



RECYCLING PROJECTS

SIBUR's progress on teaming up with partners to implement recycling and circular economy initiatives.

The textile triumvirate

The last issue of the magazine took a detailed look at SIBUR's collaboration with the Russian clothing brand WOS (<https://magazine.sibur.ru/ru/article/focus/plastic-takes-the-podium/>). As a reminder, it manufactures clothes using fabrics that contain recycled plastic but are just as good in quality as traditional materials. This is Russia's first successful example of the circular economy in action in the luxury segment. "We worked on the collection for almost a year, and now we are getting a great response. Shoppers now have a deeper understanding of both conscious consumption and sustainable production. They truly care about the environment and the future of the planet," said Andrey Artyomov, the brand's founder and designer.

The partners decided to donate all proceeds from the sale of the WOS × SIBUR capsule collection to support the charity Second Wind. This organisation recently launched We:Collect, a programme to support social entrepreneurs specialising in textile recycling, whether collection or reuse. Thousands of tonnes of used clothes are thrown out every single day, but fabric takes a long time to decompose – up to 200 years. Even if textiles end up in their own container for separate waste collection, recycling them is a challenging task. Clothes instantly absorb moisture and get dirty, so after sorting they typically are sent to a regular landfill, where they emit methane and pollute the soil and groundwater just like any other waste; clearly this does not solve the problem of minimising landfilling.

That is precisely why it is essential to develop dedicated infrastructure for collecting post-consumer textiles. "Second Wind and its partners currently have 755 containers and collection points across 56 Russian regions, but this is still not good enough. It is crucial for every city out in the Russian regions to have a dedicated organisation, and preferably several. Doing this enables among other things partnerships with major brands, which run their own collection programmes for unwanted clothes. Now the foundation is taking on these processes itself," explained Daria Alekseeva, Founder of Second Wind.



Russia's first successful example of a closed-loop economy in the luxury segment.

At the moment, everything the charity collects is brought to Moscow, where it is sorted and sent for recycling. But just think how much more efficient it would be if this work was done locally, reducing the carbon footprint from transportation and not hoarding regionally sourced recycled materials in Moscow. “We have therefore set ourselves the task of building capacity at local organisations that collect unwanted clothes on the ground, in order to help promote textile recycling more globally. It is also a matter of trust – people have more confidence in local projects,” added Daria Alekseeva.

Interestingly, the first proceeds of the capsule collection (RUB 368 thousand) were donated to Second Wind on 15 November: World Recycling Day. SIBUR and WOS expect to make the next donation by the end of the year.

As part of We:Collect programme participants from 23 Russian regions will receive 6 months of informational support and consultancy, as well as the opportunity to share experiences with other participants. The total amount of used textiles collected over the year should reach 2,000 tonnes, from which 50,000 different things can be made. Best practices from social entrepreneurs will be rolled out across other Russian regions.

A journey of a thousand miles begins with a single step

SIBUR’s partnership with the international hotel chain AZIMUT stands as another example of successful synergy in the separate collection and recycling of plastic. In 2020, we jointly launched Plastic – Resource Not Waste, an initiative promoting the recycling of hotel accessories to cut down on waste. All hotel guests were able to support the environmental initiative – all they had to do was not throw away the packaging from used hygiene and cosmetic kits, but instead leave them by the sink. Hotel staff collect them separately while cleaning the room.

