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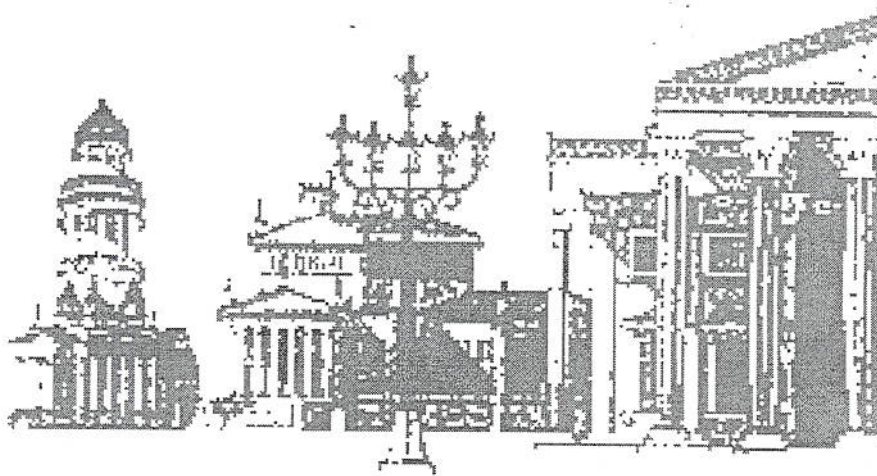
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Energy Markets What's New?



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MIDDLE EAST, RUSSIA AND CASPIAN REGION - NEW GEOPOLITICS FOR OIL & GAS FLOWS IN THE EASTERN HEMISPHERE.

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Like any change with a digit in a math pattern that may cause resultant changes in values with all the other elements, any new gas/oil production region evolving on the Earth may inevitably offer a potential impact on the geography of oil/gas supplies worldwide with trends and scopes of sales reshuffled accordingly and rivalry on the oil and gas market plummeting up or down.

The Caspian Oil Basin and its would-be impact on the world energy sales has been a big talking issue of late. However, I surmise the problem should have wider context, both in terms of economics and world policy. The Caspian Rim states will join the international oil/gas market simultaneously with new Oil Industry projects coming on-stream in Russia. Both Russia and Caspian states will influence the existing oil/gas flows and balance of forces on the oil/gas markets of the Eastern Hemisphere. What will be the resultant of these two vectors? Will a stronger stand of Russia as one of the existing world market participants and a new big rival - the Caspian states, exert a profound influence on the competitive rating of the Middle East countries as oil/gas exporting majors? Let us try to answer the questions.

Until recently the oil markets in the Eastern Hemisphere have been rather substantially shared among big suppliers. The consumer market has created basic supply routes for oil and petroleum products (see Fig.1). Oil from the Middle East dominates the West European and Far Eastern markets. It is supplied there by tankers. The Russian oil can emulate the Mid-East oil only in Western Europe. And the Russian oil routes to deliver oil to different places in Western Europe are also different:

- West Siberian oil is supplied by tankers via Mediterranean ports to Southern Europe from Novorossiysk, Tuapse and Odessa, whereto pumped by pipelines from the Western Siberia, including oil-in-transit through Ukraine (to Odessa).
- West Siberian oil-in-transit through Ukraine is supplied by the *Druzhba* oil pipeline to Central Europe.
- Oil is supplied by tankers to Northwestern states via Baltic ports (Ventspils, etc.), whereto it is pumped by an oil pipeline as well.

The Russian gas is supplied by pipelines from the Western Siberia to Western Europe through Ukraine. Its major direct competitors on the Western market are gas from Norway and Algiers supplied there by pipelines, as well as Nigerian LNG. The Russian oil and gas are not supplied to the Far Eastern market on a regular basis. The Middle Eastern LNG (from Qatar, Oman) is shipped to a fast growing Southeast Asian market.

