

Irina Baranova

Leaking Operations

**Environmental Consequences
of World Bank and EBRD
involvement
in the Russian Oil Sector**

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List of Abbreviations

bb/d	barrels per day
CEE	Central and Eastern Europe
EA	environmental assessment
EAP	environmental action plan
EMP	environmental management plan
EBRD	European Bank for Reconstruction and Development
EIA	environmental impact assessment
EU	European Union
EXIM	US Export-Import Bank
fSU	former Soviet Union
GHGs	greenhouse gases
JEXIM	Export-Import Bank of Japan
JV	joint venture
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
MDB	Multilateral Development Bank
MIGA	Multilateral Investment Guarantee Agency
NGO	non-governmental organisation
OECD	Organisation for Economic Cooperation and Development
OPIC	Overseas Private Investment Corporation
RF	Russian Federation
SEA	strategic environmental assessment
SEE	State Ecological Expertise
SEEN	Sustainable Energy and Economy Network
SEIC	Sakhalin Energy Investment Company LTD
WB	World Bank
WBG	World Bank Group

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Executive summary

In Russia, oil and gas sector development poses irreversible damage to the environment. The Soviet heritage of extensive poorly maintained infrastructure, bad operational practices, high level of corruption, lack of control over compliance with environmental standards, and traditional lack of attention to environmental problems enhance this damage. Due to the high significance of the oil and gas sector in the economy and society, successful functioning and growth of the oil and gas industry are considered crucial for the whole country, which makes future expansion of oil and gas extraction unavoidable.

In light of Russia's inability to address the environmental problems caused by massive oil and gas field development, the involvement of multilateral development banks (MDBs) in the oil and gas sector is of high importance. This study assesses the effects of the International Bank for Reconstruction and Development (IBRD), International Financial Corporation (IFC) and European Bank for Reconstruction and Development (EBRD) support to oil and gas extraction activities in Russia.

On the one hand, application of high international standards, environmental requirements and good industry practices by the IBRD, IFC and EBRD increase the efficiency of oil and gas operations. On the other hand, financing of new large-scale extraction projects, uncertainties in banks' environmental policies, procedures and guidelines and their inadequate implementation in practice give rise to significant environmental problems.

The comparative analysis of the IBRD, IFC and EBRD policies made in the study reveals major deficiencies that grow into environmental problems in Russia, while the two case studies on the Komi Republic and Sakhalin support these conclusions.

The main deficiency is the absence of a specific policy on oil and gas that addresses environmental problems and includes measures to mitigate them. The failure to have a specific policy often leads to a disparity

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between the banks' stated environmental objectives and the actual implementation of these objectives in oil and gas projects in the country.

The procedure of project categorisation is also problematic and allows for variations and insufficient assessment of impacts. The absence of strict and clearly formulated requirements for environmental capability and financial responsibility of the operating company may lead to support of companies with low environmental performance who are unable to compensate for the damage. Insufficient coverage of monitoring/supervision over compliance and reliance on the project sponsor together with lack of enforcement cause a decrease in the supposed positive transition impact in the country.

The study proposes recommendations which would strengthen the effectiveness of the existing banks' policies and ensure better environmental performance and, thus, more sustainable MDB involvement in the Russian oil and gas sector.

Introduction

The Russian Federation possesses abundant deposits of natural resources including large stocks of fuel minerals. Historically, the country has been one of the major producers of oil and gas providing a significant share of the supply to the world's markets. The whole Russian economy still remains oriented to export of these fossil fuels that bring the country most of its hard currency earnings. Regarding the economic difficulties currently facing the country, the oil and gas sector has posted relatively successful performance in comparison with the other sectors; therefore, it is likely to gain even more power than it had before the transition process. In addition, the oil and gas sector has provided a large stable revenue flowing into the country's budget.

However, the future possible expansion of oil and gas production and development of new fields in remote parts of Russia will have a strong negative impact on the environment. The situation is complicated by the fact that the Soviet times have left a heritage of environmental degradation in many oil producing regions while bad operational practices, lax compliance with environmental standards, absence of modern environmentally-friendly technologies and use of outdated leaking infrastructure have characterised the oil and gas industry to date. The lack of investment prevents the Russian oil and gas sector from addressing the existing environmental problems that are accumulating as time passes by.

Over the last decade, a significant influx of foreign investment in oil and gas field development has been observed from MDBs, with the EBRD and the World Bank Group (International Finance Corporation and International Bank for Reconstruction and Development) most actively participating in oil and gas operations. Taking into account that development agencies aim to promote sustainable development, with their participation in operations it would be logical to expect addressing of the existing environmental problems and introduction of significant improvements in the environmental quality of performance. However, despite the common Russian perception that the World Bank and EBRD operations are beneficial to the environment, the economy and

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society, the real impacts of their involvement in the Russian oil and gas sector have proved to be contrary.

It should be pointed out that while the environmental consequences of MDBs activities have been thoroughly examined and critiqued in Western and Eastern Europe, in Russia this issue remains understudied, perhaps because of the high priority of economic development and the low public participation. The existing literature on MDBs operations in the Russian Federation is limited to evaluation of several operations carried out by some non-governmental organisations (Greenpeace-Russia, Socio-Ecological Union, Sakhalin Watch) without consideration of the general banks approach to oil and gas development. Therefore, there exists a need for study of MDBs oil and gas-related goals, policies, procedures and guidelines that determine the banks behaviour regarding oil and gas development as well as their real implementation in practice in Russia.

The main objective of the present work is to analyse the environmental implications of MDB involvement in the Russian oil and gas development on the basis of environmental policies/procedures and their application in practice, and provide recommendations for possible improvements of the situation. This aim is achieved through the implementation of the following objectives:

- conduct comparative analysis of the existing oil and gas-related environmental policies and procedures of the World Bank Group and the EBRD and provide comments on critical issues;
- make an assessment of the MDBs oil and gas project portfolio in Russia;
- provide two case studies on projects with participation of MDBs in Sakhalin and Komi regions to analyse both positive aspects of operations and environmental problems introduced; and
- develop recommendations for improvement of environmental performance of oil and gas development projects supported by MDBs.

Economy versus Environment

Worldwide, oil and gas field development causes a number of diverse problems and often leads to irreversible environmental degradation. Because Russia is rich in fossil fuels, oil and gas extraction takes place on a large scale making the country one of world's major producers. This results in negative consequences for the environment that are enhanced by bad practices common among domestic producers. The environmental problems related to oil and gas extraction and operators performance are not properly addressed, either by governmental bodies or public organisations. This can be explained mostly by the key role of the sector in the recovery of the Russian economy, the traditionally high level of corruption in the industry dealing with the black gold and dependence of social welfare on the oil and gas enterprises. The strong contradiction between acute environmental problems and economic/social benefits, which are brought about by the oil and gas industry in Russia, are discussed in the present chapter.

Economic and social importance

Russia, occupying a vast territory rich in mineral deposits, stands out clearly among other states in its volume of recoverable fossil fuels. According to BP Amoco esti-

Table 1. Russian Federation oil and gas reserves, 1999.

	Natural gas	Oil
Proven reserves	1,700 trillion cubic feet	6,700 million tons
Percent of the world's total	32.9 %	4.6 %

Data source: BP Amoco. 1999. BP Amoco statistical review of the world energy 1998. London: British Petroleum Company

mates¹, Russia territory possesses around one-third of the world's natural gas reserves, making it the world's leader. In addition, Russia is second only to the Middle East countries in the amount of oil, accounting for 4.6% of the world's total (see Table 1).

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Russia's substantial oil and gas deposits have made it one of the leading oil and gas producers in the world and its economy is dependent upon energy sources export. At present, energy resources provide more than 60% of foreign currency income, with oil, natural gas and their derivatives being among major export products. The relatively successful functioning of the oil and gas industry in comparison with the performance of other sectors creates an illusion of sustainable development. Also, the industry is the main and most reliable donor to the state budget through highest tax payments. The oil and gas industry remains the biggest single source of revenue in the country generating half of Russia's hard currency².

Five years ago, the WB stated in its Country Assistance Strategy for the Russian Federation³ that the whole process of restructuring and adjustment of the Russian economy would be largely paid from Russian oil and gas revenues. Today, Vladimir Putin, Russia's current president, continues to emphasise the significance of the oil and gas industry saying that it has been the major factor of economic stabilisation in Russia and in the future will initiate economic growth in other sectors, which are still in a crisis⁴.

Additional importance is attached to the development of Russian oil and gas due to social issues involved. The oil and gas industry has been most welcoming and profitable for its employees providing a large number of well-paid jobs. In 1995 it was estimated that the average salary of the staff in oil and gas companies was three times higher than in most other sectors⁵, and today this differential tends to remain due to the decline in other production spheres.

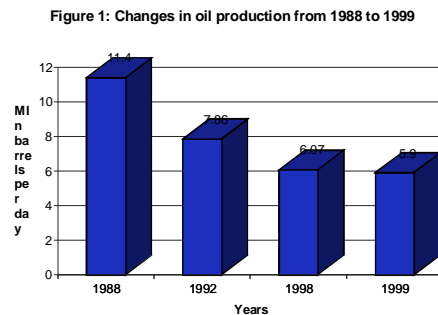
In certain regions, the social policies and local budgets are also influenced by the oil and gas industry, since during the Soviet period the location of many settlements was determined solely by the presence of an oil field nearby. The industry introduced certain improvements into the social infrastructure in production regions and local social welfare system, providing people with access to essential goods and contributing to funding of housing, education or medical services.

However, it should be stressed that the expansion of oil and gas extraction inevitably stresses on the environment, while social benefits are quite an ambiguous issue. To have a complete picture of the industry development and its consequences for the environment and people in the country, it is necessary to have an overview of the sector's state, its current problems and prospects for the future.

Production, exports and prospects for the future

Today, the oil and gas sector faces some of the same difficulties as other Russian industries. The peak of oil production in Russia was 11.4 million barrels per day in 1988⁶. Since then the volume has decreased almost 50%, mostly due to a strong decline in the domestic demand, lack of investment and complicated access to oil equipment after the

break-up of the Soviet Union (the industry was located in Azerbaijan). During the six-year period from 1992 to 1998, the rate of oil production fell by nearly 23% and, according to preliminary data, slightly dipped further in 1999 (see Figure 1).



Data source: Energy Information Administration (EIA). 1999. Russian oil and gas exports fact sheets EIA. 2000. Country analysis brief: Russia

In 1998, the Russian energy companies were hit by the August financial crisis and the subsequent

oil price collapse in December. This resulted in limiting the capital and exploratory drilling investments and caused another drop in production. This resulted in a vicious circle, as the reduction in the produced volumes of oil and gas, which played a leading role in Russia's hard currency earnings and export revenues, contributed to further economic difficulties in the country.

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Since December 1998, the world oil prices have shown a three-fold increase, which significantly raised Russia's oil export revenues and resulted in a gain of about USD 2.4 billion in extra foreign currency in 1999. This could be an additional incentive for quick development within the country. However, the tightening of export tariffs for oil imposed by the government at the end of 1999⁷, the drop in the amount of drilling and capital investment in the Russian petroleum industry and the forthcoming changes in Russia's energy strategy do not raise optimistic predictions.

It should be mentioned that although the overall oil production levels have decreased, the reduction in export volumes has not been very significant. The domestic companies traditionally export a significant share of production to take advantage of high international prices (domestic prices are kept artificially low by the government). Another reason for shipping supplies abroad is the abysmal record of Russian utilities in paying for fuel supplies. As of September 1, 1999 the state budget was owed 15.4 billion roubles (approximately USD 630 million) by utilities for fuel deliveries. On average utilities pay only for a quarter of the fuel they consume⁸. This creates an incentive for the lion's share of the produced oil to be transported to the world markets. In 1998, for instance, Russian exports (crude oil and products) totalled a record 3.5 bbl/day. The industry has re-oriented the supply patterns from non-paying former-republics consumers towards more reliable Western and Asian customers, decreasing the share of the former from 47% in 1992 to 11% in 1998⁹. This adjustment of distribution patterns with subsequent increase in the share of reliable external consumers as well as the rise of the international oil prices has provided stable hard-currency profit.

In contrast to the scale of changes in the output of the oil industry in Russia, gas production has remained relatively steady without a sharp reduction in volumes. From 1992 to 1998, the drop in annual output accounted for 8%, while the decline in consumption exceeded 15% during the same period (see Table 2). The positive difference between production and consumption has helped Russia remain the world's largest gas supplier.

As in case with the oil industry, Russia's gas production is heavily dependent on exports from outside the FSU to bring in hard currency. The main reason for relying on export supplies is non-payment of domestic consumers.

Table 2: Changes in Russia's natural gas production and consumption 1992 - 1998

	1992	1998	drop
Gas production, TCF	22.8	20.9	1.9 (8%)
Gas consumption, TCF	16.5	13.9	2.6 (15%)

Data source: Energy Information Administration of the United States (EIA). Office of Energy Markets and End Use, US Department of Energy. Country analysis brief: Russia. Report

The former republics of FSU have also created a great debt, with Ukraine owing the largest sum. It should be mentioned that Ukraine has a unique

position in this respect: the attempts to reduce gas delivery to this country for non-payment have failed, as Ukraine started siphoning the gas destined for Europe (90% of Russian gas export to Europe runs via Ukraine)¹⁰. Thus, the exports outside FSU, being the sole secure source of cash for Russian gas industry, have risen and reached 4.5 Tcf in 1999 and are expected to climb further¹¹.

