



Victoria Abramchenko:



The actions being taken are intended to save jobs, prevent the loss of feedstocks, avoid shutdown and reduced output.
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Dmitry Zylev:



The mill is searching for new business partners and improving its logistics processes
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Anastasia Sizenova:



Effective forest management implies access to complete and accurate data.
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Taking Care of People – Investing into Future

Corporate social responsibility is an important trend of our time. Many large, globally recognized companies have diverse programs aiming to facilitate development in the regions of their operation and society at large. Arkhangelsk Pulp and Paper Mill, its subsidiaries belonging to Pulp Mill Holding, and Titan Group are no exception. As the sanctions pressure mounts on the Russian economy, CSR programs gain even greater importance.

Social thrust

At the 18th Annual Meeting of Valdai Discussion Club, Russian President Vladimir Putin noted that Russia should continue its efforts to become a welfare state. The social policy of a nation and that of business sector have multiple dimensions. These include promoting socially important initiatives and support for vulnerable groups of population. No less important is ensuring talent- and capability-based access to upward social mobility.

The measure of the effectiveness of social policy is people's well-being and how satisfied the people are with their living conditions.

"It is first and foremost citizens, along with government, that expect businesses to pursue socially-driven agendas," Mikhail Mishustin, Prime Minister of the Russian Federation, stressed at last year's meeting with the Board of the Russian Union of Industrialists and Entrepreneurs. "Corporate social responsibility is best measured in today's world by how much a business invests in its own and the development of its country. Our interests come together here. We are looking to foster economic growth and increase the quality of life."

In its home region, Arkhangelsk Pulp and Paper Mill is one of the largest taxpayers. Its absolute compliance with the current legislation and, consequently, fulfillment of the obligation to pay taxes and fees is a vital factor determining its reputation as a socially responsible company. The mill is an employer to many residents in Novodvinsk, Arkhangelsk,

439.2
APPM's 2021 social agenda expenditures stand at 439.2 million rubles

and municipalities comprising Primorsky District of Arkhangelsk Province.

By recruiting the staff for itself and its subsidiaries from among the local population and by offering competitive salaries, APPM makes a significant contribution to the economy of its home region, helping to solve widely ranging social and economic tasks at regional and federal levels.

And as a result, the Regional Stage of the Russian Competition for the Best Socially Responsible Russian Company has announced Arkhangelsk Pulp and Paper Mill (JSC) winner in its key categories. APPM ranks first in "Reducing Occupational Injuries and Morbidity" and "Towards Healthy Lifestyle" and holds the third place as an industry with the best agenda for "Promoting Human Resources Development".

Arkhangelsk Pulp and Paper Mill's social agenda is recognized also by AK&M rating agency. In its fourth update of social responsibility rankings of the largest Russian pulp and paper mills and timber industries, APPM lists among the Top Three Socially Responsible Companies.

Balance of interests

Every year, Arkhangelsk Pulp and Paper



Bumazhnik Business is available in English. Please see p. 12



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News

GRACE PERIOD FOR ADAPTATION

Russian President Vladimir Putin has endorsed a law providing for amendments to a number of legislative acts, including the Forest Code. The law is intended to reduce inherent risks and give strategic economic sectors extra time to adjust to the realities of sanctions that are being imposed by the 'unfriendly countries'.

In particular, the amendments to the Forest Code suggest postponing, for a period of two years – from January 1, 2023 to January 1, 2025 – the date of launching the Federal State Forestry Information System (FSFIS).

By postponing the launch date, the state is trying to ensure a seamless transition to the actual operation of the system. During these two years, FSFIS will be operating in test mode in a number of pilot regions to receive feedback from users for further adjustments and optimization.

The law also provides for the postponement, until January 1, 2025, of the mandatory requirement for timber companies to provide the photographic evidence of their forestry operations, which implies the use of dedicated software, as well as of the requirement for their logging machines and forest fire equipment to be installed with real-time tracing means.

Source: Federal Forestry Agency Press Service



TIMBER INVESTMENT PROJECTS

Pursuant to the Russian Government Decree, all timber-related investment projects are given a grace period of one year for achieving their commitments to build new or modernize the existing timber processing infrastructure facilities, as declared in the action plans for the period from March 1 to September 1, 2023.

All timber enterprises that are running high-priority investment projects in timber harvesting will be granted, as a measure of state support, a postponement in the delivery of their investor obligations.

According to the current rules, failure by investor to fulfill the quarterly schedule of a high-priority project will be construed as ground for delisting and early termination of the forest lease agreement.

To mitigate the risk of failure to meet project deadlines or losing raw material base, the government is giving the investors who are building new or modernizing the existing timber processing infrastructure facilities to be built within the period from March 1 to September 1, 2023, a grace period of 12 months following the projected date of project delivery or the date of notice to remedy breach.

According to Deputy Prime Minister, Victoria Abramchenko, the adopted measures will allow the timber companies to retain their raw material base, stay on schedules and avoid staff downsizing.

Source: TASS

APPM Daily

APPM and Timber Industry



Arkhangelsk Pulp and Paper Mill welcomed Evgeny Markov, Deputy Chairman of the Russian Federation State Duma Committee on Ecology, Natural Resources and Environmental Protection, for his working visit to discuss the ways for APPM and timber industry to maintain their performance in the context of the Western sanctions.

Work in progress!

The honored guest was taken on a tour of the mill's industrial premises, where he was introduced to the production cycle of the pulp and paper products. Special attention was paid to the newly installed, cutting-edge facilities – Wood Treatment Plant 4 and the facilities commissioned

within the framework of the high-priority investment project "Reconstruction of Cardboard Production", completed in 2020.

As Evgeny Markov saw it, the mill continues to operate uninterruptedly despite the sanctions, keeping up with its production schedules, shipping products to customers, observing its contractual obligations and having no plans to downsize its staff. Timber and fuels continue to be supplied as usual, while issues such as shortage of bleaching agents and new markets search are being addressed. Over the past few years, Arkhangelsk Pulp and Paper Mill has provided itself with ample margin of safety and is prepared to face challenges.

The tour was followed by the meet-

ing with the management. The issues they discussed included the operational side of the domestic economy, under the Western pressure; government support for timber-related industries; environmental initiatives; and ways to improve environmental legislation.

Proposals from the mill

"The key task before us is to avoid downsizing, stay on schedule, and maintain financial self-sufficiency," said Dmitry Zylev, APPM Director General.

With this in mind, the mill considers it highly important that prompt amendments should be made to federal legislation to mitigate the sanctions' impact of pulp and paper industry. One particular proposal put forward by the management concerns lifting fiscal and technology-related restrictions on operations with wood. Also, government assistance is required for covering transportation costs. Today, the Russian businesses are busy searching for customers in Asia, Africa, and Latin America. Shipping to these regions of the planet is way more costly than to the familiar markets in the EU countries.

"It sounds obvious today that there should be measures to reduce tax burden, suspend major inspections and, importantly, suspend penalties," said Evgeny Markov. "The first thing we will do is evaluate the legal side of the proposed initiatives before putting them on our committee's agenda. The economy of the Russian Federation is up for major changes, and we must be duly prepared for them."

Elena ZAKHAROVA
Photo by Sergey SYURIN

2022
will see the Russian timber industry tackle its agendas under the pressure of economic sanctions

Achievements

In the Book of Honor

For active contribution to its home region's social and economic life, Arkhangelsk Pulp and Paper Mill (JSC) has received a place in The National Book of Honor, a federal register maintained since 2008.

As a federal register, The National Book of Honor is being maintained in cooperation with state and municipal executive authorities. Listing is free and is considered solely based on recommendations and proposals from regional and municipal authorities – independent reputable sources. Listed in The National Book of Honor are respectable organizations of different legal structure and line of work, that have been noted for their contribution to the socio-economic development of their home municipality, city or region, and for being drivers of the industries

they are dealing in. For an organization, being listed in The National Book of Honor speaks to its importance, good business reputation and public recognition. It also highlights organization's positive image, serving as a marker of its being seen by partners, customers, consumers, investors and stakeholders as a reliable partner.

