

# Foreign Investment in the Russian Oil and Gas Industry: Lessons from Sakhalin

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## **Abstract**

This paper examines the development of the Sakhalin projects to determine what lessons can be learnt about the prospects for foreign investment in Russian oil and gas industry. The paper is divided into three substantive sections. The first section reviews the current status of the Sakhalin projects. Following the annulment of the Sakhalin-3 project licenses and Rosneft's decision to withdraw from two exploration projects, the future prospects for Sakhalin seem less certain. The second section considers the factors that explain the progress made by the first generation Sakhalin projects. The third section considers the more general lessons that can be learnt from the Sakhalin projects and highlights the complexities of the investment environment and contradictions surrounding the demise of the PSA. The paper concludes by suggesting that the relative progress of the first generation Sakhalin projects should not be taken as a signal that the more general investment environment has improved.

## **Introduction**

The two oil and gas projects known as Sakhalin-1 and Sakhalin-2 (what I have called the first generation Sakhalin projects) are the largest foreign direct investments in the Russian oil and gas industry. Together, if they are both fully developed, they represent a potential investment of \$ 25 billion. Most recently, BP and Rosneft are discussing development of their Sakhalin-5 project, which, if it proves commercially viable, represents at least a further \$ 2.5-5 billion in foreign investment.<sup>2</sup> According to Goskomstat figures, between 1995 and 2002, Sakhalin Oblast received about \$ 2.6 billion dollars of FDI, which represents 8.6% of total cumulative FDI in Russia during that period, placing the region 3<sup>rd</sup> in Russia after Moscow city and Moscow oblast. The majority of this investment was related to the first phase of the Sakhalin-2 project. Now that Sakhalin-2 is developing the second phase of its project and Sakhalin-1 is developing its first phase, investment on Sakhalin in 2004 is expected to top \$ 4 billion. While the figures surrounding the Sakhalin projects are impressive, the prominence of Sakhalin at a national scale reflects the relative failure of the rest of Russia to attract substantial amounts of FDI. The western press often speculates that Russia could attract over \$ 100 billion in foreign investment to its oil and gas sector. The history and current status of the Sakhalin projects provides valuable insight into why Russia has yet to attract substantial amounts of foreign investment to its oil and gas industry outside of the BP-TNK deal and the first generation Sakhalin projects. The purpose of this paper is to assess the reasons why the Sakhalin projects have been a relative success and to determine what general lessons can be learnt from the Sakhalin experience to date. Following this brief introduction, the paper is divided into three substantial sections: first a brief overview of the current status of the projects is presented; second, the paper considers those aspects of the first generation Sakhalin projects that makes them different from potential projects offshore Sakhalin and elsewhere in Russia; and third, the paper assesses the lessons that can be learnt from the Sakhalin experience. A brief conclusion places the findings of the paper within the broader context of Northeast Asian energy cooperation.

## **The Current Status of the Sakhalin Projects**

There is not the time, nor the need, to dwell on the detailed history of the Sakhalin projects however, since the beginning of 2004 there have been a number of developments that have taken the tarnish of Sakhalin's achievements.<sup>3</sup> In the paper that I presented last year I identified three generations of Sakhalin projects.

The 'first generation' projects date back to the early 1970s and a compensation agreement between Japan and the Soviet Union to explore the offshore potential of the Sakhalin region. This initial phase of exploration discovered reserves that became the basis for the Sakhalin-1 and Sakhalin-2 projects in the early 1990s (see Table 1). The subsequent development of these projects has taken place within production sharing agreements (at present there are only three PSAs operation in Russia, the third is a TotalFinaElf (France), Norsk Hydro (Norway) and the local Nenets National Oil Company (Russia) project at Kharyaga in the Nenets region of the European North that started oil production in 1999). Both the Sakhalin projects have now declared commerciality, Sakhalin-2 began oil production in 1999 and completed its fifth production season in 2003, during which 10.3 million barrels of oil was produced. In May 2003 Sakhalin Energy announced its decision to develop the \$10 billion second phase of its project that will see the development of gas production and the construction of transportation infrastructure to bring the oil and gas onshore and move it south to an LNG plant and oil export terminal near Korsakov. Sakhalin Energy has been busy marketing its LNG output and to date has signed four contracts with Japanese utility companies, the contracts total 3.1 million tonnes per year for periods in excess of 20 years (the total capacity of the LNG plant will be 9.6 million tons). The first LNG deliveries are expected in 2007-08. Meanwhile, Sakhalin-1 has been pressing ahead with its phase 1 early oil project (total investment about \$ 5 billion), both onshore horizontal drilling and an offshore drilling platform, the Orlan, are to be used to produce oil and gas for delivery onshore. The oil will then be exported via a pipeline to an export terminal at De Kastri in Khabarovsk Krai. Year-round exports will involve the use of icebreakers and ice-strengthened tankers. First oil production is targeted for 2005. Sakhalin-1's phase 2 involving the construction of gas pipelines to Japan and China has been delayed to the end of decade due to market conditions. Both project operators, ExxonNeftegaz and Sakhalin Energy are now fully occupied with development of these large-scale projects.