As seen from the above information, the real situation is quite complicated, though among other sectors of the Russian economy, the oil and gas industry is functioning relatively successfully. Most oil and gas producers assume that recovery and further development of the sector are possible only with the influx of substantial foreign capital.

Considering the future development of the Russian oil and gas industry, predictions range from brilliant prospects of its fast development and domination to gloomy prognosis of further decrease in production/exports and significant decline in its role for the economy. Although much depends on the new Energy Strategy for Russia to 2020, to be issued this year, and measures to be undertaken in this respect, we can guess that plans for further sector development are likely to be rather aggressive. President Vladimir Putin, noted: Our interests include development of Sakhalin, access to the Karskoye Sea, accelerated construction of ports in the Baltic and Black Seas, modernisation of the

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existing pipelines and promotion of the new ones, building oil and gas bridges to China, etc. We should sell energy-carriers to the biggest possible number of countries, look for new partners and frame our work according to the geo-strategic interests of the Russian Federation¹². Such an approach seems to indicate that the development of this particular industry will take place in the future on a large scale, with massive exploration and development of both existing and new oil and gas fields. In this case, it should be stressed that the expansion of oil and gas extraction inevitably involves strengthening of environmental impacts that are often irreversible.

Environmental problems

So far, the concept of Russia's dependence on and need for accelerated development of the oil and gas resources have not been questioned. However, another point of view on this issue should be considered - stabilisation of oil/gas production and addressing environmental issues.

In the Concept of National Safety of the Russian Federation, signed by Boris Yeltsin in 1997, the development of mostly fuel and energy industries is viewed as a threat to the country's economy. Indeed, should increase in oil and gas revenues be regarded as a long-term panacea for the country. According to the EBRD Transition report update, in 1999 the Russian economy has shown 3.2% growth, but it has been largely due to the steep increase in the world's oil prices and only masked the lack of fundamental reform in this and other sectors.

Taking into consideration the predicted 20% growth in the world's demand for oil until 2010¹³, many continue to argue in favour of accelerated development of Russian fuel mineral resources. Yet the major objective of the energy policy for the Russian Federation for the same period was declared, restructuring of the fuel and energy industries, involving stabilisation of oil extraction in Western Siberia and other regions¹⁴. Stabilisation of production and re-directing the investments from recovery enhancement to the update of technologies, infrastructure and strengthening management capacity would significantly contribute to resolving a number of problems.

It should be noted that the Russian oil and gas industry has inherited the burden of environmental problems, which have not been addressed yet. At present, the fuel and energy sector in Russia ranks first among other sectors in its contribution to environmental degradation. According to official data¹⁵, the fuel and energy sector releases 70% of the total emissions of green-house gases (GHGs) in Russia. Pipeline leaks alone in Russia are estimated to generate some 35 million tons of methane emissions annually - the figure corresponding to Germany's annual CO₂ emission level¹⁶. A large share of atmospheric pollutants results from typical operational practices widely used in the country such as venting and flaring of natural gas that accompanies oil production. Interestingly, in remote provinces of Russia such flares in the field are still welcomed as a proof of oil and gas deposits in place, though all around the world gas flares are regarded a drawback from an environmental perspective. This problem is quite prominent for the country, for over 3.5 billion cubic metres of natural gas is burnt annually on the fields¹⁷. The solution to this problem is left for the future, since it would require reconstruction of the oil collection units in the fields and substantial financing.

Operational discharges also contribute to environmental degradation of the natural areas. In Russia, it is a common practice to discharge untreated wastewater with oil and other contaminants directly into landscape depressions rather than into specially constructed dumps¹⁸, which results in contamination of larger areas and poses a serious threat to wetlands. When wetlands overflow, they serve as secondary sources of hydrocarbons for nearby lakes and rivers.

The improper handling of production water, along with discharge of diluted drilling fluids and sewage that still contain hydrocarbons and chemicals, results in a high level of contamination of local soils, surface and groundwater. According to the Arctic Assessment Program, almost all samples taken from the rivers in Western Siberia, which is a large production region in Russia, exceed the maximum permissible concentrations. Contamination is also reflected in the composition of riverbed sediments (e.g., the concentration of hydrocarbons in the Pechora estuary is 250 micrograms per gram).

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From the Soviet times, the current Russian oil and gas industry has inherited extended networks of gas pipelines that are not in use, a number of processing enterprises with the load of 20-30%, and growing unemployment in towns built during the period of forced accelerated oil development of Western Siberia. Currently, significant parts of pipelines are out of use since they lead to the exhausted deposits: a majority of large fields providing 57% of annual oil recovery are 56 % depleted, with water content in the product over 90%¹⁹. At first glance, the problem of resource depletion does not seem to significantly threaten Russia, the country so rich in fuel minerals, however, beginning in 1994 the annual addition of oil and gas reserves has not compensated for reduced production volumes²⁰. Taking this into account, Russia's long-term prospect for becoming the world's crude resource supplier and having an economy dependent on depletable reserves appears especially worrisome.

A plague of Russia's oil and gas industry nowadays is the state of the pipeline systems. The country built a network of main pipelines for transporting natural gas, oil and oil products that was unique in terms of scale and throughput capacity. A large portion of this network is represented at the moment by inefficient and outdated pipes lacking safety valves and requiring urgent upgrade. From the oil operators' point of view, the existing physical constraints on the infrastructure result in decline in production. For the residents of oil provinces, defaults in infrastructure are disastrous. The most obvious example is the oil spill in Komi Republic when around 100,000 tons of crude oil escaped into the environment through fractures in the pipeline during a six-month period. This situation of pollution over a long period of time is quite common for Russia: oil is often left flowing through ruptured infrastructure while repairs are done on a section of the pipe, since the lost oil costs less than a bypass. On average, each year around 8-10% of produced oil (or 20-50 million tons) leaks into the environment through ruptured pipelines²¹.

In Russia, attention traditionally has been paid only to large-scale accidents resulting in immediate long-term pollution, while less obvious or short-term impacts were considered insignificant and were not taken into account during planning of operations. These included runoff and increase of particulate in water column during construction alteration of

hydrological regime of the area and fragmentation of habitats as a result of road or pipeline construction.

Also, within Russia's territory, most of the large fields currently being developed or explored are located in remote northern regions with fragile ecosystems (Arctic North, Siberia, and Far East). High sensitivity of pristine northern nature gives rise to additional problems. So, for example, human intervention related to oil and gas operations has the most significant consequences for the soil ecosystems in circumpolar regions²². Clearing, construction and installation works in such areas disturb or completely remove the upper layer of peat normally providing insulation for the underlying permafrost and change the heat balance, which usually leads to dramatic reshaping of the land. Also, in the north oil spills have more severe and longer consequences for the environment than in other regions because toxic components of oil remain in the soil up to 30 years compared with five years in normal conditions²³.

In Russia, penetration of the oil and gas industry into pristine territories is typically accompanied by massive and unjustified clear-cutting of virgin forests. According to the estimates of Vilchek²⁴, in northwest Siberia alone the total area of destroyed vegetation within oil and gas fields and along main pipelines exceeds 2500 square km. In addition, the rate of recovery of forest ecosystems in Russia's north is slow. As Pearce²⁵ notes, it takes trees in taiga four times longer than tropical species to reach their full height.

Quite often, secondary effects produced by the presence of hundreds of drilling and geological personnel are ignored. These might include poaching, logging and forest fires. According to scientific assessments²⁶, the frequency of fires in the Russian old growth forest areas increased two to three times due to the penetration of the oil and gas industry and casual attitude of workers towards fire. Typically, forest services in Russia fail to control fires due to large distances and lack of transportation and funding.

The pressure of new site development on forest regions is enhanced by facilitated access to remote areas and subsequent introduction of poaching and logging. This, along with fire risk increase, makes the Russian oil and gas industry the leading destroyer of Russian taiga among

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non-forestry sectors²⁷. Indeed, the network of roads, rails and river ports put in place in Siberia and Far East for the purposes of oil and gas exploration and production is commonly used by timber industries, with logging activities concentrated around oil and gas communities.

As noted above, allowing access to natural areas previously designated as wild lands contributes to a wider exploitation of the area through poaching. Typically in Russia, people associated with oil and gas regard the nature as an endless source of additional income, food or pleasure, which creates grounds for poaching on a large scale. As Alexei Grigoriev states²⁸, Russian oil officials and workers traditionally hunt animals both for food and for sport using company equipment such as helicopters or all-terrain vehicles. This practice, both illegal and uncontrolled, often results in reduction of sensitive species as well as overall degradation of the area.

The decrease in wildlife populations in the country is also caused by the use of outdated practices. So, for example, due to the rare application of worldwide accepted preventive practices, there is a high mortality of small animals and birds in sludge ponds. Because there are no strict limitations on noise levels and use of extraneous light, the impacts remain not addressed.

Marine mammals tend to flee from the territories with a high level of noise. This migration from the natural habitats poses a serious threat to fringe populations at the limits of their geographical habitats. A potential example of such populations in Russia can be Asian and Western Pacific whales, whose critical summer habitat is near Sakhalin Island, where a number of oil and gas projects are being fulfilled or planned to be implemented in the near future. The Western Pacific gray whales, of whom only about 80 remain in the world, are displaced from their habitat. According to Vorontsova, Russian Director of the International Fund for Animal Welfare, a significant part of the breeding area of gray whales is located within Sakhalin II oil field. In addition, these whales are impacted by noise, particularly because they use the same low-frequency sounds as vessels exploring for offshore oil²⁹.

Overall, it should be stated that in Russia the negative impacts typical for oil and gas extraction, are magnified by application of outdated equipment, bad operational practices, leaky infrastructure, and lack of control over activities in remote oil and gas-producing regions. In this connection, significant environmental improvements are urgently needed for mitigation of severe environmental impacts.

Repair and upgrade of the existing facilities as well as purchase of new more environmentally friendly equipment require a substantial influx of capital. Since the amount of domestic investment in Russia has been steadily decreasing, the significance of foreign investments has significantly risen and, in the eyes of the public, become crucial for finding solutions to environmental problems.

Foreign involvement

Questions arise regarding financing of improvements, which could ensure long-term economic viability and high environmental quality of operations. During the last decade, foreign direct investment in Russia's oil and gas has shown rapid growth and has become the major factor in introducing the necessary changes.

Russians have generally been quite sceptical of foreign involvement in the country's economy, mostly due to the national sentiments, which have deep historical roots. According to McPherson³⁰, foreign direct investment has been viewed as a necessary evil, providing essential bridge finance during economic transition, at the expense of giving away part of the national heritage. Foreign participation was not allowed at the initial stage of the privatisation. Later on, it was discovered that in the case of foreign involvement, the Russian oil and gas sector could get accelerated development due to shared financial risk, and modern technical and managerial practices. After the break-up of the Soviet Union with the move toward a market economy, the Russian petroleum industry opened for foreign investment through joint ventures, allowing foreign investors opportunities to take equity stakes in Russia's oil and gas industry.

Despite Russia's difficulties in accommodating foreign capital (caused by uncertain regulatory framework, unfavourable tax system,

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non-transparency and low-quality performance of many Russian partners), a number of joint ventures (JV) appeared providing a way for Russia to get access to capital and efficient technologies and granting to foreign companies access to natural resources. The attention of foreign investors to the Russian reserves resulted in the establishment of numerous exploration and development joint ventures that concentrated mostly in three large production regions: Western Siberia, Arctic North and Far East. The Arctic region was characterized by the presence of joint ventures with participation of such widely-known companies as Texaco, Chevron, Amoco (USA), Gulf Canada (Canada), British Petroleum, British Gas, Shell, Quest Petroleum (UK), Aminex (Ireland), Total, Elf (France), and Neste (Finland). In the Far East, Mitsui, Mitsubishi (Japan), Royal/Dutch (UK), Marathon, Exxon, Mobil (USA) and others got involved in projects near Sakhalin Island. The participation of these companies in the development of Russian oil and gas was associated with a significant influx of capital. For instance, foreign investment in 1999 in Sakhalin alone was over USD one billion, which constituted 24% of total direct foreign investment in Russia³¹.

Currently in Russia foreign investments are regarded a major condition for successful functioning of the oil and gas sector³². Foreign involvement is expected to bring in good international operational practices and efficient equipment, while contributing to increased production and alleviation of acute environmental problems facing today's industry. Since foreign companies in the oil and gas sector have been active in Russia, development of the industry in the country will be influenced by the level of performance and practices/standards applied by foreign partners as well as the terms of agreement with the Russian side. This is expected to have an overall positive impact on the business and environmental performance of the whole sector.

The positive implications for the environment should not be overestimated, however, since the priority is not to clean up the existing pollution or compensation for damages, but to enhance production that could increase exports and provide more profit. As mentioned above, the industry has experienced almost 50% decrease in oil production since 1988³³. As a result, foreign investments have received high importance as a means for production stabilisation and the industry's recovery. In re-

gard to the environmental implications, it should be emphasised that an increase in production is typically obtained through development of new oil and gas fields or expansion of the existing operations, which undoubtedly leads to putting more stress on the environment.

Regarding the foreign involvement in oil and gas operations in Russia, the role of bilateral and multilateral finance agencies such as the US Overseas Private Investment Corporation (OPIC), the US Export-Import Bank (EXIM Bank), Export-Import Bank of Japan (JEXIM), the WB and EBRD has become stronger. Most of the joint ventures became possible due to strong support, guarantees and financing provided by these financial institutions.

