

# THE RUSSIAN PULP AND PAPER INDUSTRY: SITUATIONS, PROBLEMS AND PERSPECTIVES

The timber complex plays an important role in Russia's economy. Its share in the total industrial production volume is about 3,8% and it brings 4% of the total currency revenue from exports.

Production volumes of the main kinds of timber products in 2005 are shown in Table 1.

The highest rates can be observed in the production of deep wood-processing (wood particleboard, fiberboard, plywood). No such growth is evident in pulp and paper production.

Traditionally, the key timber productions of Russian exports are low-priced goods. Round wood and sawn timber make up about 60%, market pulp – 9%, newsprint – 8%.

The pulp and paper industry, being an integral part of the timber industrial complex, started its development in the 1960's – 70's upon the

adoption of Decree # 478 of April 7, 1960 of the Central Committee of the Communist Party and the Council of Ministers of the Soviet Union "On liquidation measures of the gap in the pulp and paper industry." Within the frame of the Decree the biggest enterprises were realized up until around 1980, e. g. Kotlas Pulp and Paper Mill, Syktyvkar and Bratsk Timber Complexes, Baikal Pulp and Paper Mill, Amur, Perm and Selenginsky Pulp and Cardboard Mills, and the construction of the Ust-Ilimsk Pulp Mill began. Operating plants – Arkhangelsky, Balakhninsky, Kondopozhsky, Segezhsky, Solikamsky – and most of the paper, board mills and processing plants had been significantly modernized and enlarged. Much attention was given to the construction of companies specializing in machinery and equipment production for the pulp and paper industry: Petrozavodsk and Izhevsk, heavy engineering plants, and reconstruction of the Krasnokamsk Plant (the only one in Russia producing iron nets), and the Sverdlovsk Plant of pulp grinders, in order

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**Table 1. Production volume of main sorts of timber in 2005**

Production	2005	2005 in % to 2004
Timber removal, million cub.m	105	94.0
Commercial timber, million cub.m	93.7	101.6
Sawn wood, million cub.m	20.8	98.2
Plywood, million cub.m	2.6	113.6
Fiberboard, million sq.m	378	110.5
Particleboard, million sq.m	4.0	111.2
Market cellulose, million tons	2.4	100.4
Paper, million tons	4.0	101.7
Pasteboard, million tons	3.1	104.5
Newspaper, billion issues	17.1	98.3
Magazines, billion issues	2.5	75.6

for packaging materials, mostly from cement producers. The biggest bag production in Russia is the Open Joint-Stock Company "Segezhsky Pulp and Paper Mill." In 2005, the Mill increased its output volume to 20,9%, or 311,7 million paper bags. The company's share in the total aggregate output of paper bags in Russia is 59%.

### SANITARY-HYGIENIC PAPER PRODUCTION

There are only two mills in Russia using pure pulp for these types of products. Toilet paper produced by other Russian mills is made 70% from wastepaper.

### MECHANICAL WOOD PULP PRODUCTION

The production of mechanical or wood pulp is not widely developed in the Russian plants, since this semi-manufacture requires a high rate of specific consumption of energy – 3000 kW/h per 1 ton, and has a low grade and stability of whiteness in a bleached state, and sewage that is difficult to clean. Production volumes of this semi-finished product do not exceed 2 million tons, of which 60% is manufactured from pulpwood by grinders, and 40% from chips by crushing disc mills (TMM, XTMM). At present, operating plants have practically no reserves of

**Table 9. Production of paper bags by the biggest companies, million items**

Company	Region	2005	2004	2003	2005 in % to 2004
Segezhsky Pulp and Paper Mill	Republic of Karelia	311.7	257.81	269	120.9
Kotlas Pulp and Paper Mill	Arkhangelsk Region	83.9	116.89	117.3	71.8
Novolyalinsky Pulp and Paper Mill	Yekaterinburg Region	53.8	55.2	54.6	97.5
Selenginsky Pulp and Cardboard Mill	Buryat Republic	15.9	16.7	16	95.2
Maiysky Pulp and Paper Mill	Republic of Mari-El	6.3	3.43	3.2	183

