THE MINERAL INDUSTRY OF

LITHUANIA

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The mining industry of Lithuania extracted peat and industrial minerals, including clays and sand and gravel. Lithuania had been among the leading countries of the former Soviet Union (FSU) in the production of lime, cement, and brick. At the time of the breakup of the Soviet Union, there were more than 290 enterprises engaged in the production of industrial minerals, including nitrogenous fertilizer, and more than 240 sand and gravel deposits under exploitation. The country's peat production was used in agriculture as compost and litter. Following the breakup, no new mineral production facilities appear to have been built, and a number of them may have shut down.

The Ignalina nuclear powerplant in Lithuania, a graphite-moderated pressure-tube reactor (RMBK), provides a large percentage of the electric generation capacity for the country. Lithuania also has the Baltic states' only oil refinery at Mazeikiai with a capacity to produce more than 13 million metric tons per year (Mt/yr) of petroleum products.

The country is a major transshipper of mineral products, mainly through the port of Klaipeda on the Baltic Sea. Construction was underway on a petroleum- and petroleum-products-loading terminal at the port of Butinga on the Baltic Sea. The first stage was completed in 1995. The terminal is to have a designed import and export capacity of 8 Mt/yr of oil and 2.5 Mt/yr of petroleum products. The terminal was designed with the assistance of the U.S. firm Fluor Daniel Williams Brothers and is being built by Lithuanian companies with credit being extended by the United States Export-Import Bank.

The Lithuanian economy had been experiencing growth since 1994. In 1996, the gross domestic product (GDP) reportedly increased by 3.6% compared with that of 1995 (Interfax Statistical Report, 1997). Although a sectoral breakdown for GDP is not available for 1996, the structure of GDP, by economic sector for 1995, was industry and energy, 24%; agriculture, 9%; construction, 7%; trade, 26%; transport and communications, 8%; and services, 26% (Ministry of Industry and Trade, 1996).

The first stage of Lithuania's privatization program began in 1991 and was completed in mid-1995. During this stage, 5,714 (86%) of 6,644 eligible companies were privatized. On March 19, the Lithuanian Government approved a list of companies to be privatized during the second stage of privatization, which began in mid-1996. The approved list contains about 200 companies (Lithuanian Privatization Agency, 1997).

The program of privatization was not without opposition, particularly as it affected large enterprises involved with energy. The Lithuanian Government promised to find out more about the views of opposition parties on the privatization of strategic enterprises and to seek a compromise that would not threaten the interests of the state and its citizens. The Social Democratic Party reportedly was seeking a consensus with the ruling Conservative Party on the subject of privatization. The Social Democrats also insisted that the Government should fully adhere to the 1995 agreement made by the political parties not to privatize a number of major enterprises, including: Butinges Nafta (oil terminal in Butinga); Mazeikiu Nafta (Mazeikiai Oil Refinery); Naftos Terminalas (oil terminal in Klaipeda); Gargzdai Naftotiekis (Gargzdai Oil Pipeline); Geonafta (oil exploration enterprise), the Ignalina nuclear powerplant; Lietuvos Dujos (Lithuanian Gas); Lietuvos Energija (Lithuanian Power); Lietuvos Gelezinkeliai (Lithuanian Rail); the Lithuanian Shipping Company; the port of Klaipeda; and all airports (Foreign Broadcast Information Service, 1997e).

A statement made by the press office of the Government of Lithuania in April 1997 said that the protests against the privatization of the Ignalina nuclear powerplant, Lietuvos Dujos, and Lietuvos Energija were totally unwarranted because these enterprises are not on the list of enterprises to be privatized (Foreign Broadcast Information Service, 1997e).

The Lithuanian Government was forming a national oil concern, Lietuvos Nafta (Lithuanian Oil), to hold the state-owned shares of Lithuania's four major oil sector companies—the Mazeikiu Nafta refinery, Gargzdai Naftotiekis, Butinges Nafta, and Lietuvos Kuras (the oil products trader); the Government owns controlling interests in all four companies. The Government plans called for reducing its holdings in Lietuvos Nafta to 34% by issuing shares for sale (East/West Commersant, 1996). Reportedly, privatization of Lietuvos Nafta was to take place through an international tender; Lietuvos Nafta had been removed from a list of organizations declared ineligible for privatization (Summary of World Broadcasts, 1997).