The activities undertaken with the presence of multilateral development agencies, which have strict environmental guidelines and standards, are implemented at a higher level than the operations of domestic companies, both in terms of business conduct and environmental performance. According to this approach, MDBs are supposed to improve the sector performance and participate in shaping regulatory framework in the country. The next chapter will consider the environmental policies, guidelines, procedures and operations in Russia of the three MDBs, which have been most active in providing loans for oil and gas projects, in order to assess their implications for the environment. These are the EBRD, IFC and IBRD.

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The banks environmental policies, procedures and operations

The activities of development banks can have double-sided impact on the environment. On the one hand, the operations conducted by financial institutions - providing advice, guarantees, technical assistance, structural and sectoral adjustment loans - aim to enhance investment in private and public sectors, which would produce positive changes in the economy. On the other hand, it is well known that large-scale economic changes and rapid industrial development are often accompanied by significant negative environmental impacts. In developing and transition countries, existing environmental problems and bad practices magnify these impacts. Thus, in these countries, through stimulating economic growth and social development, MDBs can indirectly speed up environmental degradation.

However, development agencies are committed to promoting the well being of citizens in their member-states, which along with poverty alleviation implies a contribution to a better environment. The balance is typically reached through either supporting projects with primary environmental goals or implementing activities in a way that would ensure elimination or mitigation of negative impacts on the environment. Environmental policies and procedures developed by banks provide grounds for this.

In general, the issue of potential environmental impact of MDB-supported operations has drawn a lot of attention from the Western public, which resulted in a strong critique from non-governmental organisations (NGOs). For the most part, critics tend to emphasise the problems associated with specific bank-sponsored projects. For example, the organisation Friends of the Earth International constantly monitors such projects and has criticised banks for lending in the energy sector that contributes to global warming. Sustainable Energy and Economy Network (SEEN) and Greenpeace International are critical of financing the projects that promote further ozone depletion and climate change. Environmental Defence Fund consistently offers suggestions for improvement in particular projects, while Central and Eastern

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European (CEE) Bankwatch Network reviews banks' policies and provides related recommendations. It should be noted, however, that within Russia research on this topic has been scarce and the issue of potential consequences of banks' projects within the country are not studied to a sufficient extent.

Meantime, MDBs have made substantial investments in Russia, paying close attention to financing oil and gas sector operations. As shown in the previous chapter, oil and gas activities in Russia are responsible for a number of serious environmental problems. Therefore, for meeting the objective of contributing to economic development and environmental protection, the banks are supposed to make significant environmental improvements in the projects such as introduction of efficient technologies, application of highest environmental standards, promotion of best international practices.

This chapter considers existing environmental policies and procedures related to oil and gas as well as their reflection in the project portfolio of the most active multilateral banks in Russia - IBRD, IFC and EBRD - analysed. Though a comprehensive objective assessment of implementation of the policies and procedures cannot be currently fulfilled due to the confidential nature of information, the comparative review of the policies/procedures adopted by different banks is carried out. The statements and conclusions on the banks' environmental behaviour in the Russian oil and gas sector made in this chapter are supported by the case studies contained later in the study.

General overview

IBRD operates by guaranteeing or making loans for projects of reconstruction and development, which is represented by direct government lending backed by governments. The Bank has the broadest scope of activities: its operations range from economic structural adjustment and industrial sector's reform to support of the spheres not addressed by other banks (e.g., education, health, and social protection). Tamar Gutner states¹ that out of the three largest MDBs (WB, EBRD and European Investment Bank) today's IBRD is 'least bank-like', i.e., the

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IBRD acts more like a development agency addressing the most critical issues in developing countries, triggering policy and institutional changes in all areas including the environment.

Currently the IBRD finances a certain number of projects aimed at pollution reduction, natural resource management, promotion of renewable energy, and institutional capacity building for national and local institutions world-wide. It should be mentioned, however, that in Russia the proportion of projects with primary environmental goals in the bank's portfolio is quite insignificant. As of June 2000, there are only four projects directed to rational resource use or clean up of pollution, which altogether account for USD 340 million².

IFC was set to promote economic development by encouraging private investment, both foreign and domestic, in developing countries. The Corporation participates in private ventures through lending directly to the companies, making equity investments without guarantees from the governments, and providing advisory services as well as technical assistance to businesses. According to the IFC statements, the institution takes part only in private ventures that benefit the economies of host countries, are environmentally sound, and have strong demonstration effect.

In Russia the IFC has been present since 1991 when it started a technical assistance program for privatisation reforms. The Russian Federation became an official IFC member only in 1993, with the first year of membership opened by two IFC loans for oil and gas field development.

More weight should be given to consideration of the IFC policies and operations in the Russian oil and gas sector in comparison with the IBRD's due to the planned change in the focus of future lending provided by these two institutions. According to a new Country Assistance Strategy for the Russian Federation developed by the WBG for the period of 1999 - mid-2001³, the IBRD will shift its lending away from the energy and infrastructure projects in favour of institutional strengthening and poverty reduction through social programs, while the IFC will concentrate its efforts on the export-oriented areas where foreign in-

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investors see strong comparative advantages and lower country risks (which means oil and gas, gold, silver and other mining).

Over the past decade the IFC has paid close attention to the development of its environmental strategy that, along with environmental procedures and policies, were modelled after the IBRD s. Today, the IFC promotes private sector involvement in the environmental services sector in developing countries mostly through water supply and wastewater treatment, solid and hazardous waste management, recycling, and ecotourism projects. In contrast to the IBRD, the IFC does not emphasise green investments. In Russia, for example, no projects of this type have occurred so far.

EBRD was founded to foster the transition towards open market-oriented economies and to promote private and entrepreneurial initiative in the CEE countries ⁴. As with many other MDBs, the EBRD carries out activities in such spheres as privatisation of state-owned industries, economic restructuring, strengthening of domestic financial institutions, and mobilising foreign investments. The main focus of its operations is quite similar to the IFC s, since the Bank funds specific projects rather than big policy reforms (the latter is more the IBRD sphere) and emphasises the private sector providing most part of its loans, guarantees and equity investments for private operations. While other older institutions (IBRD, IFC) have been developing their environmental strategies over a lifetime, the EBRD was born with the environmental mandate built into its founding agreement that commits the bank to promotion in the full range of its activities environmentally sound and sustainable development .

The EBRD declares high priority of operations with primary environmental goals and environmentally sound projects. The former are mostly projects promoting energy efficiency, use of renewable resources, introduction of cleaner technologies, and alleviation of severe environmental problems.

All the MDBs acting in the region have two basic patterns of behaviour regarding the environment: funding projects with primary environmental goals/major components and mitigating potentially adverse environmental impacts, which is mostly ensured by the Bank s policies

and procedures. The review of the environmental policies and procedures outlining common and bank-specific critical issues is provided below.

Project categorisation

Most existing literature on the organisational behaviour states that despite the ambiguity of the compliance and implementation issue, the behaviour of an institution is strongly shaped by the rules and standard operating procedures. The IBRD, IFC and EBRD have strong sets of environmental policies and procedures, which seek to mitigate the environmentally destructive effects caused by the bank-supported activities, but have a few weak points.

All the three banks pay close attention to Environmental Assessment (EA) process. EA targets such a design and planning of operations that could provide their implementation in both economically and environmentally sound and sustainable ways. The IBRD and IFC operate according to the policy and procedure OP/BP 4.01, though it has some specific points for each bank. The EBRD has developed its own procedures that differ from the WBG s quite significantly.

Considering the effectiveness of this policy in oil and gas projects, special consideration should be given to project categorisation in different banks. In the IBRD and IFC, OP/BP 4.01 states that depending on the nature of operations, magnitude of impacts and sensitivity of the areas, the project can fall into one of the following categories:

- A - normally full Environmental Impact Assessment (EIA) including Environmental Management Plan (EMP) is required if the project is likely to have significant adverse environmental impacts that are sensitive, diverse and unprecedented⁵. EIA typically covers a wide range of issues: basic facts about the environmental conditions of the area, project description including off-site investments (e.g., in construction of roads, pipes, housing), potential positive and negative impacts, analysis of alternatives, including consideration of alternative investments (without project situation), sites, technologies, design. EMP describes mitigation, monitoring and institutional strengthening measures. In general, the requirements for Category A allow for

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conducting a detailed survey and presenting a full overview of environmental impacts with measures for addressing them.

- B - more limited EA is required if the project's potential environmental impacts on human populations or environmentally important areas are less adverse than those of Category A, and the measures to address them are easier to identify, the impacts are site-specific and few of them if any are irreversible⁶. The projects are assigned to this category on the case-to-case basis by the bank's staff, and the EA considers significantly narrower range of issues than in the event of A-category. It appears rather important that the examination of alternatives does not take place for category B, and EMP is typically replaced by a management plan only, which does not concentrate on environmental issues.
- C - beyond screening, no further EA is required if the project is likely to have minimal or no adverse environmental impacts.
- FI (financial intermediary) - verification of the fact whether the operation meets the host country environmental requirements is undertaken, if the investment of the Bank's funds through financial intermediary is involved in sub-projects that may result in adverse environmental impacts.

WB used to have a list of certain project types typically falling into A category, which among others involved mineral extraction (including oil and gas development), and pipelines (oil, gas, water)⁷. However, the directive was revised and the list was removed from the policy. EA policy makes the screening process at WB flexible, and the decisions on the category are taken by the experts depending on particular situation. The absence of sample list of A projects as well as non-existence of strict definitions allow the banks an opportunity to assign an oil and gas project with quite significant environmental impacts to category B.

Substitution of A for B category has significant implications for the project that concern the quality of EA. Firstly, this makes possible focusing on a significantly narrower range of environmental issues while implementing EA, which, in its turn, could cause insufficient addressing of the problems. Secondly, EA for an A-category project is to be undertaken by independent experts⁸, but there is no clear statement in the IBRD and IFC policy regarding the actors in charge of EA implementation in case of B-operations. Since it is assumed that the responsibility lies with the project sponsor, the latter may use this to engage the pro-

ject-associated experts and compile an EA requesting minimum design changes and mitigation measures and save on the project costs.

Thirdly, for many B-projects, especially if they include rehabilitation, upgrading or expansion, EA may result only in an action plan that focuses on mitigation and monitoring of the existing impacts and gives significantly less importance to prevention and mitigation of the impacts caused in the course of project implementation. Such approach common for the IFC and IBRD⁹ may result in underestimation of the project impacts, which leads to the development of actions insufficient to address all of them.

Finally, we should mention that the procedures for consultations with the affected groups and disclosure of information are different for various categories. So, for A-operations, consultations are held at least twice with full EIA report made publicly available well in advance, while for B-projects consultations are organised as appropriate and the document submitted for public comments is represented only by the environmental review summary without full version of EA. This shortage of environmental data on B-projects available to the public is specific for the IFC and provides grounds for inadequate input from the locals.

Generally, in the IBRD and IFC history of operation all around the world, the examples of the projects with diverse and significant impacts assigned by the banks into B- instead of A-category are known. The existing provisions in environmental policies and procedures do not eliminate an opportunity for similar practices in the future.

The EBRD has a system of project categorisation different from the IBRD s and IFC s. In the EBRD, there are two groups of environmental categories that assume a certain type of environmental investigations to be carried out:

A - full EIA of the operation is required if the impacts from operations are potentially significant and cannot be easily identified, assessed and mitigated.

B - a less detailed Environmental Analysis is requested if future environmental impacts are potentially significant but can be readily identified, assessed and mitigated.

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C - neither EIA nor environmental analysis are required. The EBRD operations also require environmental audit determining risks and liabilities, compliance and adequacy of pollution control measures. This classification divides operations into the following groups:

1 - Environmental Audit is to be undertaken if the loan is provided for ongoing operations with application of the existing facilities

0 - no Environmental Audit is required if the project is a greenfield investment¹⁰

The EBRD does not provide clear definitions of project categories, but it has developed a list of greenfield and/or major expansion project types which are subject to full EIA¹¹. Other projects not included in the list would typically be screened as B or C-categories, though in the event of additional factors involved (e.g., sensitive location, large scale, risk of serious accidents or threat to human s health) they may be reviewed and assigned to A-category. If this list were not only a guidelines but obligatory to follow, this measure could guarantee due handling of environmentally damaging projects, eliminate the opportunity for mistakes, facilitate decision-making for the staff responsible for screening and save their time, as well as allow for some degree of flexibility in order to ensure proper actions in the event of any complications. However, this list of A-category project types serves only as an example, general guidelines for the staff. In practice, decisions are made on case-by-case basis as in the IBRD and IFC and, subsequently, do not exclude the possibility of assigning of a project with significant and diverse impacts to category A instead of B.

In oil and gas sector, the discussed list of A-projects includes hydrocarbon production, crude-oil refineries and large-diameter oil and gas pipelines. Adoption of this measure by the EBRD shows that the bank recognises the significance of environmental impacts caused by oil and gas industry. Nevertheless, it should be emphasised that the list refers only to greenfield and major expansion projects and does not apply to relatively small-scale operations on existing fields that still may have considerable environmental impact.

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For all the three banks, there can be distinguished several common points for improvement. So, it is highly important that the banks have more specific and strict procedures on the project categorisation. Stronger definitions of categories along with the obligatory adhering to the list of A-projects due to significance of impacts could significantly benefit the overall EA process efficiency, facilitate the staff's task and have a positive impact on the overall environmental project quality. Moreover, taking into account that routine oil / gas operations and accidents have potential to bring about damage to the environment, trigger changes at local and regional scale and contribute to global problems (climate change, release of ozone depleting substances), the author argues for the relevance of only A category for any oil and gas projects, regardless of activities scale and sensitivity of the area. For the IFC, it can be recommended that the disclosure of the full set of conducted studies to local NGOs and inhabitants should take place in case of any project category.

