

The ESPO project guidelines

The idea of building a pipeline in the Far East was conceived in the mid-1990s. Until 2003, it was actively lobbied for by Yukos oil company, which was interested in supplying oil to China¹, while Rosneft and the state-owned pipeline monopoly Transneft wanted the future pipe to run to one of the Pacific Ocean ports. The bankruptcy of Yukos and the disputes over the route of the pipeline (whether to China or a sea port) postponed the Russian government's decision to build the ESPO until December 2004. The pipeline's annual capacity will reach 80 million tons. It will run from Tayshet (in the Irkutsk oblast) to Nakhodka in the Perevoznaya Bay on the Pacific coast (the terminus of the pipeline was later moved to the Kozmino Bay). From there, oil will be exported to markets of several Asian countries (including Japan, China and South Korea). As a result, considering the possibility of competition between the consignees, it is expected that the oil would reach a higher price than if it were exported to China alone.

The first stage of the ESPO project provides for building a 2,757 km-long pipeline running from Tayshet to Skovorodino (Amur oblast), with an annual capacity of 30 million tons, and an oil terminal by the Kozmino Bay, the annual capacity of which will reach 15 million tons of oil (see map). Oil will be carried by railway transport from Skovorodino to Kozmino. The construction work started in April 2006, and the pipeline was initially planned to be completed by the end of 2008. However, due to delays, the completion deadline was moved forward to December 2009. In the second stage, a pipeline from Skovorodino to the Kozmino Bay (capacity up to 50 million tons, length 1,963 km) will be built, and the capacity of the first pipe, running from Tayshet to Skovorodino, will be increased to 80 million tons. Building work will start upon the completion of the first pipe, and is planned to be finished in 2014 or 2015.

The ESPO will be the most expensive project implemented so far in the Russian energy sector, and it will be the longest oil pipeline in the world. The estimated cost of the first pipe is approximately US\$14 billion, while according to the original budget version, the pipeline was to cost US\$6.6 billion. Funds for the investment will come from Transneft's own assets (30%) as well as loans from Russian banks (70%). 15,000 people are engaged in the work, including 2,500 Chinese workers. The construction of the second ESPO pipe, the estimated price of which will be at least US\$15 billion, will be partly funded by the state (the Russian Federation Investment Fund) due to Transneft's problems obtaining more bank loans².

The China branch

According to the (still unapproved) plans, an ESPO branch running to China with an annual capacity of up to 30 million tons (the Skovorodino–Daqing pipeline) will be built. Beijing has been making efforts for several years to ensure that the pipeline is built, and has declared that it will be able to back it financially³. Although Moscow has suggested that the Daqing branch will be built (as provided for under the Russian *Energy Strategy* document adopted in

August 2003), the construction work has been hindered due to lengthy negotiations over the oil price between the two parties. Russia has to build the pipeline running to China because the capacity of the railroad between Skovorodino and Kozmino is very small, reaching only 15 million tons

(its expansion would take from four to five years, and be very expensive). If the first pipe of the ESPO carried oil only to the Pacific coast, the profitability of the entire pipeline would be significantly reduced. Thus, the construction of the Skovorodino–Daqing branch is vital for the success of the ESPO project as a whole.

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¹ Yukos supplied small quantities of oil to China by railway transport.

² Rosneft's plans to build a refinery in Nakhodka with an annual capacity of 20 million tons at a cost of US\$13.9 billion are directly linked to the ESPO.

³ China has already paid US\$37 million for the feasibility study.

The development of oilfields in Western Siberia...

The construction of the ESPO pipeline is directly linked to plans to develop Eastern Siberian oilfields. According to forecasts, oil production in Western Siberia and in the Ural-Privolzhye region, which have traditionally been Russia's key oil provinces, and accounted for 91% of Russian oil production in 2007, will gradually decrease as the resources run low. To keep oil production and export at the previous levels, it is necessary to open new production centres, first of all in Eastern Siberia, the Krasnoyarsk Krai, and on the Arctic shelf.

