

Baikal. Energy of Life

Report on the best corporate practices in the field
of sustainable development on Lake Baikal



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Energy of Life

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The Report on the best corporate practices in the field of sustainable development on Lake Baikal presents modern environmental and social initiatives of Russian business and the non-profit sector aimed at preserving the unique nature and culture of the Baikal region. The publication reveals the importance of balancing the protection of the unique Baikal ecosystem and the interests of local communities, reflecting the importance of joint efforts in creating a sustainable future environment and economy.

The collection of projects highlights the significance of the participation of all stakeholders in the long-term protection of the natural and social capital of the Baikal region.

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En+ is a world leader in low-carbon aluminium production and renewable energy. The foundation and heart of En+ is the power of Siberia's rivers. The company's activities are inextricably associated with the Baikal region, as it is here, on the waterway of the Angara Cascade — the only river flowing out of Lake Baikal — that its key hydro power plants are located. This deep connection with a unique ecosystem defines En+ Group's philosophy: sustainable development is impossible without caring for the preservation of the region's natural wealth. Therefore, dedicating efforts towards the conservation of Lake Baikal and supporting the development of the Baikal region are integral parts of the company's long-term strategy, combining innovation with a responsible approach to nature.





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Foreword

The soul of Baikal is not only in its unique, harsh nature but also in the vast cultural layer formed over hundreds of millennia by generations of people who lived along the shores of the lake and worshipped it. Today, as Baikal's fragile ecosystem has gained legislative protection at the national and international level, only a careful balance between strict environmental norms and the hopes and aspirations of the people living within the Baikal ecological zone can ensure simultaneous preservation and growth of both its natural and social capital.

This Report tells the story of how the environmental and social initiatives of Russian businesses and the non-profit sector are helping the regions around Baikal develop and face the future with confidence. It's the stories of people of different generations and professions uniting to make their region better, preserve its unique nature and culture, and care for its future. These initiatives, supported by concerned businesses, corporations, and foundations, demonstrate how much can be achieved together. They confirm a simple truth: by investing in people — through sustainable infrastructure in cities and towns, a circular economy, and environmental and cultural education — we are helping to preserve Baikal for upcoming generations.

Preserving Baikal's unique natural and cultural heritage and protecting its ecosystem, a globally significant reservoir of potable water, is one of our paramount priorities. This challenge can only be addressed by taking into account the perspectives of all stakeholders: local residents, including indigenous minority peoples, the business and scientific communities, thought leaders, and regulators who act as guardians of nature's interests.

The album you are now holding is a collection of materials showcasing the contribution of the business community and the non-profit sector to preserving the ecosystem of Lake Baikal, its natural wealth, and its social capital.



Message from UNEP

In the world today, sustainable development is becoming an increasingly complex and multifaceted challenge that requires a comprehensive approach and close cooperation among various sectors of society. Collaboration between science and business is particularly important. As these two powerful driving forces can combine knowledge, technology, and practical experience to address environmental and social challenges at both the global and regional levels.

The global and regional United Nations Environment Programme (UNEP) places special emphasis on advancing scientific research and innovation in the fields of nature conservation, climate change adaptation, and the sustainable use of natural resources. We see great potential in partnerships between business and the scientific community, as such cooperation fosters breakthrough ideas and effective solutions capable of bringing about positive change. Corporate decisions and investments must be underpinned by science.

For UNEP, cooperation with science provides the essential scientific foundation for understanding and addressing the triple planetary crisis facing the global community: climate change, the loss of natural ecosystems and biodiversity, and all forms of environmental pollution, with an emphasis on plastic pollution. UNEP actively encourages and supports efforts by businesses and other concerned parties to promote the sustainable management of ecosystems.

The Baikal region is a unique ecological cluster of high scientific importance, home to valuable ecosystems with rich biodiversity. Preserving this natural heritage requires joint efforts to develop new scientific methodologies, innovative technologies for monitoring and assessing the state of the environment, as well as technologies that minimise the negative impact of economic activity on the environment.

The examples in this section of the report demonstrate how scientific collaboration with business helps introduce advanced technologies and provide environmentally safe solutions. This practice fully aligns with the priorities of UNEP and the broader UN sustainable development agenda, in which science is a key instrument for achieving the Sustainable Development Goals and building an economy based on knowledge and innovation.

A handwritten signature in blue ink, appearing to read 'V. Moshkalo', with a stylized, cursive script.

Vladimir Moshkalo

Representative of the United Nations Environment Programme (UNEP) in Russia

Lake Baikal is recognised as a World Heritage Site by UNESCO, meeting all four criteria: exceptional natural beauty and aesthetic value, outstanding geological processes and terrain, significant ecological and biological processes, and vast natural habitats for conserving biological diversity.

Baikal is renowned for the incredible purity and transparency of its waters. Preserving this precious ecosystem and preventing potential threats requires special attention from government, society, and the scientific community.

A particularly important role in protecting Baikal belongs to researchers and innovators, who are patiently unravelling the secrets of the great lake. This section brings together their most significant projects, spanning from multi-year observations to the quest for modern technological solutions.

For business, science lies at the core of all the programmes and initiatives it formulates. For example, the scientific environmental monitoring of Lake Baikal, supported by En+, has become the cornerstone of the programme for the lake's conservation. Scientific monitoring has revealed potential risks to the lake's ecosystem and highlighted the areas where the efforts of business, science, and non-profit organisations need to come together.





The Point No. 1 project for monitoring the state of Baikal has been implemented by the Biology Research Institute at Irkutsk State University since 1945. It is recognised in the Russian Book of Records as the longest running project of regular environmental monitoring in the history of science. Back in the 1970s, renowned Professor O. A. Kozhova created one of the first computerised themed databases with information obtained through the institute's observations. The database continues to be updated to this day. In 2016, the project started receiving financial support from the Lake Baikal Foundation, and in 2021, Yandex.Cloud and Maritime AI joined in, driving the digitalisation of the research.

