

A single crystal needed to make telephone set

The examples of China, South Korea, Japan, Finland and other countries prove that the creation of a 'smart' economy — boasting a high share of high-tech science intensive products — yields no fewer dividends than trade in energy sources. In five years' time, Belarus is to increase its exports of innovative products over 2.5-fold, to reach \$8bn

By Konstantin Yevgeniev

The country's unique microelectronic facility — Integral Production Association — boasts a sterile workshop: even more so than operating rooms. On entering, special clothes must be worn, with another change required on entering the production workshop. If a single particle of dust falls on a memory crystal (the major component of submicron production) it must be thrown away. The production of microcircuits of 0.35 microns is a lengthy process, including over a thousand operations. It takes almost two months to produce one such product, which is ten times thinner than a human hair and visible only through a powerful electronic microscope. Meanwhile, a modern telephone set can be made using just one crystal.

In Soviet times, Integral was the flagship of the microelectronic branch, supplying microcircuits to almost every USSR region. However, economic hardships affected the plant and the number of orders gradually decreased, causing accumulated



Integral becoming attractive to investors, producing microcircuits and complicated electronic equipment

debt. However, on realising the strategic importance of the facility, the state allocated financial aid. The recovery period was long and hard.

Today, the plant manufactures microcircuits and complicated electronic equipment and is becoming an interesting object for investors. Along with growing exports, its financial figures are improving. "Last year, the plant's net profit exceeded \$6m, in equivalent. This year, we plan to raise our positive foreign trade balance to \$55m," notes Integral's General Director, Vitaly Solodukha. "By 2015, this figure should reach \$100m."

The company's strategy for the near future is to strengthen its position on existing segments of the global market, while conquering new sectors — in particular, within the science intensive

branches of space technologies and defence. All the necessary prerequisites are there, with the plant conducting scientific studies and developments.

The chief engineer at Belmicrosystems Scientific-Technical Centre, Vladimir Tsybmal, shows us the 'electronic eye' of a space satellite for remote Earth sensing. Integral has produced electronic components for this optic device, which makes it possible to record images with maximum accuracy and without distortion.

The plant has already realised a range of investment submicron projects dealing with microcircuit making, to increase output and sales of new highly profitable and competitive products. Integral is also planning to master and develop over 30 varieties of integral microcircuits, under the Union State Russian-Belarusian

Basis programme. Over 50 companies in Russia's military-industrial complex have confirmed their needs.

Not long ago, the Council of Ministers' Presidium held its session at Integral's premises. The Government's interference is inspired by the company's difficulties over floating assets. "We aren't asking the state for additional funds," notes Mr. Solodukha. "We've formed a serious portfolio of orders and our products enjoy demand in non-CIS states. The enterprise feels confident and has begun making money." However, the debts accumulated in previous years are hampering progress, so Integral has asked the Government to look at restructuring these debts, to be paid in instalments. Corresponding proposals are now being studied.

Investors to assess

By Vladimir Vasiliev

Investments are always needed, especially in these modern times. Evidently, money plays a key role in overcoming existing economic problems

Aside from loans, two major sources of injections exist: export revenue and capital invested into the creation of new manufactures and into the development of existing facilities. Decree #4, adopted by the Belarusian President, opens up additional opportunities for those wishing to inject money into Belarus.

Importantly, the Decree allows project documentation elaborated abroad to be implemented into investment projects, which should help businesses considerably save time. Moreover, investors will receive a whole range of financial preferences, particularly, a VAT privilege when establishing a new site. Investors are also exempt from paying land tax and rent (for state-owned land lots) for the duration of the project, allowing engineering and construction. Previously, such privileges were granted on an individual basis only, by corresponding decrees to a particular investor. Now, this package of preferences is available to everyone.

How do experts view the Decree? Georgy Grits, Deputy Chairman of the Belarusian Scientific-Industrial Association on Investment and Innovation Politics, notes that the 'document will ease the realisation of investment projects and, undoubtedly, will promote the attraction of additional funds to Belarus'. He also stresses that the country's balance of payment depends on foreign trade figures and on the inflow of foreign injections. The more capital that arrives and stays in the Republic, the better for the economy.

Profitable technical grit

By Sergey Kulyagin

Mogilev Metallurgical Works doubles exports from January-May

According to its Director, Anatoly Volkov, the plant has managed to boost exports by raising sales of technical grit. As a result, the company has registered a \$6.7m trade surplus. The company's top trading partner is Russia, which accounts for almost half of all exports, with the remainder sold to Western Europe. Until recently, the company primarily exported its goods to Germany, the Czech Republic and Poland but, in 2011, signed long-term contracts with Italy, France and the UK. Talks with Canada, the South African Republic and New Zealand are underway.

"Sustainable increase in demand for technical grit has driven us to set up a new production line. As a result, we've doubled output this year and plan to launch production of steel grit in the near future. Currently, we're revamping our existing production line and working on new technology," Mr. Volkov explains.

Patented brands of upgraded quality

By Valery Sidorchik

Gomel's 8 Marta JSC launches hosiery production meeting European standards

The first batches of hosiery are already on sale in the shops, with exports to Russia also launched and a trial batch sent to Canada. The company has used its own funds to buy and install modern technological lines by Italian Lonati — a leading global manufacturer of equipment for the textile industry. This has allowed it to manufacture both classical and exclusive designs, in various colours. It is using not just traditional cotton,

but bamboo fibres, mercerised cotton and other fibres from leading foreign producers (in Turkey, Germany and France). The new, modernised lines are able to produce 100,000 units of hosiery monthly.

8 Marta is among the oldest and largest light industry enterprises in Belarus. Established in Gomel in 1926, it manufactures underwear and outerwear for children, men and women, in addition to sportswear. Almost all its products are sold under patented brands: 'Emico' for men's clothes, 'Marta' for women's and 'Martinka' for children's. Every year, over 60 percent of its range is updated.



Level of quality enhanced at Gomel's factory