Arkhangelsk Pulp and Paper Mill is a socially responsible enterprise. Its progress and industrial achievements are what assures the well-being of its home region and its population. The mill's corporate responsibility policy has as key priorities responsible environmental management; contribution to economic development; improved business performance; stimulating human resources, research potential and social infrastructure; and implementing charity and outreach programs.

Own source



In delivering its social agenda the mill uses the initiatives that have the best potential for improving the quality of life of population. The mill's socially-oriented programs are developed with the active input from the public, state authorities and local self-government.

Feature

Continued (page 1)

Mill (JSC) allocates an impressive amount of funds to support the area's social programs. Its 2021 social spending stands at 439.2 million rubles, including 129.3 million as donation to charities.

"From the perspective of employer-employee relationship, we rely on balance of interests," comments Dmitry Zylev, APPM Director General. "The mill is consistently working to improve its material incentive schemes and support the long-term programs with intensive human capital investment."

One important line of work involves staff training as a measure to enhance efficiency of business processes and increase labor productivity. In 2021, APPM's personnel training expenditures amounted to RUB 22 million.

Considerable attention is being paid to ensure occupational safety. Every year, the mill's "Workplace Environment and Labor Protection Action Plan" is added with new measures. In 2021, the spending on measures to improve workplace environment and labor protection amounted to 213.4 million rubles, which is 3.9 times more than required by the Labor Code of the Russian Federation. Since 2016, the mill has been supporting the families of its younger employees – by acting as a co-financier of "New Housing for Young Families" program.

APPM's current social development portfolio has around twenty programs. The need for their implementation is entrenched not only in relevant collective agreements, but also APPM's voluntary obligations. These programs cover rehabilitation and health-improvement, children's summer holidays, private pension schemes, provision of voluntary health insurance policies, and much more.

Where there is APPM

"Arkhangelsk Pulp and Paper Mill's social and charitable agendas seek to promote development in the territory of its presence," comments Olga Savvina, APPM Administrative Director. "Massive funding is allocated every year to promote mass sports, improve healthcare services, preserve cultural heritage and support



vulnerable groups of population."

Particular support is being provided to Novodvinsk School of Industry – the major source of manpower for the mill. This support is intended for teaching and learning purposes, provision of internships, and increasing the school's material resources.

During the days of the coronavirus pandemic, APPM was providing its assistance to the medical and social services providers in all the territories of its presence. The support under this program continues to be delivered to date.

Sporting and recreational services are provided to the population by BYT (JSC), a subsidiary of Arkhangelsk Pulp and Paper Mill. This socially oriented enterprise incorporates a sports and recreation complex, health improvement facility "Zhemchuzhina Severa" ("Northern Pearl"), community center Palace of Culture, and Uyt Hotel.

No less important are the allocations being made by APPM to maintain the urban environment of Novodvinsk, a sin-

gle-industry town which turns 45 this year. In 2021, the mill contributed to the municipality-run program "Creating Comfortable Urban Environment", revival of the urban meeting place Anastasia, and repairs on the building of the local school and sporting facilities.

The mill does a lot of charity work, supporting the civil society organizations and social centers based in Novodvinsk and adjacent municipalities in Arkhangelsk Province. Recipients of its charitable assistance include sports clubs, schools, environmental organizations, cultural and outreach projects, and the Russian Orthodox Church.

Together with its core shareholder and investor, Pulp Mill Holding Group, Arkhangelsk Pulp and Paper Mill will continue implementing its social programs. This is that type of investment in the future, which does not pay off immediately but always in full.

Pavel FASONOV
Photo by Sergey SYURIN

Achievements

Eight-Million Milestone

Cardboard Machine 2 has achieved its eight-millionth ton. The record of its output has been maintained since December 1970 when Cardboard Machine 2 was started.

Investment project bears fruit

According to Tatiana Lipatova, Head of Production Planning and Sales Unit under APPM Director for Economy, the previous milestone – 7.5 million tons – was passed on July 6, 2020.

As a reminder, Cardboard Machine 2 underwent a complete overhaul in the second stage of "Reconstruction of Cardboard Production" – the investment project listed by the Russian Ministry of Industry and Commerce among high-priority projects in the field of domestic harvesting. Its renovation lasted three years and was completed in late spring 2019. Installed with the technologies by Valmet, Cardboard Machine 2 has enabled a real breakthrough in the mill's performance. Not only did its renovation strengthen the

mill's position on the product markets, it secured the future for both the mill and the economy of Novodvinsk and entire Arkhangelsk Province.

Big project – superb result

As a result of reconstruction efforts, Cardboard Machine 2 received new mesh, press sections, approach flows for two layers and core, conveyor and packaging line, slitter rewinder, calender, and reel-up. Renovation covered also its drying section and heat recovery system. The machine is currently producing fluting paper and linerboard. Its annual output of cardboard has increased to 100,000 t and its annual containerboard output stands at 600,000 t. Our mill has achieved a cardinal increase in quality and is now better prepared to meet its operational product planning needs.

The modernization of Cardboard Machine 2 has had an invigorating effect also in terms of the efficiency targets for the vertically integrated production and mar-

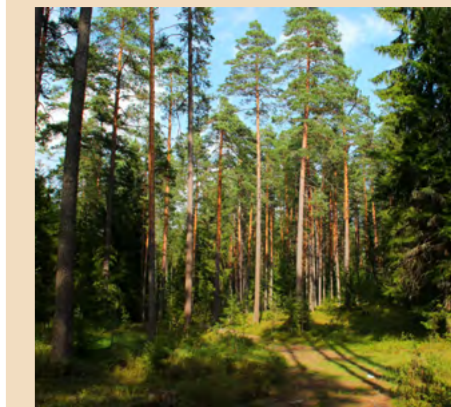
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Cardboard Machine 2 has passed eight-millionth ton milestone since its launch in 1970

keting of corrugated packaging, as established by Pulp Mill Holding Group – Arkhangelsk Pulp and Paper Mill's sole shareholder and investor.

Pavel FASONOV
Photo: editorial board archives



News



FOREST AND STRATEGY

Prime Minister Mikhail Mishustin endorsed the action plan for the Russian Timber Complex Development Strategy 2030. The action plan lists more than 50 activities.

As commented earlier by Russian Deputy Prime Minister, Victoria Abramchenko, the proposed measures will allow the timber sector to increase its economic viability and implement the conservation and reforestation plans, while leading to tighter forest protection on the part of the state.

The plan particularly provides for the elaboration of proposals to reduce the customs duties on imports such as forestry equipment and consumables, and of industry-specific input-output tables that would show production volumes, capacity utilization and proposals for supporting measures. Underway, with deadline in July 2022, is the list of the supporting measures targeting those of the forestry companies that are pursuing greenhouse gas emissions reduction plans.

MEETING BUSINESSES HALFWAY

Until the end of 2022, the procedure for reviewing timber companies' harvesting plans will have shorter timeframe.

Relevant document is in place, intended to relieve organizations' and entrepreneurs' administrative burden – by cutting down the timeframes and financial expenditures relating to licensing and permit issuance procedures.

"Instead of the established 30 days, the procedure for reviewing timber companies' harvesting strategies will be reduced to 15 days; plans concerning recreational use of forests, construction of infrastructure facilities and geological surveying will be reviewed within 10 days. The document has entered into force and is intended as a measure of support for businesses in the current economic situation," said the head of Federal Forestry Agency, Ivan Sovetnikov.

PLAN OVERFULFILLED

In 2021, for the first time in many years, Russia's reforested area has exceeded that of cut-down and lost forests – the ratio of 109% indicates that the reforestation plan has been overfulfilled.

This news was first announced at a roundtable, held in March, on ways towards increased effectiveness of Russia's reforestation efforts. The event focused on preparations for the forestry planting season 2022, increasing forest nurseries' capacity for ball-rooted seedlings, and progress with federal project "Forest Conservation", a sub-project within the national Ecology project.