Since 2019, to study potential risks to the Baikal ecosystem, the A. N. Severtsov Institute of Ecology and Evolution under the Russian Academy of Sciences, with the support of En+ Group, has been conducting environmental monitoring of the lake. The monitoring includes an annual assessment of water quality in Baikal and the rivers of its catchment area, identifying identifying the sources of pollutants entering the lake, and studying the status of Baikal's endemic species. The project helps obtain objective and reliable information on the state of Baikal's coastal ecosystems, identify negative trends and potential threats to the lake's ecosystem, and develop recommendations for preserving this unique natural site.

Point No. 1
Why do they do it, then?
The very first of men.
Each morning, come again,
For years beyond our ken.
No matter where or when,
They peer at lake and fen —
The scholar, biologist,
Your neighbour, in the end,
A person, just like you, my friend



For goals you chase,
Three things embrace:
A tranquil soul,
A heart of steel,
A mind that sees the path along

Since 2021, the Limnological Institute (Siberian Branch of the Russian Academy of Sciences) has been conducting continuous digital monitoring of Baikal and its tributaries. The project involves research institutes from Irkutsk, Novosibirsk, Tomsk, and Ulan-Ude. They collect and analyse data from automatic stations on water and air conditions in real time. All information is fed into an interactive platform. Thanks to this data, changes in water levels and concentrations of harmful substances can be quickly tracked and compared with previous readings. This helps scientists prepare analytical reports and forecasts on the lake's condition. The high-tech approach not only enhances the region's environmental protection but also serves as a model for other projects on water bodies in Russia.

One of the great symbols of Lake Baikal is the Baikal seal, an endemic species and the only mammal inhabiting its waters. The development of the research programme and initial monitoring efforts were supported by En+. The A. N. Severtsov Institute of Ecology and Evolution has been conducting systematic studies of the seal population and its condition according to the established programme for many years. The results of these studies, now carried out with the support of the Lake Baikal Foundation, serve as the basis for management decisions aimed at preserving Baikal's biodiversity.



The young generation of scientists at the Research Institute of Biology of Lake Baikal, Irkutsk State University, is discovering new ways to combat microplastic pollution in the hydrosphere. Several research projects investigating the path of plastic particles — from their movement through trophic chains to their accumulation in bottom sediments — received grant support from the Irkutsk Branch of the Russian Geographical Society.

The protozoic inhabitants of Baikal are contributing to the fight against plastic and other types of pollution. Supported by the En+ Grant Competition, scientists from the Baikal Museum of the Siberian Branch of the Russian Academy of Sciences are studying the ability of organisms to break down plastic waste in water. Special racks with different types of plastic — polyethylene and polyethylene terephthalate — have been placed on the bottom of Baikal to study the microorganisms that colonise them. Interestingly, the new tenants liked polyethylene terephthalate better than polyethylene. The ongoing research helps us understand which enzymes microorganisms use to process plastic, with the aim of applying these findings to reduce the impact of plastic pollution on Baikal's valuable ecosystem.



Man, the careless, playful child,
Left his mess on Earth compiled.
With a gentle, heavy sigh,
Nature repairs all that we defiled

A team from the Research Institute of Biology at Irkutsk State University, with support from En+, is developing a technology to purify polluted water as it enters Lake Baikal using aquatic plants from the Angara River and the lake itself: Canadian waterweed and duckweed. This applied scientific project on the phytoremediation of aquatic environments in the Baikal region could help ameliorate the pollution of Lake Baikal's ecology from tourist facility wastewater.

Scientists at the Research Institute of Biology of Lake Baikal at Irkutsk State University have identified new types of antibiotics produced by bacteria that inhabit deep-water Baikal crustaceans, helping the latter combat infections. These bacteria can, therefore, be used to make antibiotics, as, according to the scientists' data, over 80% of the bacterial strains analysed demonstrate pronounced antimicrobial activity. Uniquely, the researchers have confirmed that the compounds are effective even against microbes that are resistant to modern antibiotics.



The potential for applying artificial intelligence to preserve the nature of Lake Baikal and develop the region is growing year on year. AI offers unique capabilities for supporting sustainable development that help in forecasting climate change, managing resources, and reducing the human factor in nature conservation. It is advancing digital services, from smart subsidies to medical devices, making life more comfortable for the local population. The Baikal Artificial Intelligence Centre has been established at Irkutsk National Research Technical University with the support of Sber. It is a platform where science, business, and the government come together to create smart solutions for the territories around Baikal.

Commissioned by the Information and Analytical Centre for the Water Resources Development, a Federal State Budgetary Institution, as part of the Protection of Lake Baikal and the Socio-Economic Development of the Baikal Natural Territory federal targeted programme, the Environmental Monitoring of Lake Baikal Geoportal has been established.

The Geoportal is a publicly accessible internet source publishing information about Baikal as a specially protected natural site. The service publishes data from state monitoring on air quality, water quality, and radiation. It also publishes state reports on the conservation of Lake Baikal, scientific reports from the Siberian Branch of the Russian Academy of Sciences, and reports from expeditions initiated with the support of business.

Since Baikal is a treasure for all of mankind, the portal's materials are published not only in Russian but also in English, French, and German.



This large-scale project, recognised by the Russian Academy of Sciences as one of the most prominent scientific achievements of 2021, was launched in the tradition of Irkutsk's widely renowned cartography school. It features 354 detailed maps created by a team from 12 scientific institutes in Russia and Mongolia, including the Institute of Geography of the Siberian Branch of the Russian Academy of Sciences, Irkutsk State University, and other leading academic centres in Siberia. The atlas is the first comprehensive cartographic encyclopedia of the region, where Baikal's nature, regional economies, social processes, and environmental challenges are all masterfully intertwined. The unique value of the atlas lies in its combination of fundamental science with a practical focus. It is used by ecologists, economists, and policymakers.

