

# Multilateral Energy Security

Alexander Arbatov

Discussions about the security of the world's energy supplies have been ongoing for a number of years now. This seems a good moment for me to stand back and take a detached look at the component elements involved in delivering energy to the world market and at the interrelation between these elements. Such an understanding is important, not least because there is no precise definition of the concept of energy security. That is because the subject involves different individual groups, each with its own goals and interests.

The interests of the various parties are brought together and given expression through the International Energy Agency. This organization conceives energy security as designed to protect energy consumers from delays in supply caused by exceptional circumstances, such as terrorism, underinvestment in infrastructure or poor market organization. However, this is an incomplete definition, as it mainly reflects the interests of energy consumers.

The global energy system consists of the resources of production, consumption, transportation and trade. Some companies and enterprises specialize in one of these operations, while others participate in several of them, with the aim of increasing the overall efficiency of their economic activities. At the same time, different groups have their own interests, which over time may coincide, call for compromise, or be in conflict. But, in general, the system works, despite the contradictions, and the consensus view of energy security is that work should be directed towards the stability of the energy market.

Let us begin by looking at the role of energy producers, since they are most often accused of playing the major destabilizing role by threatening the security of energy supplies.

It might be thought that the market for a product such as oil, with a high degree of monopoly and low production costs in most OPEC-countries, might be noted for its stability. However, since their sharp rise in 1973-74, oil prices have been subject to fluctuation more than once. The economic situation of most OPEC-countries cannot be characterized as brilliant, and OPEC's member countries are fully aware of their dependence on oil consumers. Their attempted embargo on oil exports to Europe proved ineffective when the member states of the International Energy Agency created strategic oil reserves equal to nearly three months' import requirements. They have not attempted since then to exert political pressure. At present an informal union has been formed in order to support stability. Causes for concern remain however. They include: — recurrent disorder and strikes in Nigeria and Venezuela; the unsettled situation in Iraq; the uncertainty in relations between Israel and Palestine, and between Israel-Lebanon — Syria; growing concern about the situation in Iran and the latter's aggressive stance.

Russia and Norway occupy a special situation among developed countries in that high oil prices are to their economic advantage. However they recognize that high prices are often the result of heightened political tension and this may outweigh the economic gains. They are often willing, therefore, to fall in with the suggestions of OPEC and the importers on maintaining stability in oil markets.

The self-evident interest of exporters in maintaining high oil prices has to have a limit and they are prepared to discuss the so called “fair price” which provides long-term stability in consumption of their product. “Fair price” is understood as a less than maximum price that meets exporters’ reasonable economic requirements, as recognized by the world community, without exceeding a level that could have negative consequences for exporters and importers. The concept of a fair price for oil and, accordingly, of natural gas and other kinds of energy, as they are generally inter-related, is defined as the oil price corridor. OPEC-countries, for instance, manage this corridor by imposing extraction quotas on oil for supply to the world market. Too high a price slows down the rate of economic growth in the net importing countries, leading to global economic recession which thus hits the interests of the net exporters of hydrocarbons. Many experts, including those connected with the OPEC-countries’ interests, note that the longer hydrocarbon prices remain high, the more likely it becomes that alternative energy sources will emerge and be put into commercial production.

Russia and other net exporters of hydrocarbons are not interested in excessively high prices as they have a negative influence on economic development within the country, by increasing energy’s share in the national economy, as well as favouring accelerated depletion of mineral resources leading to an eventual decline in oil production and export.

The role and problems of Russia will be considered in greater depth later in my report.

Some experts believe that in the absence of regulating mechanisms by the net exporters, the coming two years will see both a continuation of the growth of oil production and a reduction of the oil price.

Apart from price, where high prices favour exporters and low prices favour importers, another area in which the interests of the participants diverge is access to the most favoured markets. To a large extent this is connected with the development of the corresponding transport infrastructure — the network of main pipelines, railway transport, terminals, oil refineries and plants for the production of liquefied natural gas. All this requires huge investment involving considerable risks for the private sector which it would like to reduce by receiving some kind of state support.

The creation, maintenance and development of infrastructure are of equal importance to both exporters and importers. However, exporters face an additional challenge, the changing geography of their supplies as they enlarge their raw-material base, by opening up new fields. It should be noted, however, that although our

increased knowledge of geology makes this an attractive proposition, there are risks involved and those risks might increase over time.

As to the coincidence of the interests of exporters and importers they have, first of all, a mutual interest in providing for stable economic growth of the world economy as a whole. Robert Skinner, Director of the Oxford Energy Institute, describes the interrelation between net exporters and net importers of hydrocarbons as “co-dependence”.