Source: TASS, Federal Forestry Agency Press Service

Interview

Dmitry Zylev: The mill is operating sustainably



In the end of winter 2022, the domestic economy suffered a series of unprecedented transformations caused by sanctions. Affected are also the global timber trade flows. In this situation, Arkhangelsk Pulp and Paper Mill, JSC is doing its best to expand its product line, find new business partners and improve logistics processes. We talked to APPM Director General, Dmitry Zylev, to find out more.

The targets are being achieved

“Despite the pressure of the Western sanctions, the mill continues to operate according to plan,” commented Dmitry Zylev. “We manage to meet our output targets, shipping products to our customers, fulfilling our contractual obligations and paying wages without delays. Fuel and feedstock supply goes uninterrupted, and there has been some progress in dealing with the issue of bleaching agents supply and searching for new markets. There is no downsizing plan in motion, even though some employers in Russia are already communicating layoffs to their employees because of economic hardship. Analysts forecast that the employers’ job cut plans will affect about 50,000 Russians.

New solutions

Like other Russian pulp and paper mills, Arkhangelsk Pulp and Paper Mill has been suffering the shortage of bleaching reagents – hydrogen peroxide, sodium chlorate and sulfur dioxide – since the onset of sanctions. These chemicals are indispensable ingredients of the pulp bleaching technology. Some of the companies in Europe have stopped supplying them to the Russian Federation.

This has forced APPM to search for alternative markets and bleaching agent manufacturers, and we have succeeded in finding some.

Also, we have teamed up with experts at M.V. Lomonosov Northern (Arctic) Federal University for extra schemes of preparing chlorine dioxide to avoid the use of sulfur dioxide.

According to the results of the environmental monitoring of our production processes, conducted during the schemes testing period, there has been no increase in levels specified in our integrated environmental permit. Now, Arkhangelsk Pulp and Paper Mill will be able to produce chlorine dioxide using several recipes, depending on the availability of the ingredients.

As reported by APPM’s process engineers and the university researchers, the products’ quality performance will remain at the same high level despite the change of chemicals suppliers.

We are considering the option of setting up our own bleaching agents manufacturing plant. If we go for this option, this plant will be serving solely the needs of Arkhangelsk Pulp and Paper Mill. Moreover, we will make sure that it operates in accordance with all environmental standards there are to be met.

Additionally, Arkhangelsk Pulp and Paper Mill has tested its capacity for manufacturing the

unbleached kraft pulps using as feedstocks the deciduous and coniferous wood. The trial batches have already been shipped to our prospective consumers, so these unbleached kraft pulps might soon complement our bleached products.

Paper-Making Machine 6 has been tested for different types and grammages of machine-glazed paper. In the future, this machine will be producing both white and kraft papers, which we see as one of the possibilities for us to be placed more orders.

Advances will continue

In the current situation, Arkhangelsk Pulp and Paper Mill has revised its technical re-equipment program. This means that large investment projects such as Cardboard Machines 3 and 4, new digester lines and auxiliary workshops will have to be put on hold. For the time being, the work focuses on developing design solutions and searching for possible suppliers of equipment. We will try to use this time to our advantage by thoroughly preparing ourselves for action once the opportunity arises to go on with our re-equipment plans.

This year will see the completion of only those projects that have entered their final stage. One such project is the installation of the on-site gas pipeline.

For better cost-efficiency, the mill set up a dedicated procurement task force that has among its members the technical experts of Pulp Mill Holding. Work is in process to achieve a much larger reserve of chemicals, consumables and machine clothing.

Currently under review is offsetting the prepayments received as part of the technical re-equipment programs of all the member companies. The mill is monitoring its accounts receivable and solvency of its customers.

APPM continues to carry out major repairs on process equipment and power supply facilities. The tasks of industrial and economic development are high on its agenda even in this difficult situation.

Our procurement and logistics team are busy searching for suppliers in China, Turkey, India and other countries. We are working to increase product shipments to the countries in Asia, Latin America and Africa. It should be noted that the Asian destination, and especially the People’s Republic of China, look very promising in terms of sales.

The mill boasts a vast experience of partnership relations with overseas countries. As the sanctions pressure mounts, the work to find new marketing opportunities keeps picking up speed.

Strategy and priorities

Under the present challenging conditions, APPM works closely with the federal and regional authorities. We are being provided with

some significant support. The state is doing everything possible to support us in the face of the many challenges before us. A number of regulatory legal acts are being finalized by federal authorities, that contain a set of measures to support the timber industries.

Thus, according to RF Government Decree No.393, credit organizations will be subsidized for their loss of income in respect of loans issued to ‘systemically important industries’. Classified as such is also APPM. This also means that APPM will be eligible for the government support when lending funds to pay wages to its staff and make other mandatory payments.

The country is having a tough time, indeed, and the challenges before the national economy are simply unprecedented. But with the support from the authorities Arkhangelsk Pulp and Paper Mill continues to operate according to plan, which allows it to stay in line with all the clauses of the collective agreement currently in force and to fulfill the scope of social obligations.

We are not giving up on our goals and we will keep our sustainability principles unchanged. They are an integral part of our strategy. Environmental protection has been and will be our priority in today’s conditions. Arkhangelsk Pulp and Paper Mill will continue to implement its environmental protection measures. Similarly, environmental outreach and career guidance will continue to take place in schools.

As a local economic mainstay, APPM plays a crucial role in the fate of Novodvinsk and the performance of the member companies of Pulp Mill Holding and Titan Group. Contingent on its progress is the economic well-being of the land of Pomors and even entire country. The main thing for us now is to keep achieving our performance goals in an efficient and professional manner.



Environment

APPM’s Forest Initiative



Progressing while preserving

Fully aware of its responsibility before nature and future generations, by designating this year as its Year of Forests, Arkhangelsk Pulp and Paper Mill seeks to draw attention to the urgency of efforts to preserve and multiply forest resources, promote sustainability in forest management, and broaden the environmental outreach among children and adults. This corporate initiative involves a number of actions aiming to improve awareness of the importance of forests for humans and the planet, of their low footprint as a raw material and final product, and of the need to cultivate responsible attitude to natural resources.

“Never before has Arkhangelsk Pulp and Paper Mill started an environmental campaign as significant as this,” said Dmitry Khrapach, APPM Operations Director and Senior Assistant to Director General, at the opening event. “Being one of the main forest consumers in the area, the mill pays due attention to reforestation, respecting and cultivating respect for nature.”

Invited to make proposals for the Year of Forests action plan were all employees, as well as Novodvinsk’s young nature enthusiasts. It is proposed to hold creative contests, educational projects, neighborhood clean-ups, tree planting actions, joint trips for wild-growing food resources, and more.

“One promising project that we expect to give our economic efficiency a good boost involves collecting and implement-

ing suggestions from the staff as to ways to enhance conservation efforts and lower raw wood consumption,” said Maria Nesterova, events moderator, head of APPM Division for Sustainable Development, deputy head of APPM Organizational Development. It should be noted that the initiative aims to achieve a more global task – to incorporate the forest management issues into Arkhangelsk Pulp and Paper Mill’s sustainable development strategy.

Encouraging the younger generations

The starting day of the Year of Forests initiative was marked by a tour of APPM’s premises, organized for students of forestry science class. Talks revolved around sustainable use of natural resources and preservation of forests. The first stop along the way was Park of Friendship near the lumber yard. Its coniferous trees originate from the industrial forestries of Titan Group and were to here brought by their managers. The next destination was Wood Treatment Plant 4. Installed with best available technologies, this facili-



On March 21, on the International Day of Forests, Arkhangelsk Pulp and Paper Mill proclaimed 2022 to be its corporate Year of Forests. With an extensive activities plan, this initiative is designed to attract people’s attention to ecosystems restoration and preservation of the planet’s green wealth.

ty distributes the wood between processing lines depending on its properties. This helps to minimize raw material losses. The bark goes to multi-fuel boilers that generate heat for industrial and community needs.

“It’s my first time at APPM, and it was really interesting to see the technologies at Wood Treatment Plant 4,” said Milana Popova, student of forestry science class. “I try to take care of the nature. I never drop litter. I sort my waste. My dad and I periodically clean up the territory around the building of Novodvinsk College of Industry where he works.” APPM has been supporting the forestry science classes at School No.1 for quite some years. In order to encourage future generations to pursue careers in forestry sector, APPM has a team of curators to hold thematic lessons and tours for high school students, involving in this work M.V. Lomonosov Northern Arctic Federal University.