A particular point of pride for the Irkutsk Branch of the Russian Geographical Society is Istok, the Ecological and Geographical Bulletin — one of the country's most renowned nature conservation publications. It publishes scientific research on the nature, economy, and life of people in various regions of the Baikal territory. The bulletin is supported by the Russian Society for Nature Conservation, the V. B. Sochava Institute of Geography of the Siberian Branch of the Russian Academy of Sciences, and businesses operating in the Baikal region. Istok explains how geography helps to solve important economic tasks, use natural resources wisely, and protect the environment. The bulletin's articles also cover forecasts of environmental change, studies of entire regions, models of natural processes, and advancements in cartography. In Istok, you will find environmental monitoring data, reviews of international research, and, of course, lively debates on where science and society are headed.





Message from the UN Global Compact

Planning social investments, we think about how we want to shape our shared present and future. But how consciously and responsibly do we approach the contribution we make to sustainable and prosperous development? What are social investments? And do we always assess our social impact? These questions are answered convincingly and inspiringly by the projects presented in this section, demonstrating the full extent of the creative cooperation between En+ Group and all interested parties for a sustainable present and future of the Baikal region. These projects preserve the unique natural and cultural heritage of Lake Baikal. Collaboration between business, scientists, local communities, representatives of indigenous peoples, and the government provides the potential for effective social investment. Such partnerships improve quality of life, develop educational and cultural infrastructure, transform the tourism industry, restore and preserve ecosystems, and create new opportunities for economic growth both regionally and nationally.

The companies En+, VEB.RF, RUSAL, Sberbank, Russian Railways, whose projects are presented in this section, are all participants in the UN Global Compact — the world's largest United Nations initiative on Sustainable Development. Today, the UN Global Compact unites about 26,000 companies that support the Sustainable Development Goals and adhere to responsible principles in the areas of human rights, labor, environment, and corporate governance. The status of a UN Global Compact participant reflects their high level of national and international business reputation. It is important to note that the Global Compact is a partner of the UN Principles for Responsible Investment (PRI) initiative, aimed at creating economically effective and honest mechanisms for long-term financing in the interests of the environment and society as a whole. The UN Global Compact also made a significant contribution to the formation and promotion of the ESG concept (Environmental, Social, and Governance), which is a fundamental approach to assessing business impact in sustainable development and PRI.

The Russian Local Network of the UN Global Compact comprehensively supports the values and principles of corporate social responsibility focused on achieving sustainable development nationally and internationally. Social investment is not only an ethical component of business, with more and more companies today realizing their significant role in shaping long-term sustainable and inclusive growth for the regions where they operate.

The practices presented in this section of this significant report about business and many stakeholders' participation in the development of the Baikal region inspire us all to create and build new projects, partnerships, and initiatives to preserve and promote the welfare of one of the most beautiful places on Earth and a vital natural resource ecosystem — Lake Baikal, as well as other regions of our country with care for people and nature!

A handwritten signature in blue ink, appearing to read 'Natalia Dorpeko'.

Natalia Dorpeko

Executive Director

Russia Local Network of the UN Global Compact

Social investment is becoming an increasingly vital tool for the development of regions, especially those with unique challenges and opportunities. The Baikal regions, endowed with a rich natural heritage, unique culture, and diverse ethnic groups, require particular attention and a strategic approach to investing in the social sphere. Their development is impossible without considering the local characteristics, traditions, and needs of the population.

What will become of the Baikal region? What prospects lie on the horizon for its residents? The answers to these questions are being laid down now — through projects and initiatives that put people first. This section is dedicated to how social investments are helping to shape a sustainable future for the region. Thanks to them, towns and cities are being transformed. New infrastructure facilities are appearing, and the quality of life for residents is improving. Young minds are gaining access to modern knowledge and skills, opening up new opportunities for self-fulfilment. Volunteers are uniting to do good deeds — from environmental campaigns to supporting vulnerable groups. And the region's culture is actively developing, helping to preserve its unique identity in the face of globalisation.



[2.1]

Sustainable Urban Environment

An integral element of a sustainable urban environment is its cultural component. Public cultural development projects are valuable social investments. En+, as one of the leaders in social investment, is paving the way and setting a new standard for engagement in the urban environment. For En+, the region where it operates has long been its region of responsibility. Today, cities compete for tourists, and this competition has become a powerful driver for improving the urban environment. To be attractive, a city strives to constantly raise the bar: to create quality public spaces, ensure safety and cleanliness, and preserve historical heritage. Initiatives by large companies such as En+ play a key role in this effort, setting new quality standards. Thus, a focus on tourists initiates a process of continuous improvement, of which the residents themselves are the primary beneficiaries, gaining a more comfortable and aesthetically pleasing environment in which to live.





Under the patronage of the country's top leadership, an ambitious project is being implemented to transform Baikalsk, home to the previous Baikalsk Pulp-and-paper Mill, into a modern, all-season international-level resort. While implementing the master plan for the city's development up to 2040, developed by VEB.RF, residential blocks built in line with today's green standards, hotel complexes, and modern infrastructure, cycling routes to a congress centre and the Baikal Water Hub, will replace the industrial buildings. The projects are being implemented by En+, Grand Baikal, Baikal Aqua, and many other companies.

Special emphasis is placed on environmental friendliness and accessibility. The future resort is intended to be a place of recreation for people of different generations and social groups. At the same time, tourism development is pursued in tandem with the preservation of the unique nature of Lake Baikal.

As part of the transformation of the spaces at the Baikalsk Pulp-and-paper Mill, En+ is creating a unique platform that will unite key scientific and expert participants in the field of water resource management. The Baikal Water Hub, will become a focal point for the water agenda in Asia, combining one of the leaders in water bottling production with cultural and scientific components. The Hub will host a scientific co-working laboratory for Russian and international research institutes, a museum of water, and facilities for hosting federal and international events. The Baikal Water Hub represents the transformation of the town-forming production facility of the past into a scientific and educational complex of the future.

