

OIL & CAPITAL

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Blueprint to retrieve a black situation

Russia's oil and gas sector has entered a new stage in its development, requiring serious restructuring in the sector itself and the environment where it has been functioning — the national and world economy.

This has been recognised with the establishment of a working group which included the deputy chairman of the Ministry of Economy's and the Russian Academy of Sciences' Council for Studies of Productive Forces, Alexander Arbatov, the chairman of the Ministry of Fuel and Energy's Expert and Advisory Council, Eduard Grushevenko, and the head of the Ministry of Fuel and Energy's Strategic Development Department, Alexei Maste-panov, to determine what has been titled the Basic Concept Provisions of Russia's oil and gas sectors in the future and the need to shift from 'technocratic' to 'financial and economic' approaches to shaping the country's energy strategy.

The Russian, and before that the Soviet, oil and gas sector has throughout its history adhered to one dominating strategy — constantly moving on from exploited fields into newer, richer areas and steadily increasing production volumes.

The first worrying signals of problems and negative trends in the oil and gas sector's development came in the mid-1970s. The then Soviet oil industry minister Valentin Shashin warned that the more we produced, the broader should be exploration in new regions. Those new regions should be prepared for

development in anticipation of a natural production decline at already developed fields.

Mr Shashin said that unless reserves in new regions were prepared, inertia could ensure that it might be too late to do that when production began to go down. The higher the current production rate at giant fields like Samotlor and Fyodorovskoye, the greater the drop in production will be.

But Mr Shashin's warning was ignored.

The US Central Intelligence Agency's report, prepared some time later, came as a bolt from the blue in claiming that the Soviet oil sector had reached its peak potential and, in the mid-1980s, a drop in production would be inevitable.

The CIA report confirmed the fears of some soberly minded domestic specialists who believed that unless early action was taken to ensure a replenishment of known reserves, there would be a slump in output — and consequently it would take far more cash to retrieve the situation.

In the middle of the 1980s, when the CIA forecast was seen to be true and production volumes in the country went down for the first time ever, enormous efforts and spending were required to avert a long-term decline. But since the end of the 1980s a production decline has been irreversible, further aggravated by the Russian economy's restructuring.

In 1990s the oil and gas sector, like the whole of the domestic economy, experienced a serious decline in production but not so

catastrophic as in other economic sectors. The sector still met domestic and external demands and provided a substantial share of social and political demand for fuel for which it could not get payment in full.

The oil and gas sector's relatively successful functioning today, compared to other sectors, creates illusions of its long-term and stable well-being and makes the sector a regular — and main — source of cash to state budgets.

But there is a threat of a landslide retirement of old assets and shutdowns of a large number of wells that are past their best.

Given that the oil and gas sector has been the most important source of national budget revenues (accounting for about 40 per cent of federal budget revenues and 20 per cent of consolidated budget revenues) and the main exporter (bringing in around 40 per cent of the country's hard currency earnings) its economic health, directly and immediately, affects Russia.

There is now an urgent need over the next 10 to 15 years to promote the oil and gas sector's development to ensure the growth of hydrocarbons production to meet demand. That will remain pressing until energy saving becomes a real alternative to energy production.

During that period the oil and gas sector will have to be the driving force of national economic growth for investment made in the sector to have a multiplication effect.

At the end of that period, which cannot be shorter than the whole investment cycle in oil

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and gas industries, gradual stabilisation may begin and demand for hydrocarbons in the domestic market may start going down.

Economic growth leading to a growth in demand for hydrocarbons, will be offset by a decrease in demand for them due to better efficiency of oil and gas utilisation.

It is necessary, first, to take advantage of the current decline in demand and make serious changes in the oil and gas sector's functioning in line with the current objectives in its development.

Second, demand for hydrocarbons and the macro economic effect the oil and gas sector's development produces, should be used to 'heat up' related sectors of the Russian economy and ensure the country's transition to a phase of stable and quality economic growth.

That should not be done from the principle of 'take away and divide' (that is, strip the oil and gas sector of all of its revenues and divide what has been taken away among other sectors where demand for their products does not exist, because they

cannot compete in the market). The oil and gas sector should be guaranteed a chance to generate effective competitive demand for products and services in related sectors.

Under that development model, the macro economic effect on the country depends on the ability of Russian enterprises providing goods and services for the oil and gas sector to compete.

Using 'force' to increase the utilisation rate of those enterprises and place the oil and gas sector's orders with them, irre-

spective of whether or not their products are competitive, is absolutely hopeless for the state in economic terms — long-term damage exceeds immediate benefits. Therefore, encouraging the oil and gas sector and related industries to make their products more competitive should be one of the state's priorities under the current conditions. The oil and gas sector's current problems are based on a combination of natural factors (depletion of mineral resources), consequences of changes in the system of economic relations and

FACT FILE

The logic of 'natural dynamics' in the resources base of Russia's oil and gas sector

Changes in the raw materials base conform to natural laws related to the finitude of nonrenewable mineral resources (oil and gas, in this case) within the boundaries of an oil- and gas-bearing province. The development of such provinces has several stages (early, mature, later and waning), differing in the scope of discovery, production rates and costs and risks involved.

Not long ago each of the newly introduced major producing provinces was bigger than the previous one in its reserves and was put on production when the previous domineering province was in the mature stage of its development (see *Oil production dynamics in the Soviet Union and Russia*). That ensured a steady growth in the country's oil and gas production, characteristic of the early stage. That substitution of new provinces for depleting ones and relevant changes in production rates and economic parameters can be described as 'natural dynamics', which is a natural basis for actual dynamics and economy of oil and gas production and should make the foundation of state regulation in the oil and gas sector. In particular, proceeding from the influence of the 'natural factor' on the dynamics of production costs and the share of the 'mining rent' in the price of produced oil and gas at various stages of 'natural dynamics'.

The country's main oil-producing province — Western Siberia — now shows obvious signs of reaching a late stage of its development. Russia as a whole has by the basic criteria reached a phase of transition from the mature stage of 'natural dynamics' to a later stage. Timan-Pechora, East Siberian and other

provinces cannot ensure a swing-round either by their estimated reserve volumes or development conditions — the raw materials base of Russia's oil sector has been growing old due to fundamental geological and natural and climatic reasons. Oil and gas provinces on the Arctic shelf have been in a similar situation — development conditions and costs will be the main hindrance there. The most one can expect from those provinces in case of their successful development would be a slow-down of Russian oil's transition from the mature to late stage. Therefore, the Russian oil and gas sector's further development will go on in conditions of 'natural dynamics' stages with the mining rate's declining share in the price of produced crude. The transition to later stages in oil and gas production's development is inevitable for any country and requires that a model of oil and gas supplies should be changed. In that case,

as production volumes go down, the rent component in oil and gas prices substantially decreases and the state's rent charged as special taxes and duties plunges. Therefore, focus at those stages should be made on the broadening of the tax base, rather than on the strengthening of fiscal pressure on producers, which can only be justified at earlier development stages (as the share of rent in the price of crude grows). The tax base can be broadened by bringing the dynamics of the tax load (in a broader sense of the word) on the oil and gas sector in line with 'natural dynamics' of the restoration of the mineral resources base in the sector at its later stages.

The state's policy related to the creation of a favourable investment climate requires corresponding modernization. It should take account of additional, objectively existing investment risks inherent in the later stages of 'natural dynamics'.



