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The Commission launches an overall debate on a future european energy strategy with a Green Paper on the energy supply security

Today the Commission adopted a Green Paper on supply security in order to launch a debate on the geopolitical, economic and environmental stakes involved in securing the European Union's energy supply. "Confronted with both increasing external dependence and the urgency of the fight against climate change, the European Union cannot be complacent" said Loyola de Palacio, vice-president in charge of Energy and Transport. She added: "We have to be aware of the efforts needed and try and define a real European strategy, more coherent and responsible: it means a wider energy supply and a genuine policy of rationalisation of energy consumption, particularly in the building and transport sectors."

The main elements of this reflection are the following:

1. The European Union faces structural weaknesses in the energy sector

- The European Union produces only half of its needs. If nothing is done, between now and 20 to 30 years, the Union will meet its energy needs with 70% by products imported against 50% currently.
- Current energy consumption is covered for 41% by oil, 22% by natural gas, 16% by solid fuels (coal, lignite, peat), 15% by nuclear power and 6% by renewable. By 2030 the energy balance will continue to rely on fossil fuels: 38% oil, 29% natural gas, 19% solid fuels, 6% nuclear power and barely 8% renewable.
- Dependence is seen in all sectors of the economy. Without deceleration of the growth in consumption in the principal expansion sectors, transport, electricity and domestic, the energy dependence of the Union will be increasingly alarming.
- Thus, transport, the domestic sector and electricity are largely tributary of the hydrocarbons and at the mercy of erratic international price variations.

Some examples can illustrate the extensiveness of the challenge:

- According to the countries, Transport accounts for 4% to 10% of the GNP. One predicts between now and 2020 a 20% growth in the transport of passengers and more than 30% of goods.
- Consumption of petroleum products in road transport has not ceases to grow and represents today almost half of oil consumption (47% of consumed oil) compared to 18% in 1973. Opening up the dependence of this sector on oil constitutes an ecological need and a technological challenge.

- Electricity is a sector where the demand is particularly constant. In the years to come, it seems to have to develop at almost 2% a year -and in the candidate countries by 3% at least-. Electricity production depends on fossil fuels (coal, lignite, natural gas) and nuclear power (35%). Tomorrow it will depend on natural gas for almost 50%.
- The consequences of dependence are important in economic terms. They represent, in 1999, 240 billion €, i.e. 6% of total imports and 1.2% of the GNP. In geopolitical terms, 45% of oil imports come from the Middle East and 40% of natural gas imports from Russia. But the European Union does not have today all the means to make it possible to change the international market.

2. Common reflection is today necessary.

Today, Member States bring different solutions for common problems, while they are more and more interdependent both in the fight against climate change and following the establishment of the internal energy market. In the future, energy policies will have to take into account these new conditions. Any energy policy decision taken by a Member State will inevitably have a recurring effect on the operation of the market in other Member States. Energy policy has taken a new Community dimension

The fight against the climate change is difficult: inversion of the trends is more difficult than it appeared to be three years ago. Thus, while the Union stabilised its emissions of greenhouse gases in 2000, the forecasts of the European Environment Agency consider that they will increase by 5.2% between now and 2010. This increase in emissions is mainly due to economic growth and the development of our energy consumption, almost that of electricity and of transport, a consequence of our way of life. The fight against global warming aims initially at the consumption of fossil energy. Oil is responsible for 50% of CO2 emissions and solid fuels and natural gas for the remainder. This situation requires more radical solutions.

3. The outline of a strategy

The European Union cannot free itself from its increasing energy dependence without an active energy policy. This long-term energy strategy has to make it possible to reconcile the physical and continuous availability of the energy-generating products on the market at a price accessible for the well-being of its citizens and the smooth operation of the economy, whilst respecting environmental concerns.

The Green Paper outlines the need to rebalance the policy of supply by clear actions for a policy of demand, which more promising room for manoeuvre.

More precisely, the Green Paper outlines the plan of a long-term energy strategy, in 5 main fields:

1. To Stop the waste: the Green Paper calls for a genuine change in consumer behaviour. The Commission will propose an active policy of energy saving and of diversification towards non-polluting energy. Therefore, it clarifies the advantage of the tax instrument with a view to directing the demand towards better-controlled consumption; more environmentally friendly.

2. Need of a truly alternative Transport policy: in 2010, if the current trends were to continue, emissions would be up by 40 % compared to 1990 levels. We must revitalise the railways, to reorganise the road transport sector, to focus the infrastructure investments in railways on the bottlenecks, to rationalise the use of conventional private cars and to promote more environmentally friendly and efficient modes of transport.

3. To bet on the development of new and renewable energies: Doubling their share from 6 to 12% in the energy balance and passing from 14 to 22% for electricity production is an ambitious objective to be achieved between now and 2010. Under current conditions, they will stagnate around at 7% in 10 years. Only financial measures (State tax aid, tax deductions, and financial support) could support such an ambitious aim. Among the ways to be explored, one could envisage that profitable energies (oil, gas, nuclear power) finance the development of the renewable energy which did not benefit, like other conventional energy, from consequent support.

4 To maintain a relative autonomy: the medium-term contribution of nuclear power has to be the subject of an analysis, without omitting any element of the debate: decision of the majority of the Member States to opt out, waste management, global warming, the security of supplies as well as sustainable development. Notwithstanding the conclusions of this reflection, research on the technologies of waste management and their practical implementation under optimum safety conditions has actively to be continued.

   It also raises the need for an access to Community coal reserves and to maintain a minimum production platform for this purpose.

5. To find common solutions to common problems: this need for more cohesion must drive to accelerate the completion of the Single Market, to examine ways of strengthening European strategic oil stock mechanism, and consider extending it to natural gas. This common approach should also insist on a more coherent energy taxation to steer energy consumption towards more environmentally friendly sources. Finally, it should also strengthen and diversify supply networks.

4. Orientation of the debate

The Commission does not propose a ready-made strategy: it launches a wide-ranging and innovative discussion on the principal questions that it endeavours to identify, knowing that there are others.

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?

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?

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?

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?

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?

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?

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)?

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?

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?

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?

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?