The Southeast Asian states will account for the fastest growing demand in the future. This region provides a basic market for growing oil/gas exports. The Middle East will continue building up supplies of hydrocarbons to that region. However, they will come across intensifying competition for oil/gas (LNG) exports with new exporters from Russia and the Caspian Rim countries.

Within the nearest several years the Russian oil supply geography will undergo drastic changes on the world market resulting from more diversified sources and routes of oil/gas supplies (see Fig.2). New production areas will emerge in Russia. Simultaneously, the Russian oil/gas companies will start penetrating into the oil & gas-producing CIS and other states abroad (predominantly - to the Caspian Rim states, and further into the South or certain Middle East countries, first of all - into Iraq).

Along with the Western Siberia - traditionally basic oil/gas-producing region in Russia - the Russian map will feature new ones, including export-oriented oil & gas-producing regions in the Far East (Sakhalin), the Eastern Siberia (*Kovyktinskoye* field in the Irkutsk Oblast, etc.), in the north of Russia's European part (Timan-Pechora). As a result of that, the Russian oil and gas will arrive on the Far Eastern market.

The Sakhalin offshore developments will bring along oil and LNG supplies to the Japanese, Korean and Taiwanese markets. At present two Sakhalin projects are under development:

- *Sakhalin I* - Chaivo, Odoptu and Arkutun-Dagi fields are developed by consortium consisting of *Rosneft-Sakhalinmorneftegaz* (Russia), *Exxon* (USA), *Sodeco* (Japan).
- *Sakhalin II* - Piltun-Astokhskoye and Lunskoye fields are developed by *Sakhalin Energy Investment Company Ltd.* - a consortium incorporating *Marathon* (USA), Japan's *Mitsui* and *Mitsubishi* and British-Dutch *Royal Dutch Shell*.

The *Sakhalin III* package has been covered by a bidding procedure and awarded to *Texaco/Mobil* (Kirinsky block) and *Exxon* (West.Odoptinsky & Ayashsky blocks). At least 5 more areas, to be covered by tenders (in addition to those mentioned), are altogether planned for development in the Sakhalin Shelf.

New oil & gas (LNG) exports related to the Sakhalin projects basically tend to:

- a fast-growing market in Southeast Asia (to ensure profitability of the projects, whose development is based on project financing);
- Russia's Far East experiencing acute shortage of hydrocarbons (now liquid fuel is supplied by railway from the Western Siberia to Far Eastern refineries in Khabarovsk and Komsomolsk-on-Amur, and small quantities of gas are pumped by a gas pipeline from the north of Sakhalin).

Gas to be extracted from Kovyktinskoye and other East Siberian fields may be another source of gas supply from Russia to the Southeast Asian market. The gas is likely to be pumped by a pipeline to the north and north-east of China and to Korea (the project's feasibility study was commenced in the framework of a bilateral inter-governmental commission).

Thus, Russia will be a supplier to emulate the Middle East countries both on the oil and LNG markets traditional for them. The Caspian Rim countries will make a second rival.

All the Caspian states are active in their offshore exploration involving international oil companies, notwithstanding the fact that the international delimitation problem with the Caspian Sea has not yet been resolved. The outstanding problem and resultant political disagreement - a recent dispute over the Kyapaz (Serdar) field among Turkmenia, Azerbaidzhan and Russia may serve as an example - can slow down the dynamic process of the Caspian offshore oil/gas developments, but they will never stop it.

Azerbaidzhan alone accounts for most active oil/gas developments of the Caspian Shelf; 8 agreements on exploration and production of oil and gas have been already signed with international consortia (under projects *Azeri-Chirag-Gyuneshli*, *Karabakh*, *Shakh-Deniz*, *DanUlduzu-Ashrafi*, *Lenkoran-TalyshDeniz*, *Apsheron*, *Nakhchyvan*, *Oguz*).

The Russian oil companies are vigorously infiltrating into the region, but only *Lukoil* and *Rosneft* are among those who have "consolidated" the hard-gained ground. The process will intensively go on in the same fashion as before. *Central Fuel Company*, *Yukos* and other Russian oil companies are next to come.