Along with APPM staff and young nature enthusiasts, invited to take part in the Year of Forests activities are also veterans, people with special needs and enthusiastic residents of Novodvinsk. There will be thematic quizzes and photo contests. School students are offered to do thematic research or contribute the works to “Forests are the Lungs of Our Planet” drawing contest, while veterans are welcome to offer recipes for dishes from wild-growing food. There will be a dedicated environmental conference with a roundtable on forestry issues, scheduled to take place in June.

“This is a well thought-out action plan,” said Andrey Lyubovtsov, Head of Forestry Department at the Ministry of Natural Resources and Timber Industry of Arkhangelsk Region. “Our department places high demands on local forest users. It’s very important that the mill lays much focus on the environmental outreach, along with staying in line with its obligations.

Anna SOLOVOYOVA
Olga VORONINA
Photo by Sergey SYURIN

News

POMORLAND’S TREE PLANTING PLEDGES

In 2022, Arkhangelsk Region’s reforestation operations will cover 76.1 thousand hectares. In 2021, the target coverage stood at 87 thousand hectares and achievement rate at 103.1 percent.

“The preparations for the planting season go according to plan. There’s no reason for fear of underperformance,” said Igor Muraev, Minister of Natural Resources and Timber Industry in Arkhangelsk Region. “Our stock of seeds is sufficient for the next three years. We have 300 kilograms of forestry seeds harvested in 2021 and about 800 kilograms as reserve stock, which fully meets the area’s reforestation needs.”

According to Igor Muraev, the demand for high-quality planting material will only be increasing every year. Last year, Arkhangelsk Region produced 20 million seedlings, including 12.9 million ball-rooted ones.

“We are working to include the industry’s plans to construct and modernize their nurseries in the federal project “Forest Conservation”. Also, there should be a mechanism for reimbursing forest users partially for their direct expenditures for seedling nursery construction. Relevant proposals are already in place, awaiting to be reviewed by the government,” noted the minister.



FOR PERSONAL USE

Federal Forestry Agency (RosLeskhoz) explained the procedure for purchasing wood for personal use. Individuals wishing to purchase a volume under 10 m³ are not required to have the sale transaction declared or accompanied by electronic cover sheet.

The electronic cover sheet (ECS) has been developed in pursuance of the order of the Russian President instructing to ensure traceability of wood from the point of harvesting to the point of processing or export. Its data fields include owner, shipper, consignee, volume of wood, species, CTL technology, among other details.

According to the current legislation, from January 1, 2022 all sales of harvested wood must be effected by state institutions via lumber exchange.

The procedure for citizens to purchase wood for personal needs, including fuel wood, involves entering into sale and purchase agreements with state institutions engaged in timber harvesting.

If the volume to be purchased is over 10 m³, its transportation will require filling out – by seller, not buyer – of the electronic cover sheet in LesEGAIS (Unified State Information System for Forestry Accounting and Timber Tracking). Individuals buying wood for personal use will be furnished with a paper copy of the ECS or its reference details in LesEGAIS. ECS has a validity period of seven days following the date of the transaction.

Source: Ministry of Natural Resources and Timber Industry of Arkhangelsk Region

Hot topic

Anastasia Sizenova: Effective forest management implies access to complete and accurate data

In this interview, Anastasia Sizenova, Deputy Director at RosLesinforg, talks about the current issues on her agency's agenda, the solutions to forest inventory challenges, and the changes to domestic forest legislation.



To the beat of digitalization

Anastasia Sergeevna, the Russian government has been instructed by President Vladimir Putin to conduct forest inventory and to have the data on their boundaries included in the Unified State Register of Real Estate. How far is RosLesinforg with this work and what are the preliminary results?

The inventory instruction was addressed to the regional authorities, but RosLesinforg will, of course, not stay uninvolved. Earlier this year, the Russian government issued a decree establishing RosLesinforg's sole authority for drawing up the documents

required for cadastral registration of the existing and newly regenerated forests for leasing out to private sector. Cadastrally registered, and included in the Unified State Register of Real Estate, are currently more than 300 million hectares, which represents almost a third of the forested land.

The work follows the general procedures established for land inventory, and with due account of the features specific to forested lands. First, the forest inventory specialists check the boundaries of newly regenerated forests, using previous inventory data and statutorily prescribed documents. Then, each plot is covered with design documentation and other documents as may be provided for by law. Forest boundaries are established in this process without the actual demarcation on site. For the time being, no forest plot can be leased out without prior cadastral registration. Putting order will certainly increase the profitability of forest sector as it will become possible to start exploiting also the forests that are currently out of use but fall within the area of intensive forest management.

How far along is the progress regarding LesEGAIS and its implementation across the country? How long do you think it may take to make the domestic forestry a fully digitalized sector?

This upgrade of LesEGAIS (Unified State Information System for Forestry Accounting and Timber Tracking) is not our experience in modernizing an existing or creating a new large federal system. We haven't detected any acts of sabotage by shadow market since the launch

of LesEGAIS.

The system has created about 1.3 million new-format electronic cover sheets (ECS), of which 600,000 were filled out using LesEGAIS mobile application. With LesEGAIS, the export of unprocessed wood "disguised" as rough-sawn timber will decrease. The volume of unprocessed wood exports – intended mostly

for the manufacture of high-tech products – amounts to 6 million cubic meters. Since January 1, there have been no export-bound shipments of untreated softwood and valuable hardwoods (oak, beech, ash) – either raw or as sawn lumber.

Digitalization has as its ultimate target federal state forestry information system (FSFIS), designed to function as an electronic forestry register – the country's major array of forestry data. But, the task of creating a system as large and this, and with high quality standards, can't be tackled in a short time. As stated in FSFIS concept document, the development process will be three-stage and is scheduled to complete in the end of 2024.

Digitalization will benefit both the state and the business sector. We are staying in touch with businesses at all times to promptly respond to queries and changes.

Comprehensive solutions

Which of the changes introduced to the Forest Code in 2021 were the most important?

The first change towards improved forest policy relates to the adoption of the federal law on digital transformation. This means that the upcoming federal state forestry information system will be fully electronic, with rules and principles binding on all the Russian regions. Once in operation, this system will finally enable all forestry data to be cohesively integrated in one big pool. This will expose loopholes and gray schemes, stop forestry-related crimes, and streamline the work of public authorities and responsible companies.

Another recently adopted federal law concerns forest management. Since forests are state-owned, the responsibility for their inventory should lie with the state, and the inventory itself must be carried out by certified specialists and in accordance with uniform methodology. Unlike earlier times, when forest inventory tenders could be competed for, and won, by businesses that had nothing to do with forestry (for example, bread factory) and did tree count the way they saw fit, the state will now be governed by up-to-date, accurate data on intensively managed forests. By establishing one common standard that requires forest inventory operations be performed as single package, not as separate series, we can expect a positive effect on their cost.

One more important achievement is the change in the reforestation rules. With the previous rule – "replant where you have cut" – it became challenging for forest businesses to have their cut plots reforested within the statutory timeline of one year because they didn't have capacity. Now, reforestation can be done in areas other than where they cut – subject to an agreement with the Federal Forestry Agency. What is more, it is now a requirement that businesses' reforestation efforts include not only planting, but also the improvement cutting during the period of three years.

The current year started with significant changes for the industry. What improvements do you expect them to bring?

True. The start of the year saw the adoption of a number of important decisions. The first of them, effected in January, concerns changes to state forest inventory methodology. For-

est monitoring will now cover also the abandoned agricultural lands. The forests on such lands do not have a legal status, but once they are inventoried, we'll have more data to include in climate registers. These forests will start to be monitored and protected from natural and anthropogenic impacts.