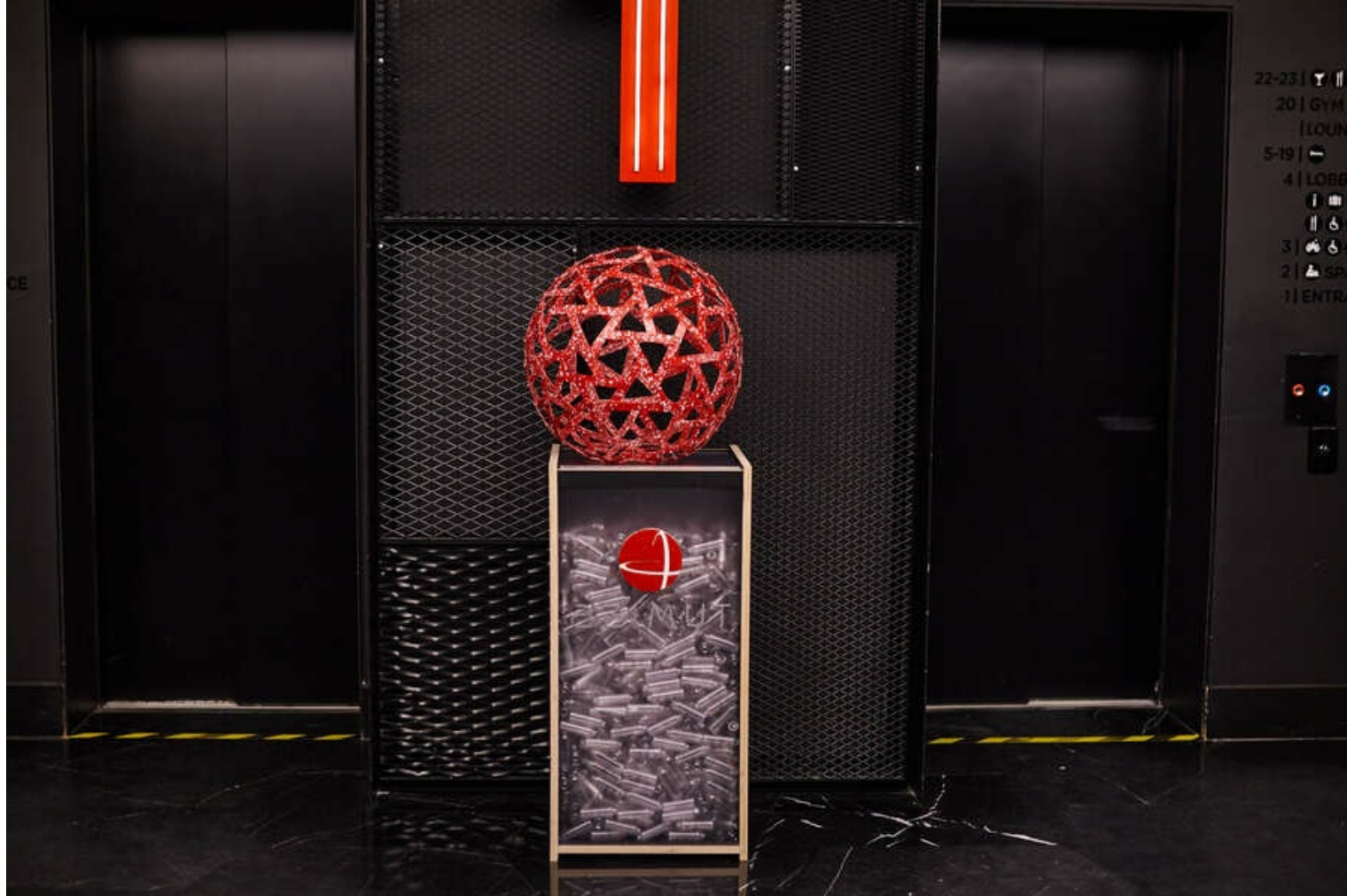
In 9M 2021, about 6 tonnes of plastic were collected. At AZIMUT hotels, shaving kits, shoe horns, and combs are made using recycled materials, while mini bottles of shampoo, shower gel, and lotion made of recyclable virgin PET have been introduced.

It should also be noted that this summer, the Da Vinci Dome art installation was unveiled at AZIMUT Hotel Smolenskaya in Moscow. The artwork is made of recycled waste and, on the one hand, is symbolic of a clean planet Earth, which all of us are responsible for; on the other hand, it is a good example of how a used product can get a new lease on life when disposed of correctly.



AZIMUT Hotels now offer shaving kits, shoe horns and combs made with recycled materials, as well as shampoo, gel and lotion bottles made from virgin PET recyclable materials.

