LNG prices down or acquire more flexibility in LNG deliveries that could prove vital in case of pipeline gas supplies disruption or unforeseen increase in gas demand i.e. due to severe weather conditions. This effect could be further strengthened *via* a voluntary demand aggregation mechanism where several entities could negotiate greater volumes of gas to be delivered.

The above could constitute a basis for a virtual gas reserve mechanism as presented by Poland in its position for the public consultation on the revision of Regulation 994/2010. Alternative sources of gas available in case of supply disruption, flexibilities of existing contractual conditions allowing for increased or accelerated deliveries, gas reserves available as well as demand management could be identified, quantified and used in a coordinated manner, including *via* SWAP transactions, to increase the EU resilience to gas supply disruptions.

The regional operational centers as proposed in the EC Communication on the Resilient Energy Union from February 2015 allowing for the optimal utilization of available LNG regasification and transmission system capacities could constitute a vital part of the above mechanism.

As EC highlighted in the consultation paper, gas plays a key role in the Member States' energy systems and its importance will not decrease in the foreseeable time horizon as the EU is on the path of energy transition. Moreover the role of gas in the EU energy system could increase i.a. due to the need to support the operation of intermittent RES as a back-up. Also, according to the TYNDP 2015 prepared by ENTSOG, the demand for gas in the EU is supposed to remain stable in the perspective of 2035. The preparations to a transition to a low emission economy in the EU should thus take into account that both gas and other fossil fuels continue to play a significant role in the national energy mixes of the Member States.

## **POTENTIAL ENTRY BARRIERS FOR LNG**

- 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 behavior? Please describe in detail.**
- 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?**
- 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?**

For vulnerable regions which face gas supply problems maintaining instruments aimed at increasing the security of supply even if not market based, is necessary to protect consumers against the results of potential crisis. Their scope should be designed to avoid market distortions as far as possible. Together with the EU support for the development of crucial infrastructure, these measures provide ground for mitigating the impacts of potential energy crisis. It has been observed that practices of both European and third country suppliers, which can use the commercial restrictions, may provide the **limitations of free flow of gas on both the EU borders and intra-EU cross-border connections**. It may also have a negative impact on an optimal use and access to LNG terminals. Poland encourages the EU to take further steps in guaranteeing that **both third country gas suppliers and all the EU based companies fully comply with the relevant energy market legislation and that the abusive clauses are eliminated from all gas agreements, including from commercial contracts, in the spirit of increased transparency**.

Specific energy security conditions may cause problems with the utilization of high cost of some new LNG infrastructures and as a result their competitiveness. In consequence, it may lead to insufficient utilization of regasification capacities in these installations. These circumstances may require specific regulatory treatment in order to allow for effective operation on common EU energy market. **The EU should allow for a differentiated and flexible approach toward coping with the tariff and regulatory challenges within national frameworks**, especially in the regions/Member States with no or limited access to global LNG potentials. These national approaches should aim at limiting operational costs and risks and thus enable certain Member States and regions to compete for LNG imports with other regions, where LNG facilities are mature and well-established, i.a. not burdened with amortization costs.

Another possible barrier for an optimal use of LNG could be the **high cost of transmission system entry**. This barrier could be reduced by provisions of **NC TAR** which is now under development. In the current text (Article 11 of NC TAR<sup>1</sup>) NRA's may apply secondary adjustment while setting tariffs for entry and exit points to storage facilities. This option should be, by analogy, applied also to LNG facilities. Similar challenges of these infrastructures within the national security of supplies systems as well as similar impact on

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<sup>1</sup> Doc. no. TAR0500-15, 31st July 2015



the increased resilience to supply disruptions require that carefully fine-tuned approach should be allowed in the Member States. It is expected from the **EU to facilitate access to information** on the how the LNG terminals operate and are utilized both on the European and global market. That would allow the Member States to take stock of the best practices aimed at increasing the effectiveness of LNG terminals and providing for the optimal arrangements to this difficult global market.