One more important change is the adoption of federal forest management plan. Its contents comprise four sections corresponding to the four types of forestry inventory works – design of forestry area; identification of forest types (exploitable forests, shelter forests, reserved forests) and areas to be protected; forest inventory (i.e. assessment of volume and quality); and planning the types and scope of protection and reforestation measures. The area to be covered by forest inventory operations totals 202 million hectares, or 478 forestry areas in 67 regions of the country. The works are starting this spring. Our goal is to provide us, over the course of 10 years, with complete and accurate data on nearly 300 million hectares of intensively managed forests and exploitable forested lands.

As to Arkhangelsk Region, the first stage of the plan covers 17 forest areas with a total area of about 19 million hectares. This represents almost 70% of Arkhangelsk's total forest area.

In the context of the big changes we are witnessing, the state is focused on putting such a valuable resource as forest on a par with oil and gas, so that forests could be exploited in the most efficient way, based on complete and reliable information. Many decisions concern ways to combat forestry-related crimes and create favorable conditions for investors in the timber industry.

FSFIS has as one of its components the National Forestry Register. When will it become fully operational and how will it benefit the forestry sector?

FSFIS is Russian forests' digital twin. With up-to-date information about every single forest stand and its condition, it will serve as a multi-register and will be maintained by regions in accordance with unified rules. While designed to be a single information space for public relations in forestry, FSFIS does not rule out the use by regional authorities of their own information systems, provided that these are integrated with FSFIS, as is prescribed by the Forest Code. Users will have personal offices to create documents for further filing with the public bodies and to check their status.

The Forest Code provides for a significant expansion in the range of data to be submitted to the National Forestry Register. The register will contain consistent details of the forests, their location and reserves. Users will have access to a much greater number of types and forms of record extracts from the National Forestry Register. Once fully implemented, FSFIS will increase the accuracy of data on forest resources and transparency of harvesting volumes and timber transactions. For authorities, businesses and individuals, the system will be a convenient tool for providing and accessing public services.

Thank you for the interview!

Prepared by Yulia LEONOVA
Photo courtesy of RosLesinforg

Region

Serving the Forestry Needs



Under control

Andrey Nikolaevich, what are the key responsibilities of RosLesinforg Office in Arkhangelsk?

Parallel to the increasing scope of statutory duties, our team continue to fulfill the orders from our customers. These include forest inventory, forestry operations planning, land marking and boundary survey. We also perform forest health monitoring, topographic and geodetic surveying, and IT-related services in forestry.

How would you assess the trial performance of LesEGAIS (Unified State Information System for Forestry Accounting and Timber Tracking) here in Arkhangelsk? What are the main challenges?

By promoting digitalization in forest management, we are trying to reduce the human factor and corruption-related offences across sector-specific processes. Otherwise, illegal harvesting, illegal production, misappropriations across supply chains, loss of budget revenues will continue to take place in one way or another. While someone's coining money by exploiting forests that do not belong to them, the state stays unaware and the planet is losing forests. Therefore, the government is taking clear and transparent steps to ensure that the timber industry follows transparent procedures and that state surveillance covers all processes within timber operations.

The electronic document has data fields that are identical to those on the paper document, the latter having been in use for so many years and mandatory for every timber transporter. Besides, electronic entries are easily traceable. Their digital footprint allows for monitoring all subsequent stages of transaction, and it's natural that the system isn't welcome among some of the forest users. Some did have a problem filling in their shipping documents this year. This means one thing for us: Shadow market has existed for years and its players were able to continue to ignore mandatory papers because there was no system to verify their information.

Complaints about errors or malfunctions come mostly from those who didn't bother complying with the statutory requirement of filling out the paper shipping documents. Conscientious businesses don't seem to have trouble using LesEGAIS. We can safely say that responsible forest users are being recognized by the system as responsible and will not have their harvesting or shipping operations blocked.

Without loss of reserves

Can you give examples of where you cooperate with Titan Group and Arkhangelsk Pulp and Paper Mill?

From 2017 to 2020, the team of RosLesinforg Office in Arkhangelsk was doing the inventory of more than one million hectares of forested lands in operation of Titan Group and Arkhangelsk Pulp and Paper Mill. The surveying involved the use of remotely sensed data and high-resolution aerial imagery, which made it possible to achieve high-accuracy quantitative and qualitative analysis.

Much attention was being paid to middle-aged stands. Having determined the size of the reserves of coniferous and broad-leaved species, we were able to give objectively verified figures for the thinning operations to be performed as part of the intensive forest management plan in Dvina-Vycheгда Taiga Area, as well as identify extra raw materials. As a result, it became possible to expand the estimated cutting area within the forest blocks by 43%. Our current work is concentrated in Kholmogory District, Arkhangelsk Region and covers more than half a million hectares.

What do you think are the main trends in the development of Arkhangelsk Region's timber sector?

Until 2014, Arkhangelsk Region's harvesting efforts traditionally targeted the indigenous coniferous forests, while secondary forests traditionally remained underused. The majority of the middle-aged deciduous forests continue to be used only 5% to 10%, but they, too, have rather impressive reserves, the average volume being 270 cubic meters per hectare. Provided that intensive forest management is coupled with improvement cutting, the Dvina-Vycheгда Taiga Area and the North Taiga can additionally give us 7 to 10 million cubic meters of middle-aged wood. Most importantly, by doing the improvement cutting we will be able to maintain the target species composition and increase the share of coniferous species. This will guarantee the coniferous stands remaining highly productive within the next 20-30 years without any loss of reserves.

In Arkhangelsk Region, medium-aged forests take up over 4.9 million hectares, of which 2.7 million are broad-leaved forests. Beginning from this spring until 2024, Arkhangelsk Region's forests will be covered by extensive surveying works. To provide an objective assessment of the wood reserves, our team will be using high-precision data. Once we have the figures, we will be able to calculate the amount of mature and over-mature stands and the required scope of thinning. To give one example, based on the results of the inventory conducted in the forests being exploited by Titan Group in Ustyansky District, the cutting area was increased by more than 60% (from 314.9 thousand m³ to 512.0 thousand m³). A total of six forestry districts have been surveyed by now. The increase in estimated cutting area from 6.6 million m³ to 9.2 million m³ speaks to our inventory works having been effective in this region.

About local potential

How intensive is your 2022 plan for demarcating forests in Arkhangelsk Region?

This year RosLesinforg is involved in demarcating forest boundaries in ten districts of Arkhangelsk Region. In this line of work, we are governed by the data available in the national forest register. We expect our 2015-2022 plan to result in boundaries being established for all the forest areas in Arkhangelsk Region and presented on the cadastral map, which is going to be placed in public domain.

This line of operations also exposes cases of illegal exploitation of forests. These case are reported to the Ministry of Natural Resources and Timber Industry of Arkhangelsk Region and to the Federal Forestry Agency for initiating court proceedings for the legitimate interests and rights to forested lands.

