

## EUROGAS COMMENTS ON THE GREEN PAPER ON SECURITY OF ENERGY SUPPLY

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### EXECUTIVE SUMMARY

Eurogas welcomes the publication of the Green Paper on Security of Energy Supply, as it offers the opportunity for a general debate on the issue of energy security, after the publication of the Communication on Security of Gas Supplies (COM(99)571) in November 1999. For Eurogas, the need for establishing a stronger and regular dialogue with energy producing and transit countries emerges as one of the most important messages to be drawn from the analysis contained in the paper, in view of securing the energy needs of the European Union and favouring greater trade and market-driven economic development.

Considering the nature of the Green Paper, the European Natural Gas Industry appreciates that many policies and proposals presented in the paper would need further analysis and discussions. The gas industry is eager to share the debate that will lead to the publication of a White Paper on Security of Energy Supply. Such analysis and discussions, and the resulting policy proposals, should:

- take into account the general findings of the Communication on Gas Security of Supply and the conclusions of the Energy Council held on 30 May 2000 on that Communication and in particular those citing the opportunity for subsidiarity measures in security of gas supply, the positive assessment made of the role of gas in power generation and of the possibility for an increased role of natural gas in total EU primary energy consumption;
- promote the inclusion of supply-side measures to guarantee higher energy security of supply, e.g. favouring the diversification of supply routes and producing countries, reflecting the availability of large energy reserves near Europe together with the considerable achievements necessary for their exploitation;
- consider the market realities in price formation for all energy sources and the role of long term contracts in ensuring financing of capital intensive gas supply projects in the past and in many cases also in future, albeit complemented with additional risk management tools including new financing instruments;
- bear in mind the difficulties in actively managing additional energy stockpiles at EU level, as well as the differences between natural gas storage and other energy sources stockpiling, and appreciate the measures already implemented by gas companies for gas storage, tailored to each market characteristics and prospects;
- keep in view that energy taxation is not an efficient way to curb energy demand in several sectors, and, in case new energy taxes are introduced for the internalisation of external pollution costs, the necessity to implement an appropriate tax differential among energies taking into account environmental qualities of natural gas compared to liquid and solid fossil fuels;
- clarify the measures proposed for facilitating the full development of renewable energy sources;
- take into account an appropriate interpretation of the measures on the choice of primary energy sources for power generation contained in the Electricity Directive;
- favour an open debate on the proposal to maintain a "minimal access to coal reserves";
- fully present the well-known climate change case for natural gas.

## GENERAL COMMENTS

1. Eurogas records that between the Green Paper on one hand and the Communication on Gas Security of Supply and the Conclusions of the Energy Council (May 2000) on that Communication on the other, a different perspective exists on the way an increased Natural Gas role in EU primary energy consumption is considered. For Eurogas, the approach presented in the Green Paper for Security of Energy Supply, combining in one study the physical disruption of supplies, the price of energy, the social consequences of price volatility and the environment, can not change the findings of the above-mentioned papers, as the natural gas industry retains an excellent record regarding all those considerations, with:
  - uninterrupted supplies to its customers along the years, as the Green Book and the Communication on Security of Gas Supply do recognise;
  - competitive pricing compared to other sources of energy;
  - reduced price volatility for customers, due to lagging and damping mechanism in price variations present in current supply contracts and billing practices;
  - lowest GHG emissions compared to other fossil fuels, unobtrusive transmission and distribution.
2. Eurogas appreciates the definition of the aims of security of supply presented, to reduce the risks linked to dependence rather than seeking to maximise energy self-sufficiency or independence. Any “neo-mercantilistic” approach in dependence assessment would be counterproductive for EU’s competitiveness and would risk limiting the potential economic and political relationship with energy producing and transit countries.
3. The most important issue to be addressed in a debate on security of energy supply is indeed the strategic management of the growing energy dependency of the EU. Eurogas recalls that the strategies implemented by gas companies, with diversification of sources and transit routes and long term contracts, helped greatly to increase security of gas and energy supply. It is in the interest of supply diversification and security that EU legislators help to maintain the right investment and regulatory climate, recognising for example an adequate return on existing and new assets to provide an economic basis for the maintenance and development of the network, and incentives to invest for the longer term in these regions where gas demand is expected to increase.
4. The Green Book correctly underlines the importance of establishing a regular dialogue with producing countries. This is especially valid for gas, as the long term nature of gas projects favours the establishment of long-lasting relationships reciprocally advantageous for all the parties involved (producers, consumers, transit countries). The Natural Gas Industry would favour all the initiatives promoting the establishment of these relationships, not only with Russia, which is correctly identified as a major partner for actual (nearly 20 % of total EU gas consumption) and future energy supplies, but also with all other partners that could increase their role in energy supplies, for example in the Mediterranean region, the Middle East and the Caspian region. In consideration of the strong political and economic relationship of the EU with Norway, oil and gas production from this country should be always presented as internal, especially when forecasts are considered.
5. Eurogas is studying the issue of oil indexation of gas price and according to the first findings, this pricing practice has a justification because, also in liberalised energy markets, the main economic drivers affecting the gas price remain the competitive forces and the supply/demand positions. Some correlation with other fuel prices (e.g. coal, oil products, etc.) is likely to occur if there is some potential for end users to switch between fuels. Competitive forces for example allow for price differentials in regional energy markets

which also occurs for products cited in the Green Paper as traded on competitive international markets.