The 'second generation' Sakhalin projects are those associated with the Sakhalin-3 blocks. Three of these blocks were tendered in 1993 and the Vostochno Odoptinsky and Ayashsky blocks awarded to Exxon and the Krinskiy block to Mobil and Texaco. Subsequent mergers resulted in ExxonMobil having an interest in all three blocks and ChevronTexaco having a share of the Krinskiy block. Rosneft (the state-owned Russian oil company) became a partner in all three blocks. The initial focus has been upon the Krinskiy block and initial exploration work was conducted while the project participants sought a PSA in Moscow. The original 1995 PSA legislation, that had been used for the first generation projects, was subsequently revised in 1999 and there followed a good deal of conflict and dissatisfaction in Moscow surrounding the role of the PSA as a vehicle for foreign investment in Russia's oil and gas industry. In 2000 President Putin made a strong statement that 'PSAs were for Russia' and responsibility for the PSA regime was transferred to the Ministry for Economic Development and Trade. This turned out to be a retrograde step and what limited progress that had been made stalled. Meanwhile, the Krinskiy project participants, in a consortium known as Pegastar, continued to press for the inclusion of their project on the PSA list. However, Russia's economic recovery and the positive signal sent by the BP-TNK deal (plus BP's

**Table 1: THE CURRENT STATUS OF THE SAKHALIN PROJECTS  
(as of 8<sup>th</sup> April 2004)**

Project	Fields/Blocks	Participants	Recoverable Reserves	Project Status
Sakhalin-1	Chayvo, Odoptu, Arktun-Dagi (oil & gas)	Operator: Exxon Neftegaz Ltd (US) 30% SODECO Ltd. (Japan) 30% ONGC Videsh Ltd. (India) 20% SMNG-Shelf (Russia) 11.5% Rosneft-Astra (Russia) 8.5%	307 mlt t of oil 485 bcm of gas	PSA Development Phase 1: early oil
Sakhalin-2	Piltun-Astokhskoye (oil), Lunskoye (gas)	Operator: Sakhalin Energy Investment Co. Royal Dutch Shell (Netherlands/UK) 55% Mitsui (Japan) 25% Mitsubishi (Japan) 20%	600 mln t of oil 700 bcm of gas	PSA Development Phase 1: early oil Phase 2: Gas/LNG
Sakhalin-3	Krinskiy Block	Operator: Pegastar ExxonMobil (US) 33.3% ChevronTexaco (US) 33.3% Rosneft (Russia) 33.3%	453 mln t of oil 700 bcm of gas	Exploration project suspended due to loss of exploration rights
	Vostochno Odoptinsky, Ayashsky,	ExxonMobil (US) 66.6% Rosneft (Russia) 33.3%	167 mlt t of oil 67 bcm of gas	Project idle and now suspended due to loss of exploration rights
	Veninsky Block	Rosneft (Russia) Sakhalin Oil Company (Russia)	51 mlt t of oil 578 bcm of gas	Early exploration
Sakhalin-4	Astrakhanovskaya offshore structure	Rosneft (Russia) 51% BP (UK) 49%	89 bcm of gas	Project stopped by Rosneft
Sakhalin-5	Vostochno-Shmidtovskiy and Kaigam/Vasyukan (and zapadno-shmidtovskiy ) blocks	Rosneft (Russia) 51% BP (UK) 51%	600 mlt of oil 600 bcm of gas	Exploration To drill first well summer 2004
Sakhalin-5	Lopukhovskiy Block	TNK-BP (Russia-UK) 100%	130 mlt of oil 5 bcm of gas	Early exploration
Sakhalin-6	Progranichny Block	Alfa-Echo (Russia) Rosneft (Russia)	200 mlt of oil	Rosneft have withdrawn from project

Source: table based on oil and gas industry press and oil company websites and press releases.

