

EBRD Presentation on “Tier II” Oil Spill Response Requirements in the Former Soviet Union

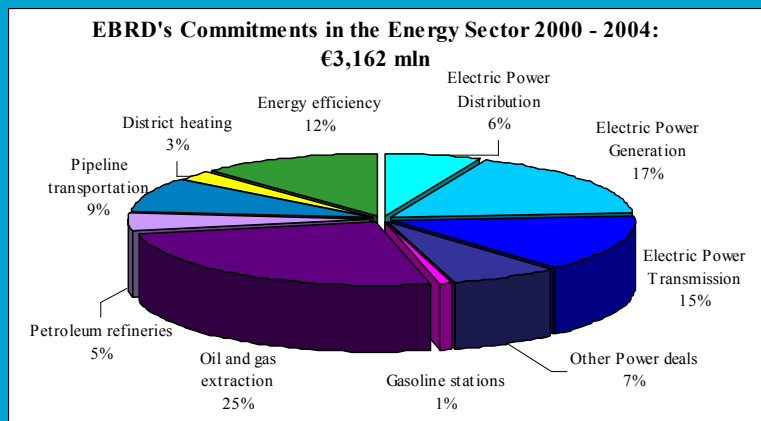
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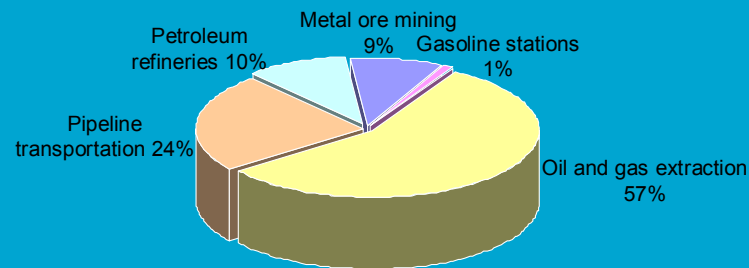
EBRD Energy portfolio



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Natural Resources portfolio

As of today €2.1 billion have been lent to €13.9 billion projects



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EBRD is instrumental in a wide variety of landmark projects in the Region

- SeverTEK (Lukoil-Fortum)
- Nations Energy
- Buryatzoloto
- Sakhalin II, Phase I
- Baku–Tbilisi–Ceyhan oil pipeline
- Azeri–Chirag–Gunashli oil field
- Shah Deniz gas field
- Ukrainian Gastransit gas pipeline
- Galnaftogaz



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EBRD Environmental Mandate

- Environmental mandate: EBRD is seen as a pioneer in transactions with complicated or multi-boundary environmental aspects.
- Critical area for many natural resource related projects due to potential involvement of environmental groups and stakeholders.
- All countries of operation are shareholders of the Bank and the Bank's involvement will facilitate relevant contacts as well as enable a better understanding by these governments of the project and potential mitigations.



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Oil and Environmental Pressure no.1 Upstream / midstream disbalance

Total upstream: 5.00Mbd?

- Azerbaijan export potential
 - ACG: 1.10Mbd
 - Others: 0.10Mbd
- Kazakhstan export potential
 - Karachaganak: 0.50Mbd
 - Tengiz: 0.70Mbd
 - Kashagan: 1.20Mbd
 - Others: 1.00-1.50Mbd?

Total midstream: 3.75Mbd?

- West bound potential
 - CPC: 1.60Mbd
 - BTC: 1.0Mbd
 - Kaz-Russia: 0.50Mbd
 - Baku-Supsa: 0.14Mbd
 - Baku-Novo: 0.11Mbd
- East bound potential
 - Kaz-China: 0.20-0.40Mbd?



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Oil and Environmental Pressure no.2 Limited trans-caspian shipment capacity

Routes for crude/product	Est 2010 capacity
Aktau-Russia	3.0Mt
Aktau-Iran	1.5Mt
Aktau-Azerbaijan	3.2Mt
Turkmenbashi-Russia	1.0Mt
Turkmenbashi-Iran	2.2Mt
Turkmenbashi-Azerbaijan	2.4Mt
Total	13.3Mt

- Capacity out of Kazakhstan is only 150Mbd vs. large volumes of Kashagan oil shipped to Sangachal/BTC
- Only ca. 70 tankers in the Caspian, most over-aged
- Significant legal issues still outstanding notably flag restrictions and Caspian sea dispute
- Environmental concerns



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Oil and Environmental Pressure no.3 The Bosphorus strait

- Exploding oil exports thru Black Sea
 - 2000: 60Mt / 2004: 100Mt / 2010(e): 160Mt ?
- Costly Bosphorus straits delays
 - 2004: 8 days / 2010(e): 16 days ?
- Major environmental risks
 - 10 million people metropolis
- Tightening traffic regulation by Turkey



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Mounting Pressures for OSR

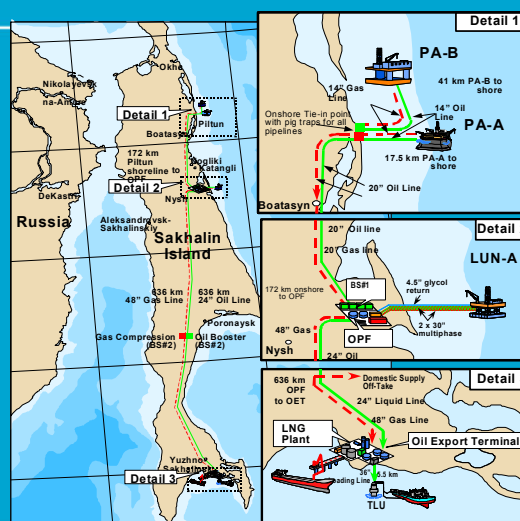
- The pressure on companies and authorities to increase responsibility and requirements for environmental priorities is evident.
- Marked increase in number of applications regarding environmental projects supported by the relevant authorities in the regions.
- The authorities recognise that there is a requirement for increased spill response in addition to other environmental protection services however, the solution is not easily available.