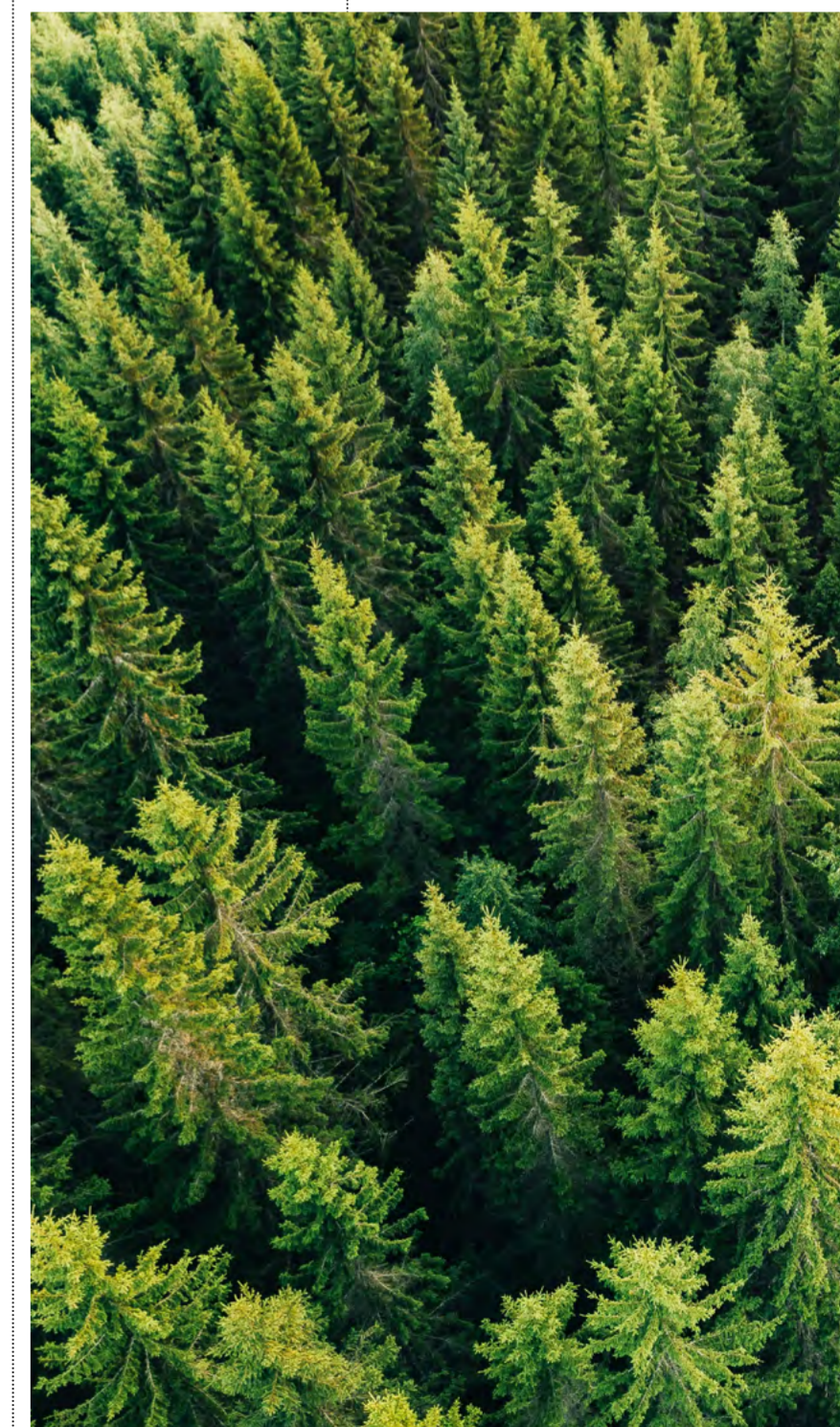
Federal State-Financed Establishment "RosLesinforg" has a mandate of federal level. Forest management, state forest inventory, demarcation of forests are the core responsibilities of RosLesinforg Office in Arkhangelsk. We talked to its manager Andrey Tretyakov.

Arkhangelsk ranks among the top three regions in terms of forest inventory coverage. How does this influence the potential of its forestry sector?

This is a truly historical achievement, I might say. But updating has so far covered only 15% to 20% of the materials available to us. For this reason, any long-term forest management planning is questionable. By 2025, Arkhangelsk Region's timber sector can expect to have the objective data on the qualitative and quantitative parameters of its forest blocks, which, in turn, will allow to plan and, most importantly, calculate the future expectations using more accurate forest surveying data. For the time being, intensive forest management model works only in four forest districts – and this is thanks to their having been covered by surveying in previous years. In these four districts, forest users have gained an additional 2 million cubic meters of wood thanks to thinning operations. Contributing to the increase in cutting area are hardwoods, birch and aspen. The trend for the resource potential to expand will only with increasing in the next 20-30 years. Logically accessible, hardwoods will guarantee a bigger output of pulp and plywood products.

Prepared by Yulia LEONOVA
Photo courtesy of RosLesinforg

10
RosLesinforg's
2022 demarcation
plan covers 10
forest districts in
Arkhangelsk Region



Pulp Mill Holding Group

The companies comprising the vertically integrated Pulp Mill Holding Group are working in parallel. In this column, we update you on their progress and how they continue to support Arkhangel'sk Pulp and Paper Mill's performance and respond to challenges under economic sanctions.

Demand Stable

Arkhbum (JSC), whose premises are based in Central and Volga Federal Districts of Russia, is fulfilling orders without interruptions. Its output continues to meet the target figures set in business plans, with the demand for corrugated packaging remaining stable. One competitive advantage that gives Arkhbum market power is the availability of its own raw material base – the high-quality container-board it receives from Arkhangel'sk Pulp and Paper Mill.



"The most important thing for us today is to retain our ability to fulfill our obligations to customers and partners, avoid downsizing, and support our employees financial-

5
Corrugated packaging is being manufactured by Arkhbum (JSC) at 5 production sites

ly," said Irina Sherstneva, Director General at Arkhbum (JSC). "Our current capacity enables an output of more than one billion square meters per year, allowing Arkhbum to retain its status as Russia's largest manufacturer of corrugated products not only in terms of capacity, but also finished-product output. We are a subsidiary of Arkhangel'sk Pulp and Paper Mill (JSC) (sole shareholder – Pulp Mill Holding). Our core product is corrugated packaging, and our production premises are based in Podolsk, Voronezh, Ulyanovsk, Istra-1 and Istra-2. All of them receive their feedstock from Arkhangel'sk Pulp and Paper Mill, which, given the current sanctions and the pressure on the domestic economy, ensures guaranteed sales of our cardboard products."

For the record

In the period between January and December 2021, Arkhbum member companies achieved a 16.1% increase in their corrugated products output, as compared to last year, which currently stands at 592.4 million m². Shipments increased by 16.3%, to 590.2 million square meters, and revenues by 73.2%, to RUB 19 billion.

The increase in performance was enabled by the company's internal efficiency strategy, adopted earlier in 2021.



2
The premises of Arkhbum (JSC) are based in 2 federal districts – Central Russia and Volga Region



Efficiently and According to Plan

Arkhbum Tissue Group LLC (based in Vorsino Industrial Park, Kaluga Region) operates according to plan. The company manufactures personal care and hygiene products, shipping them to retail chains in planned quantities.

Fully committed

Arkhbum Tissue Group stays fully committed to its partners. Jobs, steady paycheck and full social package are retained for employees. Its current capacity stands at 96 million standard reels per month.

According to Arkhbum Tissue Group director, Irina Galakhova, the company is making every effort to provide the country with steady supply of some of the most essential mass consumption products. It owes its sustainable performance to the consistent supply by Arkhangel'sk Pulp and Paper Mill of feedstock – solid wood-free raw materials for high-quality sanitary products.

At the same time, like many pulp and paper industries in Russia, Arkhbum Tissue Group is currently experiencing difficulties with the supply of chemicals. Its management believes it is essential that the measures of

the state support for forestry-related enterprises should have as their high-priority focus programs to develop Russian counterparts of chemicals that are traditionally used in timber industry. Furthermore, given the current situation on the market, the domestic import substitution policy should cover all key lines of operation so as to reduce dependence on other countries and promote domestic technologies.

Under its own brand

A daughter of Arkhangel'sk Pulp and Paper Mill, Arkhbum Tissue Group LLC has as its core business the production of basic paper and sanitary products under its own brand name, Soffione. In 2021, after the company had reached full capacity for basic tissue, its sales revenues increased by 37%, compared to the previous year. The technologies in use include Futura 3 converting line and Omet tissue technology. Their installation has led to a positive increase in sanitary products output. The trend has been positive, beginning from last year, also for paper towels for home use.

Arkhbum Tissue Group LLC is looking to update its product line in response to customer demand. One novelty – Soffione Two-Layer Dolce Gusto Fresh Pastry Flavored Paper Towels – came out on the Russian market recently, two pieces per pack. The idea for it remained fundamentally unchanged, with key

values being hygiene, convenience, versatility and comfort.

Staying innovative is one of Arkhbum Tissue Group's key strategic priorities that its business models build on. The company stays watchful of the market trends, consumer choices and benefits of new technologies.

Own source



Titan Group

Sustainably Operating Group

Despite the restrictions that have been imposed on Russian timber imports by the European Union and the revised terms of the delivery from Western companies of the machinery, equipment and components, members of Titan Group continue to operate sustainably.

Arkhangel'sk Region-based companies have not been suspended.