From the old Baikalsk, the new takes its cue,
We gaze at a future, bold and anew





Today, the Sobolinaya Mountain Baikal ski resort is not only about alpine sports. It is also a large-scale social and environmental project. As part of establishing a sustainable urban environment, over RUB 8 million have been invested into creating more green spaces in Baikalsk, involving landscaping and the planting of mature coniferous trees, 5–6 metres in height, which have noticeably beautified the town's scenery. The resort is actively developing its tourist infrastructure: the construction of the Vostochny (Eastern) lift is underway, which will accommodate more visitors, including those from other regions of Russia. For thrill-seekers, a national-level track for downhill mountain bike racing is being created. For those who prefer a tranquil nature experience, an eco-trail has been established at an altitude of 1,200 metres — a walking route with picturesque views, accessible during the summer season. Sobolinaya Mountain is becoming a key element of the Baikalsk tourist cluster, offering guests diverse opportunities for year-round active recreation.

Tourism in its myriad forms is now widely recognized as a force for transforming urban environments worldwide and creating new opportunities for the city's residents themselves. In the Baikal region, there is a clear understanding that recreation and tourism are not only for guests to the region, but are also there for the comfort of the local residents. A prime example is the Burduguz park hotel, one of the largest complexes on the Baikal Trakt in the green zone, capable of hosting up to 200 visitors at once. But its significance is broader: the planting of coniferous trees on the hotel's grounds helps combat soil erosion and preserve the nature of Lake Baikal's territory, thereby improving the environment for all local residents.

Another project that makes life in the city better is the Elektra resort hotel with medical services. Its children's centre (the first of its kind in Russia!) provides not only treatment for children but also a comfortable environment for whole families: mini-baths, play areas, and special treatments. Energy-saving technologies, notably a closed-loop water heating system for the pool, conserve resources, which benefits both guests and locals. Furthermore, the resort arranges tours around Lake Baikal and Irkutsk, meaning local residents also gain more options for cultural entertainment.

The recreational projects we have named, along with many others like them, directly impact the quality of urban life: from ecology and infrastructure to new options for recreation.



Sber's Baikal Bank is creating a new model for sustainable tourism on the southern shore of the lake. Since 2019, the Southern Shore of Baikal project's office has been uniting business, the government, and local communities to develop smart tourism. The primary objective is to create modern infrastructure (ethno-villages, eco-campsites, visitor centres) that will increase tourist flow while simultaneously preserving the lake's fragile ecosystem. Sber develops comprehensive master plans for territorial development, supports green startups, and involves local residents in creating new tourist products. Models that could become a standard for any of Russia's unique territories are already being tested here: from a recreational load management system to zero-footprint principles in construction.

In 2024, DOM.RF Bank opened a unique smart office in Irkutsk. This is a space of the future: there is no paper, bulky furniture, or assigned desks. Employees conduct all their work from mobile devices, saving 4 tonnes of paper per year.

An atmosphere of complete autonomy and technological sophistication reigns. Modern ATMs, which function both inside the office and in a 24/7 zone, are installed for handling any enquiries. But most importantly, the office is created with everyone in mind. It is fully adapted for people with disabilities, so anyone can feel welcome. While parents handle their financial matters, children can spend their time in special play areas offering both relaxation and development. Moreover, there's no need for trepidation about coming in with one's four-legged friends: pets are also looked after here.



The Baikal regions, like the rest of the world, are pursuing the path of ESG transformation. Cities have become focal points for sustainable development efforts and hubs for social investment. A key question for businesses in social investment is how to define priorities.

The Sustainable Cities Responsibility Index is a tool for the comprehensive assessment of territories, towns and cities on their attractiveness for work and life. By evaluating the perception of the local population regarding the environment, prospects, and value of their territories, the Index helps identify priority areas for local community development and measures the public impact of social projects. Building on the methodology of VEB.RF, En+ and RUSAL developed their own Index for all their territories of responsibility. The En+ and RUSAL index has become an example for large businesses and a foundation for the Operational-Territories Quality of Life Index formed by the ESG Alliance.

Today, En+'s social investments are based on the Index's metrics and reflect the needs of the local population.

Since 2020, En+ has been running the Cities with a Plus Grant Competition, aimed at supporting projects to develop urban environment infrastructure with the involvement of local communities and entrepreneurial initiatives. It also supports organisations and companies that are modernising urban services and public spaces and even creating new ones. Dozens of projects across the company's 9 territories of operation are supported annually in 4 areas: ecology, leisure, society and education. Between 2020 and 2025, the En+ Grant Competition supported over 90 projects, with a total grant fund of RUB 85 million.

For example, in 2022, one of the winners of the Grant Competition was the Slyudyansky District library with the Spring of Life ecological project. In order to develop the urban environment of the Slyudyanka city, a route was laid, featuring informational stands about the biodiversity of the area near the spring, which originates from the upper reaches of the Khamar-Daban mountain range. Hundreds of citizens and tourists now have the opportunity to learn more about the unique nature of the southern Baikal region.



[2.2]

Investment in Future Generations

Contributing to awareness and education is an important component of sustainable development. It is precisely through knowledge and education of new specialists that we develop an informed approach towards nature and society. Education fosters environmental literacy, explains how to steward resources responsibly and stimulates the innovative solutions needed to preserve the planet and ensure social progress.

In the Baikal regions, state and private corporations, national parks and non-profit organisations make significant contributions to the education of upcoming generations. They implement educational programmes, provide scholarships and develop platforms for acquiring valuable modern skills.



