Sergey Shapkhaev, Russian Federation
Buryat Regional Department for Lake Baikal,
Sosnovka Coalition NGO (PE, SEU, Greenpeace Russia, BEW, etc.)

«Eurasian Pipelines: A Path to Integration or Degradation?»
Viewpoint ecological NGOs»
Pipeline projects in XXI century

Legend: Oil pipeline (green line)  Gas pipeline (red line)
Main pipeline projects

• **Gas pipeline «Altai» to China (Gasprom)**
  Preliminary stage

• **Gas pipeline «Kovykta» to APR (TNK-BP)**
  Preliminary stage. Preparing a joint NGO-TNK-BP research report to optimize hydro-carbon delivery to customers.

• **Oil pipeline «Yukos variant» to China**
  Project has been stopped on a pre-investment stage. A public and state expert commissions took a negative decisions. See Appendix.

• **Oil pipeline «ESPO» to APR**
  Technic-economic substantiation stage. Positive decision of a commission state experts. Negative decision of a commission of public experts. Legal process for appeal against a positive decision are continue by NGOs. ESPO – East Siberian – Pacific Ocean. APR – Asiatic-Pacific Region (China, Japan, Korea, USA and etc.) *Slide 2*
Planning Process

• **Oil Pipelines ESPO (Transneft)**
  - North-North corridor.
  By Russia’s President’s decision the revisited route of the Siberia-Pacific Pipeline is proposed to be built in 400 km away from Lake Baikal. .
  [www.pacificenvironment.org](http://www.pacificenvironment.org)

  - North corridor (across Baikal watershed)
    A public expert commission took a negative decision. A state expert commission took a positive decision on a project pre-investment stage (substantiation investment stage).

  - South corridor (along Baikal-Amur Railway)
    A state expert commission took a positive decision. A public expert commission took a negative decision which was later cancelled by Russia’s President. *Slides 5, 12*

• **Oil Pipeline «Russia- China» (Ukos). Slide 6**

• **Gas Pipelines «Kovykta» (TNK-BP).** Preliminary stage
- Proposed in 2004, approved, but rejected by Transneft on the substantiation invest stage (*yellow line*)
- Proposed in 2005 and approved, but rejected by Putin on April 26, 2006 (*red line*)
- Proposed in 2004 by K.G. Levi, professor of the Earth Crust Institute SB RAS, build by Transneft (*blue line*)

http://seismos-u.ifz.ru/baykal-next.htm
Oil pipeline "East Siberia - Pacific Ocean" (Transneft)
Introduction

Transneft, Russia’s state-owned oil pipeline monopoly, plans to build the world’s longest oil pipeline (4,188 kilometers) to transport oil from western and eastern Siberian oilfields to the Sea of Japan. The pipeline will be Russia's largest federal project to date with total investments estimated at between 15 and 18 billion USD. The two major environmental issues associated with the pipeline are the proximity of the route to Lake Baikal and the proposed oil terminal location on the Amur Bay near Vladivostok. This report will focus on the Lake Baikal issue. See more detail www.pacificenvironment.org
Oil Pipeline «ESPO»

The planning length - 2,602 miles (4,188 km),
It’s the world's longest oil pipeline.

Cost: $15-18 billion

Capacity: 80 million tons per year (1.6 million barrels per day)

Phase One: Taishet - Skovorodino, located on the Chinese-Russian border. Stage One also calls for the construction of an oil terminal on the Pacific Ocean at Kozmino Bay, which is located southeast of Nakhodka in the Russian Far East.

Phase Two of the project involves the completion of the pipeline from Skovorodino to the Pacific Ocean. Oil will be transported to the oil terminal by railroad before the pipeline is completed.

[www.pacificenvironment.org](http://www.pacificenvironment.org)
In June 2003, the first version of the pipeline route (Angarsk--Nakhodka) was not rejected by the state environmental impact review, which cited close proximity to Baikal as the main problem. This first route was set to pass 7.5 miles (12 km) from the lake.