decision to seek an exploration license for its Sakhalin-5 project, rather than wait for a PSA) contributed to a change of heart on the part of the Russian Government. In November 2003 Prime Minister Kasyanov announced that the role of the PSA had been reconsidered and that it would only be used in extreme remote regions, consequently, 26 projects, including Krinskiy, were removed from consideration for PSAs. Subsequently, the Krinskiy partners decided to pursue an exploration license for the block; however, they were overtaken by events and on 28<sup>th</sup> January 2004 then Deputy Prime Minister Viktor Khristenko announced the cancellation of the tender awarded to the Sakhalin-3 projects (presumably meaning both

the Krinskiy project and the other ExxonMobil/Rosneft project). The logic being that the initial tender had been within the context of the Krinskiy project getting onto the PSA list, that was now not going to happen and therefore a new tender was required to develop the block under a normal tax regime.<sup>4</sup> The project participants, the US Government and the foreign business community in Moscow all expressed their dissatisfaction and concern, but there has been no change in attitude. Following the reshuffle of the Russian Federal Government and the re-election of President Putin, the hard line on the future of PSAs remains. The new Natural Resources Minister Yury Trutnev has made it clear that he is against reviving the PSA and made specific mention of the Sakhalin-3 project.<sup>5</sup> Meanwhile, responsibility for what remains of the PSA has been transferred to another government organisation and seems destined for oblivion. The bottom line is that the second-generation projects are now stalled. The Russian Government hopes to gain substantial revenue from a new tender, a sum of \$ 800 million to \$ 1 billion has been mentioned. No date has been set and it is not all clear who will bid in the new tender, Pegastar may regain the rights, if not they will expect to be reimbursed the \$ 60 million they have already spent on preliminary research and seismic surveys.<sup>6</sup> What is sure is that this whole episode casts doubt over the development of Sakhalin's offshore as a major oil and gas province.

Progress on the 'third generation' Sakhalin projects has been mixed. These are the most recent projects that are based on exploration licenses and, should they prove commercial, would be developed under the normal taxation regime. Rosneft and its local affiliate Sakhalinmorneftgas (SMNG) are involved in most of these projects. Rosneft has been through a process of reassessing its Sakhalin projects and has announced that it is no longer interested in developing the Sakhalin-4 and Sakhalin-6 projects. Meanwhile, they have obtained a 5-year exploration license for the fourth block of the Sakhalin-3 acreage, Veninsky block, which they hope to develop in cooperation with the Sakhalin Oblast Administration's Sakhalin Oil Company. However, this project is in its very early stages and may be a speculative acquisition in search of other partners to bankroll exploration and development. It is Rosneft's alliance with BP to develop its Sakhalin-5 project that is showing greatest promise. The two companies expect to drill their first well this summer and they are now discussing terms for further exploration and development. Rosneft expects BP to carry them through the exploration phase and public announcement of an agreement is expected soon. Given the problems with Sakhalin 3, the Rosneft-BP Sakhalin-5 project is now clearly in third place behind Sakhalin 1 and 2 in terms of progress, not a position that one would have expected to occupy a couple of years ago! At the insistence of Rosneft, the project remains outside the TNK-BP structure, but TNK-BP have their own modest interest in the Lopukhovskiy block of the Sakhalin-5 project, but this is only in the early stages of exploration.

Less than six months ago the prospects for Sakhalin's future looked very good indeed. The first generation projects were making substantial investments, there was every chance that the second-generation Sakhalin-3 Krinskiy project would progress and the third generation exploration projects were sufficient in number to protect the longer-term viability of the offshore province. Now things are not so clear. True, Sakhalin Energy is developing its gas phase and ExxonNeftegaz are developing their early oil strategy; but the gas phase has been delayed. The stalling of the Sakhalin-3 projects is bad news and the number of active exploration projects has dwindled, so why the change in fortune? The next section considers those factors that contributed to the success of the first generation projects.

## **What makes the first generation Sakhalin projects different?**

However one measures it the Russian oil and gas industry has failed to attract substantial foreign investment. While the oil price remains high and cash is readily available to the domestic industry, this may not seem a problem. However, the industry needs substantial new investment and new technological capabilities to expand exploration, production and transportation to maintain production and access new markets. There is every indication that much of Russia's future oil and gas production will come from the challenging frontier regions of the North, Siberia and the Far East and offshore. Russia's Siberian frontier was initially developed during the Soviet period and scant attention was paid to the economics of development and its environmental consequences, this will not be the case in the future. The Sakhalin projects provide insight into the kind of challenges that will have to be faced to develop new frontier resources. The fact that the first generation Sakhalin projects have developed to the level that they have in a decade or so is due to a set of circumstances that may difficult to replicate, even for future projects offshore Sakhalin. The key elements of the first generation projects are considered below.