It can be seen from the above that a willingness to compromise prevails in the field of production and supply of energy and this was confirmed by the discussions at the G-8 summit this year. The outcome of the discussions was a declaration of mutual readiness to support and strengthen the existing system for the supply of energy.

The present relative stability of oil production and consumption is under constant threat of change, though this is not necessarily a bad thing. Weak points in the existing infrastructure and new infrastructure projects change the overall picture of the flow of world energy. These include regions where the density of shipping traffic is especially high (Turkish, Danish, Ormuz and Malacca straits), as well as transit problems and political instability resulting from inter-ethnic and interstate conflict.

Other factors influencing the delivery of energy supplies include alternative supply routes. New pipelines such as Baku-Djailhan, the North-European gas pipeline, and the oil pipeline East Siberia-Pacific Ocean, are among the projects under construction or at the planning stage for the transportation of liquefied natural gas and other products. Increased oil supplies from Russia to the APR [Arctic Polar Region] and China of up to 80m tonnes per year might, during the initial period of this process, reduce Russian supplies to the European market by several tens of million tonnes of oil per year. [This is dependent on the success of geological prospecting in East Siberia] Another example — the opening of the Baku-Djayhan oil pipeline will significantly decrease the volumes of Azerbaijanian oil transit through the Baku-Novorossiisk pipeline and consequently the freight turnover of Novorossiisk’s terminal.

Apart from the economic risks we see political risks growing in significance. The development of a reliable system of risk management must be seen as one of the most important components in achieving security for the world’s energy supplies.

Risk management has both an economic and a political dimension. From the economic point of view it means decreasing expenses in the economy of certain countries. Politically — it means preventing socio-political crises within individual states and conflicts between states. Conflicts may arise in different spheres — between net exporters and net importers; among net exporters themselves or within the group of net importers.

In the past, world energy security has been considered primarily from the point of view of the leading net importers of energy (consumers), ie from the standpoint

of providing them with a regular supply of hydrocarbons at a reasonable price. This requires the producers as net exporters to maintain considerable reserve capacity to deal with times of crisis in the supply of oil to the world market. Any decrease in supplies from one area would be made up by other countries increasing oil extraction from their reserves. This is clearly unsatisfactory. From the producer's standpoint, security of energy supplies is associated with significant risks. These include: the cyclical nature of world economic development (i.e. falls in demand for energy); large investment in the production and transportation of energy supplies; attempts by traditional consumers to switch to alternative energy sources and concern for the safety of energy supply routes. The threat by some producers to put an embargo on oil supplies is also not helpful

Producers in their turn are no less dependent on consumers. This is seen in the need to secure budget receipts, which often make up the lion's share of OP EC's income, as well as that of other oil producers. In addition to fluctuations in demand, producers are also affected by inflation of the US dollar, the major currency in which oil is traded. If all the factors forming dependence or security on oil market are weighed against each other, the two sides are, more or less, roughly in balance. The situation in energy security is perhaps best described as "fair economic interdependence".

Specialists, however, point out that excessive emphasis on providing security of supply from the consumer's point of view has a negative influence on the interests of producers.

## THE RUSSIAN SITUATION.

Russian oil extraction has entered a period of rapid growth: production has risen in 2000 — by 6.1%, in 2001 — by 7.7%, in 2002 — by 9.1%, in 2003 — by 11.1%, in 2004 — by 8.9%, in 2005 — by 2.7%.

It should be noted, that this growth has taken place without bringing into operation any new large projects. It has come from fields already discovered in the Soviet period, with other fields still waiting to be fully exploited. This explains, to a certain extent, the recent slowdown in extraction rates.

High world prices for oil have made exports increasingly attractive. This has encouraged the oil-extracting organizations and enterprises to produce as much oil for export as possible, and to implement a programme of development of their infrastructure for export transportation. In the early 90s Russia's extraction capacity was officially estimated at 112m tonnes per year. Exports beyond the Union of Independent States in million tonnes per year were as follows: 2000 — 125m; 2001 — 125.9m; 2002 — 128.5m; 2003 — 139.5m; 2004 — 182.8m; 2005 — 204m. These figures do not include oil transported by railway.

Oil exports are currently the main trigger and take up the main part of the growth in Russia's oil extraction. It is, therefore, important to determine the opportunities

and limitations that exist in this field. How much oil should be extracted and what are the optimal volumes for export, taking into account the market situation, the financial requirements of the state and oil-producers, and the raw-material base? Naturally, it cannot be assumed that the “price corridor” will always meet all Russia’s requirements, in relation to the volumes of oil it sets aside for export.

