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**THE DEVELOPMENT OF A GLOBAL LNG MARKET:
COMPETITION AND ISSUES REGARDING SECURITY OF SUPPLY
FROM A EUROPEAN PERSPECTIVE**

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Overview

Increasing concern for security of supply triggered by declining production and rising import dependence of European countries has become a very notable topic. Recent events of interruptions of gas supplies from Russia to Europe in early 2006, high gas prices in the United Kingdom and supply cutbacks in Italy in winter 2005-06, have deepened fears of growing insecurity regarding large scale gas deliveries to Europe (IEA, 2006). Inevitably, these events have focused attention on issues regarding increasing competition for gas supplies from policy makers, the energy industry and the general public.

Natural gas from far-distant producing countries can reach consuming centers in two ways: it can be transported by pipelines and in the form of Liquefied Natural Gas (LNG). However, the relative growth of LNG trade compared to pipeline trade has become more remarkable. During the past few years LNG has become the "fashionable" source of supply. This strong interest reflects both pessimism about the ability of indigenous supply and traditional pipeline imports to sustain the projected growth in natural gas demand but also positive changes in the business character itself. Substantial reduction of LNG costs has enhanced the size and scope of trade and the traditional business model, of long term take-or-pay contracts is evolving in a new global LNG market, offering more flexible shorter contracts including diversion rights, optimization of trade flows and short term market indicators.

This path towards globalization of LNG markets both in the Atlantic and Pacific basins will certainly influence the security environment for European gas supply. The main aim of this paper is to analyze in what extent growing competition for LNG supplies will constraint European options for LNG deliveries. Increased international gas trade has become so complex that it is essential to define a geographical focus, the time frames which are considered. While this paper focuses on Europe, it takes into account the future environment in the Atlantic and Pacific Basin, including the potential requirements of new importing gas countries as China, India and North America.

Methods

In order to address this issue, this paper contributes to the understanding of this new security environment by developing two alternative paths for the future of global liquefied natural gas (LNG) to evaluate strategies and potential outcomes for the industry and its customers and suppliers. The scenarios cover the period out to 2020, with an emphasis on the medium term to 2010. It looks at prospects for new LNG export projects and the potential demand for markets in Europe and the Americas to absorb these volumes.

For this purpose, we have created a project inventory that aggregates all publicly announced aspiring; proposed projects. However, since many projects reported in the trade press fail to meet their schedule start-ups or are abandoned altogether, it is necessary to make independent judgments as to which projects will go forward and when (Jensen, 2004). We have classified potential new supply projects according to the

likelihood of their becoming commercial. This classification can be broken down by region and by country, as well as by “existing”, “firm”, “probable” and “possible”. On the demand side, we have forecasted LNG imports by country, using a variety of energy models from country-specific sources that take into account the drivers of gas demand in each sector (power generation, industrial, residential and commercial). Gas demand forecasts are reconciled with contracted and future gas supply, using our own LNG contract database. From this analysis, it is possible to have on one side some idea of the likely availability of supply in the near term. On the other side, it is possible to determine the future incremental supply requirement in the medium term (out to 2010), as well as the need for future infrastructure development in the longer term.

Results and Conclusions

This study confirms that LNG will indeed retain its central role in Asia, but for the North American and European regions, LNG will become an essential supply source at the margin. Our demand projections show an important capability of traditional and new consuming countries to absorb large volumes of LNG. This is particularly the case of Europe and North America, where their internal production is likely to decline after 2015. Thus, the Atlantic basin will feature most of the expected growth whereas Asian buyers will see their share diminished on a global basis. Market demand will not be a constraint on LNG development. However, the shift in relative importance of specific countries will have consequences on their bargaining power to attract new LNG supply.

In the supply side, the LNG industry will respond as we predict a strong build in LNG facilities around the world. However, as it is stated in the paper, this development is constrained by the capacity of the industry itself to respond. We don't expect sufficient volumes of LNG to be bought to the market to create large surpluses in the near term. In this sense, supply control will become a key element in the availability for gas supply.

Since it will be supply and not demand that will determine the pace of timely arrival of LNG supply to Europe, we identify a surplus in regasification capacity that will probably result in lower average load factors. Given the important call for LNG in consuming countries, sponsors have shown to be willing to go long in regasification. The fact that it is relatively inexpensive among the chain and that it provides flexibility of destination explains the huge number of LNG receiving terminals that are being developed.

Finally, we anticipate a significant shift in the supply security environment for LNG supplies in Europe in the next years. With countries like Qatar being able to export both to Atlantic and Pacific markets, the regionalization of the gas markets is breaking down. We can expect that increasing competition for LNG supplies with North Americas and Pacific importers may constrain European option regarding additional LNG deliveries dedicated to Europe. This also means that segregated analysis of supply and demand for Europe and North America are no longer pertinent; an integrated view of the Atlantic basin, with the emergence of price signals transmissions between these two markets, will be fundamental for policymakers and corporate planning departments.

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