## **INTERNATIONAL LNG MARKETS**

- 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?**
- 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?**

Poland shares most of the of the assessments on the worldwide LNG markets presented by the EC in the consultation paper. The role of LNG deliveries will be increasing in the coming decades and there is still a strong need to improve the liquidity of the LNG market and increase its transparency. This should be done in **cooperation with the main global LNG actors**. The EU has already taken the efforts in providing more transparency of the IGA agreements with the traditional gas suppliers to the EU. However, the same problems on transparency may occur in cooperation with the global LNG suppliers, where **abusive IGA and contract clauses may lead to serious distortions** to the European energy market. The EU should extend its action within the revision of the 994/2010 SoS Regulation and the 994/2012 IGA Decision aimed at **increasing transparency also on the LNG market**.

Poland encourages EC to analyze if there are any **trading or transportation barriers** in the LNG sector on a global scale. If such barriers are identified the EU should take appropriate actions to address them in close cooperation with other international organization such as WTO or Energy Charter. Physical transport of LNG by vessels is also a very important part of whole supply chain which can face some obstacles i.a. safe transport of cargos *via* sea.

Having that in mind the EU should support already existing, global initiatives and projects, including within the international security organisations such as NATO, assuring the safe maritime transport of LNG cargos.

**Voluntary gas demand aggregation mechanism**, including LNG, constitute a good mechanism for strengthening the bargaining power towards external gas suppliers, both in terms of obtaining a more favourable price of gas through contracting larger quantities thereof, as well as obtaining more flexible supply conditions, including in the event of disruption of supplies from alternative sources. This mechanism can be used both in the context of collective negotiations of supply conditions, including where energy entities negotiate with the same supplier, and through the auction platform that would allow for aggregating the demands of numerous entities in a larger package and provide open access of any supplier willing to answer the demand.

The EC should take action on facilitating the deployment of voluntary demand aggregation mechanism within the EU via dedicated guidelines and active coordination.<sup>2</sup>

## **LNG TECHNOLOGY ISSUES INCLUDING LNG USE IN TRANSPORT**

### **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?**

There is a slow increase in use of LNG in transport, both in maritime and road transport. The approach to these sectors should be however differentiated.

The main reasons for using LNG in maritime transport are more stringent emission standards introduced by the EU and the IMO. The Baltic Sea is the Sulphur Oxide Emission Control Area (SECA), where sulfur levels in marine fuel must not exceed 0.1%. The ship-owners can achieve such levels in two ways, either through the use of scrubbers (systems for removal of

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<sup>2</sup> The issue of voluntary gas demand aggregation mechanism, including LNG, was already addressed in the Polish response to the public consultation on the revision of the provisions of the Regulation (EU) No 994/2010 (April 2014).

some particles and/or gases from industrial exhaust streams) or the use of LNG. It seems that LNG fuel will be the new choice of ship-owners and the ports have already begun to prepare for such a change. The main barriers that has been identified by stakeholders (indicated in the document) are being eliminated step by step, however, this is still an ongoing time and funds consuming process.

The question is still open, when it comes to road transport, which fuel will contribute most to the EU climate and energy policies. We should be mindful of the fact that both LNG and other alternative fuels could be used in road transport in the upcoming decades (e.g. dual fuel engines LPG/diesel). The current experience shows that LNG in transport due to technical requirements, including the size and weight of the LNG fueling installations, seems viable only in case of larger vehicles like lorries or buses, while in case of individual transport LPG or CNG is the optimal option. That is why the EU support should remain technology neutral leaving it up to the market to decide on the most economically viable options.

The EU adopted the **2014/94/EU Directive on the deployment of alternative fuels infrastructure**, which requires the Member States to ensure that an appropriate number of LNG refueling points (that meet common standards) is provided for maritime and inland waterway transport and heavy duty vehicles across the TEN-T Core Network. The Member States are still awaiting common technical specifications for refueling points for LNG for inland waterway vessel or sea-going ships and for motor vehicles. The EU should focus now on finalizing the transposition of the Directive 2014/94/EU, to create common technical specifications and to closely monitor the results of these actions.

