

EUROGAS COMMENTS ON THE GREEN PAPER ON SECURITY OF ENERGY SUPPLY

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 CO₂ 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 CO₂ emissions could be envisaged. Eurogas has tried to be more precise (S/EUR/01/1323). 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 CO₂ 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.

ANSWERS TO THE COMMISSION'S QUESTIONS ON SECURITY OF ENERGY SUPPLY

1. Can the European Union accept an increase in its dependence on external energy sources without compromising its security of supply and European competitiveness? For which sources of energy would it be appropriate, if this were the case, to foresee a framework policy for imports? In this context, is it appropriate to favour an economic approach: energy cost; or geopolitical approach: risk of disruption?

A general consensus exists on an expected growing dependence of Europe on external energy sources, considering the high cost of European internal supplies in the case of coal or the long-term reduction of European reserves in the case of oil and gas.

In the case of gas however, this expected increase of external supplies should not be overestimated, as the huge reserves available in the North Sea should be properly taken into account together with the possibility of new probable additional reserves in the area (see GATE study and Annex 6 of the Communication from the Commission on Security of EU Gas Supply).

In any case, an increase in EU dependence on external energy sources is acceptable, and indeed could be beneficial in building new long term international trading relationships, provided that there are sufficiently diverse and secure supply routes. It is in the interest of supply diversification 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.

In a competitive market, the only framework import management policy at EU level should only deal with international relationships, as energy users must be allowed to make their choices on such things as fuel type and source. Any EU centrally defined targets or limits on the importation of particular fuels would tend to cause market distortions, increase costs and reduce overall security of energy supply.

As far as gas is concerned, we refer to the conclusions of the Energy Council (May 2000) on the Communication on Security of EU Gas Supply (COM (99) 571 - issued in November 1999): “..natural gas has contributed to the Community's diversification of energy supplies and 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”.

Moreover, supply security is not the sole objective of energy policy, but it is a matter of finding and keeping a good balance considering also competitiveness and environmental and climate issues. Natural gas, as the May 2000 Energy Council noted, made a “positive contribution to the achievement of the three objectives of energy policy in the EU”.

2. Does not Europe's increasingly integrated internal market, where decisions taken in one country have an impact on the others, call for a consistent and co-ordinated policy at Community level? What should such a policy consist of and where should competition rules fit in?

The EU is already implementing an ongoing energy policy with the aim to liberalise the gas and electricity markets, underpinned by the necessity for subsidiarity measures in view of the differences of 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 are given in detail in the Eurogas' general comments.

A consistent and co-ordinated policy at Community level could be beneficial in reinforcing relationships with external suppliers and would increase security of supply. This policy would be implemented through strong partnerships, safeguarding however existing commercial relationships.

For competition issues, the Commission would continue to control the respect of community rules, in the fields of abuse of dominant position, concentrations etc.

3. Are tax and state aid policies in the energy sector an obstacle to competitiveness in the European Union or not? Given the failure of attempts to harmonise indirect taxation, should not the whole issue of energy taxation be re-examined taking account of energy and environmental objectives?

State aid policies should be phased out insofar to the benefit of the environment and as they represent a threat for a fair competition in the common market.

Eurogas is convinced that only a careful approach, 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.

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.

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.

4. In the framework of an ongoing dialogue with producer countries, what should supply and investment promotion agreements contain? Given the importance of a partnership with Russia in particular, how can stable quantities, prices and investments be guaranteed?

We welcome and encourage EU initiatives aimed at securing political stability and free market conditions in countries involved in energy supply to the EU.

Agreements at EU level should be designed to reduce the risks associated with external infrastructure projects, for example by encouraging the development of market-based economies in transit countries and facilitating investment by EU companies.

Russia currently supplies less than 20% of EU gas demand but has the reserve base to enable exports to the EU to increase substantially. Russian gas supplies are to be complemented with Norwegian, Algerian, Dutch and UK supplies, and increasingly with other sources including Nigeria, Libya, Trinidad and Tobago and the Middle East.