6. The EU is already implementing an ongoing energy policy with the aim to liberalise the gas and electricity markets, underpinned by the opportunity for subsidiarity measures in view of the differences between national energy markets. A further integration of energy policy at Community level is a political decision of EU Member States, and in Eurogas' view not all the energy policies proposed in the Green Paper are fully backed by the results of the analysis there supplied. Some examples follow in more detail.

### ROLE OF STOCKPILES

7. The Green Paper proposes to increase the quantities held in strategic petroleum reserves by reorganising them on a Community basis, to use these additional quantities for helping to mitigate price volatility and is asking if reserves of other energy sources should be included in that scheme.
8. For energy in general a direct intervention of national or international authorities on energy markets, beyond the current conditions established by the IEA and existing European Directives, could be dangerous with regard to both potential market failures and losses, and at the risk of undermining long-term relations with exporting countries. Moreover:
  - many attempts undertaken to control prices on commodity markets for stabilising revenues of developing countries have shown that managing prices on international markets is extremely difficult;
  - not only the powers in the hands of institutions influence global markets, but also market fundamentals (a number of economic reasons affecting energy prices volatility are not analysed, e.g. economic cycles, level of stocks, winter/summer patterns in energy consumption, influence of temperatures, possibility of fuel switching etc);
  - the analysis on the USA mentions the role of their strategic oil reserve, but does not consider that a very important role for their security of energy supplies is being played by the strong relationships built with producing countries.
9. For natural gas in particular, establishing a Community stock management system appears to have no rationale, for practical and economic reasons. Indeed, gas storage is totally different from oil and coal storage, for the following reasons among others:
  - it needs specific geological conditions to be exploited;
  - a network with sufficient capacity is necessary for a physical link between the storage site and the customers;
  - it has already a fundamental role in assuring the necessary flexibility in supplies to customers, given a rather constant supply basis and very variable consumption, especially in the residential/commercial sector .
10. Expanding gas stocks management beyond national/regional boundaries would entail an enormous financial cost, and would be less effective than current practices and policies, tailored to the characteristics of primary energy sources consumed in the country concerned, including share of imports over national production of gas, diversification of sources, availability of storage, share of imports via LNG versus via pipeline, share of interruptible supplies etc. At the moment, gas storage capacity is being expanded in line with the development of consumption, and according to the above-mentioned criteria. The decisions to establish gas strategic storage in some countries should be correctly seen in the context of subsidiarity, given the specific conditions of each country concerned.

11. Eurogas therefore still agrees with one of the “key messages” of the Communication on Security of EU Gas Supply (COM(1999) 571 final), according to which “each gas market has different characteristics. Consequently rigid, EU-wide security of supply criteria and mechanisms do not seem to be the most appropriate response”.

### TAXATION OF ENERGY

12. Eurogas is convinced that only a careful approach on energy taxation, which takes account of both the absolute levels of taxation and the relative fiscal treatments of the different energies in each country, and which integrates budgetary orientations with environmental and industrial competitiveness policy objectives, could have any beneficial impact.
13. Eurogas recalls that energy taxes are not the most suitable means to curb energy demand. Given the low elasticity of energy consumption in many sectors, a reduction in demand could only be obtained through such an increase in taxation to make energy prices going beyond social acceptance. Moreover, additional across-board taxes on energy would enlarge the energy prices gap with the U.S., reducing the overall competitiveness of the European industry.
14. In case new energy taxes are introduced for the internalisation of external pollution costs, it would be necessary to implement an appropriate tax differential among energies taking into account environmental qualities of natural gas compared to liquid and solid fossil fuels.

### ROLE OF RENEWABLES

15. Eurogas agrees with some findings on renewable energies of the Green Paper, according to which a greater percentage of this source of energy would be beneficial for the long-term economic and environmental objectives of the EU, and recalls that:
  - natural gas can complement the diffusion of renewable energies when they suffer from structural discontinuity in production and/or difficulties in storage;
  - research is underway for gas-wood, gas-solar schemes and biogas development.
16. The nature of the proposed aids for renewable energies should be clarified. Eurogas would welcome some well-focused support for renewable energy projects, in the overall interest of the EU, and giving priority to projects on course for economic viability. An appropriate move towards internalisation of external costs would probably create the best possibilities for renewables.
17. On the other hand, a direct taxation on some energy sources to create funds for the financing of renewable energy projects would be detrimental to the development of new economical and efficient energy projects, the overall competitiveness of the EU and would create big problems in the field of competition law. Eurogas would oppose the proposed “parafiscal tax on most profitable sources of energy – nuclear, oil and gas – to finance a regional or national fund for the necessary start-up investment”, because of the unfair criteria it contains in the choice for energy sources to be subjected and as it would undermine the general competitiveness of natural gas and the necessary development of the costly and capital intensive gas grid.