Environmental assessment

According to the established procedures, the screening is performed to determine which environmental assessment instruments should be applied to the project. The IBRD instruments include EA, environmental audit, hazard or risk assessment, and EMP. As an alternative to EIA of a particular project, regional or sectoral EAs may be required to assess cumulative impacts. However, the environmental procedures do not stipulate the detailed provisions for application of regional/sectoral EA, and the investigations of this type are rarely done.

The range of existing the IFC instruments used in environmental assessment is more limited than in the IBRD: it is constituted by EIA of a particular project, environmental audit, hazard or risk assessment, and environmental action plan (EAP) - equivalent of the IBRD EMP. The implementation of sectoral/regional EA is not requested by the adopted policy. The Bank might explain this by working with separate private enterprises instead of dealing with governments or implementing large-scale projects and sectoral reforms. In this respect, the IFC does not estimate the impact of supported private operations as signifi-

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cantly affecting the environment at the regional level and, thus, does not consider appropriate to conduct regional/sectoral EA. However, cumulative effects of small IFC projects in oil and gas field development, concentrated in one area, may give rise to regional changes. A number of similar projects pushing the industry to expansion and more rapid development are likely to have significant implications for the environment. Therefore, the absence of regional or sectoral assessment in the set of the IFC instruments is a strong drawback, and it would seem reasonable for the IFC not to deviate from the IBRD policy in using regional or sectoral EA.

In the EBRD, the main types of environmental investigations normally required for operations are EIA, environmental analysis and audit. Additional instruments, which can be used, depend on the nature of operations and may include energy or waste audit, hazard analysis or quantified risk assessment.

Also, the Bank may carry out strategic environmental assessment (SEA), which can be considered an equivalent to the IBRD regional or sectoral environmental assessment. Since SEA allows determining more far-ranging and cumulative impacts of operations as well as to propose broader types of alternatives, its presence among the EBRD instruments has positive implications. However, it should be mentioned that the EBRD Environmental Policy and Procedures do not contain any detailed instructions on exact cases of application of particular additional assessment instruments. It would significantly clarify the situation, if the Bank defined exact conditions of their applicability and time frame of implementation.

It seems logical to conduct strategic EA at the initial stage before project approval, so that it could ensure proper mitigation of impacts via changes in project design. Nevertheless, in case of Sakhalin offshore project in Russia, the EBRD stated that cumulative and multiple impacts in the area were unknown and SEA might be relevant only two years after the project had been approved¹². Thus, the project was designed without taking into account cumulative impacts in the region and the ways of their mitigation. This SEA planned by the EBRD can be useful only in case of another loan for operations in Sakhalin to be provided in the fu-

ture, otherwise, it remains theoretical research without any practical application in the bank s operations.

Borrower s responsibility and bank s supervision

Supervision over the borrower s implementation is one of the major bank s functions. Environmental policies and procedures shape the Bank s behaviour if they are implemented in practice. The issue of supervision should be attached additional importance in all fSU countries including Russia, since the most acute common problem in this region is unreliable basic information and implementation reporting. According to the WBG¹³, the old system of central planning and control has left a legacy of inefficiency and mismanagement resulting from incomplete accountability for performance and results, and in certain cases, deliberate misreporting of environmental data . In addition to this historically originated discrepancy between actual situation and satisfactory implementation reflected in reports, the oil and gas sector in Russia is notorious for its high level of corruption¹⁴. Such practices often applied by the Russian partners in joint ventures may have significant impact on the overall project fulfilment and compliance. Thus, strict detailed banks requirements for and control of assessment studies, project progress, monitoring and reporting are crucial for successful implementation of any project in Russia. However, the IBRD, IFC and EBRD do not have any strong provisions on supervision over borrower s activities contained in their procedural documents or policies.

According to the banks requirements, the borrower/project sponsor has the responsibility of carrying out EA while the banks functions include advising and supervision. The IBRD and IFC EA Policy 4.01 stipulates participation of an independent third party in EA process for category A projects, which helps avoid conflict of interests situation. Also, the policy requires the involvement of independent, internationally recognised specialists for EA of A projects that are highly risky or contentious or involve serious and multidimensional environmental concerns . This item undoubtedly has overall positive implications for the quality of assessment.

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The important deficiency is that category B projects are subject to a less detailed assessment, and there are no definite strict provisions on the EA performer, which would ensure similar objectivity. In the event of EA carried out by the team responsible for project design, there always exists a risk of biased consideration and proposal of prevention and mitigation measures that would not introduce significant changes into initial project design. Thus, the involvement and responsibility of the third party not affiliated with the borrower and the project is essential for carrying out an effective environmental assessment, audit, risk analysis and should be stipulated in the banks policies and procedures for any project category.

The IFC Environmental and Social Review Procedure gives some specifications on the supervision of EAs for the projects of different categories (A - site visit and the sponsor's report, B - information provided by the sponsor and project team). The IFC policy, like the IBRD's, makes emphasis on the desk review of compliance and monitoring data submitted by the project sponsor itself¹⁵, which in some cases appears to be overestimation of the sponsor's ability to provide high-quality reports.

Also, the IFC gives much weight to information provided by the operators in determination of the project sponsor's environmental capabilities. According to accepted practices, the IFC sends an Environmental and Social Questionnaire to be completed by the operating companies. This can be effective for highly reputed multinational companies, but the typical situation with Russian partners in joint ventures demands continuous personal presence and deep investigations of the Bank's inspector. Moreover, it should be mentioned that the IFC undertakes the assessment of the sponsor's environmental capability only on-site, while the IBRD implements it on-site as well as at the agency and ministry levels, which is substantially broader and more reliable.

The IFC requests submission of annual environmental monitoring reports by the project company on the project performance against relevant guidelines and policies (for A-category completed or verified by independent consultants), supervision missions carried out by the Investment Department of the Bank and the Technical and Environ-

ment department, and/or project site visits by Environmental Division. However, the involvement of independent recognised third parties in reporting is not stipulated for B-category.

Also, it should be stressed that the IFC does not have any oil and gas representative office in Russia that could control implementation of routine operations in the country. Supervision is carried out at a distance from the Oil and Gas Division located in Washington, with periodical field visits, which does not allow for continuous high-quality control of the project sponsor performance.

The EBRD is not an exception among MDBs that do not have the detailed requirements for monitoring and supervision that they practice, codified in a policy or procedural document. The existing provisions appear to be insufficient for ensuring objective survey or efficient supervision.

If the IBRD and IFC stipulate the presence of an independent team for at least A-category project EA and an advisory panel of internationally recognised experts in particular cases, the EBRD procedures do not set any similar conditions.

Like the IFC and IBRD, the EBRD relies mostly on review of annual reports compiled by the operator while staff field trips are normally timed and prepared by the company. This, in the light of the common within Russia practice of misreporting and falsification seems quite an insecure measure.

Currently, there is no comprehensive procedure on inspection and supervision that would ensure continuous control over the performance of domestic partners participating in oil and gas joint ventures supported by the banks. Taking into account the specific conditions in the FSU oil and gas industry, a developed system of external monitoring, supervision and control should be worked out by the banks for a number of countries including the RF. Despite environmental capacity strengthening of the borrower/project sponsor, not the operator's reports and assessments, but site visits, supervision missions, periodical reviews and audits carried out by the banks' staff or other independent parties are to be promoted and given more weight, at least, at initial stages of implementation.

Effectiveness of guidelines and policies

Due to the developed environmental policies and procedures, staff engaged in environmental and technical issues, and project portfolio, the WB is regarded the greenest among large MDBs¹⁶. To date, the Bank has adopted specific policies covering separate areas - lending in forestry, agriculture (pest management), water resources (dams and reservoirs, international waterways), indigenous peoples and others. Nevertheless, though some of these policies (e.g., Natural Habitats, Forestry, and Involuntary Resettlement) are applicable to numerous projects regardless of the type of industry, it should be emphasised that there exists no separate natural resources policy.

In regard to oil and gas industry, the WBG acknowledges high significance of lending to this particular sector in developing countries, since it is directly linked to economic and social well-being¹⁷. This, along with acknowledgement of the fact that oil and gas field development is considered among most potentially harmful activities raising complex environmental problems, should have provided the basis for development of a separate oil and gas policy that would cover the environmental issues involved.

Though no separate policy providing comprehensive coverage of oil and gas objectives and activities exists, both the IFC and IBRD conduct operations according to sector-specific standard guidelines.

Oil and Gas Development (Onshore)¹⁸ contains normally acceptable to the WBG concentrations of air emissions and wastewater as well as noise levels while performing operations onshore. These standards can be regarded of high value, since they set strict limitations not to be exceeded during operation, but have a few critical issues which could be improved.

The guidelines promote practices designed for compliance with the fixed emissions requirements. These include maximisation of freshwater-based muds, reuse of diesel-based muds and drilling mud decant waters, oil recovery from process wastewater, minimisation of gas flaring, and scrubbing sour gases. The enumerated issues could have crucial importance for reducing the environmental impact of onshore operations. However, the guidelines do not set strict requirements assuming that ori-

entation at implementation of these practices in future is essential, while the application of the practices should provide the basis for WBG decision on provision of financial assistance.

The IFC Environmental, Health and Safety guidelines¹⁹ provide requirements and recommendations concerning offshore hydrocarbon extraction that would let Russia make a step on the way to a better environmental performance (e.g., assessment of oil spills and development of oil spill contingency plans, measures to quickly to detect a leak and minimise its impact - metering, alarms and automatic shutdown systems), since some practices are not applied by many companies in Russia yet. These guidelines set the optimal accepted levels of air emissions and liquid effluents (open water). However, some limitations such as open sea discharges of diesel-oil muds are of little relevance to offshore development in Russia, since the RF Federal Law is more stringent in this respect and prohibits discharge of any effluents containing not only oil- but also water-based muds and cuttings into open sea. Also, it should be noted that the guidelines do not have any provisions on noise level in offshore operations, which is of importance for reducing the impact on vulnerable marine environment.

All the emissions levels and practices discussed above are guidelines to be followed, which denotes that there is a high flexibility in their application. According to the IBRD policy, exact requirements are usually established on the basis of these guidelines and the country legislation, as applied to local conditions . It means that in particular cases the emission levels stated in the WB guidelines act as a final target for the company to be reached sometime during project implementation. The essential factor decreasing meeting these standards in a timely manner is that exact time frames and measures for reaching the compliance with the targeted levels are often not stipulated by the banks. This allows the emissions to remain nearly at the same level without significant improvements, which contributes to the ambiguity of effectiveness of the regarded guidelines.

In regard to oil and gas, the WBG has developed guidelines only for petroleum refining and development operations onshore/offshore, while the adoption of a comprehensive standards for offshore/onshore

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development, oil and gas transport along with general oil and gas policy containing goals and activities would be of significant benefit.

The peculiarity of the EBRD policies and procedures that attracted a lot of attention a few years ago was that the bank did not have its own operational and emissions standards for industrial sectors. Until 1996, the EBRD had the practice of application of different standards in comparative manner: the Environmental Appraisal Unit was responsible for the decision whether local or some other standards would be most appropriate for every particular project. With the revision of Environmental Policy, the EBRD set two possible variants of standards applicability:

- 1) operations have to meet most stringent national and existing European Union (EU) environmental standards; and
- 2) projects are to comply with the national and WB standards if EU standards do not exist.

The bank declares its commitment to promote programs for achieving compliance with the appropriate set of standards and good international practice. But, as it is also the case with the IBRD and IFC, the bank often does not set strict universal time frames and they can range from six months till the date of full loan reimbursement. This flexibility may substantially slow down the process of achieving the desired quality of performance.

In terms of intended environmental protection while conducting oil and gas projects, the EBRD has a distinguished advantage over the IBRD and IFC - it has specific Natural Resources Policy that provides clear guidelines on oil and gas and discusses the EBRD intentions and plans regarding the Russian oil and gas.

The EBRD Natural Resources Operations Policy most clearly out of three institutions sets the goals and priorities of the EBRD involvement in natural resource extraction, including oil and gas. In this policy the EBRD identifies key potential environmental impacts which can be caused due to the Bank's involvement in the oil and gas sector and determines the ways they are addressed and mitigated²⁰. However, some solutions proposed by the bank are too general or are not effective in eliminating the problem. For instance, the Bank declares improvement of environmental management and enforcement of implementation

monitoring but does not specify through which programs and measures it will be reached. The EBRD plans to switch from small and medium-sized oil and gas production and development of the existing fields to large-scale operations in frontier areas (Arctic North, Far East). This will undoubtedly cause serious environmental and social problems, since these territories are remote, characterised by the fragility of ecosystems, and represent subsistence living for indigenous peoples. The bank's requirements for environmental due diligence cannot be considered as a response to working in frontier areas.

Also, a certain degree of irrelevance is revealed through addressing the GHGs emissions issue. The Bank admits that oil and gas projects significantly contribute to GHGs as a result of flaring and fugitive emissions and proposes Joint Implementation projects as well as systematic collection of information on carbon dioxide emissions in the future as mitigation of the problem, instead of withholding from investing in new large-scale oil and gas extraction. A number of examples like these in the EBRD policy may lower the value and effectiveness of this policy.