There are several reasons for the Russian companies to rush into the region, CIS history of oil integration and heritage of their national leaders aside. First, they are driven by a desire to cut costs and facilitate their own access to world markets. Some time ago *Lukoil* made it clear about its intention to hit 25% share in the company's oil production beyond Russia. The reason for the way they put it like this is a never-ending upturn trend in the costs the company incurred at the "old" West Siberian fields; their new Caspian offshore developments may slow down and even stop that general process of hiking costs. On the other hand, by investing money in the oil production abroad, *Lukoil* and other companies avoid the Russian prohibiting taxes and increase cost effectiveness of their production.

The tendency to shift oil development to the outposts of Russia (Sakhalin, Timan-Pechora) and/or abroad (Caspian region) resolves one more important task - to make production more efficient for

the Russian oil companies, as they gain possibility to balk expensive *Transneft* services to pump around the oil produced by them.

By offering its rates being too high that state monopoly both shifts the burden of financing the company's investment plans onto the consumer's shoulders, and makes its users, as I see it, sort of pay indirect taxes for services offered to them, which is impossible to avoid while the oil is being pumped from the Western Siberia elsewhere. Once it is delivered, say, to Novorossiysk, the transportation overheads "slurp" \$ 23-24 per tonne. Therefore, in case there is no need to make use of *Transneft* services, the companies' oil production costs will be down rather substantially.

While the Caspian fields are being developed, the shorter oil transportation routes (with lower transportation rates) to the international market, as compared to those used to transport West Siberian oil, will prompt involvement of more costly fields to be developed on economically viable basis, making them remain competitive with the West Siberian oil. But that will hold water only in case the routes to transport the Caspian oil cross the territories belonging not only to Russia. Thus, the Russian oil companies developing the Caspian fields are objectively interested in creating competitive transportation routes alternative to Russian ones and thus lowering their transportation overheads.

Hence, the Caspian oil transportation problem can be resolved through diversifying transport routes (including those to go beyond the Russian territory), rather than finding a route alternative to the one crossing Chechnya, which is the hottest talking issue of today. That is what the Russian oil companies are actually after. And that is what makes their interests differ objectively from those defended by the Russian State.

Therefore, the interests of the Russian companies go further to the south - to Iraq and other Middle Eastern oil-producing countries eager to build up their production potentials. The Russian companies infiltrate into Iraq following a two-phase pattern:

Phase 1 - Iraqi oil is supplied to the world market under the UN Oil-Food Program, by implementing which almost 10 Russian companies have obtained quotas to sell the Iraqi oil.

Phase 2 - the companies consolidated on the Iraqi market start expanding their business from oil sales to oil/gas investments. Most prominent are *Lukoil* and other Russian companies participating in the *Western Kurna* Project.

The mounting oil production in the Caspian region and intensifying infiltration of the Russian companies into that region and into the countries south of it will make the Middle East increasingly important as a transit region, because the shortest way for the Caspian oil to go to the world market, and in particularly to its fastest growing regional segment which is Far East, is to go to the south (by pipelines to the terminals located in or nearby the Persian Gulf) - through the Middle Eastern (Persian Gulf countries') market.

So, supplementary competitive oil and gas will conflow to the Middle Eastern export market from the Russian Far East and from the Caspian region via the Middle East itself, if not for the Middle Eastern countries, who may try and put a crimp in the supply of the Caspian hydrocarbons to the traditional export markets of Middle Eastern oil & gas by imposing a tariff policy for their transit.

The suppliers will intensify their competition in Western Europe as well. The hydrocarbons developed from the Timan-Pechora outpost fields (and later from the Shtokmanovskoye gas & condensate field) will touch off their growing supplies to the North-West European market both by tankers (*Northern Gate* Project) and/or pipelines (Baltic Pipeline System) via new oil terminals on the Russian Baltic coast (Batareinaya Bay, etc.).

