

# Politics and Economic Implications of the Siberian - West European Natural Gas Pipeline and European Nations

By Kamal Boulazreg  
Maître Assistant I.S.P.

## Introduction

The problem of energy has always been an area of concern for the industrialized world. However, until recent years, natural gas has played a modest part in the overall energy supply in Western Europe. Since the first discoveries of natural gas in the Netherlands in 1960, and the first deliveries of Algerian gas by sea in 1964, along with substantial discoveries in the North Sea continental shelf, natural gas entered a phase of rapid growth and became an object of international trade. The latest discoveries of natural gas fields in Siberia in the Soviet Union brought forth much interest from Western Europe.

Actually, one-third of the world's natural gas reserves are located in Soviet territory. This country has in a relatively short period of time become a major producer and exporter. A construction project of a natural gas pipeline was settled in the early 1980's between the Soviet Union and some major countries in Western Europe. This project had in fact brought thoughts, discussions, warnings and actions from different sides interested in the question of a trans-European pipeline. These interactions had centered chiefly around the political and economic impact of the Siberian-West European natural gas pipeline project. This study investigated these arguments and their implications.

## Background of the Problem

The current economic situation in the Western world was characterized by a high inflation rate with an alarming unemployment level. On the Eastern side, scarcity of hard currency limited the Eastern countries from importing Western goods and equipments. The Siberian-West European natural gas project offered a great deal of interest, but also fear. For some, there was a fear of jeopardizing the whole Western alliance; for others, the pipeline project was the deal of the century.

The Siberian-West European natural gas pipeline project to carry natural gas from Urengoy fields in Siberia to Western Europe starting in 1984 offered different prospects. Whereas in Europe both sides of the Iron Curtain saw a good deal, the United States did not look at it from the same viewpoint; it was a matter of security and the future of the Western world.



The American arguments over the Siberian-West European natural gas pipeline project were based on the view that the Soviet Union's vulnerability should be exploited. Another aim was preventing Moscow from gaining a flow of hard currency for vital imports of Western technology, as well as providing financial support for a Soviet military buildup. Also, the United States was very concerned by a dangerous overdependency of Western Europe on Soviet natural gas, which could be used as leverage against the Western alliance in crucial times. From this point of view, the Siberian-West European natural gas pipeline project could threaten the alliance's good relationship. Beside the political and economic aspects, the United States' position against the project was to prod governments of Western Europe to a tougher stance against Soviet behavior, especially in regard to interfering in Polish domestic affairs. The United States commented, warned and even took actions against companies that failed to support its ideas and decisions.

The Soviet Union appears to have two priorities. The first priority relates to the whole political / strategic / economic aspect within the Eastern bloc. The Soviet Union saw a rapid development of this efficient energy supplies and the opportunity to solve its Eastern energy problems. Natural gas may become particularly important in the future of the energy trade of the Council for Mutual Economic Assistance. The importance of natural gas was due to a decline of oil demand in the world market, and also because of the Soviet Union maintaining significant levels of oil exports to the West. The second priority of Siberian natural gas was sale to Western Europe. This appeared at two levels: economics, in terms of hard currency earning and transfert of technology and equipment vital to the Soviet Union's energy efforts; and politics, in terms of forming a stable link with a number of Western European countries in which both sides had a considerable stake.

For Western Europe, the project provided a relatively rich source of natural gas for the future; also, the Siberian West European natural gas project meant ten billion dollars in sales to West European manufacturers along with the foreign exchange it brought in. In addition to this, it saved thousands of jobs at a time when unemployment reached a postwar record of an estimated 9.5 percent. On the other hand, the project served the necessary diversification of energy supply in case of an eventual energy embargo. Natural gas was a major issue for Western Europe whose energy needs were increasing. Furthermore, Western European security was maintained with a steady supply of natural gas required for stable economic growth. Western European officials argued that Western Europe's defense capability was inextricably linked to its economic well-being and stability.