An appropriate energy and foreign policy framework is clearly a pre-requisite for the further development of Russian gas exports, and the recent initiatives undertaken by the Commission thanks to President Prodi are in the right direction and are warmly welcomed by the Gas Industry. The same initiatives could also be undertaken also towards Mediterranean, Caspian and Middle East countries with energy production or transmission potential. However, it will also be crucial to reach agreements at company level which are acceptable to both exporters and importers and which contain price conditions enabling long-term competitive sales of external gas on European gas markets. For the time being, long-term agreements with firm take-or-pay commitments and oil indexation are the only type of contracts that exist with by exporting countries to the EU in order to obtain the necessary funding for their investments. In many cases these schemes will be adopted also in future, albeit complemented with additional risk management tools including new financing instruments.

Eurogas would be worried however if the issue of price stability means any form of price regulation, irrespective of market signals and away from world energy market prices with fatal consequences for any chance to attract new supply sources.

5. Should more reserves be stockpiled -as already done for oil - and should other energy sources be included, such as gas or coal? Should the Community take on a greater role in stock management and, if so, what should the objectives and modalities be? Does the risk of physical disruption to energy supplies justify more onerous measures for access to resources?

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 both with potential market failures and losses, and with the risk of undermining long-term relations with exporting countries. Therefore, a general debate on the purpose of additional energy stockpiling would first need to be established, and the potential conditions for using the stockpile defined. The issues of who pays for the cost of the stockpiles and how they could be distributed to avoid distorting competition would also need to be addressed.

For natural gas there does not appear to be any rationale at present for the EC taking on a role of stock management. According to the EC Communication on Security of Gas Supply, "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". Moreover, given the differences between oil, coal and gas, there is no sensible way of massive stockpiling gas reserves available at the moment. Gas storage capacity is being expanded in line with the development of consumption, and Eurogas is confident that the consideration expressed in the 30 May 2000 Energy Council "the European gas industry has managed successfully the

security of gas supply, during a phase of steady growth over recent decades”, will be hold true also in future.

With the advent of a liberalised market the responsibilities for security of gas supply, covering many aspects of the supply chain, are being redefined in some Member States, following the implementation of the Gas Directive, the creation of Gas Regulators bodies and in the context of the subsidiarity principle.

6. How can we ensure the development and better operation of energy transport networks in the European Union and neighbouring countries that enable the internal market to function properly and guarantee security of supply?

The natural gas industry will continue to expand its infrastructure, given a clear and stable regulatory framework, at national and EU level, allowing inter alia for a sufficient rate of return on the investment undertaken and for projects to be launched.

Thanks to the creation of GTE (Gas Transmission group Europe), information on the main features of the gas transport grid are being made available to all the interested stakeholders.

The Western European gas industry not only works to extend its own network, but provides for important technology transfers and direct investments in the further development of Central and Eastern Europe gas supply networks. Similar relations are also being fostered with non-EU Mediterranean countries. The European Gas industry welcomes the European Charter Treaty and supports EU programmes promoting network interconnections and extensions (Trans-European Energy Networks) as well as the upgrading and development of gas infrastructure in central/eastern Europe and in the Former Soviet Union (Phare, Tacis, Synergy, Inogate Programmes).

7. The development of some renewable energy sources calls for major efforts in terms of Research and Technological Development, investment aid and operational aid. Should co-financing of this aid include a contribution from sectors which received substantial initial development aid and which are now highly profitable (gas, oil, nuclear)?

Eurogas would like to correct a possible misunderstanding and inconsistency on this issue between the Green Paper and the text of this question, and in the Green Paper itself. The Green Paper says that energies such as coal, oil and nuclear needed significant initial investment, and proposes that one possible way of financing renewables could be to subject the most profitable sources of energy – nuclear, oil and gas – to a contribution towards the development of renewable energy sources. The establishment of the natural gas industry needed significant initial commercially based investments, and will continue to do so in order to enlarge its grid. The European Gas industry did not receive substantial initial development aid as it is mentioned in the question, therefore rejects the possibility of being subject to a contribution for the development of other energy sources¹. Moreover, Eurogas considers unfair the list of activities to be subject to the contribution.

Conventional fuel prices have risen sharply during the last year, to a level that makes some renewable energy projects economic. In a few countries this has not been followed by an increase in electricity prices as competition and oversupply has kept prices down.

¹ In few disadvantaged areas (Southern Italy, Portugal...), and to a limited extent, the construction of some gas local distribution networks received a regional contribution, only where and when the development of the distribution network was considered to be beneficial for the social and economic development of the area by local and national authorities, but not economically viable for gas companies alone.