As noted by the managers and board of Titan Group, the current situation is off-pattern, calling for endurance and decisive action. The group will focus its efforts on maintaining operational sustainability, employees' safety and well-being, and staying committed to its partners.

Important

- In November 2021, Titan Group celebrated its 31st birthday.
- Titan's 2021 expenditure for retrofitting and modernization of its members stands at RUB 2.5 billion rubles.

Titan has for many years been partnering Arkhangel'sk Pulp and Paper Mill and Sawmill 25 as general suppliers of raw timber. Under the current economic sanctions, the group did not resort to downsizing. Its members keep paying wages and providing social security protection and benefits.

A crisis center has been set up to monitor the situation and provide response. Deliveries and sales are being adjusted in real time mode, while the mill's management stays in constant touch with regional and federal authorities. Cooperation with



Cradle to Gate

Sawmill 25 has, for the first time, estimated the carbon footprint of its core products. As part of the work to elaborate the corporate greenhouse gas emissions management system, this member of Titan Group made a study into the carbon content of sawn lumber, wood pellets and chips on each of its three production sites.

The assessment used the cradle-to-gate approach, which means that greenhouse gas emissions have been calculated for product's entire life cycle – from the moment of resource harvesting to the moment the product enters the finished products yard.

The calculations for the 'cradle' part of the assessment involved Titan LLC – raw material suppliers. The company has provided data on specific fuel and energy con-

sumption per 1 cubic meter of harvested wood and gave details of the transportation modes and distances that are travelled to deliver wood to Sawmill 25.

The findings of the study will allow Sawmill 25 and Titan Group's logging divisions to identify the ways towards further reduction of their carbon footprint and wider adoption of low-carbon technologies.

The adopted product decarbonization strategy has already yielded positive results. According to the latest greenhouse gas emissions inventory, Sawmill 25's 2020 emissions (CO₂-eq.) have decreased by 12.2%, compared to the reference year 2014; thanks to projects aiming to increase the integrated use of wood waste, the unreleased GHG emissions were estimated at 104,000 tons (CO₂-eq.) in the end of 2020.

For the record

Sawmill 25 (JSC) is currently one of the largest sawmills in North-western Russia. A member of Titan Group, in 2021 Sawmill 25 achieved a 1.51% increase in its export shipments, having produced 900,000 cubic meters of sawn timber. The output of chips rose by 2.28%, to 572,000 cubic meters, and that of wood pellets by 1.3%, to 196,000 tons.

The demand for the company's core products remained high throughout the year, bringing its annual turnover to more than EUR 250 million.



Yet Another Nursery

Titan Group announced its plan to construct yet another greenhouse facility. The location chosen for the project – ball-rooted seedlings nursery, intended for the group members' afforestation needs, is Pinega Municipality.

For afforestation purposes

Since 2014, Titan Group operates eleven nurseries, all based in Nyandoma, Arkhangel'sk Region, that provide it with coniferous seedlings. The group's annual afforestation expenditure exceeds 100 million rubles.

Last year, Titan's reforestation efforts covered 21.5 thousand hectares, which is 15% more than originally planned. A total of more than 3 million trees were planted on forested lands.

The group's reforestation strategy pursues artificial reforestation using ball-rooted seedlings. Apart from reforestation activities, Titan members are tending the forests planted in previous

years. In 2021, tending and weeding operations covered 2.6 thousand hectares of coniferous stands; improvement thinning and removal cutting covered 3,000 hectares of young forests.

The group owes its annual increase in the improvement cutting volumes to the switch to intensive forest management. Its members emphasize the importance of thinning as an important part of responsible and efficient forestry. With natural reforestation still a predominant reforestation method, improvement cutting is the only option to enable the formation of the target tree species in their natural environment. The areas reforested with the use of seedlings tend to lose more than half of their young pine and spruce trees, if not tended.

Modern methods

Titan Group is Russia's leader in voluntary forest certification under the FSC label (FSC License Code: FSC-C016977®),

with more than 5 million hectares of forests under sustainable management.

While the certificates that have been issued to Russian and Belarussian forest users are currently suspended by FSC International, since April 8, Titan Group stresses that they draw a thick line between politics and responsible forest management, so they will definitely continue to adhere to the international environmental standards – by practicing sustainable resources management and preserving biological diversity and high conservation value forests. Titan's afforestation efforts will continue to make use of the most advanced techniques.

Titan Group is one of Russia's five largest operators of raw timber. The forests in its operation take up 6 million hectares, located in Arkhangel'sk, Vologda and Komi Republic.

Every year, Titan supplies to Arkhangel'sk Pulp and Paper Mill approximately 4 million cubic meters of raw timber. Within this vertically integrated group of compa-



nies, Arkhangel'sk Pulp and Paper Mill and Titan hold the estimated cutting area of 5.3 million cubic meters.

Column prepared by Anastasia LOMAKINA
Photo courtesy of Titan Group
Own source

Social responsibility

For Better Comfort and Domestic Harmony

A total of 103 families of Arkhangelsk Pulp and Paper Mill employees were able to improve their living conditions over the years of the mill's participation in the program called "New Housing for Young Families". The mill does provide a significant contribution to making its employees' new housing plans a reality. The year 2022 has once again witnessed its employees receive housing certificates.

Day of happiness

Traditionally, the official certificate award ceremony took place in the mill's administrative building. Congratulating the lucky owners of new housing were the CEO of Novodvinsk municipality, Sergey



Dmitry ZYLEV,
Director General at Arkhangelsk Pulp and Paper Mill, JSC:

For quite some time, our company has been supporting the housing program existing for our younger employees. This program is an important part of our social responsibility agenda, and we will go on with it even in today's challenging economic conditions. People – our employees – have been and will be the most important asset in the value system of APPM and its shareholder.

Andreev, and Arkhangelsk Pulp and Paper Mill Director General Dmitry Zylev.

The Chernitsyns are overfilled with joy. For this young family, the housing certificate is a true gift and the way to pay off their long-term mortgage. Elena Chernitsyna has been working at APPM customs office for several years. She applied the "New Housing for Young Families" program the moment she learned about it. Finally, the mortgage on her two-room flat, issued back in 2016, can be repaid.

"We have been waiting for this day for about two years," said Elena. "It's good to know your mortgage can be finally repaid. This has been a true gift for us! Our big thank you to Arkhangelsk Pulp and Paper Mill!" According to the rules of the program, the payment amount depends on the family size. The Chernitsyns are recipients of one of the largest sums paid to young families this year – more than one million rubles. After their marriage, Elena and her husband, Ilya, were living in a rented flat. The plan to buy a property, and have the comfort of their own family home, emerged when they received kids.

As six-year-old Yegor and seven-year-old Ksenia are talking merrily at once about their being lucky to have the biggest room in the flat, their happy mom and dad are thinking of maybe having a third.

"We were all born here in Novodvinsk and we love our small home town," said Elena Chernitsyna. "We aren't planning to leave for another place."

A competitive advantage

Housing certificates are issued within the framework of the federal program with three sources of funding – federal, regional and local budgets. Novodvinsk has been able to contribute to this program for more than six years now thanks to the shareholder of Arkhangelsk Pulp and Paper Mill. APPM employees are given preference and this, according to the CEO of



Novodvinsk municipality, Sergey Andreev, has been a huge help for the municipality in solving the housing problem.

For Arkhangelsk Pulp and Paper Mill, "New Housing for Young Families" is a way to motivate its young specialists. As we were told by Dmitry Zylev, Director General at APPM, by supporting its employees' families the mill gains an additional advantage in competing for the promising employees.

"We are thinking about starting our own housing provision program," said Dmitry Zylev. "This is a highly effort- and time-consuming issue, and also an investment-intensive one. But, no company can work without its people. And given that our technologies require special knowledge from their servicemen and operators, we are highly interested in people who are energetic and highly qualified."

The housing program's waiting list currently has 109 Novodvinsk-based families, of which 103 are the families of the mill's employees. Without the help from its largest employer, Novodvinsk would not have been able to provide its residents with housing. Eligible for the program are young married couples under 35. The application process is via the municipality board. Although large families are a priority, eligible are also families without children. The recipients of housing certificates can use them to pay off their mortgages or buy a flat or house.