Sibiryachok is a children's magazine from Irkutsk, published with the support of the regional Ministry of Culture since 1991. It is published six times a year, and each issue contains new interesting stories, fairy tales, games and educational materials for children aged 5–12. The magazine introduces its young readers to the nature of Siberia, the culture of the peoples of the region, and the work of local writers and artists.

Every issue has eye-catching inserts: for example, about Baikal, the birds of the Baikal region, the traditional games of Siberian children or facts about the Irkutsk region. And there are also fairy tales, stories about famous Siberians, workshops and even bits of advice from Kesha the forest spirit!

Sibiryachok has been repeatedly awarded as one of the best children's publications in Russia. For over 30 years it has been teaching children to love books, their native land and its traditions.

Specially protected natural areas on the shores of Lake Baikal play a key role in preserving the unique Baikal ecosystem, and maintaining its biodiversity and natural stability. In the protected Baikal regions, the protected areas of Eastern Syberia, the Baikal Nature Reserve and other establishments responsible for conserving valuable natural areas, conditions are being created for research, tourism, and environmental education. This fosters an awareness of the value of natural heritage and the need of its preservation. The directorates of the Baikal specially protected natural areas actively maintain longstanding traditions of conserving valuable ecosystems through a diversity of environmental education projects. It has become a beloved tradition to host the Baikal International School in the village of Tankhoi's boarding school No. 21, with the support of Russian Railways and the Baikal Nature Reserve. The extensive programme with various activities allows young researchers to realise their potential under the guidance of experienced mentors.



The Zvyozdny children's holiday camp, located near Angarsk, presents a unique educational project, PROknowledge, under the motto Discover the world at Zvyozdny! This is a programme that combines recreation with learning through games, creative workshops, and themed events. Each session is dedicated to a different theme, ensuring every child finds an activity that suits their interests.

For example, in 2025 the session themes included:

- PROcinema — acting training, filming and film screenings with Irkutsk cinematography schools.
- PROscience — fascinating experiments, science shows and quizzes.
- PROcreativity — art workshops and photography lessons.
- PROsport — tournaments, meetings with champions and training with professionals.

At Zvyozdny, children don't just relax. They also discover their talents, learn new things, and make friends!

Modern educational spaces for children's learning and development: En+ consistently supports initiatives in the sphere of youth education and development, forming long-term and strategic partnerships with scientific institutions and bringing businesses together in joint educational projects. Starting from 2022, on the initiative of En+, multilabs are being established in schools across the Baikal region in Irkutsk, Bratsk, Ust-Ilimsk, and Angarsk. At these well equipped facilities, schoolchildren of various year groups learn about electronics, robotics, 3D design, engineering, and media production.

Thanks to such opportunities, new prospects are opening up for the children to develop engineering, architectural, and communicative competencies — the skills of the future



The synergy of businesses and higher education institutions makes it possible to multiply the quality and practical value of educational activities in the higher education segment. For instance, at the Irkutsk National Research Technical University, with support from En+, a Corporate Educational and Research Centre has been established to train future ecologists and power engineers. This project aligns with the career guidance interests of the region's personnel policy, as the majority of the centre's graduates go on to work in the energy sector immediately after finishing their education as intended.

The Eco-Youth Association has united dozens of youth environmental communities since 2020, bringing together active young people from universities and schools across the Irkutsk Region and the Republic of Buryatia who take practical action to protect the Baikal region's nature. This is not merely a group of eco-activists, but a full-fledged movement where theory translates into tangible action. Students and schoolchildren deliver engaging environmental lessons, conduct scientific research on the lake's ecosystem, organise educational expeditions, and, since 2021, have started hosting the annual Youth Environmental Forum of Russia.

The Association members also clean Baikal's shores from waste, engage in environmental education initiatives, collaborate with youth councils of major corporations (including En+, Sber, Irkutsk Oil Company, and Russian Railways) and even establish recycling collection points. Eco-Youth demonstrates that one doesn't have to wait for someone else to start improving our world. And you don't have to start with some grand planet-scale plans — start with yourself. Make small steps like taking reusable bags for shopping and sorting waste. Baikal needs such dedicated people!



The Baikal International Youth Forum serves as a platform for active young people seeking to make a change in their cities and the Baikal region. Starting from 2008, the forum has been contributing to the development of the economy, tourism, culture and public life through education and various initiatives.

The organisers are the Government of the Irkutsk Region and the Federal Agency for Youth Affairs with the support of the Presidential plenipotentiary representative to the Siberian Federal District. Each year the programme is updated to reflect current trends. For example, in 2025, the main theme of the forum was Sustainable Development Goals across 7 areas: tourism, business, politics, urban and regional development, international cooperation, ecology and education.

The Baikal Forum has become a real springboard for youth initiatives, giving rise to practical ideas and uniting kindred spirits!

A unique educational event dedicated to Lake Baikal gathers thousands of participants from various regions around Russia annually. The idea originates from the main organiser of the dictation competition, the Irkutsk Regional Branch of the Russian Society for Nature Conservation. The event is run with the support from the Ministry of Natural Resources and Environment of the Irkutsk Region, Irkutsk Oil Company, the Limnological Institute of the Siberian Branch of the Russian Academy of Sciences, the Federal State Budgetary Institution for Baikal region Nature Reserves and others. To get top marks in the dictation, one must avoid grammatical and spelling errors and correctly answer questions on Baikal studies. The author of the dictation texts is the talented Irkutsk writer Anna Maslennikova, who has a gift for finding a path to anyone's heart with her words, helping them understand how vitally important Baikal is for all humanity.



Starting 2020, the Baikal region hosts the SDGs: Ambassadors of Baikal eco-festival, turning theory of sustainable development into real action. How? Schoolchildren and students explore the 17 Sustainable Development Goals — from clean water to responsible consumption. The Irkutsk Region Centre for Supplementary Education and the Pedagogical Institute of Irkutsk State University, being the organisers, help the participants to not simply learn the theory but to immediately put it into practice. Participants complete a special course where they learn how to improve the ecology of the Baikal region. The most active ones receive ambassador diplomas and begin transforming the world around them: implementing waste sorting projects, protecting the environment and promoting eco-habits in their schools and universities. It's more than a mere competition — it is a school for future eco-activists who are already making the Baikal region better.