A danger still exists of Russia becoming the raw material appendix of the world economy. Most analysts think that the currency earnings from raw material export, mainly oil and gas, are important not only for achieving a satisfactory level of budget receipts but also for Russia’s economic growth as a whole. According to approximate estimates, during the past few years the contribution of petrodollars to its economic growth has ranged between one-fifth and one-third.

It might be thought that Russia is vulnerable to the so-called “Dutch disease”. It does have a concentration of wealth among a relatively small group of people and a tendency toward replacing domestic production with imports. However, Russian oil and gas revenues have a rather more solid foundation than the short-term supply base in the Netherlands.

If world prices remain at a level which makes extraction profitable, Russia will have a stable income from oil production and export enabling her to apply these funds to social needs over a number of years, while maintaining a favourable balance of payments. During the process of economic reconstruction and privatization large resources are being released which can be used to meet domestic demand without exerting inflationary pressures on consumers’ income.

The production base of much of Russian industry has become obsolete and is in need of fundamental modernization. No major new production capacities were set up during the 90s, except for a number of industries either producing raw materials or guaranteeing quick returns (such as the food industry). After the collapse of the Soviet Union the financial establishments newly set up under the Russian Federation would only look seriously at projects offering a payback period of not more than a year, or, occasionally, two years. [The explanation for this enthusiasm for short-term returns is explained by the relationship of these institutions with government financing, to which most of them owe their early success.] Now this period has increased somewhat but is still inadequate. The accepted standard period for seeing a return on industrial investment is at least five years. Some strategic projects, which are of essential importance for the Russian economy, might have considerably longer payback periods.

The situation recalls the model for the interaction between producers and consumers of energy resources, adopted during the Soviet era. During the Cold War and afterwards, such interaction was founded on the interest of developed countries in stable supplies of Russian minerals, particularly energy.

The case for good economic relations between Russia and energy consumers has rested on the following:

- Russia is rich in energy resources and world demand means consumers are experiencing increasing shortages;
- Russia is close to the most significant consumer markets for energy.

It was therefore of mutual interest that good relations were maintained despite the problems of protracted confrontation.

There remain many reasons in favour of retaining and developing a relationship based on the model outlined above. However it has both natural limitations and disadvantages

Firstly, for consumers, concern about the reliability of supplies plays an important role alongside the need for diversification of sources of supply. The rest of the world considers Russia, in the context of energy security, as a major producer and exporter of energy resources. Russia links its energy supplies to the receipt of finances necessary for its economic development, including development of its energy sector. It must therefore be admitted that Russia and its partners are equally interdependent and their partnership in this field cannot be used as an instrument of political pressure on either side.

Secondly, in the short term the capacities of the Russian fuel and energy complex are limited, particularly in relation to increasing oil supplies. Finally and most importantly, Russia cannot be content to be seen by the consumer-countries only as a supplier of energy, even if it is one that is of strategic significance. Energy exports, even taking into account the “multiplier effect” cannot guarantee modern living standards in a country with a population the size of Russia’s. It is not a matter of refusing to enjoy the natural benefits of possessing abundant raw materials. It is a question of how to integrate these advantages into a modern economic structure.

Russia’s need to modernize its economy and increase its energy output runs in parallel with the demands of consumers for secure and abundant supplies of energy. How to increase Russia’s raw material output and adapt its economy to meet global demand could become the basis for a bilateral agenda stimulating cooperation between the two sides.

There are good reasons why Russia has lagged behind in the development of high tech sectors; many other nations also face problems of modernization. This is becoming more acute as modern global competition means that there is no obvious advantage in locating new production capacities in the developed world. In the past few years investors have generally looked to Asia, and particularly to China, that developing “world factory”, as the home for high volume production, particularly for goods requiring substantial labour inputs. But where the first stage processing of raw materials is concerned, China’s attractiveness becomes questionable. There is a stronger case for locating such activities closer to the source of the raw materials. In this sense Russia looks like an extremely promising player.

Naturally, the primary production of raw materials when taken to extremes can hardly be characterized as ecologically sound. But where restructuring is concerned, apart from its economic advantages, Russia has other factors working in its favour.

First, the level of pollutant emissions in Russia is substantially lower than it was in 1990, giving it opportunities as stipulated by the Kyoto Protocol to make additional investment in more up-to-date and less ecologically damaging production processes.

Second, replacing obsolete equipment which fails to meet modern requirements could compensate for the negative ecological impact of increasing the scale of raw material production.

Finally, the growth and expansion of raw material production would provide the economy with substantial volumes of construction materials, metals, and other substances used in the manufacture of high-tech products. Growth in supply is likely to stimulate demand; this in turn would boost those sectors which make products with a high added value and intended for final consumption.

The result would be to encourage competition for investment in the Russian financial market which would speed up technological advance in the Russian economy.