***Economic-Geographic Situation:*** The relative location of Sakhalin is a key factor in explaining its progress. The oil and gas fields under development lie on the continental shelf offshore of Sakhalin Island. Had they been located in the interior of the country it is extremely unlikely that they would have been developed by foreign companies under a PSA regime. Their relative distance from Moscow and the heartland of the Russian oil and gas industry in West Siberia meant that they were of limited interest to domestic oil companies and remained the sole purview of the Russian State via Rosneft and its local affiliate SMNG. In fact, Sakhalin still remains a relatively oligarch-free region. While the fields are distanced from Moscow, they are in close proximity to energy-hungry export markets in Northeast Asia, principally Japan, South Korea and China and, in an increasingly globalised market, Sakhalin can also access markets on the West Coast of the USA. Commenting on its agreement to buy LNG from Sakhalin Energy, the President of Toho Gas, Mr Toshitaka Hayakawa, commented that: Sakhalin has abundant supplies of natural gas on our door step, and the Sakhalin Energy LNG plant will be just a few day's sailing time from us."<sup>7</sup> Furthermore, both first generation Sakhalin projects are being permitted to build their own transportation infrastructure to deliver oil and gas to market. At present Sakhalin-2 delivers oil via the Vityaz complex offshore, but oil and gas pipelines are being constructed as part of phase 2. Similarly, Sakhalin-1 is building a 400 km oil pipeline to DeKastri. Russian oil companies are presently not permitted to build their own pipelines, all oil pipelines are under the control of the state monopoly Transneft, while transportation of gas is the responsibility of Gazprom. The precedent set by the Sakhalin projects has not gone unnoticed. In sum, the Sakhalin projects benefit from both proximity to market thanks to their location and also access to market thanks to their ability to develop dedicated transportations infrastructures.

***History:*** While the first generation projects in their current format date back to the early 1990s, the concept of using foreign assistance to develop Sakhalin's offshore potential to export energy to Northeast Asia, principally Japan, dates back to the early 1970s. <sup>8</sup> It was in 1972 that the Soviet Union proposed to the Japanese government a project to develop Sakhalin oil and gas potential. In 1975 a compensation agreement was reached and between 1975 and 1983 Rosneft-SMNG carried out extensive geological surveys using investment and technology provided through the compensation agreement and the Odoptu and Chayvo fields were discovered in 1977 and 1979. In the late 1970s the project fell foul of US sanctions and then the global recession, but the Russian side continued with its exploration activity and

three more fields were discovered: Lunskoye (1984), Piltun-Astokhskoye (1986) and Arkutun-Dagi (1989). Thus, by the end of the 1980s the fields that were to form the basis for the first generation projects had been delimited and in the dying days of the Soviet Union the Soviet government invited foreign companies to tender for the rights to develop these fields. Thus, when the fledgling Russian government signed the initial agreements it was accepted that foreign capital and technology were essential to realise Sakhalin's offshore potential. This remains the case today; Russian industry lacks the capacity to develop the offshore acreage.

***Fiscal-Legal Framework*** Because of the undeniable instability of the early years of the Yeltsin era it was accepted that the Production Sharing Agreement represented a means of protecting the interests of the foreign investors, while also protecting the interests of the Russian state. However, Russia had no experience of PSAs and the wider fiscal and legal environment was inherently unstable. Nevertheless, a PSA regime was created in 1995 and the first generation projects were subsequently awarded PSAs. As Russia's fiscal and legal environment stabilised so the PSA regime was revised with new legislation in 1999, but strong domestic interests in the State Duma and among the domestic oil companies perceived that the PSA granted too many favours to foreign investors and progress on the development of a stable PSA regime faltered. As noted above, President Putin intervened in 2000, but things continued to deteriorate. While the PSA has yet to be pronounced dead, it is certainly in intensive care. The recent decision to remove Sakhalin-3 from the PSA list makes it clear that PSAs are no longer for Sakhalin. Thus, the protection and relative stability afforded the first generation projects will not be available to future projects. The Russian government is adamant that the domestic investment environment is sufficiently stable that PSAs are no longer required, only time and some bold foreign investors will prove if they are right.