In 2004, Transneft then submitted a new route proposal - this route passing more than 50 miles (80km) from Baikal’s shore.

In 2005, Transneft was moving forward with plans to build less than one kilometer from Lake Baikal until President Putin intervened in April 2006 and demanded that the pipeline be routed outside of the Baikal watershed.
Environmental Impact and Risks

• Complex engineering-geologic conditions
  High risk emergency: seismic, permafrost, mudflows, creeps and etc. It will require at least 5 years of engineering-geologic field research to make a complete study of the area. *Slide 12*

• **Oil Pipeline is proposed across the largest intact forest in Russia**
  Fragmenting of Intact Forest Ecosystems will affect implementation of the Kyoto Protocol objectives/goals. *Slide 13*

• **Watershed Area (Lake Baikal, River Lena and etc)**
  There is a possibility of negative impact on the water quality of the Arctic Ocean watershed.
Social Impact and Risk

- Indigenous Peoples’ and Local Communities’ (IPs and LC) Zones of Traditional Land Use

Traditional lifestyle and local economics can be destroyed. There is a high risk of oil spills caused by illegal oil pumping from a pipeline (the oil is stolen through so-called “cut-ins” into the pipeline). The local community poverty issues are the main reason for illegal oil pumping and development of the oil black market.

*Slide 14*
Natural ecosystem and gas/oil fields

Legend

- Gas and oil fields
- Rivers
- Lakes

Landscapes:
- Arid lowland desert
- Desert
- Evergreen and semi-evergreen forest
- Evergreen holm oak (Mediterranean) forest
- Evergreen, semi-evergreen and deciduous forest
- Forest-steppe
- Intertidal
- Mixed and broad-leaved forest
- Mixed, semi-evergreen-deciduous, coniferous forest
- Open woodland, shrubland and savanna
- Polar desert
- Semidesert
- Semidesert and savanna
- Steppe
- Taiga
- Tundra

Russia

Lake Baikal

China

Mongolia
Socio-Economical Assessment
(Geopolitical aspects)

- High dependence of Russia’s economy on oil and gas exports
  («oil needle» problem)
- High power intensity/expenditure of the Russian economy
  which is 2,5-4,0 times higher than in the G7 countries. Slide 16
- Limits to Growth (Meadows et al, 1972, 1992)
  Russia - «beyond Maximum», G7 - «before Maximum»
- Globalization (High technology, Internet) and Location
  (Agriculture, Industry)
Power intensity economics of individual countries

Human Development Report, 2004, UNDP
Conclusions

1. Complex engineering-geologic conditions of the East-Siberian region require that long-term field research works be carefully conducted/managed. Unfortunately, “AK Transneft” company has not been planning any studies of the area. It is rather doubtful that the ESPO (VSTO) project will be environmentally sound, and the oil pipeline will be environmentally safe.

2. The economies of IPs and LC, located along oil and gas pipelines, require support, and it turns to be crucial for meeting energy security needs.

3. The further increase of the export volumes of crude oil exacerbates high dependence of the Russian economy on the oil market, does not meet the national interests and contradicts the main priority guidelines of the Russian Energy Strategy which is to stay in effect till 2020.

4. The forthcoming project of a gas pipeline «Kovykta - Asia-Pacific Region" by TNK-BP looks more appealing as it aims to balance the domestic and foreign demand/needs for gas.
What Can We Doing?

It is crucial to move on from the diversification of the export supplies of oil and gas to the diversification of the economics. One of the urgent problems of the energy safety sector is to establish some balance between countries that export energy resources and countries that do not produce but rather consume those resources. The environmental protection guidelines must be given top priority in compromising and optimizing that global balance. Some policy to reduce an environmental «footprint” for different countries and regions and/or to decrease an amount of energy used per capita could create good examples of environmental protection guidelines.
1. It is vitally important to locate oil and gas refineries in close proximity to oil and gas fields, this measure will contribute to significant reduction of resource losses (up to 15%) during their transportation. 
   It will also be important to transport treated (refined,secondary) oil and gas products to consumers and use the already existing transportation networks (for example,Railways).
   These measures/activities will help reduce cases of stealing oil and gas from a pipeline, decrease hydrocarbon losses in terrorist attacks, and minimize risks of oil spills and environmental damage caused by natural disasters (earthquakes, floods, sills and forest fires).