"The majority of the young families chose to buy flats," Sergey Andreev, CEO of Novodvinsk municipality, continues. "This means they and their children will stay. They won't leave their home town and the mill."

Be our housewarming guest

Since its start in 2016, this 'housing for young families' program has provided funding to 107 couples. Arkhangelsk Pulp and Paper Mill has contributed to it a total of over 20 million rubles. This year,

107
107 families of APPM employees were able to improve their housing conditions thanks to "New Housing for Young Families" program

with the contribution from APPM, which amounted to more than 1.5 million rubles, the number of the lucky families increased. The Chernitsyns are one of the four families who were issued housing certificates this year. Having been awarded his eagerly anticipated certificate, Sergey Shumeyko, father to an 11-month-old baby boy and turner at APPM, said:

"My wife and I have long wanted to buy a flat in Novodvinsk. A four-room apartment is our biggest dream, and with this certificate we are one step closer to it."

Sergey's wife, Zoya, is doing a pediatric degree at Northern State Medical University and would like to work in Novodvinsk. Having her own flat would help her settle in this town on the Northern Dvina River. At the housing certificate award ceremony, Dmitry Zylev said jestingly he wouldn't mind being invited to the housewarming party to make sure that the contributions from APPM really work.

Last year, Dmitry Zylev received the invitation from Andrey and Natalia Fedotovs, parents to three daughters. The certificate helped them to pay off the mortgage on their three-room flat. It may well become a good tradition for APPM to visit their employee's housewarming parties. It's always nice to have guests to share your joy over tea!

Anna SOLOVYOVA
Photo by Sergey SYURIN



stry science classes. Polina Manakova would like to build career in forestry sector and is planning to enroll in NarFU like her classmates. This course can be a useful tool for her in choosing the right academic track and a help in writing a solid project idea. Project defense is this course ends with.

Anna SOLOVYOVA
Photo courtesy of editorial archives

In-depth study of exact sciences, challenging academic tasks, tours of the mill's workshops are designed to give more insight into the subtleties of the profession.

"Since the laboratories of the Northern (Arctic) Federal University have capacity for not more than twelve students, we decided that the Chemistry of Paper course would be first delivered to grade 11A," says Yulia Tarasova, curator of forestry science classes and head of Personnel Selection and Training Unit at Arkhangelsk Pulp and Paper Mill, JSC. "It is now tenth graders' turn."

The paper chemistry classes take place once a week. More than 90% of them are held in the laboratories of NarFU. There is a bus transfer, provided by the mill. By maintaining partnership relations with the university, the APPM contributes to making students better candidates for forestry jobs. It may well be that some of them will build careers as managers of the country's forest industry sector.

History

Heroism Immeasurable, Contribution to Victory Immense

The Day of Victory in the Great Patriotic War is the most treasured day for all of us. When that deadly war broke out, Arkhangelsk Pulp and Paper Mill was still in its infancy. With less than a year in operation, it continued to fine-tune its machines, many of which saw their commissioning during the war. Nevertheless, the mill had managed to make a huge contribution to the victory over fascists.

For the war effort

In 1942–1943, the mill and its staff had been active in providing assistance to the fielded Red Army – by raising funds for the National Defense Fund and shipping warm clothes to the soldiers. A significant portion of the money raised went to the formation of the aviation squadrons "Komsomol of Arkhangelsk" and "Workers of Arkhangelsk Region", tank column "Arkhangelsk Collective Farmer" and motor convoy "Northern Polar Explorer".

Many of the factories built in the era of the 1930s were designed in such a way so as to reorient some of their facilities to the production of defense products. Classified as having military value were all plants and factories whose process technologies involved metals and chemicals. Among such plants was Arkhangelsk Pulp and Paper Mill.

As early as July 1941, some of APPM's workshops started to be repurposed for the production of defense products. Its core asset tailored to the defense needs was the pressing shop, commissioned in November 1942. Its product – nitrocellulose, known as 'VCA cellulose' – was an ingredient of powder mass. The earlier technologies for making gun powder used the costlier cotton pulp.

By launching a series of mills like APPM, the country had succeeded in equipping its defense sector with cheap and easy-to-make powder mass. This workshop was the mill's most security-sensitive facility.

It is entirely possible that the grenades that were triumphantly exploding in the Battle of Kursk and during the fall of Berlin, contained the nitrocellulose, or pushonka as it was affectionately called, produced by Arkhbum mill.

From paper to felt cloaks

The metal working shops were now

used to make igniter sets and bodies for Mills bombs and grenades of 1914–1930 and 1933. Their production was deployed in pursuance of Regional RCP(b) Committee Decree "Concerning the production of grenades at Arkhbumstroy" dd. November 25, 1941.

Another essential product was the paper type called PIK. With increased density and high tensile strength, PIK paper was used in the production of chemical protective capes. During the early years of war, those capes were part of soldier's kit and would be carried together with gas masks.

To speed up the production of PIK paper, modifications were made to the wire frame and vacuum facilities. However, since the use of chemical weapons was rare during the Great Patriotic War, the mentioning of PIK paper is found nowhere in the mill's archived documents of 1945.

The May of 1942 saw the commissioning at APPM of an alcohol plant. Structurally a separate enterprise, it was managed and administered by the USSR People's Commissariat for Food Industry. That plant converted waste liquors into alcohol. Its products had civilian and military applications. Some of its equipment had earlier been used in Leningrad province.

Additionally, the mill started the manufacture of skis, sapper shovels and end pieces for tent frames. The waste cloth from its paper-making machine was used as a material for felt cloaks. The mechanical repair shops were converted to make steel helmets (for wear by firefighters and military personnel).

One more product that the mill had mastered the production of was colored paper. Its possible applications include leaflets and security identification cards, the latter known to have been used extensively by restricted access facilities and military units.

However, the important thing is this. The nation owed its victory in the Great Patriotic War no only to its military and industrial power, but in the first place to its people and their morale. It was thanks to their faith in their own strength, bravery, self-sacrifice, and high sense of responsibility before the world, that the USSR and the mill were able to stand and win.

Pavel FASONOV
Photo courtesy of editorial archives



For the record

1941
In 1941 Arkhbum Mill was producing grenades to aid war effort

During the first days of the war, APPM and its community saw off to the army 160 of their members. 425 more enlisted in the people's volunteer corps before the end of June 1941. Enlistment requests were being filed endlessly with Isakogorka Recruitment Office and the local military registration office by the volunteers for the Red Army – a total of about 200 workers, clerks and underage men.

There is a memorial in Novodvinsk commemorating the countrymen who died in the Great Patriotic War. The idea to install it was first voiced in 'The Bumazhnik' newspaper. A stele with valiant Red Army soldier sculpture and two banners on its sides, the memorial was laid on May 9, 1970 and unveiled on August 28, 1971. Lying at its foot is a shell case with the earth taken from the Brest Fortress and Stalingrad. The Eternal Flame was lit at the memorial in 1985. The 'star part' of the memorial was molded in APPM's repair and mechanical shops.

Engraved on the memorial are the names of 404 members of Arkhbum community. This number became known thanks to the archival research and analysis of records of the local enlistment offices.



1943
In 1943 APPM commissioned its pressing shop that started to produce gun cotton



Education

Useful Collaboration

M.V. Lomonosov Northern (Arctic) Federal University's Hall of Science Collaboration has started Chemistry of Paper training program.

Intended for the forestry science classes of Novodvinsk School No.1, the course will introduce its students to the fundamentals of paper and cardboard production. Instruction, which will take place in the university laboratories, will be delivered by faculty and students of NarFU Department of Pulp and Paper Production

and Wood-Based Chemicals. The course is organized with the support from Arkhangelsk Pulp and Paper Mill.

"The cut surfaces of trees look beautiful under the microscope. They are like volumetric grids," tenth grader Polina Manakova shares her impressions of the trip to the House of Science Collaboration (HSC).

Organized with the support from APPM, the "Chemistry of Paper" course holds a lot of exciting discoveries for for-