In general, it is characteristic of the EBRD that its goals are most clearly stated, its documents covering oil and gas handling seem more comprehensive, well developed and provide rather good basis for a higher environmental performance than in the IFC and even IBRD. But the critical point for the EBRD may be the implementation of the objectives and application of all the adopted practices and procedures in practice. For drawing a comprehensive picture of the bank's behaviour in the Russian oil and gas sector, their project portfolio and its correspondence with the stated goals should be analysed.

Implementation of environmental objectives

The general issues of the MDB policies and procedures discussed above serve as a basis for the bank's behaviour and can apply to the selection and handling of projects by the institutions in all the sectors. Having benefits and difficulties pre-supposed in the related environmental policies and guidelines, we can proceed to consider the specific

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goals of oil and gas and their correspondence with the banks' oil and gas portfolio in Russia.

The WBG declares among its environmental priority objectives in oil and gas the following²¹:

- the clean up of past environmental bad practices;
- prevention and rapid response to environmental disasters;
- repair of oil field surface infrastructure, especially pipeline leaks;
- development of legislation and regulations to minimise the oil and gas-related impact on the environment and indigenous populations; and
- strengthening institutional capacity to address environmental concerns.

The targeted critical issues are addressed to a certain extent in the operations of the IBRD, as seen from the bank's project portfolio (see Table 3).

The IBRD has a relatively green portfolio having two loans with primary environmental goals out of four in the Russian oil and gas. The two 1995 projects were designed to meet the IBRD core environmental objectives: Emergency Oil Spill Recovery project aims to mitigate the oil contamination in the Komi region²², while Gas Distribution Rehabilitation project has a component covering the repair of outdated leaking infrastructure. It should be noted, however, that the amount of financing of these green projects is insignificant in comparison with the oil rehabilitation projects, which five to eight times exceed the sums provided for environmental purposes.

The two rehabilitation projects include coverage of some environmental aspects. They contain such components as repair of the existing infrastructure and strengthening of environmental capabilities through managerial and technical assistance. This part of the operational tasks corresponds with the stated goals. Nevertheless, the full feasibility of the tasks in practice appears to be doubtful. According to Organisation for Economic Cooperation and Development (OECD)/EIA²³, the investment of USD six billion would be needed to rehabilitate only one of the gigantic oil fields in Western Siberia. Thus, the rehabilitation project costs prove to be inadequate for full meeting the goals, which makes impossible high-quality field rehabilitation with paying proper attention to environmental problems. As Schmidt notes²⁴, the modernisation and en-

Table 3. The IBRD oil and gas projects in the Russian Federation

Loan, major components and objectives	Amount (million USD)
1993 - Oil rehabilitation I <ul style="list-style-type: none"> • strengthen RF ability to earn foreign exchange through increased oil production and exports 	610
1994 - Oil rehabilitation II <ul style="list-style-type: none"> • assist in attracting foreign capital in private oil and gas joint ventures • slow down the rate of oil production decline in Western Siberia • rehabilitate idle wells and facilities where warranted, reconstruct existing field infrastructure for a limited number of fields • transfer international technologies and management practices • help in implementation and preparation of field optimisation plans 	500
1995 - Emergency oil spill recovery and mitigation <ul style="list-style-type: none"> • stabilise the oil in the spill area prior to the spring thaw • continue clean-up in an environmentally appropriate way and minimise to the extent possible damage to the impacted areas • support safe pipeline operations in the near term and evaluate the need for a replacement pipeline investment project for the longer term 	99
1995 - Gas distribution rehabilitation and energy efficiency <ul style="list-style-type: none"> • improve gas distribution network: installation of metering system, cathodic protection and pipe replacement • energy efficiency investments (replacement of outdated equipment) 	70

Data source: World Bank Group. 2000. World Bank support to the Russian Federation [on line]. URL: <http://wbln0018.worldbank.org/ECA/eca.nsf>; IBRD. 1993. Gas distribution rehabilitation and energy efficiency project. PID RUPA 8803; IBRD. 1994. Second oil rehabilitation pro-

vironmental strengthening may not be considered the essential part of these projects, as the operations actually aim at increase in production through re-conditioning of abandoned wells. Also, taking into account that no exact time frames for impact mitigation measures and means of their enforcement were not fixed in project documents, while an efficient system of supervision was not developed, we might assume that the oil rehabilitation projects more seem than really contain environmentally beneficial aspects.

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The portfolio analysis shows that the bank implements its environmental objectives mostly through its green projects, while some goals such as development of environmental legislation remain not addressed. The IBRD green investments could have significantly improved the situation in the Russian oil and gas sector if they had not been stopped in 1995. In general, it should be acknowledged that the IBRD portfolio corresponds to its environmental objectives to the greatest extent among the three institutions.

As a member of the WBG, the IFC is supposed to share the goals in oil and gas with the IBRD. Nevertheless, despite these environmentally beneficial goals and policies so similar to the IBRD's, due to its nature and purpose of establishment, the IFC cannot rival the IBRD as a greener development agency. As Gutner notes²⁵, the institution oriented at private sector lending is strongly demand-driven, and this orientation to client responsiveness significantly reduces its ability to influence the national policy framework, push for green projects or even build in environmental considerations into operations, if the environment is not given high priority in the country-borrower. Obviously, at present, the environment is not among the priorities for private oil and gas companies operating in Russia, since they are mostly concerned with enhancing the production, which is a major prerequisite for increase in profit. This defines the nature of projects supported by the IFC in the Russian oil and gas sector and substantially influences the quality of operations performed.

Comparing the IFC and IBRD oil and gas sector projects in Russia, it should be noted that the IFC portfolio outlined in the table below is substantially less green than the IBRD's, since the projects are not focussed on primary environmental goals but mostly involve greenfield onshore development aiming to attract private investments into oil and gas sector and increase in production. Thus, the IFC mostly concentrates on the implementation of its primary economic goal - to encourage investment in private ventures in the industry that plays an important role in the recovery of the country's economy.

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The overview of the IFC oil and gas sector operations shows that the corporation has not initiated any green operation with primary en-

Table 4. The IFC oil and gas projects in the Russian Federation

Project, main objective	Finance (million USD)
1993 - Polar Lights <ul style="list-style-type: none"> develop the Ardalin oilfield in the Komi Republic: drill development wells, establish treatment facilities, construct a 36-km pipeline 	60 (loan)
1993 - Vasyugan Services <ul style="list-style-type: none"> increase output of the existing oil and gas wells in the Tomsk region with the use of modern oil well fracturing methods 	10 (loan) 1.5 (quasi-equity)
1997 - Aminex <ul style="list-style-type: none"> recover crude oil from the Kyrtael oilfield in the Komi Republic for export to Western Europe assist a small, publicly traded, widely held company to complete the financing plan for its investment program support private sector hydrocarbons development 	17 (loan) 3.05 (equity)
1999 - Aminex <ul style="list-style-type: none"> further develop Kyrtael oil field 	0.12 (equity)
1999 - Bitech Silur <ul style="list-style-type: none"> fully develop South Kyrtael and Lekker oilfields in Timan-Pechora region (Komi) with installation of drilling and gas-re-injection facilities carry out an extended well test and seismic studies on non-producing Subor heavy oil field assist a relatively small independent company to complete the financing plan support private sector hydrocarbons development 	17.50 (loan) 7.50 (equity)

vironmental objectives (remediation, clean-up, recovery and mitigation, infrastructure replacement and repair). Instead, the IFC is mostly engaged in projects of oil and gas field development with application of modern technologies and modern managerial approach.

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Though the IFC projects may be designed to have a demonstration effect in terms of higher environmental standards and requirements for environmental impact assessment and mitigation plans²⁶, the nature of the corporation dealing with the private sector presupposes more business-like, profit-oriented approach to oil and gas projects. This eliminates green projects from the IFC portfolio and provides for more limited environmental components of the projects in comparison with the IBRD. There could be observed certain discrepancy between the goals stated by the WBG in regard to oil and gas and their implementation by the IFC. In this respect, we can argue that among these two institutions the IBRD is a development agency with a significantly greener project portfolio, better correspondence between its environmental goals and their implementation, thus, with a considerably better environmental performance.

The EBRD has a set of environmental goals different from the one adopted by the WBG and, thus, should be considered separately. The main objectives of the bank in the oil and gas sector include the following:

- promotion of private participation in oil and gas sector through strategic investment in oil;
- transfer and dispersion of skills through promotion of new but proven technologies and involvement of capable local employees;
- demonstration of new replicable behaviour through support for environmental clean-ups, implementation of adequate EA, audit and monitoring;
- taking holistic approach to complex gas issues including upgrading and rehabilitating pipeline infrastructure, storage facilities and gas utilization;
- improvement of regulatory and institutional framework: assisting in development of appropriate legislation (emissions and business conduct standards), strengthening the institutional capacity to monitor and enforce the existing policies and standards; and
- addressing the national and regional environmental problems.

From the very beginning, the EBRD intended to play a leadership role in the environmental recovery of the region initiating and supporting studies and programs that would address regional and national envi-

ronmental problems²⁷. However, the EBRD faces the same problem as the IFC, which hinders the fulfilment of this ambitious goal: the private-sector orientation does not allow for strong influence on the environmental behaviour of the borrowers in such countries as Russia where the economic development takes place at the expense of the environment. As a result, the EBRD project portfolio in the Russian oil and gas sector, which is outlined in the table below, includes a very limited number of oil and gas operations with primary environmental goals and quite a substantial share of field development projects directed at gaining profit, though they can include some environmental components.

From the table above, we can see that the bank is very active in providing loans to the oil and gas extraction industry in comparison to the IBRD and even the IFC²⁸, and most of the EBRD projects are directed to the oil and gas reserve development and increase in production.

It should be emphasised that there is only one project in the bank's portfolio whose specific purpose was the clean up of caused environmental damage. This green loan, which provided by the EBRD in 1995 for the clean up of the oil spill in Komi, appears to be the sole project with a primary environmental goal. The attention should be drawn to the amount of financing - USD 25 million, which looks quite insignificant in comparison with loans for other projects. Overall, more than modest percentage of purely environmental projects in comparison with the IBRD testifies to significantly less green impact of the bank in comparison with the IBRD.

Therefore, on the basis of the bank's portfolio for the Russian Federation we can state that the EBRD in the same way as the IFC pays more attention to meeting its financial and economic goals in attracting investments in oil and gas private operations. These operations might have demonstration effect due to proper EA, management, standards provided that relatively profound and specific (in comparison to the other institutions) environmental policies and procedures of the EBRD are implemented. However, the planned support to large-scale oil and gas development in frontier areas with significant environmental impacts is likely to overweight any positive implications of the bank's involvement for the country.

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Table 5. The EBRD oil and gas projects in the Russian Federation

Project	Financing, (Million ECU/ USD)
1993 - Chernogorskoye JV <ul style="list-style-type: none"> • construct oilfield facilities and purchase of drilling equipment • develop the existing field in Western Siberia 	23.8 ECU
1993 - Purneftegas Oil Producing Association <ul style="list-style-type: none"> • enhance oil production and increase in exports 	80.9 ECU
Polar Lights JV <ul style="list-style-type: none"> • develop the Ardalin oilfield in the Komi Republic: drilling of wells, construction of facilities and pipeline 	90 ECU
1994 - Samotlor Pan-Canadian <ul style="list-style-type: none"> • enhance oil production in three fields in western Siberia 	9.1 ECU
1994 - KomiArcticOil <ul style="list-style-type: none"> • develop the second phase of an oilfield; gas utilisation 	70 ECU
1994 - Vasyugan Services joint enterprise <ul style="list-style-type: none"> • enhance crude oil production 	8.2 ECU
1995 - Emergency recovery and mitigation project <ul style="list-style-type: none"> • assist in clean up of the oil spill in the Komi Republic and reconstruction of the pipeline • mitigate spill effects in indigenous communities 	25 USD
1996 - Geoilbent <ul style="list-style-type: none"> • develop an oil and gas field in Western Siberia 	49.8 ECU
1997 - Unified Gas Supply System Upgrading <ul style="list-style-type: none"> • increase the system efficiency and improve environmental performance • transfer skills and international knowledge 	92.7 ECU
1997 - Chernogorneft <ul style="list-style-type: none"> • stabilise of oil production decline, increase oil recovery • undertake the infill drilling programs and EAP for a part of Samotlor field in Western Siberia 	26.6 ECU

The banks environmental policies...

Project	Financing, (Million ECU/ USD)
1998 - Chernogorneft II <ul style="list-style-type: none">• develop the northern part of the Samotlor field• stabilise production decline and increase• expedite of the company s Environmental Action Plan	107 ECU
1999 - Permtex <ul style="list-style-type: none">• develop oil reserve in the Perm region	45 USD

Data source: EBRD. 1993. EBRD: senior lender in Polar Lights. Press release of 16 September; EBRD. 1995. EBRD supports Komi oil spill clean up. Press release of 4 May; EBRD. 1997.

Overall, we can draw the conclusion that the EBRD goals are not fully reflected in the bank s project portfolio in the Russian oil and gas. Its environmental objectives are met only partially, putting this institution somewhere in between the IBRD and IFC on the axe of environmental performance and benefits brought by its operations to the RF.

Summary

Since massive MDBs investments into oil and gas sector to a certain extent determine the way of the country s development, the institutional objectives in this sector, content of policies, procedures, guidelines and applicable standards have high significance for the state of the environment. The IBRD, IFC and EBRD environmental documents related to oil and gas have similarities and differences, which, along with their possible implications for the environmental quality of operations, have been previously discussed. Nevertheless, it seems reasonable to provide a brief summary of institutions approach to particular issues (see Appendix).