***Technological challenges*** Sakhalin's offshore conditions present some of the most challenging environments in the world. The whole region is seismically active. The offshore is subject to pack ice and icebergs during the winter months as well as typhoons and tsunamis. Added to which, the geology is complex and the conditions for exploration seldom ideal. Only the application of leading edge technologies such as 3D seismic and horizontal drilling has enabled development of the first generation projects. Furthermore, the engineering and design solutions required to protect against the elements and protect the environment are extremely challenging. The capacities of the world's leading oil and gas companies and shipbuilders and engineers have been stretched to meet Sakhalin's operating conditions. The Russian, and before it, the Soviet oil and gas industry has had very limited experience of offshore oil and gas exploration and development. Conditions in the Caspian are very different from Sakhalin. The net result is that the domestic oil companies lack the know how to develop sub-arctic offshore regions such as Sakhalin. That said, this is clearly a capability that they need to develop and therefore they have much to gain from working with foreign companies. This was the initial logic of the Soviet-Japanese compensation agreement and it clearly helped develop an indigenous capacity to carry out seismic surveys on Sakhalin's continental shelf. These technological challenges set the Sakhalin project aside from those say in West Siberia, Russian companies do not have the technological capacity to develop Sakhalin.

What this analysis suggests is that there were a unique set of circumstance surrounding the first generation Sakhalin projects that enabled them to progress. Their historical background is probably foremost in explaining why they proceeded while subsequent projects have stumbled. In short, their realization represents the end point of a process that started in 1972.

That is not belittling the achievements of the current project operators, they have persevered through difficult times to bring these projects to fruition, but they were building on an established precedent that foreign investment was necessary. While it still remains the case that future Sakhalin projects require foreign involvement, the terms of that involvement have been compromised by battles in Moscow over matters of economic nationalism that relate to Russia's continental oil and gas provinces. Sakhalin has become collateral damage of a conflict over who controls Russia's oil and gas industry and who determines national energy strategy.

### **What lessons can be learnt from the Sakhalin projects?**

The previous section argued that there was a degree of path dependence and a set of contingences that enabled the first generation Sakhalin projects to progress. Consequently, the progress of the Sakhalin-1 and Sakhalin-2 projects should not be seen as a litmus test of the investment environment in the Russian oil and gas industry. That progress can't be replicated on Sakhalin let alone elsewhere in Russia. However, there is a more general set of lessons that can be learnt from the wider Sakhalin experience and these are discussed below.

***Location, location, location*** As noted above, Sakhalin's relative location is a key element of its success. Looking at the map, it is clear that projects that are in the interior of Russia and therefore dependent upon negotiating access to the Transneft and Gazprom pipeline networks to access export markets are at a natural disadvantage. BP's solution to this project is to become a Russian company through the creation of TNK-BP, but they are still subject to the whim of Transneft. Projects with an interior location and that require the construction of new pipelines are at an even greater disadvantage. The Kovytko gas project is a good example, located in Irkutsk oblast and aimed at exporting gas to China and South Korea, the project operators not only have to develop the gas field in a remote location, they have to champion the construction of a transcontinental pipeline to find markets. There are already rumblings that Gazprom considers such developments to be its business. The current problems facing Yukos in part result from their desire to develop an oil export pipeline from Angarsk to Daqing in China. The irony is that much of Siberia's new frontier oil and gas fields are essentially landlocked and spatially trapped, requiring substantial investments in transportation infrastructure to reach both domestic and export markets, yet the Russian government insists in maintaining a monopoly over the construction of such pipelines. This is pure folly and will only serve to retard the development of Russia's oil and gas potential.

***Centre-region relations*** The ability to build a relationship with the Federal Government in Moscow and the Sakhalin Oblast Administration has been a key element in the development of the first generation Sakhalin projects. One could add that a failure to recognise this dimension was a key failing in the early stages of the Sakhalin-3 Krinskiy project. As the projects developed through the 1990s so the pendulum swung from a focus on gaining support on Sakhalin to a need for lobby for support in Moscow. In part this was because the initial stages of the PSA process were dependent upon the support of both the Sakhalin Oblast Administration and the Sakhalin Oblast Duma, but also because during the Yeltsin Presidency Russia's regions gained significant autonomy at the expense of the federal authorities in Russia. The projects' development beyond the initial approval stages coincided with the arrival of President Putin and the reestablishment of central authority through a series of reforms in the federal apparatus and the tax system. Thus, as the regions became more dependent upon Moscow and more compliant, so the regulatory authority governing the development of the Sakhalin project was clearly established in Moscow. Support in the region

was still important, but the Moscow ministries had the power to make or brake, the most extreme illustration being the fate of Sakhalin-3. The project operators now find themselves trying to strike a delicate balance, lobbying for support in Moscow by trying to promote the reform agenda, while keeping the regional administration onside to deal with the day-to-day bureaucracy associated with the implementation of their projects.