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The oilfields of Eastern Siberia, the estimated resources of which are at least 1.6 billion tons (and may be much bigger), have not been developed at all so far. The main reason for this was the lack of the infrastructure necessary for oil transport. Oil companies did not want to initiate very expensive investments in oilfield de-

velopment without being sure that the pipeline would be built. The launch of the ESPO is expected to encourage the Russian companies which hold oil production licences to commence development of the field on a larger scale. However, this will be time-consuming, because most of the field development investments are at the initial stage, and need huge outlays. According to the Russian government's plans, the new oil pipeline will also be the key element of the strategy for economic development of the Far East. In fact, the building of the ESPO and the related development of the new fields may cause a tremendous increase in investments in the region and create new jobs. However, the process will take time. Tax exemptions for periods of several years are one of the measures the government has taken to encourage Russian oil companies to develop the Eastern Siberian oilfields.

... and the diversification of oil export directions

One of the declared objectives for constructing the ESPO is to diversify the directions in which Russian oil is exported, as most of it is currently sold to European markets. As little as 5–6% of the total exports are supplied to Asian countries (mainly China and Japan). When the new pipeline is launched, Asia's share in total Russian oil exports will rise to approximately 25%. The creation of an alternative outlet for Russian oil is expected to cause an increase in its price on the European market. At present, the two key types of Russian oil (Urals and Rebco) are sold at a lower price than Brent oil, which is produced in the North Sea. A new type of oil (ESPO Blend) will be created for the oil exported via the ESPO. Since its quality will be better, its price will be higher than that of the Russian oil exported to the West.

Moscow has been using the expected increase in Russian oil and gas exports to Asian markets as a propaganda instrument in its relations with the EU. Russian politicians have suggested unofficially that legal impediments to Russian energy

companies' investments in EU member states may result in the intensification of their activity in Asia. A similar approach from Russia was reflected precisely in the article by the Russian Minister of Industry and Energy

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Viktor Khristenko published in the *Financial Times*, where he wrote that Russia "can diversify our industrial and energy co-operation by turning to Asian and Pacific countries. Incidentally, the eastern vector has an important domestic dimension [for Russia] - such co-operation will help us develop eastern Siberia and east Asia"⁴. However, regardless of such declarations, redirecting

⁴ *Financial Times*, 19 October 2007.

a significant part of Russian oil exports to Asia at the expense of the EU is impossible. Oil supplies to Asian markets would be much more expensive than to European markets, and would require the building of a new infrastructure with much larger capacity than the new ESPO pipeline.

Where will we take the oil from?

The greatest challenge which the ESPO will have to face is filling it with oil. Pursuant to the project guidelines, the pipeline will transport oil produced in the new fields in Eastern Siberia. However, everything seems to indicate that in the immediate future there will be not enough oil even to fill the first pipe of the ESPO. The state report entitled “Geological survey programme for East Siberia and the Sakha Republic (Yakutia)” of 2005 states that annual oil production in Eastern Siberian oilfields will reach 30 million tons in 2012–2013, and 80 million tons by 2020 or later (many experts believe these forecasts are too optimistic). This means that for at least the first several years, the ESPO will have to take oil from very distant fields in Western Siberia. Transneft expects that the oil will be mainly supplied from Rosneft’s Vankor field, located in the northern part of the Krasnoyarsk Krai, in the initial phase of the new pipeline’s operation. Oil production will reach 10 million tons in 2010, to increase later to over than 20 million tons. However, the oil transport will not be cost-effective, due to the great distance between Vankor and Tayshet (approximately 3,000km). Still, it will be impossible to fill even the first section of the ESPO without oil supplies from Vankor or other Western Siberian fields.

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The Eastern Siberian fields are now in the initial stage of development, and will be able to supply between 13 and 15 million tons of oil at most to the ESPO in 2010. It seems that some companies will benefit from the annual delay in the construction of the first pipe. Meanwhile, since this October small amounts of oil have been sent in the opposite direction, East to West, via the already operational Tayshet-Talakan section by Surgutneftegaz (120,000–150,000 tons monthly) and TNK-BP (60,000–70,000 tons), the first companies to have started developing oilfields in Eastern Siberia.

The problems with filling the first ESPO pipe, and those connected with the slow pace of development of the Eastern Siberian fields, are likely to cause the second pipe’s construction to be postponed. Semyon Vainshtok, the then president of Transneft, declared in 2007 that work would start on the Skovorodino–Kozmino section when the companies operating in the region were able to produce 80 million tons of oil annually. Experts estimate that this may not happen before 2025.

Will the ESPO be a cost-effective transport facility?