## NATURAL GAS AND POWER GENERATION

18. Eurogas has studied the interrelation between Security of Gas Supply and Power Generation in detail, and has issued a position paper on the subject (S/EUR/99/1144). The main finding of this paper was that increasing the physical links between the gas market and the electricity market through the use of gas-fired power generation will enhance the overall security of energy supply. The European Commission in its Communication on Security of Gas Supply recognised this finding and agreed that in "the Single Energy Market, the contractual arrangements between gas suppliers and gas buying producers, including their security features and obligations, should in principle be left to the actors themselves to agree upon on a commercial basis". Moreover, the Council Conclusion on the Communication conceded that "there is scope for further increasing the share of natural gas in the EU's energy balance without compromising the overall security of energy supply in the EU".
19. The Green Paper mentions the risk in the choice of primary energy sources for electricity generation of jeopardising security of supply by over-concentration on gas in years to come as "natural gas gains ground" in the power generation sector. Eurogas considers that this risk is overestimated, and will never materialise. Indeed, the role of natural gas in power generation is increasing for its environmental qualities, high efficiency, low investment and operational cost, short project lead-times, flexibility in size. Its role in the power generation sector however should be better described. At present, coal and nuclear are still the dominant fuels for power generation: nuclear 35%, coal 27%, hydro and other renewables 15%, natural gas 16%, with coal accounting for 54% of the fuel input for thermal power generation. The share of gas is therefore quite limited at the moment, and could potentially increase to between 25 and 35 % in 2010 (depending on load factors and definition of sectors), but not however monopolising future fuel supply for power generation. The future growth is mostly concentrated in some countries, benefiting from internal gas production (United Kingdom), of large real and/or potential diversity of supplies (Italy, Spain). Especially in Southern Europe natural gas will help cover growing electricity needs, and in many cases it will substitute only power plants using imported fuels. All these countries have well established policies to tackle the issue of growing share of gas in their Primary Energy Consumption. Moreover, the foreseen increased gas consumption in power generation has stimulated new gas supply projects (pipes from Norway, from Algeria, from Libya, new LNG terminals), increasing diversity and therefore security of supply.
20. For all the above-mentioned reasons, Eurogas can only repeat that the risk of an over-concentration on gas as a fuel in the power generation sector envisaged in the Green Book is overestimated, and continues to express its agreements on the findings about natural gas and power generation of the Communication on Security of Gas Supply and on the Council Conclusions on that document.
21. Eurogas wonders if the interpretation of the Electricity Directive given in the sentence "Where a primary energy source is too important or develops so rapidly that it endangers overall security of electricity supply, the (Electricity) Directive authorises the Member State to fix the nature of the primary resources for any new capacity" is correct. In Eurogas' opinion, the Electricity Directive states that the nature of the primary sources is one of the criteria to be considered for granting the authorisations for the construction of generating capacity, but does not mention its importance and/or the rapidity of its development.

## NATURAL GAS AND THE ENVIRONMENT

22. Eurogas would like to recall the well-known climate change case for natural gas, as considers that in the Green Paper it is not fully described.
23. The CO<sub>2</sub> produced by natural gas combustion is 25-30% lower than from the combustion of petroleum products and 40% - 50% lower than from coal combustion for the same energy

input. High efficiency applications and utilisation technologies deliver even lower emissions comparatively. Based on the current breakdown of primary energy use and of expected growth of natural gas use replacing coal and oil, a rough estimate (because benefits will vary depending on the type and quality of fuel displaced) is that for every 1% increase in natural gas share in the primary energy consumption in Europe, 1% decrease of CO<sub>2</sub> emissions could be envisaged. Eurogas has tried to be more precise (S/EUR/O1/1323). In a scenario developed on the basis of a forecast increase of about 2% (+ MTOE 27) in gas consumption (displacement of solid fuel share of 1.5% of PEC (-25 MTOE); decrease of 16 MTOE oil). Eurogas estimated that there would be a decrease in net CO<sub>2</sub> emissions of nearly 3% (- 89 Mtons).

24. Care, however, should be taken to ensure that unrealistic expectations are not developed regarding the contribution to be made from increased gas use. The gas industry increasingly operates in a new and challenging commercial environment, the impact of which cannot be wholly pre-determined. EU policy, e.g. on tax harmonisation with differentials favouring more polluting fuels, would have a negative impact on gas penetration. To promote fuel switching, a clear and stable regulatory framework in favour of gas is recommended. Even then, it should be recalled that fuel switching is an important part of the climate change solution, but can only be a part.

Also on the environmental dimension of natural gas, Eurogas recalls that:

- LNG carriers serving the EU have the highest level of safety for maritime transport;
- Gas distribution and transport networks are unobtrusive, very efficient and reliable in absolute terms and compared to other energy transport and distribution networks.