The analysis has shown that though in some respects the EBRD might have more comprehensive policies and procedures regarding oil/gas and the environment, the IBRD appears to be the institution en-

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sure the meeting of its goals to the fullest extent and having the best environmental performance.

It should be noted that the policies and procedures of all the discussed banks, though varying in particular issues, possess one and the same points needed to be clarified or improved in order to ensure sustainable nature of operations. The existing policies are quite general, broad without specification of some important issues or with their insufficient coverage (e.g., application of regional/sectoral/strategic environmental assessment, supervision over the borrower's activities). They provide mostly general course of actions being in many cases guidelines but not strict requirements. This flexibility allows for numerous exceptions and violations in particular situations. Also, it is important that enforcement measures that would push the borrower to comply with the banks' policies, procedures and guidelines are not defined or specified clearly enough, which may result in non-compliance. The problems arising during implementation are pre-determined by the imperfection of the existing policies and will be discussed in two case studies contained in the following chapters.

Case study: Sakhalin II

At present, Sakhalin II (phase I) is one of the largest among oil and gas projects supported by MDBs in Russia: it ranks third in the amount of the EBRD oil and gas financing in the country. The present chapter discusses the ambiguous issue of expected social benefits, high environmental risks, unsatisfactory quality of performance (problems of project compliance with national and EBRD environmental requirements) and insufficient oil spill response capacity of the project sponsor.

Project description

The table below contains summary of project objectives, essential practices and standards applied as well as data on implementing companies and financiers.

Table 6. Description of Sakhalin II Project

Project	Commercial development of the Astokh feature of the Piltun-Astokhskoye oil and gas field located in the Okhotsk Sea 15 km from the Russian mainland near Sakhalin Island with oil export by pipeline and tankers to the countries of the Asian-Pacific region
Objectives	<ul style="list-style-type: none"> • increase Russia's crude oil production and exports; • promote economic development of Sakhalin Island; • introduce modern and environmentally sound offshore oil production techniques; and • provide demonstration effect that would facilitate implementation of production-sharing framework in Russia enhancing fiscal stability for oil and gas companies and facilitating foreign investment.
Involvement	Operator: Sakhalin Energy Investment Company Ltd. (SEIC) - a joint venture comprised of: Marathon Petroleum Sakhalin Ltd. (USA - 37.5%); Mitsui Sakhalin Development Company Ltd. (Japan - 25.0%); Shell Sakhalin Holdings BV (USA - 25.0%); and Subsidiary of Mitsubishi Oil Corporation (Japan - 12.5%).
Financing	Sakhalin Energy Investment Company EBRD - USD 116 million (ECU 102 million); Overseas Investment Corporation (OPIC) - USD 116 million; and Export-Import Bank of Japan (JEXIM) - USD 116 million.

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Current status and activities under project	Piltun-Astokhskoye field development, Phase I: establishment of a significant new field using a mobile drilling and production unit Molikpaq including drilling of 12 production wells and two wells for accompanying gas re-injection, construction of pipeline and temporary work camp for 100 workers Seismic survey completed, two appraisal and three production wells drilled, seasonal oil recovery
Category	A/0 requiring EIA with associated public consultations
Standards Applied	environmental standards developed on the basis of Alaskan offshore environmental, health and safety guidelines that meet or exceed WB standards
Advanced practices used	Gas separation from oil at the platform, compressing and re-injection of the produced gas into the formation, gas flaring in cameras for emergency use, application of state-of-the-art automatic shut-off valves and periodic break-away safety couplings on the flow-line from the floating storage to the tanker allowing to stop production in the event of the facility damage, use of low-toxicity water-based drilling muds with re-use of up to 70% muds, treatment of formation fluids Prohibition to seismic sounding or explosions in the event of the whales being in proximity and during limited visibility periods EAP with independent audit schedule, oil-spill modelling, coastal sensitivity studies, oil-spill contingency plan

Data source: EBRD. 1997. Sakhalin II. PSD; EBRD. 1997. Sakhalin II. Environmental analysis; Garipov, V. 2000. K voprosu o problemakh realizatsii soglashenia o razdele productsii [On the implementation of Production Sharing Agreement]. *TEK* (1); Sakhalin Energy investment Company. 1994. *Techniko-ekonomicheskoye obosnovanye po projektu Sakhalin II, nachalni etap osvoyeniya* [Feasibility study on Sakhalin II, Phase I]; State Committee on Environmental Protection of the Russian Federation. 1998. *Conclusion of the Expert Commission of the State Ecological Expertise on the feasibility study for Piltun-Astokh licensed area (Phase I - Astokh feature) - Project Sakhalin II*. Report (May)

At first sight, on the basis of the project description, Sakhalin II appears to be beneficial for both the RF and Sakhalin economy, and harmless to the environment due to a broad set of mitigation measures/best practices being integral part of the operations and designed to comply with the EBRD requirements. However, the offshore Sakhalin operations are likely to have significant negative impact due to high risk and inadequate oil spill response while the problems with the project's environmental documentation and doubtful compliance with all the applicable laws and requirements might enhance this impact.

Economic and social benefits

As far as the economic side of Sakhalin II is concerned, it is commonly supposed that Sakhalin II project is to bring Russia fabulous revenues and social benefits. However, this issue is rather disputable. Some economists tend to estimate the role of the project as vitally important for the whole country, since Sakhalin II involves not only long-term participation in expected profits, but also near-term several hundred million USD compensation for subsoil use¹. Nevertheless, the amount of revenue flowing into the RF and Sakhalin region budgets from Sakhalin II appears to be overestimated. According to Richard Fineberg's calculations², during early production phase bonus and royalty payments from Sakhalin will total only USD 75 million per year, which is 30 times smaller than payments produced in Alaska. Moreover, the additional revenue to be received by the RF and Sakhalin will be paid only after Sakhalin Energy Investment Company Ltd. (SEIC) is completely reimbursed for its investment, which is likely to take long years. Thus, any significant revenue promises to start flowing into Russia only in remote future.

Taking into account the current social and economic difficulties faced by the Sakhalin region, the offshore hydrocarbon development is likely to raise the level of welfare of the local population. Since the project is implemented on the terms of production sharing agreement (PSA), it stipulates the involvement of domestic resources. Thus, the boost of oil production activities in the region is theoretically expected to provide new employment opportunities (with all necessary training programs) and demand for application of domestic equipment and materials.

Nevertheless, the share of local materials that could stimulate domestic production in reality is quite limited: autonomous energy supply system used in the project is adjusted to 110 V³ while in Russia it is 220 V, which leads to application of only imported equipment and subsequent increase in employment in some other countries and not on Sakhalin.

It should be also pointed out that the energy supply in the Sakhalin region is poor, and the population of many villages can use electricity

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only within certain time periods making several hours per day. The development of local fossil fuel reserves of the Astokh feature is not expected to change this situation, since SEIC does not intend to provide non-stop safe supply to local settlements prior to production export⁴.

Also, it should be mentioned that during project implementation certain damage will be caused to the local fishing industry through fishing area take-up, loss and damage to fishing gear, lowered quality of fish catch. Regional fishery currently employs more than 50,000 people while indigenous Nivkh people totally depend on salmon fisheries most sensitive to environmental changes. In these circumstances, any oil spill is likely to have a devastating effect on the well-being of Sakhalin residents. This aspect, together with the other two-sided economic and social benefits resulting from the project, provides grounds for a critical approach to Sakhalin II. The environmental risks and impacts considered below may enhance the doubts arising around extreme profitability and sustainability of the project.

Environmental risks and non-compliance

Theoretically, the EBRD provides financial support to operations consistent with all the existing national environmental legislation/standards and EBRD environmental requirements. Also, the EBRD claims to deal with responsible transparent companies that ensure high quality of operations. However, Sakhalin II project proves that there can be deviations from this policy. The inconsistencies and deficiencies in environmental materials submitted by Sakhalin Energy to RF and the EBRD may have negative environmental implications and are discussed in the present chapter.

First of all, it should be emphasised that some critical components of environmental assessment remained incomplete. According to the Russian legislation⁵, financing and fulfilment of any works on the project on the territory of the RF is allowed only in the event of positive conclusions of State Ecological Expertise (SEE). In case of Sakhalin, in 1993 the Expert Commission of the SEE of the Russian Ministry of Environment gave a negative conclusion for the feasibility studies prepared for

Piltun-Astokh and Lunskeye offshore oil and gas field. However, beginning from 1992 SEIC has been actively performing exploration surveys and construction works on Sakhalin shelf without a legal permit for such activities.

Without all necessary domestic environmental assessments (the Russian variant is called OVOS) and Expertise conclusions from the Russian side, no foreign party has the official right to finance and start projects, even in case of conducting their own satisfactory EIA. However, the second EBRD board review of the project took place in late 1997⁶. Already with the EBRD participation, the purchase of drilling and production platform Molikpaq, its transportation and refurbishment in South Korea took place in 1997-early 1998 - before obtaining the positive conclusion of the SEE.

Another legislative problem associated with SEIC performance concerns the applied technologies and practices. Though the EBRD assured that the treatment and disposal of all drilling wastes would be handled in compliance with good industry practices and the national legislation, meeting or even exceeding WB standards, Sakhalin II reveals the contrary. The feasibility studies compiled by SEIC contained provisions on the controlled discharge of drilling muds and cuttings into the Okhotsk Sea. The proposed technique was obviously in conflict with best available practices and standards of the RF which provide for re-injecting of the muds/cuttings into the well or shipment ashore for processing and disposal, and prohibit the discharge of any drilling wastes into the open sea⁷. Taking into account that the Okhotsk Sea belongs to a special category of water bodies due to its significance for preservation and reproduction of valuable fish, this practice was undoubtedly damaging not only for the environment but also for local fisheries.

To solve this problem, the foreign companies operating in the Far East (Sakhalin I and Sakhalin II projects) urged the government to introduce modifications into the existing Russian law concerning the Far East zone and received a permission to discharge production waters, water-based drilling muds and cuttings into the open sea⁸. This process of giving legal status to an illegal action was unprecedented and drew

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public attention. Thanks to the decision of the Supreme Court, which declared the government's regulation contradicting and violating from the Russian legislation, the President Vladimir Putin annulled the discussed regulation⁹. While this half-a-year struggle between environmentalists and oil companies was taking place, significant environmental damage from drilling discharges was done.

In Sakhalin II numerous problems and non-compliance issues are associated with . Though prepared by independent consultant firm and only compiled by SEIC, the submitted EIA did not meet international standards. According to Dr. Melkov¹⁰, a special consultant to the Russian Parliament, the assessment was absolutely unconvincing and provided a general overview without consideration of the specific conditions of the Okhotsk Sea. The EIA did not take into account the significance of general cumulative impacts likely to occur during different phases of the project implementation as well as the impacts resulting from implementation of other oil and gas development projects in the area (at present, there are six projects in Sakhalin under implementation or at preliminary stages). This did not allow setting proper limits for acceptable extent of impacts and might result in significant changes in sea ecosystem.

Also, in the Natural Resources Policy the EBRD gives high priority to high-quality consultation process in RF. According to the Russian legislation¹¹, since Sakhalin II pre-supposes the benefits and impacts at the national scale and involves foreign participation, the EIA hearings and consultations are to be conducted at the federal level. However, the consultations were held only within the Sakhalin region. As one of the bank's officials pointed out, the EBRD is not an implementing agency for the RF and conducted EIA process in accordance with its own policies. The consultation process on Sakhalin II resulted in non-compliance with the country's requirements, and this issue was obviously left by the bank to be discussed and settled down with the Russian authorities and not the EBRD staff.

According to an independent expert team¹², SEIC contingency plan contains several over-optimistic statements on sensitivity of birds and mammals to oiling, which results from reliance upon inadequate and outdated data. It should be noted that the issue of data adequacy is critical in

some other respects. For example, according to the EBRD consultants opinion, EIA provides insufficient amount of baseline information for estimation of impacts on fisheries. It should be stressed that the fact of data insufficiency was pointed out with recommendations for further improvement, while PSA on Sakhalin II project requires description of much broader range of issues including full assessment of the project impact on sea bio-resources as well as agreed with the Russian side compensation measures for the damage to fish stocks, which are absent from SEIC documentation.

In spite of obvious EIA non-compliance with the bank's guidelines and Russian legislation, the EBRD agreed to provide support to SEIC and requested only preparation of EAP under condition that several key elements of the projects will be completed later. In other words, the EBRD gave Sakhalin II the green light, though it was aware of the existing cases of inconsistency and non-compliance testifying to the company's unsatisfactory level of performance.

The EBRD declares sustainability the key principle of its operations. Logically, all the projects supported by this bank including Sakhalin II are supposed to be sustainable both in economic and environmental respects. However, the environmental safety of the Sakhalin project appears to be doubtful, since the risks involved are not adequately addressed by the oil spill response measures proposed by SEIC, and their implementation seems unfeasible due to the company's poor capability to organise immediate clean-up.

First, it should be emphasised that the equipment chosen to perform the operations should be given due consideration for risk assessment. Melkov states¹³ that the platform used by the company does not meet the modern technical requirements. The unit Molikpaq was constructed in 1984 and was originally designed not as a drilling and production platform but as a unit for drilling of exploratory wells at the sea level 12m¹⁴. The platform was modified in South Korea to be able to perform not only drilling but also production functions and assembled in the Okhotsk Sea at the depth of 28-30m. Molikpaq was delivered to Sakhalin 20 years after its construction, while the normal period of operation of similar units is 20-25 years¹⁵. Since this outdated unit will now

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be operating in the conditions different from the ones it was originally designed for during upcoming 20-30 years, it would be unrealistic to expect that its environmental performance will be significantly higher than in case of other Russian oil companies using old unreliable equipment.