The artists behind the work took part in SIBUR Circularity, Russia's first plastic recycling and sustainable design course, which used facilities at the HSE University's Shukhov Lab and [zerowaste.lab](#). A number of two-week courses were run to allow architects, designers, and engineers to learn about the various stages of recycling plastic waste in practice: from sorting the collected materials (bottle caps and bottles that used to hold cosmetics and drinks at AZIMUT hotels were used as raw materials), through shredding, melting, and compression molding, to injecting molten polymers into molds with an injection molding machine. Besides the art installation, participants also created useful souvenirs, including handles for interior furniture, soap dishes, and multipurpose key chains.



"Da Vinci Dome" art object in AZIMUT Hotel Smolenskaya Moscow.

“Designers can and should reduce the footprint that their works leave at each stage of their life cycle. By selecting eco-friendly materials, allowing the products to be repaired, and by making them durable, efficient, and easy to dispose of, designers can create sustainable products that people really need. We tried to convey these values to course participants,” said Maria Stepanova, a co-organisier behind SIBUR Circularity and designer at zerowaste.lab.

SECOND LIFE OF PLASTICS, A PROGRAMME FOR SCHOOL STUDENTS, HAS ALREADY BEEN RUNNING FOR SEVERAL YEARS NOW. DURING THIS TIME, MORE THAN 10,000 TEACHERS AND PARENTS ACROSS RUSSIA HAVE TAKEN PART

A win-win game

SIBUR partners with the Football Union of Russia (FUR) to spread environmental awareness. In the autumn of 2021, the Clean Stadium project was kicked off. At two FIFA World Cup qualifiers held in Kazan and St Petersburg, special yellow containers were installed in the stands to collect plastic, and uniquely designed waste containers in the shape of goalposts were installed in the players' locker rooms and by substitutes' benches.

More than 12,500 bottles were collected during the matches, but this was not the only main goal of the environmental initiative. We were faced with the question “How can we tell football fans about the importance of recycling in a new and exciting way?” The answer could be found in the stadium atmosphere – challenge them to a game! SIBUR set up an “eco football” stand in the fan entertainment zone, where spectators could test their skills by trying to score a goal, all while learning more about the power of recycling in an accessible form.



More than 700 warm vests for football fans can be made from the collected plastic at two matches – about 16 bottles per vest.

Prizes were up for grabs for the top goal scorers, from T-shirts and fitness trackers to gilets made of recycled plastic. Many football fans were surprised to find out that a regular plastic bottle can be recycled into sports kits, shoes, or all kinds of sports equipment! In fact, the amount of plastic collected at the two matches would be enough to make over 700 gilets for these football fans – it takes around 16 bottles to make one gilet.

These kinds of events also give us the chance to dispel the baseless myths that the life cycle of synthetic materials is limited and that there is a lack of effective recycling technology. “Today, each of us is faced with a huge flood of information, and it can be tricky telling fact from fiction. Plastic in particular is often criticised because it is disposed of incorrectly, although it has great potential for recycling and reuse, and its production is less harmful for the environment on a per unit basis than alternative materials,” pointed out Maxim Remchukov, Sustainable Development Director at SIBUR.



"Clean Stadium" is not a one-time event. Containers for plastic collection will be installed during all matches of the national team.

The Clean Stadium project was not a one-off event. Containers for collecting plastic will be set up at all matches played by the national team. Similar ones can already be found at the Russian national team's training ground in Novogorsk, the Moscow Region.

DMITRY KONOV,

Chairman of the Management Board, PJSC SIBUR Holding:

"Developing a habit of responsible consumption and care for the environment might difficult to do as an adult – but children are a blank slate."

On top of this, SIBUR's work with the FUR is not confined to running events at football matches. This year, the two partners hosted a session for students of the Sirius Innovation Lyceum in Sochi, with stars from the Russian sports world also invited. The students first discussed responsible consumption before splitting into teams with the famous athletes to play an eco-themed version of a popular Russian TV quiz show. The event was rounded off with the planting of camellia, juniper, and cypress in the Lyceum's botanical garden. A similar event took place with students from the Senezh educational centre in Solnechnogorsk, the Moscow Region.

