

The 2012 Autumn Gas Conference
Czech Gas association
Security of supply and liberalization:
The role of infrastructures
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Mr. Miloslav Zaur, new President of the Czech Gas Association,
Mr. Jan Svetlik, Chairman and CEO of Vitkovice Group,
Mr. Tomas Tichy, first Past President of the Czech Gas Association,
Distinguished Delegates,
Ladies and Gentlement,

I am delighted to be here with you for the 2012 Autumn Gas Conference of the Czech Gas Association, and to convey the message of IGU, in this extraordinary CEZ ARENA, a beautiful and futuristic venue reflecting the image of the Czech gas industry.

Converting a former coal gas plant reservoir into a Palace for Sport and Culture was a daring challenge. Gas, which, as some of you may remember, comes from the old German word *Geist* (or spirit) has without doubt inspired its architect, Vladimir Dedecek, as before him so many famous architects and artists who have contributed to the beauty of Ostrava and Vitkovice.

The goal of this presentation is twofold. I would first like to discuss the effects on the security of supply of the changes that have taken place over the last 15 years on the organization of the EU gas market. I then propose to outline for you the role attributable to infrastructures, namely transcontinental and cross-border pipelines, LNG terminals and underground storages in mitigating the risks in the new liberalized market paradigm.

Everyone knows that Europe is and will be more and more dependent on imports for its supplies: on the basis of the production forecast of its conventional proven gas resources (including Norway), Europe's dependency would rise from 49% in 2011 to 70 % in 2030.

There is no reason to believe that Europe will be short of gas in the medium and long term, if we consider such capital factors on the supply side as the availability of new conventional imported resources and the possible contribution of shale gas. However, another critical factor will be the attractiveness of the EU gas market for producers when they evaluate the economics of new pipeline gas and LNG supply schemes and, more precisely, how they perceive the EU gas market growth in the current and next decades.

Before expanding on this issue, I would like to remind you a few important points about the present situation of the gas market in the EU:

- Over the last 15 years, the diversification of resources has accelerated, mainly through a sharp increase in LNG imports (*Slide 1*);
- The growth of the demand of gas in the EU has stopped in 2005 and no clear signal of improvement of the market has been given to the industry by policy makers at national and EU levels in several years (*Slide 2*);
- Russian gas is important in the EU gas supply balance, but it is no longer dominant : its share in the EU gas imports has decreased from 60 % in 1995 to 34% in 2011. There is presently almost a parity between imports from Russia, Norway and under LNG form (*Slide 3*);
- However, the share of Russian gas remains in excess of 50% in seven EU countries, namely Finland, Slovakia, the Czech Republic, Greece, Hungary, Poland and Austria, which makes it advisable to improve the interconnectivity between the Eastern and Western gas transmission networks (*Slide 4*);
- There is a rather uneven distribution of storage capacities among the EU countries and a number of them stand below the critical Storage/Imports ratio of 25 %, thus implying a risk factor that may be aggravated when such countries are heavily dependent on a dominant supply source (*Slide 5*);

- Disruptions of supplies from Russia, which occurred in 2006 and 2009 have evidenced that we should also take into account the transit risk in Ukraine and Belarus, a risk that might affect more severely the Eastern European countries.

As an overall rating, we should say that although much has already been done by the industry to improve the safety of supply in the EU, in particular with the construction of more than 10 new LNG terminals, progress has still to be made on two essential fronts: firstly, by improving the **diversification of resources** through the development of new pipeline and LNG projects, secondly, by enhancing the fluidity of gas flows inside the EU so as to **mitigate, at a paneuropean level, possible disruptions of a major supply source**. On these two grounds, it means that new investments in infrastructures should be decided by the industry.

There is no doubt that abundant new resources of conventional gas are available at the EU gate. On the top of the list are the reserves of the Caspian area, which offer a high potential, notwithstanding the now prevailing geopolitical situation (*Slide 6*). Such resources, along with shale gas that has still to be consolidated on the technical and environmental sides, are the most credible options to foster the diversification supply pattern of the EU.

However, the development of the Southern corridor (*Slide 7*) is a multi billion Euros project and its financing requires that the main risks, I mean volume and price risks, should be adequately covered through a series of long term commitments between the producers and EU buyers. The same critical risk factors affect other new pipeline or LNG projects that may follow the recent discoveries in the Eastern Mediterranean area and are still at the exploration and appraisal stage.

Concerning the volume risk, it should be stressed that no project can be decided on the mere ground of diversification of supply: the investment decision has to find a stand-alone economic justification implying confidence in the growth of the market.

I am afraid that the present EU energy policy does not grant much visibility to potential investors. Since several months, IGU has been advocating, in particular through the *Gas Naturally* initiative, for the acknowledgement of natural gas as the cornerstone of the energy mix, in particular for complementing renewables that are by nature intermittent.

As a paradox, we observe a slow down in the development of CCGT and cogeneration projects, notwithstanding the obvious merits of the “gas to power” option in economic and environmental terms (*Slide 8*).

Furthermore, coal prices having collapsed on the world market, mainly as a consequence of the development of shale gas in the United States, a series of new coal fired power generation units have been built in the Netherlands and in Germany. These facilities have obviously a negative impact on GHG emissions, which is not sanctioned financially, since the CO₂ market has also collapsed following the economic downturn of 2008. (*Slide 9*).