Moreover, seismic considerations should be given due weight in analysing the existing risks. According to the project feasibility study, the Molikpaq's ability to resist seismic activity is quite limited - within seven to eight points at Richter's scale, while the earthquake in Neftegorsk on Sakhalin Island proved that the region has the potential for stronger earthquakes which can lead to numerous ruptures in pipelines and oil spills¹⁶. Thus, the Molikpaq's relatively weak seismic resistance and high wave force in the region are the factors adding to the opportunity of the unit's breakdown, which would result in a substantial oil spill.

Also, the attention should be drawn to the fact that SEIC has chosen the most potentially dangerous way of oil transportation - by tankers. According to the world's statistics¹⁷, tanker transportation accounts for over 50% of accidental oil spills. The Okhotsk Sea is notorious for its storms, tsunamis, sea currents, ice sheers and fog lowering the visibility, therefore, in these weather conditions, the presence of the floating storage with capacity of 140,000 tons and continuous circulation of tankers carrying up to 90,000 tons of oil threatens the environment with collisions and accidents resulting in large oil spills¹⁸. Moreover, the company does not require the use of double-hull tankers, which would be consistent with the EBRD statement about application of best available and good industry techniques and could decrease the risk of accidents.

Considering the risks of spills from the tanker, we should point out the issue of financial responsibility for the oil spill response and clean up as highly significant. The financial liability of the tankers used by SEIC for oil transport is defined as USD 81 million¹⁹, which is an insignificant sum, insufficient to address a large-scale oil spill. The response to Exxon Valdez spill of 40,000 tons of oil, for instance, cost over USD 2 billion²⁰. Thus, believing that the sum of USD 81 million could cover all the costs of the spill including clean up and compensation for damage in the case of Sakhalin as it is proposed in the event of tanker accident would be just ridiculous. As for the opportunity for the operating company to cover

the costs, SEIC has ensured least costs possible for itself: it can have financial responsibility only until the tanker leaves the floating oil storage unit.

Generally, it should be emphasised that SEIC has inadequate financial ability to provide oil spill clean up and compensation. According to the company's management, for oil spill clean up and recovery the most part of expenses is to be covered by insurance agencies or international treaties. However, insurance cannot be paid in certain cases (e.g., force-majeur or accident due to the personnel's error). There exists a risk of non-financing of appropriate response works, since SEIC is a company with a limited responsibility, which means that it is responsible only for the sum of its capital fixed in the Charter, namely, USD 100 million. The companies participating in SEIC also do not seem to be able to pay the necessary costs: Marathon, Shell, Mitsui and Mitsubishi participating in the Sakhalin project are not world-wide recognised giant oil and gas operators as it is commonly believed but their subsidiaries with limited financial responsibility.

SEIC financial responsibility for the oil spill response and compensation for the damage does not ensure elimination of the consequences of the spill. Thus, in this respect, Sakhalin II should be considered as a highly risky project in terms of potential environmental and economic damage to the RF, since the latter is likely to be a financier and compensatory in case of a large oil spill.

In addition to the issue of financing, due attention should be paid to the oil spill response capacity of the company and existing oil spill contingency plan. Pavlikov²¹ argues that the oil spill contingency plan submitted by SEIC is of declarative nature and is characterised by lacking important details and exact positions on particular issues (e.g., company's responsibility for environmental damage and response operations, equipment applied for response to oil spills of different levels).

It is widely acknowledged²² that oil spill response industry on Sakhalin island is practically non-existent. The Russian government does not have any equipment in case of an oil spill (by the beginning of 1999, on Sakhalin only one vessel belonging to Ecoshelf was properly equipped with pumps and booms), no offshore or onshore infrastruc-

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ture is available while sea safety service does not operate due to the absence of modern equipment²³. The contingency plan suggests oil collecting in groups of three or more vessels with all necessary equipment in place and the well-trained crew, but this does not correspond with the available on Sakhalin resources. In the rough climatic conditions of Sakhalin it would be possible to organise this with five to ten days delay with involvement of vessels from other regions. Taking into account that the company can response to a large-scale oil spill only with involvement of external agents (Sakhalin has contract with oil spill response firms in the UK and Singapore), we can state that due to delay needed for goods delivery from these countries, customs clearing and their installation on the vessels, the effectiveness of the response measures would be dramatically lowered.

The oil spill of any scale has significant negative consequences for the environment, and in the Sakhalin II case the situation would be complicated by transboundary nature of pollution (Sakhalin Island is located in the proximity of Japan) and slow bio-degradation of hydrocarbons in the environment due to low temperatures²⁴. Therefore, the thorough planning of oil spill response with clear issues of responsibility, exact measures and clean-up organisation would be essential for addressing the risk and ensuring a certain level of environmental safety in the region. However, this is not relevant to the company operating Sakhalin II project that is supported by the EBRD.

Considering overall potential implications of the project, in addition to the high risk of an oil spill and doubtful company's ability to provide proper response and compensation, there are several violations from the country's and EBRD environmental requirements regarding the quality of EIA (oil spill contingency plan, cumulative impacts assessment, consultation process). However, despite the inconsistencies and problems related to SEIC environmental documentation and performance, the EBRD is considering a new loan to start another oil and gas extraction project on Sakhalin, which could magnify the existing impact.

Case study: Komi Republic

Nowadays, the Komi Republic is well known for the oil spill that occurred in 1994. Indeed, the scale of the event and the volumes of the oil spilled are unprecedented for the Russian Federation. The estimates of the amount of the oil released into the northern environment range from 14,000 tons to 100,000 tons¹ and higher. The official figure from the Russian Ministry of Environment is 60,000 tons, which exceeds the devastating Exxon Valdez oil spill². However, the Komi oil spill did not receive the similar world-wide publicity, since the operating company and regional authorities made all attempts to conceal the real scale of the catastrophe from the public.

The spill caused irreversible damage. According to official data³, the identified area of direct contamination exceeded 70 hectares and this figure does not include the territories contaminated as a result of oil flow in the rivers Kolva, Usa and Pechora that brought oil to the Barents Sea. The spill led to vast contamination of swamps, forests, meadows, pastures, spawning grounds and affected the local wildlife and fish species as well as residents who strongly depend on fishing, hunting and reindeer-herding. The specific features of the Arctic environment where low temperatures do not allow for rapid evaporation but make oil travel over the frozen ground for long distances, while natural self-cleaning capacity of such regions is normally low and regeneration takes decades magnified the impact.

It was found that the spill was caused by a leaking pipeline operated by the KomiNefit corporation. The ruptured pipeline was 150 km long and was constructed in 1975. It was estimated to be beyond operational guarantees starting in 1990. According to Greenpeace data⁵, numerous pipeline fractures accompanied by oil spills started at least half a year before August 1994, when the catastrophe became obvious. The local and federal authorities did not take proper efforts to remedy the situation by stopping oil transport through the leaking pipeline until January 1995⁶. Altogether, these events led to severe oil contamination of Komi region introducing irreversible changes to the ecosystems and making its fragile environment more vulnerable.

The banks responsibility

In 1994, approximately 80-90% of all oil produced in the region was transported through the famous pipeline⁷. By that time, numerous Russian as well as foreign companies were engaged in the Komi oil and gas field development, so, it would be reasonable to expect that some of them had responsibility for the state of the infrastructure they were using. However, as the Soviet system of Russian ownership over oil infrastructure preserved by the year of 1994, the only company to bear financial responsibility appeared the owner of the pipeline - KomiNefte. Numerous western multinational companies operating in the region escaped the costs of infrastructure, maintenance, spill clean up or further repairing works. Among these companies using the pipeline and, thus, contributing to the oil spill were two joint ventures supported by MDBs, namely Polar Lights and KomiArcticOil.

Table 7. Description of Komi ArcticOil project

Companies involved	KomiNefte (RF, 40%), Gulf Canada (Canada, 25%), British Gas plc (UK, 25%), UkhtaNefteGasGeologia (RF, 10%)
The EBRD financing	USD 80 million - loan approved February 1994
Project activities	oil production at Vozey and Upper Vozey oil fields rate of production as of 1994 - 17,000 bbl/d
Amount of oil pumped through KomiNefte pipeline	1800 tons/day

Data source: Blokov, I., Levinson, M., and Usov, E. 1995. *Zakonomernaya katastropha: informatsionno-analitichesky obzor [Regular catastrophe: analytic information overview]*; EBRD. 1993. EBRD: senior lender in Polar Lights. Press release of 16 September; Greenpeace International. 1994. *Black ice. The behaviour of multinational oil companies in Russia*. London: Greenpeace

It is clear from the tables above that the EBRD and IFC got involved in the oil and gas development projects in the Komi region before the major oil spill occurred and were using the leaky KomiNefte pipeline for transportation of significant volumes of oil to the main Russian pipeline network. The Komi spill cannot be regarded as an unexpected event – oil was released into the environment over a continuous period beginning

Table 8. Description of Polar Lights project

Companies involved	Conoco Timan-Pechors Ltd. (USA, 50%), ArkhangelskGeologia (RF, 50%)
MDB financing	EBRD - USD 90 million IFC - USD 60 million OPIC USD 50 million
Project activities	greenfield project - development of the Ardalin oil field including drilling of 24 new wells, establishment of central production and treatment facilities, construction of 40-mile pipeline to connect the Ardalin complex to KomiNeft pipeline rate of production as of 1994 - 22,000 bbl/d
Amount of oil pumped through KomiNeft pipeline	1500 tons/day

Data source: EBRD. 1993. EBRD: senior lender in Polar Lights. Press release of 16 September; IFC. 1993. IFC approves first projects in Russia. Press release of 17 June; Greenpeace International. 1994. *Black ice. The behaviour of multinational oil companies in Russia*. London: Greenpeace

from February 1994, though not in such great quantities as in August. Thus, the ignorance of operating companies regarding the significant leakage appears quite doubtful.

According to the EBRD and IFC policies and procedures, an environmental assessment was to be carried out by the operating companies applying for the banks' loans. Theoretically, in order to obtain financing, the companies were obliged to submit an appropriate environmental assessment fully meeting the EBRD and IFC requirements and ensuring minimum environmental impacts. Obviously, the assessment is destined to provide a comprehensive coverage of all issues and must include the analysis of potential impacts and mitigation measures as well as information about the conditions at site, state of the existing facilities and infrastructure. Since the projects were approved, we can draw the conclusion that the EBRD and IFC found that the provided materials were satisfactory and ensured appropriate quality of operations. As the banks refused to allow access to the discussed assessment, no definite conclusions can be made in respect to why the banks got involved in these risky ventures. However, we may suggest three possible options: either the submitted assessment contained falsified information on the

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state of the pipeline infrastructure to be used or this part of environmental assessment was simply omitted, or the banks gave more weight to financial aspects of the project without paying due attention to environmental problems during project approval and, thus, considered acceptable the situation with the leaking infrastructure.

Taking into account the state of poor environmental capabilities of Russian companies in 1994, widespread oil industry corruption and tradition of information mismanagement, the first two assumptions could be real. This, however, would mean the Bank s took an inappropriate approach to the assessment due to the project sponsor s incapability for undertaking environmental studies and the Bank s weak supervision and control over its performance.

The third assumption, if it turned out to be true, would mean that in this particular case the banks took actions contradicting their general stated course of activities. Since the EBRD establishing agreement includes provisions on sustainable nature of its projects (both economic and environmental sustainability) and the IFC policy declares that the corporation supports economically beneficial and environmentally sound private operations, the financing of the projects with outdated leaking infrastructure and significant potential to cause serious environmental damage would mean violation of the banks from their own policies. In cases, the IFC and EBRD involvement into these ventures testifies to their inconsistency in meeting their requirements

The banks and the clean up

In 1995, the IBRD and EBRD provided emergency loans to the Russian Federation and KomiNefteft that was unable to finance clean up of the oil spill and compensation for the damage. The table below provides essential data on this project.

As seen from the above table, the IBRD- and EBRD-sponsored project is based on the comprehensive approach combining immediate clean up/further pollution prevention measures and longer term measures covering environmental capacity strengthening and plans for pipeline rehabilitation. Through this project financing, the IBRD and EBRD

Table 9. Description of Emergency Oil Spill Recovery and Mitigation project

Implementers	KomiNeft Government of Russia
MDBs and financing	IBRD US\$ 99 mln EBRD US\$ 25 mln
Project category	IBRD - no environmental rating according to emergency procedures EBRD - A/0 requiring EIA
Objectives	<ul style="list-style-type: none"> • stabilise oil in the spill area to prevent damage to the Pechora River basin • continue clean up to minimise damage to the impacted area and people • support pipeline safe operation in the near term and evaluate the need for new pipeline project for the longer term • identify and implement other measures to mitigate against future oil spills
Project components	<ul style="list-style-type: none"> • Spill containment and clean-up measures: containment of the largest volume of oil aimed to protect sensitive resources; gross removal of the largest volume of mobile oil; clean up of oil residues (site remediation), social expenditures • Pipeline rehabilitation: emergency replacement of pipeline sections, remediation, operational and strategic studies, provision of emergency response equipment and training for KomiNeft

Data source: EBRD. 1995. Oil spill recovery and mitigation project. Memorandum of the President BDS 95-45; IBRD. 1995. Oil spill recovery and mitigation project. Technical annex

once again proved their reputation of institutions supporting green operations with primary environmental goals while the IFC did not get involved in this sphere. However, it should be noted that the loans provided by the banks were to be paid back by the Russian citizens including those who suffered damage from the spill, while neither the IBRD nor the EBRD, which indirectly contributed to the spill, provided the so-called soft loans for the clean up. Moreover, comparing the

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IBRD and EBRD extent of participation, it should be noticed that there exists a significant difference in the scale of the EBRD financing provided for oil and gas development in the Komi region (USD 170 million) and clean up of the oil spill (USD 25 million) to which it made its indirect contribution through KomiArcticOil and Polar Lights joint ventures.