In July 1997, an announcement was made that the U.S. oil company, Mobil Sales and Supply Corp., filed a $4.5 million lawsuit with the New York District Court against the Republic of Lithuania and the joint-stock company Lietuvos Energija over unpaid bills for fuel supplied to Lietuvos Energija in 1995 and 1996. Although Lithuania's Ministry of the Economy publicly admitted the debt of Lietuvos Energija to its trading partners, the public was also told that following an investigation conducted by the State Audit Office, it was established by the State Tax Inspectorate and the Prosecutor General's Office that Lietuvos Energija actually had paid in full for the fuel supplied. According to Lithuania's Prosecutor General, however, a

preliminary investigation revealed that Lietuvos Energija did not pay Mobil directly, but made payment through a privately owned company, Dega (acting as an intermediary), and that the money did not reach Mobil (Foreign Broadcast Information Service, 1997c).

The nuclear reactors at the Ignalina nuclear powerplant are of the same type as those at Chernobyl. The pressure tubes in the reactors at Ignalina reportedly are seriously corroded, and the powerplant is said to be dangerous. The Ignalina nuclear powerplant has two reactors, each having the capacity to generate 1,500 megawatts (MW) of electricity, that began their operation in 1985. The powerplant is a key supplier of electric power in Lithuania. Last year, it contributed 83% of the country's total power-generation (Foreign Broadcast Information Service, 1997b).

Even with only one third of its working capacity employed, the Ignalina nuclear powerplant produces more electrical energy than Lithuania needs. Only 750 MW was needed to supply power for the entire country. Lithuania had ceased its exports of power to Ukraine, Belarus, and Latvia (Foreign Broadcast Information Service, 1997d).

Safety at Ignalina has been a topic of discussion in Lithuania and abroad. The European Union (EU) Commissioner said that improving safety at the plant was one of the main conditions for Lithuania's entry into the EU. A group of Western experts, that studied the condition of the plant for the European Bank for Reconstruction and Development (EBRD) recommended either improving the powerplant or shutting it down. The experts proposed that projects should be implemented to enhance its safety; these projects could cost about $120 million (Foreign Broadcast Information Service, 1997k).

A renovation program was underway for both reactors at Ignalina, with work in progress on the first reactor. The EBRD invested ECU 32 million in measures to enhance the safety of the powerplant. The Bank of New York would also lend Ignalina $10 million to improve safety; this loan would be guaranteed by the Export-Import Bank of the United States (Foreign Broadcast Information Service, 1997h).

Besides the danger of contamination from the malfunctioning of its nuclear powerplant, the country is in possession of some dangerous nuclear substances that could be used in the production of atomic weapons. For almost 10 years, the Institute of Physics in Vilnius, a secret Soviet institute, has been storing 200 kilograms of beryllium which was used by the Soviet Union to make nuclear weapons. In the past 13 years, the Ignalina powerplant has also reportedly produced enough plutonium to create a small nuclear arsenal (Foreign Broadcast Information Service, 1997j).

Lithuania was also suffering from environmental problems caused by a Soviet military base that had been closed. Only after the Russians evacuated the area in summer 1993 could Lithuania, with the assistance of the Danish firm Kruger Consult, assess the environmental impact. In 1994-95, an assessment of the level of pollution at the base was funded from the Danish Environmental Assistance Fund for East Europe. According to the results, pollution had been caused by several sources — airplane fuel (extensive), a smaller quantity of very toxic rocket fuel that had been meant for a nearby FSU rocket unit; and heavy metal pollution near the former airplane cleaning and maintenance bays (serious). In addition, The Soviets had stored nuclear warheads at the base and an increased level of radioactivity was detected.

The environmental surveys were completed in 1997. Kruger Consult and a Danish-Swedish-Lithuanian environmental firm, the Baltic Consulting Group, were prepared to start cleanup operations in the area, which covers more than 10 square kilometers. With economic assistance from Denmark and the EU, they will try to remove the immediately accessible airplane fuel in the ground. The fuel has already seeped into the ground water that is used as drinking water by people in the area and into the nearby Kulpe River and Lakes Gudeliai and Kairiai. The head of the environmental department in nearby Siauliai said that if nothing is done now, then all the town's drinking water will be contaminated within 10 to 20 years. He did say, however, that the danger was not immediately acute for the most significant segment of the region's drinking water supply system. At present, Lithuania, Latvia, or Estonia have no special dumps or disposal plants to handle the many hundreds of thousands of metric tons of toxic waste in their respective countries that will have to be disposed of in this cleanup effort (Foreign Broadcast Information Service, 1997i).

In June 1997, negotiators from Lithuania and Latvia finally agreed to sign a document listing the terms for developing a disputed oilfield in the Baltic Sea. Both governments were to form teams to work out an economic agreement on the oilfield. The disagreements began in 1998 after Latvia concluded an agreement with US Amoco and Swedish OPAB companies on prospecting and developing an oilfield in disputed territory (Foreign Broadcast Information Service, 1997f).