### III Findings

The findings are divided into two parts. Part one describes the importance of natural gas exports for the Soviet Union. Part two presents the importance of the Siberian-West European natural gas pipeline to West European nations.

#### Importance of Natural Gas Exports for the Soviet Union

Natural gas is the key to the Soviet Union's energy future in this decade of 1980 - 1990. As evidenced, natural gas was accorded priority in investments during the tenth five-year plan period: 1976 - 1980. Natural gas played a vital role in both domestic energy plans and in the Soviet Union's export prospects, and increasing the gas pipeline was central to both of these concerns. With respect to domestic concerns, oil and coal production was slated to rise only modestly, at best. Incremental domestic energy demands within Eastern Europe and the Soviet Union must be covered by the large projected increases in natural gas production, and to a considerably lesser extent by nuclear power. As shown in Table 1, Eastern Europe's oil consumption grew faster than its oil production. Therefore shortfalls in natural gas output could almost certainly be translated into a domestic energy shortage. Thus, expansion of natural gas networks would greatly reduce the possibility of internal energy shortages within the Soviet Union, and would substantially help to solve East European nations' energy problems as well.

The Siberian-West European natural gas pipeline represented the showpiece of the Council for Mutual Economic Assistance's integration in energy, and it was unique in the sense that each member was responsible for an equal share in financing and construction. The original blueprint called for each country to build its own section of the line with its own labor force. This proposition was unrealistic, as most of the countries had worked only with pipes of 800 millimeters or less in diameter, compared with the 1,420 millimeters pipe used on the Siberian-West European natural gas pipeline.

Due to this general inexperience of East European crews in handling pipes of such large diameter, these experiments had to be abandoned, and it was believed that Soviet crews had taken over the majority of the laying and welding functions.

From the dual concern of maintaining steady oil supplies to Western Europe and the growing Soviet domestic oil consumption, natural gas became very important in supplying energy to the Council for Mutual Economic Assistance.



Table 1

Oil Production and Consumption of Eastern Europe  
(in 1,000 Barrels per Day)

| Year | Oil production | Oil consumption |
|------|----------------|-----------------|
| 1971 | 393            | 1,386           |
| 1972 | 404            | 1,556           |
| 1973 | 410            | 1,759           |
| 1974 | 417            | 1,794           |
| 1975 | 423            | 1,915           |
| 1976 | 430            | 2,056           |
| 1977 | 429            | 2,216           |
| 1978 | 406            | 2,349           |
| 1979 | 383            | 2,417           |
| 1980 | 369            | 2,354           |
| 1981 | 373            | 2,232           |

Source: International Energy Statistical Review (1983: 25)

The trend in natural gas production in the Soviet Union, compared with the increase in natural gas trade with Eastern Europe, is shown in Tables 2 and 3. The Soviet Union was the main energy supplier to Eastern Europe at almost half the market price. It became very important for the Soviet Union to conserve oil for future economic and military use, and to substitute natural gas for oil, particularly when the Soviet Union possessed the largest natural gas fields in the world which represented about 37 percent of the world's natural gas reserves.

With respect to export, natural gas appeared for the Soviets to be replacing oil as their single most important source of hard currency. Natural gas sales to Western Europe would help the Soviet Union in acquiring the needed technology and equipment that were vital to Soviet development efforts in different sectors of the economy. Soviet leaders knew that the future of the Soviet Union as a world power depended upon the accelerated development of Siberia's vast natural gas reserves.

Another reason why the Soviet Union was accelerating its energy export program was that the turmoil in the Middle East made Soviet energy more attractive to the West Europeans. This was a prime opportunity for the Soviet Union to capture a new source of leverage over the West before alternative sources in Europe, the United States, and Africa had been developed.

It was found that the increased trade between Eastern and Western Europe was important to the Soviet Union for future social rapprochement.