## **LNG SUSTAINABILITY ISSUES**

**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.**

Gas will play a key role during the transition to a low emission economy in the EU. An unused potential to substitute the crude oil by LNG in the maritime transport sector exists and its activation may give a strong contribution to the fulfillment of the EU's climate and energy

goals. LNG terminals may contribute to the EU climate action by providing new services such as bunkering, reloading on smaller vessels. The EU should support and facilitate the development of new functionalities of the LNG terminals in Europe. The LNG capacities along with the strengthened solidarity and transparency mechanisms will increase the availability of gas on the EU market and if used in an optimal coordinated way could help bring gas prices down, in particular in the regions dominated by a single supplier able to impose high prices of gas supplied. Once gas is abundant, market-priced and supra-national coordination in case of gas supply disruption is implemented on the EU level, the Member States reliant on other fossil fuels like oil or coal will be incentivized to increase the share of gas in their energy mix as part of energy transition to low emission economy.

## STORAGE

- 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?**
- 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)?**
- 15. As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?**

Investment process in storage facilities is a long term commitment for the investor and the operator. The **diminishing price spreads and energy prices** are one of the main challenges for storages/storage operators on the European gas market. The recent developments in this respect on the world and the European energy/gas markets may significantly impact the investment environment in storage infrastructure which, on the other hand, will remain the most critical element of the security of supply system of all Member States. It is thus crucial to provide solutions which will allow for **more investments in storage** and **decrease the operational costs** of already existing infrastructures. Against this background, it is also important to consider this **sector as a critical provider of public services and security measures** as it is the responsibility of the Member States to provide security of supply to the protected consumers. The need for gas to be physically stored in order to provide it to

protected consumers in case of a crisis will also exist in the foreseeable future. Thus, while avoiding market distortions, the **Member States should continue to exercise the right to maintain necessary safeguards in their national legislation, such as mandatory stocks of gas.**

Storing, especially in conjunction with LNG potentials and flexible import contracts *via* pipelines, could provide for increase of natural gas available on the market, which might be of a significant importance should emergency situations occur. This could constitute the basis of the virtual gas reserve provided that cross-border gas flows restrictions are eliminated. Serious consideration should be given on how to coordinate EU actions with the activities aimed at maintaining stability and security of gas supply to the EU and within the Energy Community Member States.

The process of energy transition will result in the increase of gas usage in Europe. The storage sector's role in stabilizing the EU gas system throughout the year will thus be more frequently accompanied by the increased role in the stabilization of electricity system and generation with rising share of RES. The EU should address this issue in its analysis of the future role of storage sector for both gas and electricity markets. Poland encourages the European Commission to prepare a **comprehensive strategy for storage operators across the EU** with the involvement of our partners from the **Energy Community**.

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

19. What do you think are the most critical regulatory barriers to the optimal use of storage in a regional setting?
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?
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?
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.
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 behavior, technical problems) in detail

Gas sector should pursue the optimal balance of sources in order to increase national, regional and European resilience towards crisis situations and partner relations with the external energy suppliers. The **balance between sources** should include domestic production, access to LNG, and pipeline supply, supplemented by demand management mechanisms. For the past years the volume of gas stored in the EU resulted from the market needs and additional legislative obligations imposed on energy companies in individual Member States. As the level of possible disruption of gas supplies differs between the regions, and the need of eliminating market distortion is still present, **Member States should maintain their right to decide on which measures are the most adequate to tackle their security needs.**

One of the unresolved issues, which might be addressed within the upcoming revision of the SoS Regulation, is the safety of storing gas across the internal EU borders. The existing legislation does provide options for utilizing the unused capacities in Member States different to the Member State where gas is physically used. However, the EU legislation should also guarantee that **cross-border transmission capacities are available, especially in case of a crisis, for withdrawal of gas stored in Member States outside of a disruption zone as well**

**as for providing supplies to the protected consumers.** Swift development of missing interconnections within the most vulnerable regions as well as those connecting them with the EU gas market is of key importance here. The possible legislation in this respect should be linked both to the risk assessments and preventive/emergency plans of the Member States and take into account the overall regional and EU perspective, optimally in the framework of the EU-wide SoS planning.

In line with the approach presented on the TEN-E program for the LNG sector, Poland strongly believes that the **current EU legislation on Projects of Common Interest** together with the **Connecting Europe Facility** are the two sound instruments that **allow for real EU support during the full investment cycle in gas storing**. The experiences from the past years on granting the PCI status to storage facilities and the continuous interest of investors taking part in this process, should provide solid ground for maintaining this sector as a **priority of TEN-E legislation**.