Some well-focussed support for renewable energy projects is necessary in the overall interests of the EU, giving priority to projects on course for economic viability. Internalising the environmental costs of energy sources could be a proper move, resulting in electricity prices that would make renewable energy projects economic in their own right. However, the benefit of the renewable obligation is that it effectively focuses a large subsidy on a target quantity of renewable energy capacity.

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.

8. Seeing that nuclear energy is one of the elements in the debate on tackling climate change and energy autonomy, how can the Community find a solution to the problem of nuclear waste, reinforcing nuclear safety and developing research into reactors of the future, in particular fusion technology?

[..]

9. Which policies should permit the European Union to fulfil its obligations within the Kyoto Protocol? What measures could be taken in order to exploit fully potential energy savings which would help to reduce both our external dependence and CO₂ emissions?

The increased use of gas on the Continent for power generation that can be expected to result from full EU energy market liberalisation is already built in to most forecasts. Replacing solid or liquid fuels with natural gas not only reduces the emissions of pollutants but also increases efficiency, thus reducing overall energy consumption. Any measures to promote the commercial development of gas-fired plant will help to move towards the accomplishment of Kyoto targets, to decrease EU Primary Energy Consumption and hence overall energy import dependency. These benefits would merit an ad-hoc incentive plan

Eurogas has proposed in its "green-gas scenario" the case of a marginal increase of natural gas share in Primary Energy consumption giving the possibility for an important decrease of CO₂ emissions thanks to low-emitting and efficient gas technologies.

As the enhanced use of natural gas alone will not enable Kyoto targets to be met fully, other measures are also needed.

10. Can an ambitious programme to promote biofuels and other substitute fuels, including hydrogen, geared to 20% of total fuel consumption by 2020, continue to be implemented via national initiatives, or are co-ordinated decisions required on taxation, distribution and prospects for agricultural production?

The changes required to achieve 20 % of fuel use from biomass, hydrogen and other substitute fuels should first be identified before a rational decision can be made on the necessary co-ordination required. The cost of such a massive shift in the economy would also need to be compared with other options such as energy efficiency measures.

The development of natural gas in the transport sector could answer the need of energy diversification and could ameliorate its environmental dimension, with currently available Natural Gas Vehicles, and in future with fuel cell- powered cars. Natural Gas Vehicles are

nowadays successful for public transport and services where available, and can be advantageous for private use where a dense distribution network is on place.

11. Should energy saving in buildings (40% of energy consumption), whether public or private, new or under renovation, be promoted through incentives such as tax breaks, or are regulatory measures required along the lines of those adopted for major industrial installations?

Both regulatory measures (e.g. for new buildings or higher efficiency appliances) and incentives reducing up-front investment burden (e.g. for insulating existing buildings) could be adopted to save energy in buildings.

The natural gas industry recalls that gas-fired appliances are the preferred choice for heating purposes for their easiness to use, efficiency and cleanliness. Other gas-fired appliances, used in cooling systems, micro-generation schemes, fuel cells, can further increase the overall efficiency of the sector.

12. Energy saving in the transport sector (32% of energy consumption) depends on redressing the growing imbalance between road haulage and rail. Is this imbalance inevitable, or could corrective action be taken, however unpopular, notably to encourage lower use of cars in urban areas? How can the aims of opening up the sector to competition, investment in infrastructure to remove bottlenecks and intermodality be reconciled?

[...]

13. How can we develop more collaborative visions and integrate the long-term dimension into deliberations and actions undertaken by public authorities and other involved parties in order to evolve a sustainable system of energy supply? How are we to prepare the energy options for the future?

An assessment of the ways to guarantee a sustainable system of energy supply should take into account the respective roles of public authorities, operators and other stakeholders.

Taking into consideration the very different national situation of security of energy supply, the subsidiarity principle on energy issues appears to remain very important also in future years. The European Commission should be involved especially in the management of the development aid for the energy transmission grid, in helping to maintain and develop good relationships with external energy suppliers, and in supporting Research and Development programmes to the benefit of innovations in the gas chain and in gas applications.

Also very important is a continuous involvement of energy operators in energy issues. Eurogas welcomes the full implementation of the EU ad-hoc group on security of energy supply, and has suggested some topics for further study, as:

- the pattern of future supplies, for which Eurogas acknowledges that a study promoted by the European Commission is undergoing;
- how the growing market for gas, world wide as well as in Europe may change the outlook on supply;

- the monitoring of investment trends for new supplies and for expansion and maintenance of infrastructure.