Table 2

## Natural Gas Production of the Soviet Union

| Year | Billion cubic<br>feet per day <sup>a</sup> | Billion cubic <sup>b</sup><br>meters per day |
|------|--|--|
| 1973 | 22.9                                       | 0.64807                                      |
| 1974 | 25.2                                       | 0.71316                                      |
| 1975 | 28.0                                       | 0.79240                                      |
| 1976 | 31.1                                       | 0.88013                                      |
| 1977 | 33.5                                       | 0.94805                                      |
| 1978 | 36.0                                       | 1.0188C                                      |
| 1979 | 39.4                                       | 1.11502                                      |
| 1980 | 42.1                                       | 1.19143                                      |
| 1981 | 45.0                                       | 1.27350                                      |

Source: International Energy Statistical Review (1983: 24).

a) Original data in billion cubic feet per day.

b) Billion cubic meters per day were converted by multiplying original data by 0.0283.

Table 3

The Soviet Union's Natural Gas Trade  
with Eastern Europe

| Year | Billion cubic <sup>a</sup><br>feet per day | Billion cubic <sup>b</sup><br>meters per day |
|------|--|--|
| 1973 | 0.7  | 0.01981                                      |
| 1974 | 1.4  | 0.03962                                      |
| 1975 | 1.9  | 0.05377                                      |
| 1976 | 2.5  | 0.07075                                      |
| 1977 | 3.2  | 0.09056                                      |
| 1978 | 3.6  | 0.10188                                      |
| 1979 | 4.7  | 0.13301                                      |
| 1980 | 5.4  | 0.15282                                      |
| 1981 | 5.8  | 0.16414                                      |

Source: International Energy Statistical Review (1983: 24).

a) Original data in billion cubic feet per day.

b) Billion cubic meters per day were converted by multiplying original data by 0.0283.

The natural gas pipeline was considered as the instrument of social rapprochement and political detente. Both the Soviets and West European believed that increased trade between unequal partners in the military field, such as the Soviet Union and Western Europe, introduced an element that possibly helped decrease the tension of war.



In addition, it was found that failure to increase the gas pipeline network to allow for both increased domestic consumption and increased gas exports would seriously damage Soviet economic prospects in the decade of 1980 - 1990. In the absence of imported materials and equipment for pipeline construction, the Soviet Union would be expected to make a massive effort to complete the pipeline itself. These efforts would seriously strain their steel economy and would only be achieved at a great cost and with significant delays.

### Importance of the Natural Gas Pipeline to West European Nations

It was observed that the Siberian-West European natural gas pipeline was equally important to all West European nations. However, natural gas trade with the Soviet Union differed markedly among the West European countries, particularly between the Soviets and Austria, France, Italy, and West Germany. The decision to increase the importance of natural gas in the energy supply of these countries was taken, in part, because it was a fuel greatly preferred to either or nuclear power. coal was polluting during its fuel cycle and released sulfur oxide into the atmosphere. Sulfur oxide was a harmful element for the environment. Nuclear energy was dangerous, because nuclear plant accidents could be devastating and because the highly radioactive waste was very hazardous to life.

During the 1970's, natural gas became an increasingly important fuel in European markets. A number of factors, including the advanced exploration production technologies, discoveries and development of additional European natural gas reserves, and the decline of the West European coal industry, contributed to the extended production and use of gas.

The volume of natural gas consumed in Western Europe increased by about 50 percent between 1973 and 1980. In 1973, natural gas provided less than 10 percent of total West European energy needs. By 1980, natural gas accounted for approximately 14 percent of total West European energy consumption and 18 percent of the energy consumption of the six countries (Austria, Belgium, France, West Germany, Italy, and the Netherlands).

Natural gas use grew most rapidly in the residential and commercial sectors, where consumption rose by nearly 80 percent between 1973 and 1979. The use of natural gas in the industrial sector expanded much more slowly, but still increased by 27 percent in that period. Price competitiveness was probably the conclusive selling point for European natural gas consumers during the 1970's. Natural gas was the cheapest fuel in Western Europe.



Before the natural gas boom in the 1970's, indigenous West European production met almost all West European natural gas demand. Total West European dependence on imports was less than 5 percent in 1973, while it climbed to over 16 percent in 1980.