Lithuania serves as a major transshipper of mineral products for the CIS countries. According to the President of Kazakhstan, the port of Klaipeda is of exceptional importance to his country. The President also stated that his country was prepared to invest in the construction of a new terminal at Klaipeda with a throughput of up to 8 Mt/yr to facilitate exports of crude oil. He said that Kazakhstan would pump the oil through existing pipelines across Russia to the Baltic Sea and onward to Europe and that oil could also be shipped across Russia by rail to Lithuania (Foreign Broadcast Information Service, 1997g).

The Presidents of Kazakhstan and Lithuania also discussed the possibility of refining the crude in Lithuania and had agreed on joint participation in the development of Kazakhstan's oil wealth. According to the President of Kazakhstan, his country also could gain much from shipping other commodities besides oil, such as ferrous and nonferrous metals, to world markets via Lithuania. Lithuania also wants to gain access to Chinese and Southeast Asian markets via Kazakhstan. The President of Lithuania discussed mutual cooperation, stressing the importance of signed economic and trade accords and an agreement on freight and other services related to shipping Kazakhstan's goods via Klaipeda. Trade between Kazakhstan and Lithuania had risen from $29.9 million to $126.8 million in the past 3 years. Lithuania was buying grain and metals from

Kazakhstan, and Kazakhstan purchased consumer goods from Lithuania (Foreign Broadcast Information Service, 1997g).

Kazakhstan was not the only country from the FSU interested in expanding mineral exports through Klaipeda. The Lithuanian Government received an official proposal from the Belarussian chemical combine for the construction of an up-to-date freight terminal, with a capacity of from 80 to 100,000 metric tons per month, at Klaipeda. The Belarussian chemical combine currently exports from 40 to 50,000 tons of mineral fertilizer per month through Klaipeda, and Belarus exports approximately the same amount through the Latvian port of Ventspils. Exporting through Ventspils, however, is reportedly not very profitable for Belarus. The Lithuanian Government is now discussing a proposal to build a terminal for the shipment of mineral fertilizer within 2 years (Foreign Broadcast Information Service, 1997a).

Lithuania has adequate industrial minerals to be self-sufficient in a number of construction materials and has a large but problematic (because of safety concerns) source of electric energy at the Ignalina nuclear powerplant. As a small country, Lithuania will remain almost entirely dependent on foreign sources for its metals and mineral fuel requirements. The country's future in the mineral industry appears to be as a transshipper of minerals through its Baltic Sea ports. The country is expanding its capacity to engage in such shipments, which should be an increasing source of revenue.

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TABLE 1
LITHUANIA: STRUCTURE OF THE MINERAL INDUSTRY FOR 1996

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facilities	Annual capacity e/
Ammonia, nitrogen content		Jonava nitrogenous fertilizer plant	Jonava	600.
Cement		Akmyantsementas enterprise	Akmyane	2500.
Clays (for brick production)	cubic meters	Production at 19 deposits with the largest production facilities: The Daugelskoye plant exploiting the Daugelai deposit	Daugelai	1,500,000 (total for 19 deposits).
Do		The Ignalinskoye plant exploiting the Dinsa deposit	Ignalina region	
Do.		The Tauragskoye enterprise exploiting the Taurage deposit	Taurage region	
Clays (for concrete aggregates)		Krunay deposit	Krunay region	500.
Clays (for cement)		Saltiniskiai deposit	Saltiniskiai region	2,000.
Limestone		Karpenai deposit for cement production	Karpenia region	8,000.
Peat		Production at 11 eneterprises exploiting 55 deposits Largest eneterprises are: Siauliai exploiting Didisis-Tiryalis and Sulinkiu deposits	Siauliai region	350.
Do.		Ezherelskoye exploiting Ezherelis and Pales deposits	Ezherelis region	400.
Do.		Ionovskoye exploiting Paraistis and Disisis-Raystas deposits	Paraistis region	300.
Do.		Baltoyi-Bokeskoye exploiting Baltoyi and Vokeskoye deposits	Baltoyi-Boke region	300.
Petroleum products		Mazheikiai petroleum refinery	Mazheikiai	12,000.
Sand and gravel	million cubic meters	246 deposits under exploitation. Largest eneterprises: Trakaijskoye association exploiting Serapinshkes deposits	Trakai region	20 (total for 246 deposits).
Do.	do.	Rizgonskiy plant and Yurbarkskiy plant exploiting Rizgonys and Kalnenay deposits	Rizgonys region	
Sand (for glass)		Anyksciai deposit	Anyksciai	150.

e/ Estimated.