Since 2015, each March, the Irkutsk Regional Branch of the Russian Society for Nature Conservation organises the annual ice crossing Meeting Baikal. It takes place on the lake's expanse from the town of Staraya Angasolka to Slyudyanka. The event is held with the support of Irkutsk Oil Company and Russian Railways and teams representing educational, outreach, governmental and public environmental organisations of the Irkutsk region actively participate. The pure crisp frosty air, cloudless blue sky, and breathtaking beauty of winter Baikal along the entire 14-kilometre route offer the ideal conditions for the crossing, gifting everyone unforgettable memories and an abundance of positive emotions.



[2.3]

By Goodwill: Volunteer Projects

True love for one's homeland is measured not in words, but in deeds. This is what the projects featured in this section are about. They demonstrate the power of goodwill — of how the initiative of a single individual or a single company can grow into a grandiose movement that changes the world for the better. From corporate clean-up days to multi-year environmental marathons, these stories prove that caring for Baikal is a personal responsibility for everyone, and together, we can achieve incredible results. This is an example of how the combined efforts of business, the public and the authorities create a powerful synergy capable of tackling the most complex of tasks. Every project is a personal story of caring; of proving that even a small contribution has immense value. These people do not wait for the change. They create it. They leave in their wake not only clean shores but also an inspiring example for us all.



Project 360

Project 360 is one of the largest long-term volunteer projects. It has been underway since 2011 as part of the comprehensive programme World With a Plus Sign. En+ has embarked on this project with the main goal of safeguarding Lake Baikal and other water bodies, along with protected areas, from man-made harm. Over time, the project has brought together hundreds of thousands of eco-volunteers. Their collective efforts have helped remove, sort and dispose of thousands of tonnes of waste from the Baikal shoreline. Beyond the annual autumn clean-up in Irkutsk Region and the Republic of Buryatia, participants in the project create eco-trails, plant trees and enhance tourist facilities throughout the year. Each year, the project expands, having long since expanded beyond the Baikal region. Volunteers now revive forest and water ecosystems in Krasnoyarsk Territory, Nizhny Novgorod and Sverdlovsk regions, as well as other places across our country.

Sber Gathers Eco-Friends

In Irkutsk, Sber's Baikal Branch organizes the annual Baikal Volunteer Forum. This is a platform where corporate volunteers from giants such as En+, Russian Railways, Rosatom and Irkutsk Oil Company can connect. The forum fosters meaningful connections, recruits new members for the National Council for Corporate Volunteering and enhances tourist trails like the Angara Riverhead eco-path. Caring for nature can be fun and beneficial for Baikal!



Irkutsk Oil Company is buzzing with action as its corporate volunteers are hard at work. They don't merely help, they transform the world with purpose and passion. Volunteer work is diverse: it can range from planting trees to arranging holidays for children in orphanages. Under the guidance of the Volunteer Council of the Irkutsk Oil Company, several key initiatives are currently underway. Among these is the revitalisation of the city and the preservation of nature through regular clean-up events and comprehensive environmental programmes. It's not just about corporate social responsibility — it's a vibrant, living movement! The key idea is to take action instead of waiting for others to do things for you and collaborate to achieve goals.

Since 2021, Russian Railways has been running an annual environmental drive called Clean Baikal Shores. This initiative focuses on cleaning up litter along the shores of Lake Baikal, specifically in Tankhoi, Severobaikalsk, and the Slyudyanka District. Volunteers work to enhance the Great Baikal Trail and urban parks. They also plant trees along Severobaikalsk's 50th Anniversary of BAM Alley.

Warm Lakes, a beloved retreat for Irkutsk residents, have significantly improved in cleanliness. Large-scale environmental marathons organized by volunteers from Vkusno i Tochka unite employees, the public, government officials and local eco-brands in their shared mission to protect the natural beauty of the Baikal region.



Volunteers with the Baikal Eco-Patrol selflessly contribute to the preservation of Lake Baikal. They tackle environmental issues in the region, including cleaning up litter and monitoring the ecosystem.

Baikal's beauty is mirrored in its 336 tributaries. Volunteers cleared over 20 kilometres upstream of the Babkha River in Baikalsk to create a new bicycle trail called Babkha Landscapes. The trail winds up to the Porozhisty, Babkha and Kharlakhtinsky cliffs.

Since 2012, the Irkutsk regional branch of the All-Russian Society for Nature Conservation has nurtured this public movement. Here, schoolchildren, scientists, officials and eco-activists collaborate to protect the region's water resources. At core, the project isn't merely about cleaning the shorelines. It's about systemic action taken in a bid to create a network of eco-unions, uniting groups, squads and centres to take real steps — from research to spring cleaning. Irkutsk Oil Company, a key backer of the project, stands as an example of corporate environmental stewardship.

Together, we can transform theory in nature conservation into vibrant reality, where every schoolchild becomes a steward of Baikal.





Since 2012, the charitable foundation Give Life to the Planet has dedicated itself to protecting natural ecosystems in the Baikal region. Regional authorities and local residents collaborate each year to host environmental campaigns and educational events. These initiatives aim to foster a deeper appreciation for nature.

The Foundation's activities grow in scale annually, encompassing a diverse range of projects. These include Green Congress, Minute for the Future, environmental training for teachers, the 'Say No to Garbage' campaign, as well as educational programmes, eco-tours, and outreach initiatives. In 2025, the Foundation held its inaugural International Forest Climate Forum in Irkutsk. These efforts bolster the environmental movement, heightening public awareness of conservation issues and fostering stronger ties between government and citizens.