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Sakhalin II - Key Project Infrastructure

Oil & Gas pipelines stretching the length of the island



Additional offshore platform

Development of Lunskeye gas field through offshore platform

Construction of LNG plant and oil export terminal



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Negotiated Environmental Achievements in Sakhalin II (Prior to change of Ownership)

- Development of a robust strategy for river crossings
- Development of international good practice for addressing soil erosion protection measures to be applied during construction
- Development of international panel of experts to review and approve monitoring and mitigation measures associated with the Western Gray Whale
- Comprehensive review of the hazards posed by geological processes (earthquakes and landslides)
- Evaluate potential impacts to Hokkaido, due to a possible tanker spill in Aniva Bay (and subsequent communication with potentially affected people on Hokkaido)
- Increased public disclosure, including six public meetings held by EBRD (London, Moscow, three on island and one in Hokkaido)
- Application on international standards for social issues, including the resettlement, indigenous peoples and the grievance mechanism



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Experience in Sakhalin

- Russian system and requirements are fairly robust/comprehensive
- Sensitive environment, with the commercial salmon and Western Gray Whales as highlights, but numerous other sensitive and endangered species
- Oil in ice does not make it easy
- Remoteness of the production areas do not make it easy
- Lack of infrastructure



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Special Challenges: Sakhalin

- There is a necessity for special types of equipment for oil recovery in open sea and oil in ice conditions.
- There is little or no capability to manage hazardous waste even though injection wells are planned
- Oil waste has to be treated within a reasonable distance. Export to other countries is not a feasible and sustainable alternative.
- As the oil industry develops, additional capabilities must be developed and provided



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Other Special Areas: Siberia

- The main problems of the Region are leaking oil transfer pipelines as well as the drilling flakes, oil contaminated land and other by-products formed while drilling holes are made into this vast area.
- Main environmental needs relate to land remediation of oil polluted land as well as other environmental concerns.
- These polluted basins accumulate in the vicinity of drilling towers.
- Leaks are significant and have created huge environmental problems with vast oil ponds and polluted land with practically no treatment.
- Currently 133 different types of vehicles are used for transporting and excavating the oily polluted land to the landfills
- Oil spill technologies for swampy wet and cold areas required



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Other Special Areas: Caspian

- Many new oil drilling platforms planned to be operational
- Artificial new islands being developed, south of Atyrau. New oil drilling rigs will be installed on the islands.
- Estimated that protecting all these sites will demand three TIER II level oil spill response centres in Kazakhstan alone.
- 18 new oil tankers to operate and to transfer oil on the Caspian Sea from Kuriq to Baku in Azerbaijan: significant increase in tanker traffic will also increase oil pollution risks.
- Large onshore legacy and new onshore fields require clean-up and new protection
- Rising Caspian water-levels threaten to swamp some near-onshore wells risking seepage



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Lack of Tier II Response Capability

- Most operators have some local equipment (Tier I)
- There are organisations to provide major accident response (Tier III) e.g. OSRL
- There is a general shortage of medium response (Tier II) Centres able to be mobilised on a timely basis.
- This shortage is especially acute in the Bank's countries of operations due to a lack of investment and meagre resources of local authorities.



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Tier II Response Concept

- Establishment of Tier II crude oil spill response centres in key locations in the Bank's countries of operation and provision of regional training, prevention and remediation services.
- Underlying economics for each centre based on fixed response contracts to cover overhead costs and equipment in place
- equity upside rests in sales of additional services through the individual centres and developing synergies among the network of centres.



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EBRD Framework Facility Concept

- Framework concept: Large facility which can be used to finance a series of Centres based on a pre-agreed financing criteria.
- EBRD to provide up to 35% of financing consisting of Equity Investment and Senior Loans.
- significant co-financing in the form of export credit and other equity contributions from local partners



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Benefits of Framework Facility

- Assured financing gives Service Providers ability to negotiate best terms for individual Centres
- Substantial framework size enables pursuit of a pipeline of projects across the region to build synergies and diversify risk
- Structure flexible to permit additional third party financing and loans as available on a case-by-case basis.
- Limited risk as key investors along side EBRD will provide modest initial capitalisation and must approve each individual disbursement.



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Sources of returns

- “Stand-by” fees.
- Additional Revenues
- 20%+ annual return on assets employed after finance costs.
- Potential exit to Management or other service partners expected to be involved with the centres



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EBRD what role can it play?

- Due Diligence
- Funding of up to 1/3 of project cost
- Monitoring compliance of Sponsor(s)
- Policy dialogue with Governments related to investment climate, transparency and revenue management
- Managing complex financing
- Risk Sharing
- Established client trust



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EBRD and civil society engagement

- Engage with NGOs from an early stage
 - Ensuring NGO issues are addressed with Sponsors
 - Acting as “catalyst” to facilitate dialogue with all parties
- Consultation through Multi-Stakeholder Forums
 - E.g. BTC Pipeline Project: forums in all three countries seeking direct dialogue
 - Verify ‘mood on the ground’



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EBRD Risk sharing

EBRD may

- Take financial risks
- Take political risks both on sovereign and sub-national basis
- Accept long maturities
- Share equity risk

Sponsors should have sound management and assume operational and completion risks



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Why EBRD

- EBRD is uniquely capable of supporting service providers across all the critical oil response areas of the FSU
- Strong, internationally recognised financial partner with long-term perspective and mission
- Extensive knowledge of local economy, business environment and practices
- Environmental mandate: EBRD is seen as a pioneer in transactions with complicated or multi-boundary environmental aspects.



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