

The European Natural Gas Industry and the Oil Crisis of 1973/74

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The oil crises of the 1970s had a profound impact not only on the future of oil, but also on the prospects for other energy sources to flourish. Non-oil energy proponents were both worried and excited, facing uncertainty about whether the turmoil in oil would have positive or negative effects on their own fields. Many players tended to see opportunities rather than threats. From uranium suppliers and wind-turbine makers to coal producers and gas companies, a range of actors enthusiastically set out to exploit the brave new post-1973 world to their advantage.

One of the most important alternatives – or at least complements – to oil was natural gas. Oil and gas were closely related to each other, as they were often extracted together at the same geological site. The need for pipelines and other complex technologies in transmission and distribution of natural gas, however, made the build-up of large-scale natural gas industries a much greater challenge. As a result, natural gas started to be used in large volumes much later than oil.

For those who could build – and safely operate – large gas systems, the rewards were substantial. The enthusiasts pointed at natural gas as a superior fuel in many industrial contexts, mainly due to the even temperature with which it burned and the easiness with which production processes could be regulated when based on gas. Moreover, since natural gas was “a smoke-free fuel, which burns up completely and does not emit any polluting rest gases into the atmosphere,” as one of the Soviet Union’s leading gas experts put it,¹ a rapid transition to natural gas in urban energy systems was attractive from an environmental point of view. Similarly, the supporters early on anticipated an important role for natural gas in the transport sector. Apart from its use as an energy source, natural gas was also of great significance to the chemical industry, notably as a feedstock in artificial fertilizer production.

In North America, natural gas had become a fairly well-established fuel before World War II, whereas in Eastern and Western Europe the breakthrough came only in the 1960s. The European development was particularly noteworthy, since gas companies set out to build massive pipelines seemingly without respect of national borders and other political and cultural divides. Thus for Western Europe both North Africa and the Soviet Union became highly significant suppliers. The Netherlands, where massive gas deposits were discovered in 1959, became Western Europe’s most important internal source of supply, and from a purely geological point of view this country could easily have supplied the whole of capitalist Europe for several decades. But gas companies in Western Europe’s importing countries did not want the Dutch to monopolize the market. Competition from Libya, Algeria, and, in particular, the Soviet Union was thus highly welcomed. In the Soviet case, Western political leaders at state and sub-state levels also welcomed connections across the Iron Curtain for foreign policy and foreign trade policy reasons.

During a short formative period featuring intense negotiations between numerous prospective importers and exporters during the latter half of the 1960s, the main pattern of European supply

routes took shape. By the early 1970s, Europe was seen to have “fallen in love with natural gas.”² Gas use, while still modest in absolute terms, grew at an unprecedented pace, unmatched by any other energy source. Despite the complexity and high capital costs of the pipeline infrastructure, and perceived uncertainty regarding imports from far away, exporters and importers rushed to expand the emerging transnational system and connect new users to it. “Blue gold,” as natural gas was nicknamed in Russian, was increasingly identified as an alternative to oil, the supply of which since the 1967 Six-Days War was no longer as trouble-free as it had once been, and as a way of diversifying overall energy supply. Moreover, the excellent environmental properties of natural gas were increasingly emphasized. In 1972 the issue of “acid rain” was introduced on the agenda at the United Nations’ Stockholm Environmental Conference, and in some countries restrictions were put in place to restrict sulfur contents of fuels. Since the combustion of natural gas hardly produced any sulfur dioxide, but only water and harmless—as it was believed at the time—carbon dioxide, it profited markedly from this trend.

Then, in 1973–1974, came the first oil price shock, dramatically pulling Europe and the whole world into a new, turbulent energy era. In this situation, depending on one’s perspective, it was possible to view natural gas both as part of the problem and as part of its solution. On the one hand, natural gas contributed to Europe’s troublesome dependence on imported fossil fuels; on the other, it offered a pathway to diversification away from oil. The oil crisis reminded importers of the deeply political nature of the international fuel trade, and of the potentiality of energy exports being abused for political purposes. From this angle, the dismay expressed in connection with the Arab oil embargo resonated well with the voices that for political reasons had opposed projects involving natural gas imports from non-Western – that is, Soviet and North African – sources. If, on the other hand, diversification away from oil was the overarching goal, then the emerging East-West gas trade seemed to be a step in precisely the right direction.