Another major problem linked to the ESPO is the question of its cost-effectiveness. Transneft, the pipeline operator, hopes that the record-breaking expenses on the pipeline construction will be paid off after nearly 22 years of operation. To obtain funds for the investment, the company raised the transport tariffs on its export pipelines by 10% this August. Thus the Russian oil companies will pay some of the ESPO’s expenses. However, it is the transport tariffs on the new pipeline that will be their greatest challenge. The estimated real cost of supply of one ton of oil from Tayshet to Skovorodino will reach US\$60, and from Tayshet to Kozmino as much as US\$100, while the transport of oil from

the Western Siberian fields to Primorsk and Novorossiysk costs between US\$30 and US\$33 per ton.

To make the oil transport via the ESPO more attractive to oil companies, Transneft intends to introduce a **'network tariff'**. On this basis, a standardised transport tariff will be introduced on all Russian oil export routes. In fact, this will mean increasing the transport fees westwards by nearly 20%. Oil transport by the new pipeline would be unprofitable without subsidising it at the expense of supplies to Europe. Although the introduction of the network tariff has met with objections from the oil companies, and has not been unconditionally supported by the Russian government, the eventual implementation of this operation seems to be a matter of time. The introduction of the tariff will make export via the ESPO more cost-effective, although this will happen at the expense of increasing the westward transport rate of oil transport.

Why so expensive?

The ESPO pipeline is not only the largest but also the most expensive project in the Russian energy sector. The costs of its construction (due to the extreme climate conditions) make it one of the most expensive oil pipelines in the world. However, some Russian experts believe that it would be possible to build the ESPO for a sum much smaller than the planned US\$14 billion⁵. They have also suggested that the real costs of the pipeline construction may even be half as much as those stated, and the money 'saved' this way will go to the private bank accounts of some people engaged in the project. The procedure of choosing subcontractors was criticised at the very beginning of the ESPO's construction. The choices fell on companies which had no previous experience in building oil pipeline infrastructure, and which according to some Russian media were linked to the management of Transneft, as well as certain high-ranking politicians. The prices of the building materials and services supplied have also been questioned. Although the national Clearance House⁶ has embarked on a review of the ESPO construction, no irregularities have so far been revealed.

⁵ For example, see M. Krutikhin, Tug of War: Government Officials Clash over ESPO Schedule, RusEnergy.com, 13 February 2008.

⁶ A state supervision agency.

Conclusions

1. The ESPO project is a response to Russia's real needs, firstly to the need to develop the Eastern Siberian oilfields and to trigger the development of the Far East. However, the construction of the pipeline has faced many significant problems impeding its building in the planned form and time period, which puts the possibility of achieving the initial goals in the immediate future into question.
2. In the longer term, the ESPO pipeline will lead to the emergence of a new oil province in Eastern Siberia, which will be at least partly able to compensate for decreasing production in the fields of Western Siberia and the Ural-Privolzhye region. However, the process will take a decade or more, which means that oil transported from other parts of Russia will be used to fill the ESPO. This, combined with the oil transport costs, which will be much higher than in the case of westward exports, suggests that reasons other than economic ones are more important in the case of this project.
3. The launch of the ESPO pipeline will not pose a threat to the Western direction of Russian oil exports. Contrary to some Russian politicians' claims, Russia has no other alternative but to export the huge majority of its oil to European markets, considering the existing transport infrastructure and the better cost-effectiveness of transport westwards.

4. The problems which the ESPO is facing now undermine the feasibility of building the second branch of the pipeline in the near future. It seems that the second part of the ESPO will not be built before the Eastern Siberian fields start production on a larger scale, because the amount of oil will be insufficient to fill it. At the same time, considering the limited possibilities for transporting all the oil from the first pipe of the ESPO to Kozmino, Russia will be more inclined to strike a deal with China on building the Skovorodino–Daqing pipeline.

5. An important element in building the ESPO pipeline is the achievement of goals which are not directly related to the explicit objectives of the project. It may be surmised that a group of people engaged in constructing the new pipeline, and who are linked to some representatives of the Russian political elite, are deriving private financial benefits from the lengthy process of the ESPO's construction, which is certainly one of the causes of the project's ever-growing costs.

Map. Scheme of the ESPO oil pipeline route, with the planned Branch to China



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