The corresponding percentages for total gas and total energy consumption depended on the energy mix of each country at that time. As illustrated in Table 4, the level of Western dependence was higher if one looked at the incremental percentage of natural gas, rather than if one looked at natural gas imports in the context of total energy requirements.

Table 4

**Western Europe's Dependence on Soviet Natural Gas:  
Percentage of Total Gas and of  
Total Energy Consumption**

| Country | 1979 |        | 1990 <sup>a</sup> |        | 1990 <sup>b</sup> |        |
|---------|------|--------|-------------------|--------|-------------------|--------|
|         | Gas  | Energy | Gas               | Energy | Gas               | Energy |
| Germany | 14   | 2      | 29 - 32           | 6      | 24                | 5      |
| France  | 0    | 0      | 23 - 28           | 4      | 17 - 20           | 3      |
| Italy   | 29   | 5      | 29                | 5      | 23                | 4      |
| Austria | 59   | 12     | 82                | 18     | 62                | 14     |

**Source:** United States Department of State, Bureau of Public Affairs (1981: 4)

a) Original 4 billion cubic feet per day projected equivalent to 700,000 barrels of oil daily.

b) Revised 3 billion cubic feet per day projected equivalent to 500,000 barrels of oil daily.

While it was difficult to make precise estimates of the impact of projected Siberian-West European natural gas deliveries on the energy balance of each country, it was estimated that by 1990, West Germany, France, and Italy could depend on the Soviet Union for about 30 percent of their imports, and that Austria could receive about 80 percent of its natural gas from the Soviet Union.

Faced with a growing energy market and rising oil prices, it was observed that the West European gas industry and government officials began to consider how they could increase natural gas imports. It was found that for a variety of economic, technical, and political reasons, the Soviet Union seemed to be the most promising source of imported natural gas.



As stated earlier, Soviet natural gas reserves were massive and represented one-third of total known world reserves. Technically overland shipment of natural gas by pipeline was cheaper and appeared to be a more reliable means than liquified natural gas tankers. In addition, the pipeline was faster and safer than liquified natural gas.

More compelling were the economic advantages for the involvement of West European nations in this natural gas project. West Germany, France, and Italy all looked at the project as a way to increase sales of energy equipment and technology.

The American coal alternative left the West European nations very skeptical. Although the United States had about 438 billions tons of coal, or the energy equivalent of 2 trillion barrels of oil, the deepest concern of the West Europeans was the ability of the United States to export this fuel. The United States rail and port facilities were sadly lacking. Thus, one step to Western energy independence was to rebuild the United States transportation system so that coal could actually be delivered to the West Europeans. For the time being, West Europeans considered American coal as a supplementary alternative rather than one replacing Soviet natural gas.

Furthermore, it was found that West Germany, France, and Italy were all eager to decrease their dependence on oil from the Organization of Petroleum Exporting Countries. A very large share of their oil imports came from politically volatile regions. They sought to diversify their energy sources both by type of energy and by supplier. Therefore the Soviet Union's natural gas was seen as a way to accomplish both of these objectives. Moreover, past experience with the Soviet Union had led to the Western perception that the Soviets had been consistently reliable suppliers for economic reasons.

In addition, expanded purchases of Soviet natural gas promised to generate major new orders and jobs for ailing European steel and machinery industries in particular.

There was also a political dimension to the decisions of these West European countries to proceed with the pipeline deal. West European leaders viewed expanded East-West commerce as a means for building political ties and moderating Soviet behavior. West Germany, for instance, had a vital interest in providing the Soviet Union with incentives to moderate its behavior in Europe and to help foster improved relations over Berlin. West European nations are close neighbors of the Soviet Union; their perceptions of the political utility and also the risk of increased interdependence were colored by their geographic positions as well as by their long histories as trading nations.



Another political factor that promised to limit the amount of natural gas West European indigenous producers could supply was that Norway and the Netherlands adopted conservative production policies designed to extend the life of their reserves.

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