Altogether, although electricity generation constitutes the main driver of gas demand in the rest of the world, it fails to do so in the EU, a paradoxical situation while the Commission has made of the reduction in GHG emissions the main driver of its medium and long term energy policy.

The price risk is another critical factor for producers supplying Europe, since unlike for the US domestic resources that are close to outlets, the cost of transportation by pipeline or under LNG form over long distances may represent 3 to 4 \$/MM Btu. The profitability of production facilities has to be found on a netback basis, after coverage of such cost. At the same time, the decoupling between oil and prices of gas on market places has lead to renegotiations of the long term contracts, with the inclusion of an increasing share of market prices references in the indexation formulas (*Slide 10*).

IGU is not opposed to market pricing of natural gas and other forms of energy, as long there is political will ensure an arm’s-length competition between gas and other forms of energy, with due consideration to their respective environmental merits. However, it is not yet quite the case presently in the EU.

I now come to the point of mitigating the risks of the gas system among EU Member States .

I believe that a well-functioning European gas market would also increase supply security. The EU gas target model, now at the implementation stage, requires that sufficient interconnecting capacities are available for moving gas flows from one large balancing zone to another, with a view to meeting any important supply disruption, accomodating arbitrages between

regional LNG markets and optimizing access to storage capacities that are unevenly spread across Europe. It is therefore necessary to develop new cross-border and interconnecting capacities between the balancing zones, thus **achieving a paneuropean market for transmission capacity**.

The European gas infrastructures, set up step by step since the 60s, are a strong factor of integration. They have to be looked after, requiring new investments, innovation and completion. The heterogeneous situation of the EU Member States makes solidarity a key issue. With Article 194 of the Lisbon treaty and the gas security regulation, this issue is now part of the EU legal framework. It means investing in reverse flow and creating new interconnecting capacities. It is the prize for security of supply, but the other side of the coin is that it also generates costs, which are incorporated in the regulated transmission tariffs and have to be offset against a growth of volumes of gas sold in the EU.

The UK-continent experience, with the two UK Interconnector lines (20 Bcm/year capacity, in direct and reverse flows) and the BBL line (15 Bcm/year) is a success story that should be replicated, in a different manner but with the same goals, between the Eastern and Western transmission gas networks of Europe (*Slide 11*).

The Czech gas industry could be an important stakeholder in this process, which might also enhance the economic value of its pipeline and storage systems.

To summarize, investments in new infrastructures are still necessary, both to ensure a wider diversification of supplies and to help the countries in Eastern Europe implement the same standards of security as in Western Europe. Financing such investments requires **more visibility on the growth perspective of the gas market**, through the EU energy and regulatory policy

I will go now to the actions undertaken by IGU to foster the development of gas as a destination fuel in the EU for the coming years.

In December 2011, the EU Commission has submitted to the Council and the EU Parliament its vision for the long term under a *Roadmap for a low carbon Economy by 2050*, outlining a strategy to enable and steer the transition. The goal is to reduce by 85% the GHG emissions in 2050 below the 1990 levels. The EU Commission does not set the stage for a common scenario applicable in each Member State, since every country has the right

to adopt its own energy scenario, provided that it achieves the common 85% GHG emissions reduction target.

However, it does not either examine the consequences of the different options in economic terms, in particular on the cost of electricity for the consumers and on the employment level in the EU. These two factors are crucial since it is politically essential to ensure consistency between environmental constraints and industrial competitiveness. What would be, furthermore, the global benefit of a policy that would result in a massive transfer of industrial GHG emissions from the EU to the rest of the world?

The 2012-2015 Triennial Work Programme of IGU aims at supporting the action of the industry in favour of the development of gas and LNG at the global level, towards governments, international institutions, policy makers and opinion leaders, as well as facilitating the corresponding actions of its members in their respective countries.

IGU is therefore urging the EU policy makers to enhance the benefits expected from the *Roadmap 2050* by setting up natural gas at the centre of the process, as a common pathway for achieving EU's goals in the most economic manner.

This could be easily implemented through a series of more prescriptive measures aiming at using natural gas to phase the switch in the energy mix. It would aim at giving a priority to such actions that have the lowest cost in terms of CO₂ reduction per unit of energy used, until that time when CCS will be available at the industrial scale, thus allowing to enter into an almost fully decarbonised economy.

For IGU, the most commendable measures for which we advocate should be, in an order of priority, to:

- Substitute natural gas to coal and fuel oil in existing power plants and ban the construction of new coal fired power unit until CCS technology is available;
- Limit the subsidies to renewables, either through cross tariff transfers or directly to investments, until they prove to be competitive on a stand alone basis;
- Develop CCGT and cogeneration as a back-up to renewables;

- Engage into the development of CNG infrastructures on the main roads of the EU and send signals to consumers and vehicle manufacturers to foster a structural change in transportation fuelling;
- Transfer a part of the subsidies so far allocated to renewables towards R&D in CCS and encourage the development of gathering and storage systems across Europe.

IGU expects that the Czech gas industry will continue to be a supportive partner in this process and I am much grateful to the members of the Czech Gas Association, who are actively contributing to the progress of our working groups.

Once again, I would like to thank the Czech Gas association for having invited me to speak to you this morning and I also take this opportunity to invite all of you to join us for the WGC 2015, which will take place in Paris in June 2015.
