National Atomic Company Kazatomprom has been established in 1997 by special presidential decree with the purpose to coordinate the former USSR Nuclear Industry enterprises located on the territory of Kazakhstan.

The Government of Kazakhstan entrusts the republican nuclear sector’s future to Kazatomprom. Although Kazatomprom is a state-owned company and operates on behalf of the government, it is private in terms of ownership, being organized in a form of a closed type joint stock company, and within its structure there are daughter companies with a certain share of private capital.

Formally Kazatomprom has started only a few years ago, but it should not create confusion. Because Kazatomprom has only united the USSR traditional nuclear cycle units, which, I want to emphasize for, count as long history as that of the nuclear industry itself. This fact is the guarantee of high quality production culture inherent to the former USSR Defense Industry.

STRUCTURE OF THE COMPANY

There are five enterprises within Kazatomprom that can be described as two complimentary complexes.

The first complex – exploration of the natural uranium consists of (1) three uranium mines, (2) two joint ventures established with the world major nuclear companies – COGEMA and CAMECO, and (3) geological unit VOLKOV GEOLOGY.

The second complex is presented by the ULBA METALLURGICAL PLANT (Ulba), one of the bigger industrial enterprise in Kazakhstan. Ulba comprises three main facilities – uranium fuel pellets production, tantalum and beryllium lines.

PRODUCTION CAPACITY

Our company possesses quite diversified production capacities, which results in economic stability. In addition, despite the seeming variety of facilities, they have many common things, which is good for interrelated production plans, and allows cost saving on infrastructure as well as in the research area.

Nuclear-fuel production

Kazatomprom is already included in top ten big producers of the uranium and there are all favorable opportunities to be in top five.
This assuredness in our ability to be one of the leading uranium suppliers is based not only on the fact that Kazakhstan has its 17% of explored uranium reserves, but most of it can be mined by the in situ leaching method, which is the cheapest and most environmentally friendly way of extraction. As you may see at the chart we have the second place after Australian.

It is worth of notice that the applied acid leaching is much more pure than alkaline scheme, in particular the waste of our production leaves no Radium.

Ulba being recognized as the main manufacturer of fuel pellets for VVER and RBMK. Formerly the plant has supplied 80% of demanded volume. Now there are alternative sources for the fuel pellets, but we still supply more than one third of the total quantity in demand.

To fulfill the order of a well known American company General Electric this year we have started the new line for processing scraps allowing processing any scraps to the oxides of nuclear purity. This we deem is the promising direction for Kazatomprom, for we have the unique opportunity to extract the uranium from the scraps and remain the relatively low radiation wastes.

**NON-NUCLEAR PRODUCTION**

*Tantalum* - The tantalum Plant, which is a part of Ulba, is the only on the territory of the former USSR that can provide the scientific research and development of production of the whole range of the tantalum products. The competitive advantage of ours is the availability of the main...
reagent – hydrofluoric acid, and the possibility to complex processing of the tantalum-niobium ores.

**Berillium** - Our company is one of the two in the World with the full cycle production – from ore to the final product. The other same capacity company is the American Brush Wellman, which presently experiences the deficit of the production capacities, and has concluded with Kazatomprom the long-term contract for the Copper-Beryllium Master Alloy supplies.

The hydrofluoric acid production capacity is more than sufficiently for own requirments of the Company and we are offering it for sale. The production is fully supplied by raw material, which we get from our own Fluor spar deposit.

**NUCLEAR FUEL PRODUCTS**

Our production capacities allows to export to the world market the following products and services.

*Natural uranium* NAC Kazatomprom sells natural uranium worldwide, mainly in form of natural uranium concentrate, most of on the base of multi-year contracts. At that, production facilities at Ulba Metallurgical Plant are designed for production not only of uranium concentrate but also of nuclear purity natural uranium dioxide, so it could permit western converter facilities to curtail the production chain fundamentally.

*Low enriched uranium* (Uranium hexafluoride UF₆). We have no enrichment facilities. But we can offer this production through our cooperation with our Russian partners.

*Scrap reprocessing services* - As I mentioned above our company entered the market of reprocessing services of front end fuel cycle scraps to uranium dioxide powder. Uranium dioxide powders manufacture is a closed process. It enables to process all kinds of scraps, spoilage and wastes of fuel pellets production even materials containing erbium and gadolinium.

*Fuel pellets and uranium dioxide powder* - NAC Kazatomprom maintains and improves technologies of production that has been perfected for years.

Recently we started the output of fuel pellets with additive of burn neutron in the form of gadolinium oxide and erbium oxide. The technology of production of fuel from low enriched uranium as well as from natural uranium for reactors of new model is worked through. Ceramic characteristics of our powders allow to regulate quality of finished fuel pellets and to obtain fuel with microstructure parameters prescribed by customer. We are certified supplier of dioxide powder for General Electric.

**Tantalum** - It produced following tantalum products:

- 99.9% and higher purity tantalum ingots
- tantalum chips
- various mill products
capacitor grade tantalum powder of fragment form
high capacitance tantalum powder
Ferro niobium
niobium ingots

*Beryllium -* Beryllium Plant produced the following products;

- vacuum cast beryllium ingots, min 99.0 % of be
- beryllia based ceramics
- copper beryllium master alloys with beryllium content 5%
- nickel beryllium master alloys with beryllium content Be 6-14%
- copper beryllium alloys with beryllium content up to 2 %

We are planning to begin production of semifinished copper beryllium alloys up to 2% Be contents

**CORPORATE MANAGEMENT**

Our company is a 100 per cent export oriented. Cooperation with the World biggest companies literally forces us to follow the international standards in management as well. We realize it is a long way to the perfection, but we try hard to achieve the world level culture in the production culture.

We now concentrate our efforts in establishing the transparent financial system. All our units have been audited by the international audit company KPMG. We do establish the profit centers, and the corporate information system.

MC ISO 9002 certificate guarantees the high quality of our product.

We have obtained the positive conclusion of the Swedish company Nuclear Fuel and Environment Project.

**INVESTMENTS**

NAC Kazatomprom continues to develop the production of uranium concentrate, however the focus will be on investment in activities that bring direct client benefits. Thus, the major investments will be directed at production of fuel pellets to ensure their high quality, production of nuclear purity UF4 and UO2 to enable our customer to shorten their production lines.

In non-nuclear production the main accent will be on the production of cooper berillium (up to 2%) semiproducts and high capacitor powder and wire. These products will allow to satisfy the most dynamically developing markets.