Most actors and analysts tended to regard natural gas as part of the solution. The thesis that natural gas, like oil, might be turned into an “energy weapon” was rejected. Instead, actors emphasized the political *opportunities* linked to natural gas imports from far away. Imports from beyond the Iron Curtain, in particular, were interpreted as an important instrument in sustaining East-West détente. As for the risks, there seemed to be good reason to interpret these as low. One reason was that natural gas in Europe was still a new fuel that did not yet play any major role in Europe’s energy system. At the aggregate EEC level, the share of natural gas in primary energy supply amounted to a mere 8 per cent in 1971.³ Even in the unlikely case of a total supply disruption from all exporters at once, the actual harm would thus be kept within limits. Another reason was that, precisely because the West Europeans did not fully trust all their suppliers with regard to their willingness and ability to live up to their contractual obligations, gas companies had taken far-reaching precautionary measures that would enable them to respond effectively to any short- or long-term supply disturbances. This included both institutional measures (such as paragraphs in the gas contracts specifying penalties to be paid in case of supply disruptions) and technical measures (like the construction of underground gas storage facilities). There was thus a feeling that gas imports, even from beyond the Mediterranean and the Iron Curtain, were secure.

Ironically, the most notable negative impact of the 1973/74 events on the perceived security of

natural gas had to do with intra-West European gas sources. The Netherlands, along with the United States, had been singled out as a main target by the Arabs in their 1973 oil embargo. Controversially, Dutch Prime Minister Joop den Uyl sought to force his country's West European neighbors to resell Arab oil to the Netherlands by threatening to disrupt gas exports to Germany, France, and Belgium.⁴ At the same time, an internal debate was initiated in which a growing number of Dutch actors suggested that the country's vast natural gas riches be reserved for domestic needs, and that no further export contracts be signed. This was alarming news for many existing and potential importing countries.

The oil crisis gave rise to problems in European-Algerian gas relations, too. Immediately after the outbreak of the Arab-Israeli war in October 1973, Algerian LNG exports to the United States were disrupted. The state-owned Algerian oil and gas company Sonatrach initially referred to technical problems at its LNG plant, and exports were soon resumed. In December, however, Algerian Minister of Energy Belaid Abdessalam told American journalists that "future shipments of LNG to the US on a continuous basis may depend on the satisfactory settlement of the Arab-Israeli conflict."⁵ This was hardly an encouraging message for those European gas companies that held high hopes in the possibility of large-scale imports of Algerian gas for diversification and security purposes.

In addition, the turbulence on the world oil market made the Algerians rethink their pricing strategy. An immediate result was that a large preliminary export contract that had been concluded in 1972 with a European consortium of gas companies was declared invalid. At the time, far-reaching preparations to receive Saharan gas had already been initiated in the prospective importing nations that were part of this agreement. Several large investments linked to the deal, including a first West German LNG terminal (at Wilhelmshaven), had been designed specifically for handling incoming Algerian gas. Their fate now became highly uncertain.

The great vision of a Trans-Mediterranean Pipeline from Algeria to Italy (through Tunisia and Sicily), which before 1973 had appeared to be on good way towards realization, also suffered from the Algerian turn. The pipeline did start to be built, however, a few years later, although the second oil price shock in 1979 once again delayed its completion. When finally inaugurated in 1983, the Trans-Mediterranean Pipeline had been ready for use for more than a year. Failure to come to agreement on the gas price prevented its use during that time.

In the case of imports from the Soviet Union, the most immediate effect of the oil price shock was to make Soviet gas more attractive from an economic point of view. In the next phase, however, Moscow signaled that it would not accept this state of affairs for long. Approaching their Western partners, the Soviets offered additional gas supplies, but only under the condition that previous deals were renegotiated. In this way both Germany and Austria in 1974 contracted additional Soviet supplies at prices several times higher than in the previous deals. This was seen to reflect the new harsh realities. France was also approached by Moscow with a request for renegotiation of its Soviet contract. But the French case was different since imports, scheduled for start-up in 1976, had not yet commenced. Given the turbulence on the global energy market, upward adjustment of the gas price agreed upon in 1972 was reported to have been "a constant

bone of contention” between the two sides ever since the contract was originally signed, and at one point it even seemed that the deal would be annulled.⁶ The issue was finally resolved in December 1974, when Soviet leader Leonid Brezhnev and French president Giscard d’Estaing ceremoniously signed a new, updated contract.

In the case of Germany, Austria, and France, as well as Italy, which had signed the largest single contract with the Soviets so far, the post-1973 trend thus served to reconfirm and further expand a commitment to imports of Soviet natural gas. By contrast, those countries that at the time of the oil crisis had been interested in linking up with the Soviet grid, but had not yet signed any contracts, tended to move further away from an actual import. This was so with regard to Sweden, Switzerland, Belgium, and Spain, as well as the United States. American stakeholders had since 1970 been elaborating on a major LNG import project with the Soviet Union, and in June 1974 it was reported that they had reached agreement on everything with Moscow except the gas price. Accord on this final point, however, was complicated both by the oil price shock and by the appointment of Gerald Ford to the US presidency, who was more skeptical to the project than his predecessor Richard Nixon.