In 2016, the Irkutsk Regional Environmental Public Organisation My Baikal was founded. Its mission is to protect the unique lake.

One of the most impactful initiatives by My Baikal was the launch of an online marketplace for trash collected from Baikal's shores. They also produced a series of educational cartoons focused on the natural beauty and environment of Baikal. The organisation also focuses on environmental education and leads initiatives for separate waste collection and clean-up of landfills around the lake. Every resident of the region has the power to help preserve Lake Baikal's invaluable nature.



[2.4] Cultural DNA

Nature's grandeur transforms into art in certain places on Earth. One such place is Baikal. In this section, we explore the dialogue between a gifted artist and a visionary Creator whose canvas is the majestic expanse of Baikal's nature itself. Here, inspiration flourishes, manifesting in sophisticated installations, evocative photographs and fluid dance. Each work becomes a crafted mirror of pristine beauty, urging us to safeguard this delicate balance for posterity.





The Buryat Opera and Ballet Theatre hosts an annual dance festival, Ballet on Baikal, which attracts stars and renowned creative teams from across Russia to the shores of Lake Baikal. For one such festival, Andris Liepa, the People's Artist of Russia, brought his Chopiniana performance to Baikal and personally hosted the gala concert. Festival organisers help thousands of visitors witness human talent against the backdrop of stunning natural beauty, reminding everyone of the importance of protecting Lake Baikal's World Heritage status.

At the heart of Irkutsk stands the Baikal Hall, part of the Local Lore Museum's natural history department. Founded back in 1879, this museum is Irkutsk's oldest, boasting a rich heritage of preserving and displaying the local flora and fauna. Here, you'll embark on a captivating journey through the history of Baikal, from early 17th-century explorations to the latest scientific breakthroughs.

In the renovated Baikal Hall, visitors will encounter a meticulously restored glass model of the lake that showcases the exact bottom relief, illuminated with artistic flair. A diorama of Baikal's cliffs and display cases featuring endemic species —unique inhabitants of the lake — offer a glimpse into its biodiversity. An impressive photo archive, compiled by scientists from Irkutsk State University, highlights the minuscule gammarus crustaceans. Finally, an interactive display called Eco-Game invites guests to hone their natural history skills in an engaging way. Many of the stuffed animals here were created by the renowned taxidermist Valeriy Karpov in the Soviet era. Moreover, a number of celebrated regional artists contributed to the dioramas.

In 2025, a total renovation of the hall was completed. The new approach to presentation preserved its scientific integrity while enhancing the exhibition's visual impact. Today, it is not merely a museum — it is a vibrant, living encyclopaedia of Baikal, a place where history and innovation intertwine.



The Baikal autonomous non-profit organisation is creating a unique space on the shores of the sacred lake. Here, the ancient art and craft traditions of the Baikal region are being revived and celebrated. In expeditions across the Irkutsk region's remote landscapes — from the villages lost in the taiga of the Ekhirit-Bulagatsky district to the sunlit steppes of Alari — organisers have gathered materials about those who preserve ancestral traditions. To this day, these artisans weave carpets according to Buryat tradition, carve wooden amulets with ancient symbols and craft unique ceramics using age-old techniques. The Baikal Crafts Festival has evolved into a cherished cultural celebration. At the festival, you can witness the creation of such products first-hand. You can also try your hand at making pottery, weaving horsehair or painting Buryat patterns.

This space is more than just a way to preserve tradition. This initiative allows artisans to monetise their craft, draws tourists, and most significantly, encourages locals to appreciate their region's cultural riches anew. With presidential grants, Irkutsk's crafts cluster is emerging as a significant contributor to the region's creative economy.

The Art Park showcases over 20 installations and artworks in the untamed Baikal forest, crafted by acclaimed Russian artists. The art space is a seamless link between art and nature, a poignant conversation between the image and the Baikal taiga. The exquisite beauty of handmade installations is framed by the unspoiled perfection of nature. This is the place where creators meet the Creator.

Cultural projects often receive backing from grant foundations and charitable organisations.

Transforming waste into art — this was the challenge presented to the participants in the All-Russian creative contest Baikal Evolution: People and Meanings, organised by the Baikal Plastic-Free Alliance. The charitable Give Life to the Planet Foundation inspired and orchestrated the event. Artists and designers from Moscow, Saint Petersburg, Krasnodar, Saratov, Irkutsk, Tyumen and other places have lent their talents to the cause of preserving Baikal's natural beauty. Through their creative works, they have highlighted the critical importance of recycling. Their finest creations graced the eponymous exhibition, which journeyed through the cities of the Baikal region and beyond. This cultural endeavour aimed to foster environmental awareness among local residents.