It will be the same way for the Yamal gas and, probably, some oil from the Timan-Pechora and West Siberian fields to go, that is through Central Europe along the "Belorussian Corridor" - to counterbalance the Ukrainian transit.

The oil streamlined through the Russian Black Sea ports (irrespective of its origin) will intensify competition in Southern Europe. Thereby, the Bosphorus & Dardanelles problem will be partially

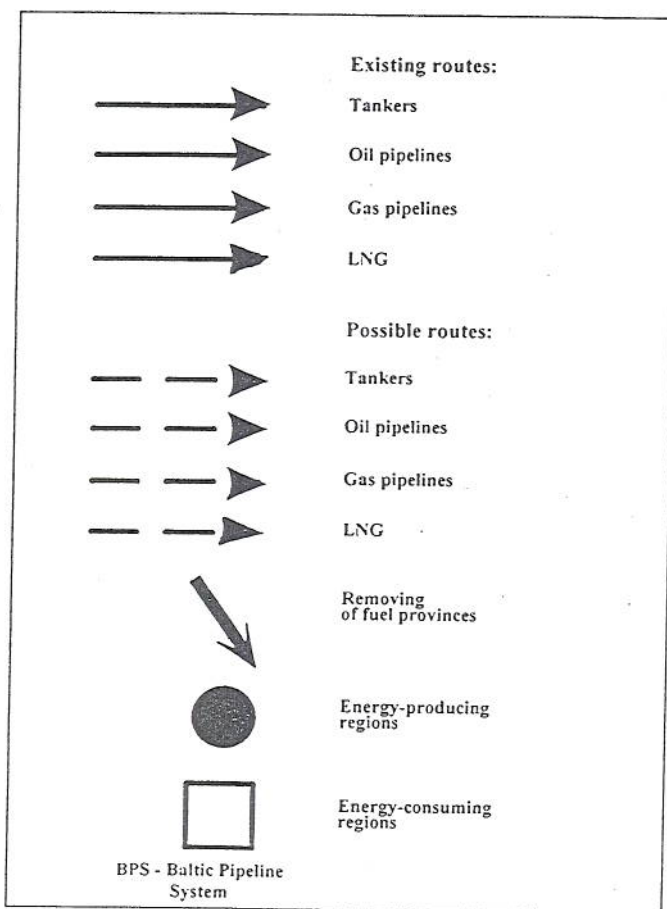
relieved by laying by-passing pipelines through Bulgaria and Greece. The Caspian oil supplied to the East Mediterranean ports through Turkey (that will also by-pass the Bosphorus & Dardanelles) will also intensify rivalry in Southern Europe.

Thus, the near future is likely to witness strong rivalry in oil and gas for the West European and Southeast Asian markets among the Middle East countries, on the one hand, and Russia with the Caspian states, on the other hand. The intense competition on the oil & gas market will be anticipated by existing rivalry among the said regions on the international capital market translating into scramble for investments in fairly capital-intensive oil/gas projects.

The volume of capital expenditures in the first 2 Sakhalin projects will total about \$ 25 billion. The Kovytkinskoye field development will amount to about \$ 7 billion (without pipeline construction). The Timan-Pechora (TPC project) oil&gas development expenditures are estimated over \$ 50 billion with up to \$ 5 billion - to construct oil transportation systems to pump oil to Western Europe. 28 billion US dollars will be invested in the first 8 Azerbaidzhanian projects to be implemented in the Caspian Rim. The oil & gas sector of the Middle East countries demand annually about \$ 20 billion; half of the sum is to be covered from abroad. The scale of investments is fascinating. It means, the scramble for them will be acute.

Those countries, who can offer most favorable, stable and credible investment terms and conditions to their potential investors, will have the upper hand in the rivalry.