Good habits

Of course, many of our life values are instilled in childhood, so it would be clearly not enough to spread awareness about waste management practices without carrying out educational work with the younger generation at the same time. Second Life of Plastics, a programme for school students, has already been running for several years now. During this time, more than 10,000 teachers and parents across Russia have taken part. All of the educational materials were created by the experts at the Resource Saving Centre with support from SIBUR, and carry the Federal Centre for Additional Education's stamp of approval; they are all in open access on втораяжизньпластика.рф (<http://втораяжизньпластика.рф/>).



The children will not only learn, for example, that plastic is not waste but also a raw material for producing new, useful things, but they will also share this knowledge with their friends.

The programme features several different types of activities that can be carried out outside the classroom, including during the school holidays. They could be run as a treasure hunt that helps the children to understand waste recycling technologies, as a puzzle, as a discussion of a film about caring for the environment, or as a research project.

According to Milyaushi Mukharlyamova, a teacher at middle school No. 36 (a school sponsored by Nizhnekamskneftekhim), these classes inspire schoolchildren to think about separate waste collection. “Paper and cardboard should be handed over to waste paper collection points, while batteries should go to special collection points. It also helps the children to understand that you need to take care of things and your surroundings,” she explained. “It is not only important that children learn for themselves, for example, that plastic is not just waste, but a raw material that can produce new and useful things, but also that they share this knowledge with their friends and peers outside the classroom, allowing this important message to reach a larger circle of children.”

New partners are being brought on board to scale up the project. For example, SIBUR took part in the Clean Country 2.0 roadshow, which taught lessons about the environment all throughout September in the cities of Moscow, Nizhny Novgorod, Saransk, Ulyanovsk, Samara, Nizhnekamsk, Ufa, Chelyabinsk, and Yekaterinburg, to name a few.



The program includes several scenarios of activities that can be carried out as part of extracurricular activities, including during the vacations.

“We are reaching out to a new generation which shapes the future of our country, and our task today is to foster the right environmental habits among them,” said Ruslan Gubaidullin, CEO of the Clean Country Association.

SIBUR WON THE GREEN LIGHT AWARD FOR SUSTAINABLE DEVELOPMENT IN THE BEST CORPORATE ESG PROGRAMME FOR PERSONNEL DEVELOPMENT CATEGORY

A novel approach helps when communicating with children: the school students were offered the chance to go on a secret mission to save humanity from an upcoming environmental catastrophe. To do this, they needed to figure out how they could change their habits right now and how to start properly dealing with waste. After a lesson as memorable as that, the children are sure to have picked up a thing or two about recycling!

A good start in life

As Dmitry Konov, Chairman of the Management Board at PJSC SIBUR Holding, notes, developing a habit of responsible consumption and care for the environment might be difficult to do as an adult – but children are a blank slate. “It is very important to draw their attention to today’s problems early on and teach them the principles that form an integral part of any educated person’s life,” stressed Dmitry Konov.

SIBUR became a partner of the Environment is Everyone’s Responsibility, an international award for children and young people set up by the Federal Service for Supervision of Natural Resources (Rosprirodnadzor (<https://экологияделокаждого.рф/>)).

To be in for a place in the competition, the children needed to post their videos, drawings, cartoons, or photos to social media or Rutube.ru. The judging panel also accepted entries from volunteering organisations, NGOs, additional education institutions, schools, boarding schools, and orphanages.

Within 6 months, 9,500 entries were sent in across the competition’s 12 categories (Let’s Save the Planet Together, My Eco-Family is

My Team, Young Eco-Blogger, Eco-school, Eco-Volunteer, Ecology in the World, etc.), and on 25 November, the expert panel presented almost 200 entrants with prizes and awards.

“The judging panel had heated debates, they really wanted to mention every entrant, every school, and every institution,” said Svetlana Radionova, Head of Rosprirodnadzor. “In fact, a huge number of worthy entries came in, so we decided to not only select a winner for each category, but also to give out special prizes. Some won a seaside holiday at the Orlyonok national children’s camp, while others won gadgets or smart speakers. Those who were placed first, second, and third won smartphones, tablets, and vouchers to take part in environmental events, while schools received interactive whiteboards, projectors, and laptops.”



During six months the organizers of the award received 9.5 thousand applications, as a result, on November 25, the expert committee awarded almost 200 people in 12 categories.

