

Russia, Ulyanovsk

**Summary**

1. **Volume of investments required – \$ 2 500 thousand.**
2. **Production** – the integrated technological systems of clearing of waste, turnaround waters and water-fences, recycling of the waste products containing mechanical inclusions, and also clearing TL (technological liquids) and LCL (lubricant-coolant liquids) in metallurgy and mechanical engineering.
3. **Trade marks** – Volga-Ecoprom.

**Company profile**

**Date of establishment** – the company takes the beginning since 1973. Activity began at the Ulyanovsk polytechnical institute, the Technology of mechanical engineering faculty. Since 1996 – “Ecosystems”, since 2000 it is transformed into Closed Joint-Stock Company “Ecoross”. Since December 2006 it is transformed into Closed Joint-Stock Company The industrial enterprise “Volga-Ecoprom”.

**Signs of public recognition** – “Magnetic Separator for clearing LCL” – diploma and gold medal at the international industrial exhibition "Eureka-2000", Brussels, 2000; special prize of the Austrian society of inventors, 2000; special prize, diploma and gold medal at the International salon of inventions “Competition Lepin”, Paris, 2001, etc. In 2004 a representative of the enterprise was awarded with the diploma of Presidium of the Russian academy of natural sciences for merits in development of a science and economy of Russia. In 2005 the enterprise took part in the VI Congress of metallurgists (October 17–20, 2005, Lipetsk). In 2006 representatives of the enterprise were awarded with a medal of the 34<sup>th</sup> International Exhibition of the inventions, new engineering and production (April 5–9, 2006, Geneva, Switzerland). Developers of technology were awarded with premium of the Government of the Russian Federation in the field of science and engineering (2003).

**Number of employees** – 180 persons.

**Team**

**Bulyzhev Edward** – Director General, 40 y.o. Graduated from the Ulyanovsk polytechnical institute in 1991, the mechanical engineer; 6 years experience of work at managing positions.

**Bulyzhev Eugeniy** – Deputy Director General, the general designer, 61 y.o. Dr. Tech. Sci., Professor, graduated from the Ulyanovsk polytechnical institute in 1971. Winner of premium of the Government of the Russian Federation in the field of science and engineering for 2003; the corresponding member of the Russian academy of natural sciences, the honored worker of the higher school.

**Rjabov Georgiy** – Sales Manager, the main engineer of the project, 56 y.o. Graduated from the Ulyanovsk polytechnical institute in 1977, Cand. Tech. Sci., the senior lecturer.

**Romashkin Vladimir** – Projects Manager, Deputy Director General of the CJSC "Volga-Ecoprom" on scientific work, 55 y.o. Graduated from the Ulyanovsk polytechnical institute in 1975, Cand. Tech. Sci., the senior lecturer. Winner of premium of the Government of the Russian Federation in the field of science and engineering for 2003.

**Kalmykov V.I., Lel'kov V.V.** – Leading Experts. Winners of premium of the Government of the Russian Federation in the field of science and engineering for 2003.

**Products characteristics**

The firm carries out manufacture and installation "on a turn-key" the integrated technological systems of clearing of waste, turnaround waters and water-fences, recycling of the waste products containing mechanical inclusions, and also clearing TL (technological liquids) and LCL (lubricant-coolant liquids) for the enterprises of metallurgy and mechanical engineering.

The integrated technological systems clear water of mechanical impurity containing petroleum (the weighed substances) organic substances, anions and cations (including heavy metals) up to maximum permissible norms that allows to use the water repeatedly in technological process or to reset it in open reservoirs. Besides technologies of effective clearing LCL, enrichment, regeneration and processing of waste products taken from a liquid are developed. It allows to increase in 6–8 times the term of application of technological liquids without dump and to provide return to manufacture for secondary use of a significant amount of technical oils and waste products containing mechanical inclusions. Clearing is carried out without pressure, without use of reagents, on the big areas of division, but in small volumes which have been made out as the cartridges, plates or sections.

**Advantages of production:** small power consumption (100–1000 times less in comparison with widely used now quartz-anthracite filters), compactness (10–100 times more in comparison with quartz filters), universality, adaptedness to fast scaling (change of productivity), adaptedness to a batch production of the wide nomenclature of standard sizes from 100 up to 20 000 cubic meters per hour, simplicity of designing and modernization, rather low cost (10–100 times decrease in comparison with horizontal radial sediment bowls, with quartz-anthracite filters, with dynamic filters “Dina-Sand” used today for clearing from mechanical impurity and mineral oil of the big volumes of water).

Production of the company is protected by more than 50 patents. Annually 10–15 applications for registration of inventions are handed in.

In comparison with the basic competitors offering technology and engineering flocculated clearing of liquids, the technology of CJSC "Volga-Ecoprom" does not demand application of account materials during their operation.

#### **Current state**

Now in Ulyanovsk the manufacture on the ground of 10 ths m<sup>2</sup> is developed, with 180 person employed (workers and engineers).

For today, the technical offers are prepared, the equipment designs are developed or the preparations of manufacture for water treating are being conducted at the following enterprises: "Ural Steel" (Novotroitsk), "Krivorozhstal" (Krivoi Rog, Ukraine), "Severstal" (Cherepovets), "NLMK" (Lipetsk), "West-Siberian metallurgical complexe".

The equipment of clearing is projected, made, delivered and mounted by the forces of "Volga-Ecoprom". Due to modular design, the installations are easily built in working manufacture.

#### **Development strategy**

##### **Use of funds**

1. R&D	10%
2. Acquisition of fixed assets	70%
3. Marketing	7%
4. Acquisition of current assets	9%
5. Other	4%

##### **Prospective outcome of investment**

The investment will allow to launch up-to-date batch production of integrated technological systems equipment for clearing of waste, turnaround waters and water-fences.

Production volume 30-40 units a year (\$10 000-15 000 thousand).

##### **Marketing & Markets**

Now the enterprise realizes the address marketing of the output production based on personal contacts with potential customers – representatives of metallurgical and machine-building enterprises. The market of technologies and engineering of clearing turnaround and sewage makes \$ 1.5–2.0 billion per year. The share of the enterprise in the market is 2–3%. Growth of the market more than in 5 times is expected. Wide use of advertising and other forms of marketing is subsequently necessary. On bringing into the market the new production – integrated technological systems (ITS) adapted to the scaled manufacture (which designs are fulfilled on adaptability to manufacture), maximal use of the existing contacts and strategic partnership with leading engineering enterprises of the market is projected. Large-scale advertising company is planned: dispatch of offers and booklets; participation in conferences and seminars; advertising on TV.

##### **Interaction with investor**

Allocation to the investor up to 50% of shares of the company is planned. The time of recovery of outlay of investments does not exceed 3 years. Capitalization of manufacture after investment presumably will make \$ 10 million. It will be offered to investor to enter into the board of directors with the powers providing protection of interests of the investor. The investor receives 50% of the total profit taking into account taxation under general conditions. It is supposed that the investor will invest profit in manufacture.