***Economic nationalism versus globalisation*** In all sorts of ways the development of the Sakhalin projects and the plight of foreign investors in Russia more generally reflects a clash between the forces of economic nationalism and the processes of globalisation. Sakhalin is one of the most open regions in Russia, open in the sense that its future is directly tied to the fortunes of the global oil and gas economy. The future prosperity of the region is tied to its ability to gain access to export markets in Northeast Asia. In retrospect, it is clear that the Asian Financial Crisis in 1997 was far more damaging to the region than the Russian Financial Crisis that followed in 1998. Depressed energy prices and a reduction in energy demand very nearly led to the delay of Sakhalin Energy gas phase and are probably behind Sakhalin-1's decision to delay its gas phase. The absence of Russian oligarch interest means that there is no strong economic nationalist interest in maintaining control over the Sakhalin projects. Rosneft is a minor shareholder in Sakhalin-1 and Sakhalin-2 has no Russian partner. The reverse is true elsewhere in Russia, there are strong Russian economic interests that seek to control access to oil and gas resources and these interests are deeply suspicious of foreign investors. It is these interests that have derailed the development of an effective PSA regime. They fail to recognise something that BP recognised, being a Russian company give them a massive advantage as long as they don't fall out with the Kremlin. The paradox of the Sakhalin-3 decision is that it was premised on the notion that PSAs were no longer required because the investment environment was stable, yet the annulling of the Sakhalin-3 tenders demonstrated that the investment environment was far from stable and likely served to make foreign investor even more nervous. Thus, we have the contradiction of an economy exhibiting economic recovery driven by high world oil prices that benefit a domestic oil and gas industry that has shunned foreign investment; yet many consider that foreign capital and technology are essential if Russia is to sustain oil and gas production. This contradiction calls into question the long-term sustainability of Russia's resource-based recovery. Put another way, by favouring narrow nationalistic interests Russia is turning its back on the economic opportunities offered by globalisation, opportunities that have brought sustainable economic development elsewhere. What is more, as noted above, Sakhalin has suffered at the hands of those nationalistic interests as they have derailed the Sakhalin-3 projects and put the future of the region in doubt.

***Global projects bring global processes*** In the Soviet period the development of the West Siberian oil and gas complex caused widespread environmental degradation, yet there was little or no protest in the Soviet Union and the international environmental movement remained silent. The Sakhalin projects illustrate that all that has changed. The global environmental movement has mobilised to protest the possible environmental impacts of the projects; local environmental NGOs have developed, most significantly Sakhalin Environment Watch, and have been incorporated into the global network of ENGOs.<sup>9</sup> The Sakhalin projects have been the subject of damaging reports in the newspapers such as the *New York Times*<sup>10</sup> and the *Wall Street Journal*.<sup>11</sup> The impact of the projects on the feeding grounds of the Western Pacific Grey Whale, one of the world's most endangered whale species, has provided an emotive focus for the environmentalists.<sup>12</sup> The ENGOs have also lobbied sources of project finance, such as the EBRD and the Export Credit Agencies of the UK, US, the Netherlands and Japan to try and dissuade them from lending to the Sakhalin-2

project. The status of the island's indigenous peoples and their traditional pasturelands and fishing grounds has also been used to protest against the projects. For the multinational oil companies such activities are commonplace and they are now equipped to enter into dialog with interest groups and are required to conduct detailed impact studies (the Sakhalin-2 impact studies are freely available on their web site) and have been required to improve their environmental protection measures, such as oil spill response. The Sakhalin Oblast Administration was not used to such activities and was initially hostile to the actions of the ENGOs which they see as threatening their future prosperity; however, they also have balance those economic interests against the concerns of other powerful lobby groups such as the local fishing industry. The Sakhalin populace is clearly concerned about the environment, but bemused by being asked to attend public consultation meetings where the project operators explain what they are doing (transcripts of these meetings can be found in the Sakhalin-2 impact statements). The Federal Government seems to have a more cynical attitude towards issues such as environmental protection, using laws when it suits then to punish to transgression of foreign oil companies, while continuing to turn a blind eye to the actions of the domestic oil companies. The ultimate irony was the criticism of the Yukos oil export pipeline route on the basis of its environmental impact statement. True the statement was a poor piece of work, but any subsequent pipeline project backed by the Kremlin is likely to be equally environmentally damaging. On a larger scale, the global environmental movement is now attuned to the environmental costs that will be associated with Russia's desire to extend it resource production further into the fragile ecosystems of Siberia and the Far East; they are also alerted by Russia's failure to ratify the Kyoto Agreement. As the Sakhalin projects demonstrate, substantial foreign investment in Russia's oil and gas industry will bring with it environmental protests that could damage a company's status in its home markets. Contrary to the accusations made in the Western press, and no doubt echoed in the Russian press, the global oil companies have nothing to be gained from damaging Russia's environment; rather they would like to see their projects held up as examples of how to minimise the environmental footprint of oil and gas developments in remote regions. Given the track record of the Russian oil and gas industry, foreign investment and know how could help reduce the level of environmental degradation associated with hydrocarbon development.