During the awards ceremony, SIBUR presented a special prize to Daria Volkova from Kostroma for the most creative entry relating to the responsible consumption of plastic.

“SIBUR pays close attention to educational work in this area, and by supporting this competition, we have the opportunity to better understand how the younger generation envisages the future and their role in it,” commented Dmitry Konov.

JOHAN VANDERPLAETSE,

President of Schneider Electric in Russia and CIS:

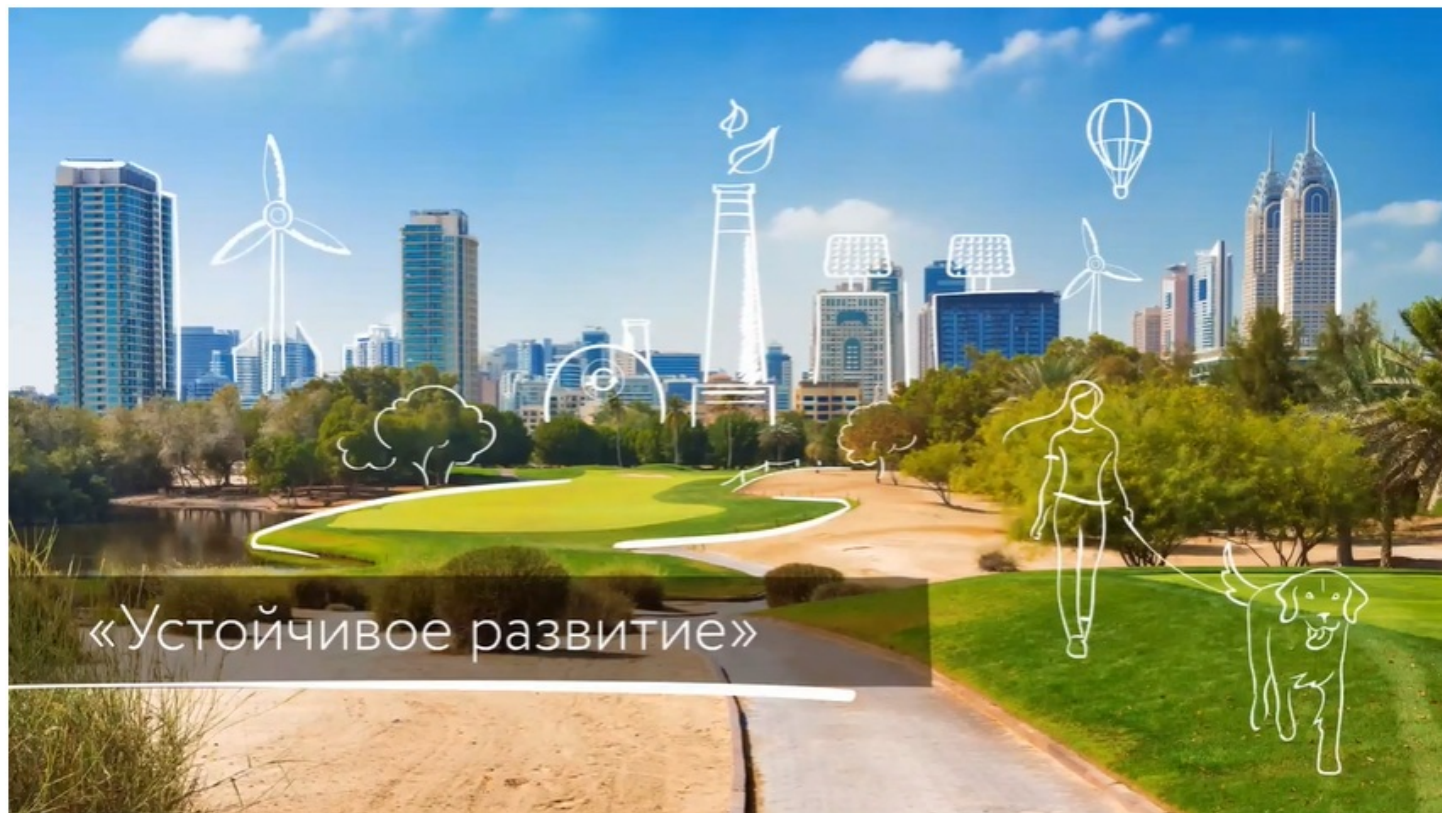
“The ESG agenda is becoming all the more relevant in Russia. We are pleased to note that our partners, customers, and other market participants are stepping up their efforts towards a green, carbon-free economy.”