The attention should be drawn to the issue of the banks' supervision and control over the implementation of environmental tasks by the loan receptor. Taking into account that the company KomiNeft demonstrated poor environmental behaviour that led to the catastrophic oil spill as well as insufficient capacity to perform clean up alone, emphasis was to be given to limitation of their responsibility and strengthening of external involvement into the project.

To ensure the quality of operations, the IBRD and EBRD required engagement of the international management contractor specialising in land clean up and remediation (Australian-American firm AES/Hartec). However, the banks requested KomiNeft to create a management team that would be responsible for approval, review and monitoring of the contractor's activities and enforcing clean-up standards⁸, which actually established KomiNeft's responsibility over overall project performance instead of controlling the company's actions and compliance. This could influence the effectiveness of the work through selection of oil clean up, removal and treatment methods and meeting the deadlines and requirements. For instance, some local environmental organisations such as Committee Save Pechora and Greenpeace-Russia expressed their concerns in regard to disposal of removed oil and snow mixture in dangerous proximity of settlements in sumps lacking hydro-insulation, which definitely could not be considered a good international practice. Also, the selection of oil burning in the open environment as the main method of area clean up appeared to be doubtful from the environmental viewpoint, since burning of 7,000 tons of oil⁹ caused substantial emissions of greenhouse gases along with various toxic substances including dioxins and threatening the health of villagers and wildlife. In addition to this, KomiNeft did not meet the deadline of phase-I completion fixed by the Komi Governmental Commission: according to the evidences of local residents, in April 1995 there still could be observed oil covering river courses and water, which means that the company failed to complete tar-

geted emergency clean up measures prior to spring thaw and this caused expansion of the impacted area.

Five years after the spill the local residents are unsatisfied with the application and the quality of the clean up¹⁰. The bank has refused to make information on the project progress publicly available. Though, the project significantly contributed to improvement of the state of environment after the oil spill in Komi republic, positive impacts could have been enhanced by strict external supervision and control requirements from the banks side.

It appears important to draw attention to the banks course of actions in Komi region after the accident in 1994. Due to the massive spill, the fragile ecosystem of this northern area became more vulnerable and sensitive. Despite this fact and the lessons learned by the banks in regard to the poor state of the local infrastructure as well as low environmental performance and capabilities of operating companies, the banks continued to finance oil and gas project in the region. The IFC got involved in Aminex project in 1997 and in Bitech Silur project in 1999¹¹. The banks support of the expansion of oil and gas development in Komi region has increased the existing pressure on the environment and local indigenous peoples.

Conclusions

Sakhalin and Komi cases have demonstrated that environmental components, included into projects did not ensure full implementation of initially set environmental objectives. The encountered problems and complications were mostly based on uncertainties and deficiencies in MDBs policies and procedures.

First of all, controversy with the banks requirements should be pointed out. Sakhalin Energy plans for disposal of drilling muds into open sea, use of non-double-hull tankers and insufficient assessment of impact on sea bio-resources as well as absence of public consultations at the federal level or agreed compensation measures for damage of fish stocks contradicted the EBRD commitment to finance projects complying with the national and higher standards and applying good international industry practices.

It should be noted that the bank s unclear requirements for the project sponsor capabilities gave rise to certain problems and risks. The company, which received the loan, did not have all necessary environmental permits such as conclusion of SEE and, thus, was not officially allowed to conduct operations. Also, the financial ability of the operator to provide clean up and compensation in the event of oil spill was obviously poor. This could occur due to the fact that the bank lacks strict requirements on environmental status, performance and financial responsibility of the operating company in case of accident, though it has clear provisions on required financial capabilities of the project sponsor.

Despite of concentration of oil and gas projects near the Sakhalin Island, the SEA has not been conducted. This may be connected to the lack of precise provisions in cases when SEA is required in the bank s policies and procedures.

In the Komi Republic case, the bank s documents of monitoring/supervision over operating company s activities proved to be insufficient. Though the banks were aware of the previous poor environmental behaviour of the operator, the latter was put in charge of

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review and monitoring of the contractor's clean up activities. This lack of strong control requirements and continuous external supervision did not ensure the highest possible quality of oil spill clean up.

Moreover, the IFC and EBRD continue with financing oil and gas development operations in Russia supporting (or considering future support to) new large-scale projects. Taking into account common problems with implementation of similar projects, which were considered in the case studies, new large projects might also be risky and bring significant environmental damage.

Therefore, the potential long-term environmental implications of MDBs' involvement in oil and gas operations in Russia might outweigh expected short-term economic and social benefits. Such deficiencies as low environmental capability and financial responsibility of the operating company, uncertainties in EA procedure, lack of strong control and non-enforcement of the existing policies bring unsatisfactory quality of operations. To ensure a higher level of environmental performance in Russia, taking into account country's specific conditions, banks should include exact requirements into its policies and procedures.

The Russian massive development of oil and gas fields in northern regions with fragile ecosystems accompanied by the poor state of pipeline infrastructure, use of outdated equipment and inefficient operational practices has caused severe environmental degradation. Some factors typical for Russia such as environmental misreporting, non-disclosure of information, weak public participation, lack of investment and corruption rife within the country do not allow solving of the existing environmental problems, generated by industry.

In the light of Russia's inability to address the acute environmental impacts of oil and gas extraction, the involvement of multinational development banks, which support joint ventures in the country, is very important. Due to high international standards, environmental requirements and good industry practices applied by the banks, the MDBs' presence in operations theoretically introduces positive effects on the performance of operating companies in Russia.

The environmental policies/procedures and oil and gas sector guidelines of the IBRD, IFC and EBRD, which actively participate in the Russian oil and gas development, have certain deficiencies and do not ensure full prevention of negative impacts. This is revealed in the process of project implementation and increase pressure of oil and gas operations on the environment. These drawbacks involve the absence of a specific policy on oil and gas with comprehensive coverage of environmental issues that causes non-correspondence between banks environmental objectives and their implementation in oil and gas projects in the country. Moreover, project categorisation procedure allows variations and insufficient EA with the absence of strict and clearly formulated requirements for environmental capability and financial responsibility of the borrower. This allows companies with low environmental performance which are unable to compensate for the environmental damage to implement projects. Weak requirements cause poor supervision and control over implementation and lack of enforcement leading to non-compliance.

- Measures to improve the environmental situation related to the oil and gas sector in Russia and other FSU countries are urgently required, and in this respect, the following recommendations are suggested:
- The banks committed themselves to contribution to development of borrowing nations and climate-friendly investment, however, loans for oil and gas operations testify the opposite. In order to provide lower national emissions level, conservation of domestic reserves and to ensure higher potential for oil and gas export at the same time, the banks should finance projects that support energy efficiency and domestic use of renewables.
- The high significance of the oil and gas industry in Russia and developing countries is acknowledged by MDBs, and the loans to this particular sector represent significant amount of money, while the banks environmental policies are broad, cover a large number of topics and do not give comprehensive coverage of oil and gas - related environmental issues. Therefore, the adoption of a separate oil and gas policy with a clear statement of objectives, impacts and measures to address them is needed.
- The banks guidelines and standards applicable to oil and gas operations are general and relatively flexible; they do not cover all the

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aspects of oil and gas operations or clearly stipulate exact requirements along with time frames for their fulfilling. Therefore, there is an urgent need to adopt detailed strict requirements, not guidelines, with separate provisions on time frames and measures for reaching the compliance with the set emission/sewage levels for oil and gas extraction onshore and offshore operations as well as oil and gas transport.

- As routine and accidental pollution from oil and gas operations initiates changes at the local and regional scale and contributes to global problems such as climate change, it is recommended that all oil and gas extraction projects, regardless of their location and scale, should be assigned to the category A due to significance of their impact.
- To ensure the implementation of a high-quality environmental assessment with objective consideration of alternatives including no-project option and recommendations on changes in design, the banks should develop strict provisions on the EA performer. An independent third party who is not affiliated with the project and who's past performance would satisfy the banks should conduct EAs.
- Since the IFC is financing oil and gas extraction projects which are concentrated in one area, this can result in adverse environmental impacts at the regional scale. Therefore, the IFC should stipulate the implementation of regional EAs. Also, exact cases of application of and requirements for sectoral/strategic/regional EAs should be revised and included in environmental procedures of all banks.
- Prior to project approval, the bank's investigations and evaluations mostly concern the borrower's transparency and financial ability to pay back the loan. More attention should be paid to examination of environmental capability of the operating company to provide proper response to an oil spill and the issue of financial responsibility in order not to allow risky projects without resources for clean up (Sakhalin case).
- The issue of operations supervision is considered to be of high priority for successful project implementation in Russia due to corruption in the oil and gas industry, poor public participation and deliberate misreporting of environmental and performance information. To address these problems and to provide objective data on project progress, the banks should develop a strong system of *external* supervision and adopt strict requirements for involvement of independent third parties in monitoring, audit and reporting on performance for all project categories. Also, the presence of the banks

Conclusions

environmental and technical oil and gas specialists in national and local offices in the country is required in order to ensure *continuous* quality of project supervision¹.

- Traditional non-disclosure of information about actual performance by oil and gas companies in Russia does not allow project monitoring and compliance by affected parties. The banks should make the information on environmental performance available to the public. At the same time, conditions for public participation in Russia should be improved.
- The enforcement measures should be clearly formulated, reflected in the banks' essential documents and put into use.

The improvements, made according to above recommendations would make the environmental performance in oil and gas operations in Russia better. Additionally, they would ensure better mitigation of the current environmental problems.

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Conclusions

1. IFC does not have oil and gas specialists in the country s office in Russia (Moscow), and, generally, the activities are controlled by the Oil and Gas Department located in Washington

Appendix

Comparison of the IBRD, IFC and EBRD policies, procedures and operations related to oil and gas development in Russia

Criteria	WBG:IBRD	WBG: IFC	EBRD
Specific policy providing comprehensive coverage of oil/gas issues with clear statement of objectives in the sector	None	None	Natural Resources Policy with a separate part on oil and gas field development, discussing operational impacts and their mitigation, the EBRD goals and plans in Russia
Oil and gas operational standards applied	Sectoral guidelines: Oil and Gas Development (Onshore)/in Pollution Prevention and Abatement Handbook/ (rather flexible standards normally accepted to the institution)	Sectoral guidelines: Oil and Gas Development (Onshore) and Offshore HCs Production (rather flexible standards normally accepted to the institution)	National and EU/WB standards applicable Promotion of best industry practice
EA instruments	EIA of particular project including EMP regional/sectoral EA environmental audit hazard/risk assessment	EIA of particular project including EAP none environmental audit hazard/risk assessment	EIA of particular project including EAP strategic EA environmental audit hazard/risk assessment
Categorisation of oil and gas development projects	Flexible: A or B decision is made for every particular project on the basis of impacts significance, project scale and location Cases of oil and gas field development projects assigned to B-category in the Russian Federation are unknown	Flexible: A or B decision is made for every particular project on the basis of impacts significance, project scale and location Cases of oil and gas field development projects in Russia assigned to B-category are known	Flexible: A or B on case-by-case basis A-category for greenfield and/or major extension projects on HCs production and large-diameter pipelines

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Criteria	WBG:IBRD	WBG: IFC	EBRD
Responsibility for EA	Borrower s EIA for A-projects - independent 3d party participation. Particular cases - advisory panel of independent, internationally recognised experts	Project sponsor s EIA for A-projects - independent 3d party participation. Particular cases involvement of independent internationally recognised experts	Project sponsor s Site audit participation of an independent third party. Particular cases review by an independent specialist
Provisions on supervision and inspection in policy/procedural documentation	General provisions on monitoring and audit without specification. Requirements for EA implementation. Project compliance and progress monitoring/reporting are performed mostly by project sponsor or the bank s staff on the basis of short site visits. No specific effective requirements	Requirements for EA implementation. Project compliance and progress monitoring/reporting are performed mostly by project sponsor or the bank s staff on the basis of short site visits. No specific effective requirements	Project compliance and progress monitoring/reporting are performed mostly by project sponsor or the bank s staff during short site visits. Audits by third parties, project implementation review by an independent petroleum engineer. No specific effective requirements
Oil and gas project portfolio	Limited number of oil and gas development/rehabilitation projects with environmental components built in; green projects with primary environmental objectives present	Oil and gas development/production increasing projects with environmental components built in; no-green projects with primary environmental objectives	Numerous oil and gas development/production increasing projects with environmental components built in; comparatively small share of green projects with primary environmental objectives

Data source: EBRD. 1996. *EBRD environmental policy and procedures*; EBRD. 1999. *EBRD Natural resources operations policy*. London: EBRD; IFC. 1998. *IFC environmental policies*; IFC. 1998. *Procedure for environmental and social review of projects*; IFC.1998. *IFC environmental, health and safety guidelines*; World Bank Group. 1998. *Pollution prevention and abatement handbook*; WBG. 1999. *The World Bank Group operational manual*. Washington, DC: World Bank

Appendix

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