***Russian Content and Infrastructure limitations*** Despite the criticisms of the PSA regime, both Sakhalin projects are making substantial infrastructure investments and are adhering to high levels of Russian content. Under the terms of the Sakhalin-2 PSA: "Sakhalin Energy will use its best efforts to maximise the Russian content in each year and to achieve a level of Russian content (including labour, materials, equipment and contract services) of 70% over the life of the entire Sakhalin project."<sup>13</sup> The Sakhalin 1 project has also signed up to 70 Russian content. This is not proving an easy task. Both companies have searched across Russia to find possible Russian sub-contracts and foreign service companies have been encouraged to create joint ventures to create Russian entities to tender for contracts. The Sakhalin Administration wishes the oil companies to pursue a 'Sakhalin first' policy towards Russian content, but the Sakhalin economy has limited capacity and the demands of the first generation projects have already exceeded the ability of the local economy to provide the necessary labour and services. Both project operators have designed Russian language web pages to encourage Russian companies to register and tender for contracts. In addition, the projects are investing in improvements to Sakhalin infrastructure including roads and bridges and the extension of the airport at Nogiliki. Both projects have also paid into the Sakhalin Development Fund, providing the Sakhalin Administration with additional funds to address social infrastructure needs in the oblast. The bottom line is that the limited level of economic development on Sakhalin, and in the Russian Far East more generally, is limiting the capacity

of the region to benefit from the multiplier generated by the investments associated with the projects. The Russian content clause is designed to maximise that multiplier, but the Russian Government, at both a national and regional level, does not see any need to assist Russian companies in meeting the standards the project operators must meet. The details of the project tenders reveal many examples of innovative joint venture formation and Russian success stories, but more state assistance would undoubtedly help meet the Russian content requirements and maximise the multiplier. This Russian content requirement is related to the PSA regime, future projects based on normal taxation will not be subject to such demands. Thus, by rejecting the PSA, the Russian government is rejecting a mechanism for maximising the benefits of such investments to the Russian economy. According to one analyst, before the 1998 financial crisis, domestic contractors met only 55% of the Russian oil industry's requirements and Russian oil companies, such as Sibneft, prefer to buy foreign-made equipment and services.<sup>14</sup> The Sakhalin projects demonstrate how difficult it is to source labour, equipment and services from domestic sources, the demise of the PSA suggests that this will not be as big a problem in the future. Furthermore, by definition, remote regions have limited infrastructure, large-scale oil and gas projects demand infrastructure development and the foreign investors will be expected to make direct (the building of bridges and roads) and indirect (payment into the Sakhalin Development Fund) contributions to improve the local infrastructure.

**Markets** The final lesson from the Sakhalin projects is that markets matter. In the Soviet period it was assumed that because Siberia and the Russian Far East possessed substantial natural resource wealth and the neighbouring states in Northeast Asia did not there was a natural complementarity that would result in significant investment and trade. This didn't happen. For a resource to be developed it must be possible to explore for it, and then develop it and deliver it to a consumer at a cost that the consumer is willing to pay and that will provide an acceptable return once the various taxes have been paid. Thus, a potential resource needs a market willing to pay a certain price for it to become a reality. As the Soviet Union was not a market economy, resources were developed and exported regardless of the cost of production and transportation. The fact that the resources earned 'hard currency' which could then be used to pay for imports of food and western technology was also very significant. The collapse of the Soviet system radically changed Russia's resource base. Now, market principles govern resource development, although there are still many subsidies that keep production costs artificially low. The viability and pace of development of the first generation Sakhalin projects has been directly linked to external market conditions. The decision to go for early oil strategies reflected the fact that Sakhalin's oil would find a ready market in Northeast Asia and would therefore generate an early income stream to recoup the initial investment costs; while gas markets were much harder to find and required far more substantial infrastructure investments. These issues were highlighted in the run-up to Sakhalin Energy's decision to proceed with phase 2. Conventional wisdom had it that depressed demand following the Asian Financial Crisis and increased competition from existing and new LNG projects meant that there was no new LNG markets to be found for Sakhalin LNG. However, Sakhalin Energy has managed to find a market niche, though still modest, it has established a demonstration effect and no doubt new contracts will follow. The lesson here is that without a market, and the necessary infrastructure to access that market, oil and gas projects in Russia will not become a reality. There are all sorts of projects currently projected in Russia, many of them in East Siberia and the Russian Far East. Insufficient attention is being paid to the basic economics of those projects, let alone the politics, needed to make them become a reality.