Creativity can be found in everyone

We can draw public attention to the principles of the circular economy not only by interacting with the public, but also with our own people – after all, the transition to a responsible, green lifestyle begins at home.

“Being part of the company that produces synthetic materials, I wanted everyone to fully grasp that we are doing a useful public good. This would be quite difficult without first explaining the ins and outs of the products and the materials we produce,” explained Dmitry Konov. “Each of us can make our own contribution through our actions: being a more responsible consumer and handling things in a way that changes the wider environmental picture.”

SIBUR is one of the first Russian companies to offer an employee training course on sustainable development: it was developed in 2019, and today more than half of our people have taken it. Since 2020, it has been made accessible to all on the SIBUR Business Practices platform (<https://businesspractices.ru/>).



Sustainability course on the SIBUR BUSINESS PRACTICES learning platform.

Environmental activities involving SIBUR’s people and their families are regularly held. One such example was this year’s Revizorro Potrebleniya (Consumption Inspector) eco drive, which attracted over 5,000 people. They had the opportunity to learn from popular eco-influencers and other experts about how to support the green economy through simple habits and life hacks that our modern culture should adopt. Participants consolidated their theoretical knowledge through quizzes and practical tasks available on our corporate network. Right answers rewarded users with points, which could be exchanged for useful subscriptions and other prizes.

It should therefore be no surprise that SIBUR won the Green Light award for sustainable development (established by Schneider Electric) in the Best Corporate ESG Programme for Personnel Development category. The award ceremony took place on 26 November at the Moscow School of Management SKOLKOVO.

PRODUCTION OF OUR GREEN VIVILEN RPET PELLETS MADE USING RECYCLED RAW MATERIALS IS DUE TO START NEXT YEAR AT POLIEF IN BASHKORTOSTAN. THIS WILL OPEN A NEW CHAPTER IN SIBUR'S WORK TOWARDS DEVELOPING THE CIRCULAR ECONOMY

“The ESG agenda is becoming all the more relevant in Russia. We are pleased to note that our partners, customers, and other market participants are stepping up their efforts towards a green, carbon-free economy,” commented Johan Vanderplaetse, President of Schneider Electric for Russia and CIS.

Closing the circle

As the year draws to a close, it is customary to not only to sum up the outgoing year but also to share your plans for the new one. For example, production of our green Vivilen rPET pellets made using recycled raw materials is due to start next year at POLIEF in Bashkortostan. This will open a new chapter in SIBUR’s work towards developing the circular economy. POLIEF’s green granules will

help satisfy growing demand for eco-friendly PET packaging while providing the manufacturer with a comprehensive solution combining virgin and recycled PET.

About 34,000 tonnes of recycled raw materials will be needed each year once its production line reaches design capacity. SIBUR is currently entering into contracts with plastic recycling companies; for example, an agreement was signed with the Russian Environmental Operator (REO) at the 2021 St Petersburg International Economic Forum. REO intends to set up the production of PET flakes made from plastic bottles and other food packaging that it will supply to SIBUR.



Next year the POLYEF enterprise in Bashkortostan plans to start producing PET pellets with the addition of secondary raw material Vivilen rPET.

“All around the globe, PET is used to produce plastic packaging for beverages, synthetic fabrics, medical products, and much more – it is one of the most common polymers in the manufacture of these kinds of goods. If we are talking about the circular economy, which calls for recycling and putting materials back into the production process, then plastic is one of the best-suited materials for it, and it is worthwhile to collect and recycle it,” explained Denis Butsaev, General Director of REO.

New plastic recycling capacity, such as the facility in Bashkortostan, will help cut the amount of waste sent to landfill. Coupled with this, the use of recycled raw materials will reduce the energy intensity of polymer production, thereby cutting greenhouse gas emissions. All of this will bring us closer and closer to the goals set out by the Ecology national project!