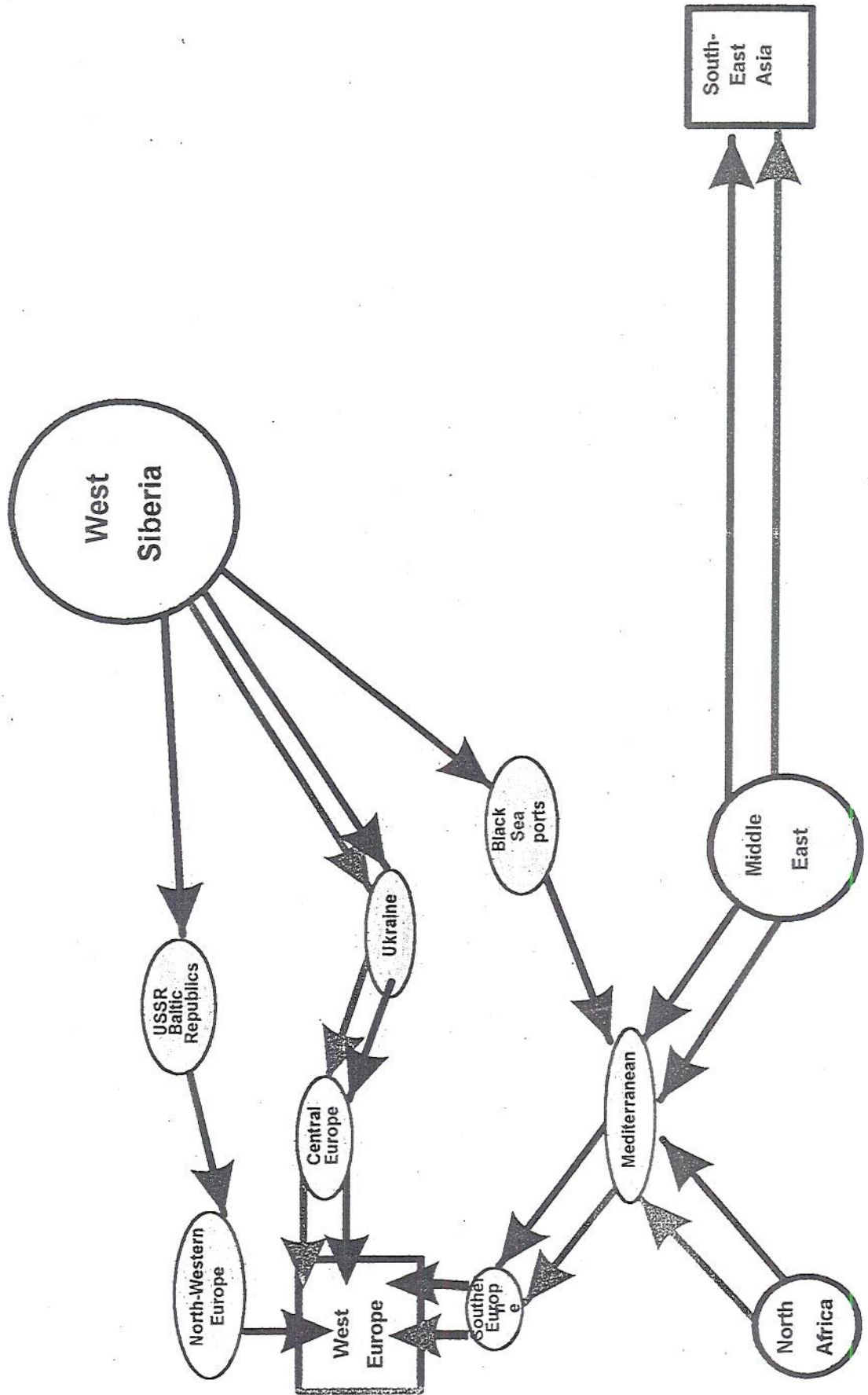
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Oil & gas markets of East Hemisphere: major export routes

PRIOR TO large-scale development of Caspian Sea resources

Fig. 1



Oil & gas markets of East Hemisphere: major export routes

AFTER large-scale development of Caspian Sea resources

Fig. 2