**Table 10. Toilet paper production by the biggest companies, million rolls**

Company/Region	2005	2004	2005 in % to 2004
"SCA Hygiene Products Russia"	343,71	317,50	108,26
Naberezhnochelninsky Cardboard and Paper Mill	287,32	275,79	104,18
Syktyvkar Tissue Group	74,41	81,77	91,0
Syasky Pulp and Paper Mill	63,99	52,60	121,65
Joint-Stock Company "Georgia Pacific"	40,77	41,26	98,81
Kaluga Region	40,59	46,87	86,60
Rostov Region	34,96	40,27	86,81
Karachayevo-Cherkessk Republic	19,40	19,20	101,04
Krasnodar Krai	28,98	28,98	100,00
Sverdlov Region	18,58	20,92	88,81
Primorsky Krai	9,26	10,57	87,89
Vologda Region	12,99	16,05	80,93
Kirov Region	10,83	11,96	90,55
Tver Region	16,20	15,19	106,65
Nizhny Novgorod Region	7,95	10,85	73,27
Saratov Region	7,77	7,63	101,83
Altai Krai	5,02	3,58	140,2
Novgorod Region	5,94	9,57	62,07
Kemerovo Region	4,04	3,57	113,17
Irkutsk Region	3,68	3,68	100,0
Bryansk Region	25,18	21,92	114,87
Kaliningrad Region	2,45	6,23	39,33
Novosibirsk Region	3,79	3,42	110,82

will specialize in manufacturing corrugated board boxes with a multi-colored flexography. In 2006, it is planned to put a second line into operation. The planned capacity of the mill will total 180 million m<sup>2</sup> of corrugated production per year. Construction of the new mill is a part of the geographic expansion of the Gotek Group.

By autumn of 2006, **OJSC "Mondi Business Paper – Syktyvkar"** (Komi Republic) plans to implement a transition to the non-chlorine bleach of cellulose. In August 2006, the plant will launch a production line for non-chlorine bleaching of softwood pulp (23 million EUR). This transition will exclude emissions to the atmosphere, allow the improvement of environmental and conservation concerns, ensure the competitiveness of the company's production in foreign markets and strengthen general safety at the production site. In 2005, the company allocated 59 million EUR for the modernization of its operation. For 2006, it is planned to invest 48.5 million EUR, 28 million EUR for environmental protection, 7.4 million EUR for the modernization of papermaking machines, and 23 million EUR for the non-chlorine bleaching of pulp. Furthermore, the Mondi – Anglo-American Corporation owners are considering possibilities to increase pulp production capacities by three times. The scope of investments for this project is supposed to come to 1 billion USD for 3 years.

**Larry's Pulp Company** (Norway) supposes to make an investment of about 400 million EUR toward the construction of a pulp mill in the Pskov Region. Construction works will begin in 2006 and be completed in 2007. This is the biggest amount of foreign investment in

#### **OJSC "Mondi Business Paper – Syktyvkar"**



the region in years. It is supposed to be the most high-tech enterprise in the Northwest of Russia.

**By 2010 OJSC "Solikamskbumprom"** (Perm Region) intends to invest about 270 million EUR toward expanding its production capacities and to double the volume of finished products manufacture by 2010 up to 14 billion RUR per year. The investment project is to be implemented in two phases. At the first phase (realization deadline is 2007) the investment amount will make up 3.2 billion RUR of funds and credits; 0.7 billion RUR is already expended. At phase 1 the production volume of finished products is to be increased up to 600 thousand tons per year or up to 8.6 billion RUR, logging volume – up to 1.5 million m<sup>3</sup> per year. At phase 2 it is planned to allocate approximately 200 million EUR. The production volume is expected to grow by 850 thousand tons or 14 billion RUR per year, logging – up to 2.5 million m<sup>3</sup> per year.

**OJSC "Svetogorsk"** (St. Petersburg Region) accomplished the modernization of Papermaking Machine #4; the invested amount stood for 50 million USD. This activity was carried out within the first phase of an investment program that is aimed at the acceleration of production capacities of the Svetogorsk Company and is part of a strategy of International Paper on sales development beyond North America and its expansion into the Russian market. The Svetogorsk Company has launched a board-coating unit for food packaging needs. The next stage of the investment program entails the construction of a plant producing bleached chemical-thermo-mechanical ground wood with an annual capacity of 200 000 tons. The plant is to start its operation in 2007. The total amount spent on modernization in 2005 was 100 million USD.

**OJSC "Mayak"** started construction of a new papermaking machine for paper production for furniture manufacturing with an output increase of 35,000 tons per year by 2007. By 2010, the company plans to install another papermaking machine with a total capacity of 75,000 tons per year.

**The St. Petersburg Paper Mill of Gosznak** began production of ink-jet paper and made a decision to modernize a coating unit in 2007.