2. It is highly preferable to address the oil exporting countries (OPEC, Russia, Norway and others) with a suggestion to declare a moratorium on increasing the export of crude oil volumes beginning 2008.
   This activity is crucial for promoting the idea of economy diversification in oil exporting countries which economies are largely dependent on the natural resource use, and of reducing the man-made (antropogenic) impact/pressure on Nature. It is important to develop a program similar to the Kyoto Protocol to address the issues of non-renewable energy resources, first and foremost, oil and gas. It is also crucial to reduce oil and gas dependence of economies which rely on hydrocarbon imports, and to promote diversification of energy-supplies that include biofuel and other renewable energy resources. The developing countries and countries in transition like Russia, Brazil, India, China, etc. should be in the spotlight, as their development strategies prioritize energy-saving and reducing oil and gas dependence.
3. It is crucial to monitor the strategy mine of the oil and gas fields in the countries which contain the world supply/reserve of oil, gas and other energy resources.

This activity is closely connected with the negative correlation between oil (gas) management and high percentage of oil and gas revenue in the budgets of the oil-exporting countries. In fact, the quality of oil management is highly deteriorated by a behind-the-scenes decision-making process, weak democratic principles, predomination of the revenue tax branch over the scientific research associated with the natural resource management.

(Retrieved from the report «From the diversification of the export supplies to the diversification of the economies» which was presented at Civil G8, Section «Environmental Safety of the Oil and Gas Industry", Moscow, July 04, 2006)
Appendix. The Speech of Shanzadba-lama Baldan Bazarov

We, under the protection of the Three treasures, watch good and evil deeds of the humans, and remember the saying of Buddha, the Teacher, that suffering is based on cupidity. We also remember that all numerous creatures who were many times reborn have been our mothers. We worship Sacred Baikal which keeps its waters purest blue and transparent. We pray our gods which have chosen the Grand Sayan Mountains to be their Earth’s Palace. We make gifts to the Spirits of Great Shamans who after their physical death have stayed to be the Masters of the Tunka Valley to guard their kindred. And we, the proud descendants of our great ancestors, declare that neither our gods, nor the Spirits of Great Shamans, nor the Masters of the land, nor us ourselves give our consent to build an oil pipeline in the area. We stand for the purity of Sacred Baikal, for pristine wilderness of the mountains and lands which are guarded by our gods and ancestors’ spirits. We protect living creatures whose life has been secured by the blessed teaching of Buddha.

May the good flourish and multiply
(Blessed be the good deeds)
1. Gombozhab Dyshinoev – Shireete-lama
   1. Gombo Darmaev - Shireete-lama
   2. Turuev Buda Rinchinovich – Khadusha ubgen
   3. Lama Losen
   4. Lama Tserin
   5. Khaduunton
   6. Booh
   7. Sushkeev
   8. Shaglanov
   9. Khurbuldaev Innokentii Ayusheevich – Khadusha ubgen
   10. Khoshkoev Bator - Khadusha ubgen
   11. Zabanov Mongol - Khadusha ubgen
   12. Uryankhai khadushadai turalagsha
   13. Budaev Badma – Darkhan ubgen
   14. Shagdurov Dasha-Nima Dareevich - Khadusha ubgen
   15. Sharnaev Budozhap – Uzegten ubgen
   16. Bazarov Sodnom - Khadusha ubgen
   17. Buyantuev Shagdar - Khadusha ubgen


Note: Khadusha ubgen is a local old man that is a person who is believed to be able to contact the gods or spirits of the land and to cure people.

http://bro.burinfo.ru