Looming shortages of natural gas in large parts of the United States at this time, leading to harsh winter curtailments and other emergency measures, served to keep the American interest in both Soviet and Algerian gas alive in the period that followed. But in the Soviet case, little progress was made in the actual negotiations, and in the meantime overall Soviet-US relations started to worsen. In early 1976, following Moscow’s much-criticized intervention in Angola, Secretary of State Henry Kissinger declared that although he had initially favored the “red” gas proposals, he now believed that “political conditions have reached a point where right now would not be the most opportune moment to produce or come forward with projects of large-scale economic cooperation.”⁷ In the period that followed, the grand Soviet-American visions of the early 1970s gradually faded away.

Another important natural gas vision that seemed to be in the risk zone following the Arab oil embargo concerned the idea of large-scale gas imports from Iran. The Shah’s vast territory was known to rest on some of the world’s largest natural gas deposits, but as of the early 1970s only small volumes were actually produced. Optimism grew following the discovery of the supergiant Kangan field in southern Iran, whose reserves seemed too vast for Iran itself to absorb. The Iranian government and its national gas company, NIGC, welcomed the idea of gas exports to Western Europe, viewing it as a pathway to diversification of its energy trade away from oil. Several alternative Iranian-European gas transport projects had been conceived already before the 1973/74 events, ranging from a massive fleet of LNG carriers to a pipeline-only project centered on transit of Iranian gas through the Soviet Union to Western Europe.

In the end the Iranian project, despite Iran’s central role in the OPEC, was boosted rather than jeopardized by the oil crisis. In November 1975, a German-Austrian-French consortium of gas companies, led by Germany’s Ruhrgas, successfully signed an impressively large gas import contract with the Shah. At the signing ceremony the Iranians, the Soviets, and the West Europeans jointly declared that they considered the deal “a perfect example of the fruits of

friendship and cooperation among states with different political, economic, and social systems.”⁸ As it turned out, however, celebration was premature. When Iran was shaken by revolution a few years later, the political chaos undermined the Iranian-Soviet-West European gas project. Construction of the export infrastructure, which up to this point had progressed more or less according to plan, was interrupted. The new Islamic regime, with Ayatollah Khomeini as its front figure, signaled that it considered the prices agreed upon by the Shah’s government far too low. In June 1979, the new president of the National Iranian Oil Company (NIOC), Hassan Nazih, told Western journalists that the new export pipeline “with 90 percent probability will not be built.”⁹ The company set out to convert already completed parts of the export infrastructure into a domestic transmission system. Today, the dream of incorporating Iran’s huge gas resources into the European energy system still remains precisely that: a dream. It remains to be seen if projects such as “Nabucco” can bring new life to the failed European-Iranians vision of the 1970s.

All in all, however, the natural gas industry was remarkably successful in exploiting the oil crisis of 1973/74 to its advantage – or at least avoiding that the turmoil in oil spilled over to natural gas. The overall impression is that the oil crisis confirmed a development in natural gas that was apparent already before 1973. Once the crisis struck, gas enthusiasts succeeded in convincing the world that natural gas was part of the long-term solution to the crisis rather than part of the problem. Intriguingly, even politically controversial pipeline projects involving dependency-generating connections to ideological and military enemies came to be regarded as important contributors to enhanced energy security. Dependence on the Soviet Union, in particular, increased rapidly in the post-crisis years. The ultimate consequences of the Soviet-Western initiatives launched in the years before and after 1973/74 would become manifest only in the early twenty-first century, at which time several radical gas supply disruptions from Russia placed natural gas, rather than oil, center stage in the quest for European energy security

Per Högselius is the author of *RED GAS: Russia and the Origins of European Energy Dependence* (Palgrave Macmillan 2013).

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² “Thoughts on the Seventies,” *Oil and Gas Journal*, January 5, 1970.

³ “Soviet gas exports ‘could ease energy crisis in Europe’,” *Financial Times*, November 15, 1973.

⁴ “Dutch gas: one bubble not to burst,” *Financial Times*, February 15, 1974

⁵ “Algerian LNG cutoff not tied to Arab embargo,” *Oil and Gas Journal*, November 26, 1973; “Algeria may renegotiate LNG pacts,” *Oil and Gas Journal*, December 17, 1973.

⁶ “French, Soviet 20-year gas deal,” *Financial Times*, December 7, 1974.

⁷ “Time seen wrong for Soviet-US natural gas deal,” *Oil and Gas Journal*, February 9, 1976.

⁸ Echo, Economic Survey, no. 32 (April 1975).

⁹ “Iran on verge of killing big IGAT II gas line to USSR,” *Oil and Gas Journal*, June 18, 1979.