## Conclusion: all that glitters is not gold

This paper is in essence a cautionary tale. First, the apparent success of the Sakhalin projects is in reality limited to the first generation projects that have a 30-year history. Second, the next generation of Sakhalin projects are barely out of the starting blocks and already the most promising project, Sakhalin-3 Krinskiy block, is temporarily suspended, while a relative latecomer, BP's Sakhalin-5, show signs of leading the pack. Third, the relative success of the first generation projects has been hard won and there are many reasons to believe that conditions on Sakhalin are far more favourable to foreign oil and gas companies than elsewhere in Russia. Fourth, there are lessons to be learnt from the Sakhalin experience, but they serve to illustrate the complexities of developing multi-billion dollar investment projects in Russia's oil and gas industry. Fifth, the first generation projects have developed because of the existence of the PSA regime, however faulty, and the current attitude towards PSAs in Russia is damaging to the long-term viability of Russia's oil and gas industry. Sixth, the current attitude towards the PSA reflects the dominance of economic nationalism in Russia and this will continue to limit the level of foreign investment going into Russia. In sum, while the successes offshore of Sakhalin might suggest that Russia is indeed "prepared to make its contribution to creating a new energy configuration in the Asian and Pacific Region", the reality is that Russia currently lacks the necessary resource base and infrastructure to make such a contribution (beyond the first generation Sakhalin projects) and what is more, it has yet to create the kind of investment environment needed to make the numerous projects on the map become a reality.<sup>15</sup> The implication of this analysis is that for the moment the only projects likely to supply Russian oil and gas to Northeast Asia are those offshore Sakhalin.

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## Notes

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<sup>2</sup> "Rosneft asks BP to put \$ 5 billion into Sakhalin-5", *Sakhalin Independent*, February 12-17 2004. Available at: <http://sakhalindependent.com>.

<sup>3</sup> See Bradshaw MJ 2003, "Prospects for oil and gas exports to Northeast Asia from Siberia and the Russian Far east, with a particular focus on Sakhalin", *Siberia*, 3 (1): 64-86. This is a revised version of the paper first presented at the RPGR Conference in Seoul in June 2003.

<sup>4</sup> See "Sakhalinskaya volokita" <http://www.aksnews.ru/tek/58/4922.html>, accessed 19th February 2004.

<sup>5</sup> "Trutnev rejects Reinstating PSAs" *The Moscow Times*, 2<sup>nd</sup> April 2004.

<sup>6</sup> Korchagina, V 2004. "State wants \$ 1 bn for an Exxon Field" *The Moscow Times*, 5<sup>th</sup> February 2004.

<sup>7</sup> SEIC Press Release, Sakhalin Energy Signs its fourth LNG supply deal with Toho Gas, 12<sup>th</sup> march 2004. Available from: [www.sakhalinenergy.com](http://www.sakhalinenergy.com).

<sup>8</sup> See Bradshaw MJ 2003, "Sakhalin in the Global Picture", *Sakhalin Chronicle*. November, 6-7 & 15

<sup>9</sup> For more information on Sakhalin Environment Watch visit: <http://www.sakhalin.environment.ru/en/>

<sup>10</sup> "Risking Russia's Fragile Coast", *New York Times*, 18<sup>th</sup> September 2002.

<sup>11</sup> Carlton, J "Oil producers flock to island in Russia with fragile ecology", *Wall Street Journal*, 4<sup>th</sup> September 2003. This article was full of inaccuracies and its basic premise that the oil companies went to Russia to do things that they couldn't do in the US was also faulty, it resulted in a vocal response on the part of the foreign companies involved offshore Sakhalin.

<sup>12</sup> For more information on the protests visit the web site of Pacific Environment at [http://www.pacificenvironment.org/press/sakhalin\\_outrun.htm](http://www.pacificenvironment.org/press/sakhalin_outrun.htm)

<sup>13</sup> Sakhalin Energy Investment Company Ltd, 2003. *Russian Content: Facts & Figures*, October.

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<sup>14</sup> Subbotin, M. 2003, "Who Bashes Production Sharing and Why: PSAs are victims of the competition between oil companies", *RusEnergy*, 14<sup>th</sup> February.

<sup>15</sup> This quotation is taken from President Putin's address at the APEC Summit in Bangkok in October 2003. It is interesting to note that sooner after Sakhalin Energy's web site was sporting the banner "Sakhalin Energy: The New Energy Source for Asia Pacific". President Putin did go on to talk about the Sakhalin LNG plant, but failed to mention that foreign investors were building it.