



## Unleashing Huge Potential

**R**ussia is beginning to appear on Western companies' radar screens as a potential base for large-scale petrochemical investment. Recent reports that several multinationals are considering projects there could herald an upsurge in the fortunes of the country's chemical industry. Local players too, particularly those owned by the country's leading energy suppliers—such as Lukoil-Neftekhim (Moscow); Sibur Holding (Moscow), the petchem arm of Russia's gas monopoly Gazprom, and the largest local producer; and Tatneft-Neftekhim (Almetyevsk)—are all embarking on significant petchem expansions. The country's second-largest petchems producer, Nizhnekamskneftekhim (NKNK; Nizhnekamsk), also has a large-scale investment program, as do several fertilizer producers including global players such as Acron (Velikii Novgorod), EuroChem (Moscow), and PhosAgro (Moscow).

Russia's expected entry into the World Trade Organization (WTO; Geneva), meanwhile, will have a big impact on the country's economy and chemical sector. Compliance with WTO regulations may lead to a change in the chemical industry landscape, says Igor Kukushkin, executive director of chemical industry association Russian Chemists' Union (RCU; Moscow).

"Some sectors of the industry will emerge winners, but others, including large parts of the dyes, man-made fibers, and paints industries could disappear," Kukushkin says.

Russia has traditionally been one of the leading fertilizer producers, but its mainstream petrochemical industry is underdeveloped, despite the country's immense wealth of hydrocarbon resources. Per capita polymer consumption of the country's more than 140 million inhabitants is only 28 kg, less than one-third of Western levels.

Russian companies chose not to invest in large new grass-roots petchem facilities in

the 15 years following the collapse of the Soviet Union in 1991, focusing instead on modernizing and debottlenecking their plants. Most of Russia's chemical assets, a legacy of the Soviet era, are old and have long since lost their global competitiveness. Russia's ethylene capacity totals just 3.1 million m.t./year, and is mostly centered on small-scale facilities with capacities below 500,000 m.t./year. Plans are under-way to raise capacity to 4.6 million m.t./year by 2011 by expanding plants at Kazan, Kstovo, Nizhnekamsk and Salavat, and by constructing new units at Kazan, Novyi Urengoi, and Samara. The increased capacity will still be insufficient to meet demand, however, experts say.

"The Russian chemical industry has been trying to catch up with the rest of the world in the past few years," RCU says. The *Perestroika* era and the switch from central planning to a market economy had an adverse effect on the chemicals sector, it adds. "The changes, which culminated in the 1998 financial crisis, led to a deterioration of the chemical manufacturing base as well as the economic health of the industry," RCU says. A revival of the industry's fortunes began shortly after the crisis as a result of privatization. Only a small number of enterprises are still wholly owned by the government, it says. The government does, however, continue to hold stakes in some of the major players, including NKNK and Sibur.

Russia is eager to add value to its oil and gas reserves, which are among the largest in the world. The country produced 598 billion cu meters of gas in 2005 from proven reserves of 47.82 trillion cu meters, making it the largest producer, according to BP's statistical review of the global hydrocarbons industry. Oil production reached 9.6 million bbl/day last year from proven reserves of 74.4 billion bbl, making Russia the second-largest producer of oil behind Saudi Arabia and with the seventh largest reserves, the review says. Russia also boasts huge potash and phosphate deposits.

The Ministry of Industry and Energy of the Russian Federation (Moscow), together with technical and economic research institute NIITEKHIM (Moscow), recently completed a plan for the development of the chemical and petchem sector through 2015. It focuses on developing those branches of the industry that meet market needs. Products hitherto not manufactured in Russia, including several engineering plastics, are top priorities. These products would