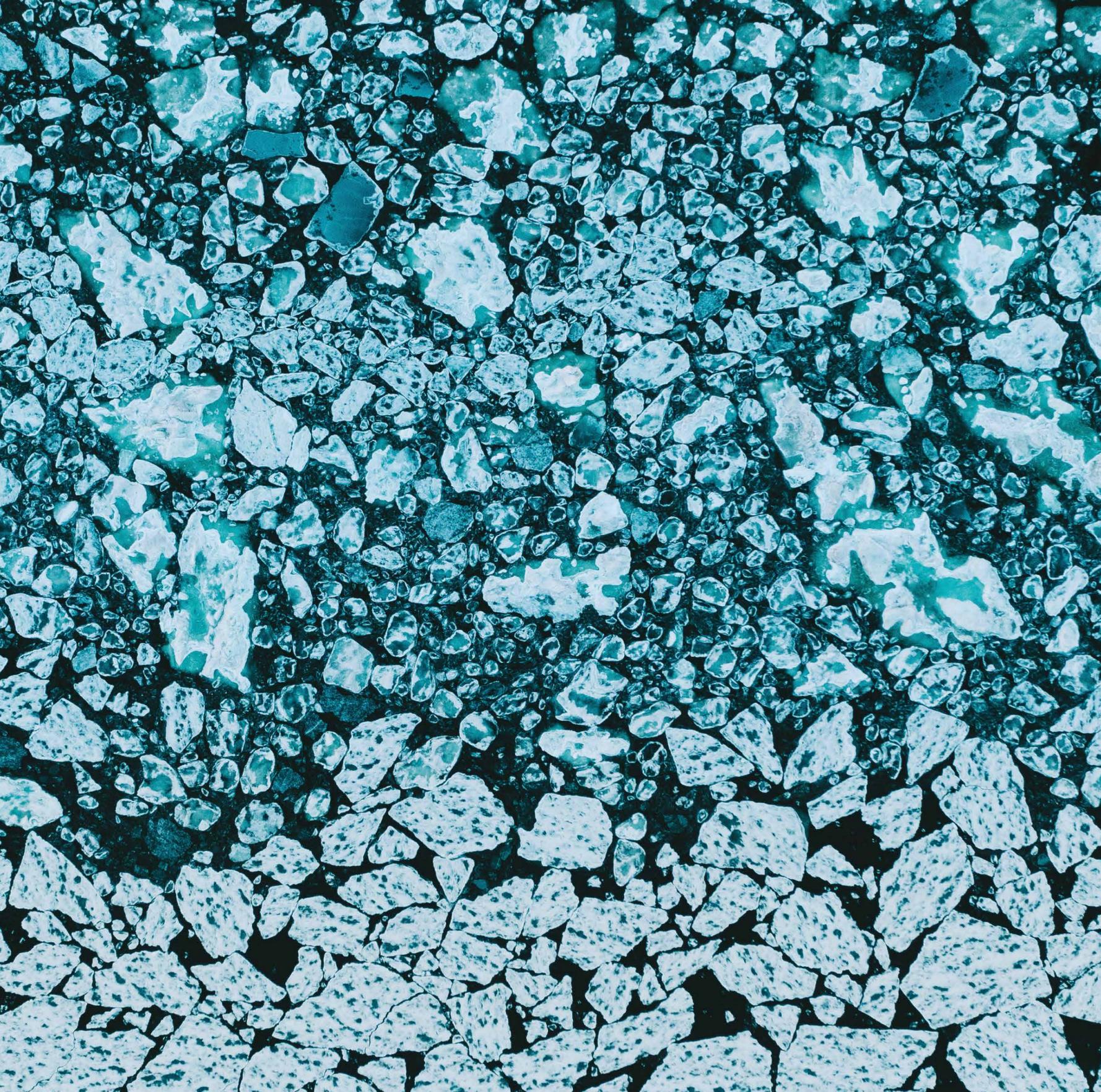
With the support of the Baikal Plastic-Free Alliance, Baikal's splendour brought together Buryatia's photographers for the Dalai/Sea traveling exhibition. Fifty of their finest works were exhibited in the cities of Buryatia and the Irkutsk Region before spreading the beauty of Baikal as captured in photographs across other regions of Russia.



This section uses photographs by photographers Bato Budaev and Dmitry Pavlov.

Bato Budaev is a photographer and traveler from Buryatia, whose shots are often characterized by naturalness and a sense of the moment. His portfolio includes majestic views of the Sayan Mountains and the endless steppes of Buryatia and Mongolia. There is a sense of sincerity in his photographs, but at the same time they are visually structured, thought out in terms of angles, light and atmosphere. Bato's works emphasize the distinctive culture of his native land and the beauty of Siberian nature.

Dmitry Pavlov is a wildlife photographer, winner and finalist of prestigious photo contests, including the Golden Turtle. His works are distinguished not only by their artistic expression, but also by their deep understanding of animal behavior and the ecosystems in which they live. This is possible due to his degree in biology: Dmitry knows where and when to look for the inhabitants of nature, how to anticipate their actions and convey their beauty without the risk of disturbing them. His photographs are a story about the delicate balance of wildlife, calling for its conservation.



Message from the National Committee of the UN Decade on Ecosystem Restoration

Our common task is the preservation and restoration of the Earth's natural wealth. In this context, Baikal holds a special, truly unique place. Baikal is not just a lake; it is a living organism, a source of life, some of the most beautiful natural territories that we must pass on to future generations.

30 years ago, in 1996, Baikal was included in the World Natural Heritage List as the most outstanding example of a freshwater ecosystem on the planet. More than a thousand species of plants and animals living in Baikal are endemic to the region. Lake Baikal is a global center of biodiversity, a living laboratory of evolution, and a sanctuary of unique nature.

The UN declared 2021-2030 as the Decade on Ecosystem Restoration. The UN Decade on Ecosystem Restoration is a global call to action, a call to unite for the protection and restoration of ecosystems worldwide for the benefit of humanity and nature. The National Committee for the UN Decade on Ecosystem Restoration was created in response to this call.

The task of the National Committee is to tell the world about the efforts of all stakeholders in preserving the country's key ecosystems. The Committee's work allows to unite the efforts of the government, scientists, local communities, businesses, and volunteers for the common goal — to preserve and revive ecosystems such as Lake Baikal.

To protect Baikal means to preserve a world that inspires and nourishes life. Every sapling planted, every cleaned stream is a step toward the revival of nature, toward a future where the grandeur of Baikal remains inviolable. The practical achievements demonstrated by businesses and NGOs at Lake Baikal become examples for the entire country.

I sincerely believe that everyone who takes this report in hand will feel a special connection with Baikal, be inspired by its grandeur, and realize their responsibility for its preservation. May the experience of businesses and NGOs inspire you to new achievements, active participation in nature conservation activities, and to become a true guardian of Baikal.

I thank all who contributed to the creation of this report. I am confident that this report will become a powerful incentive for further research, attracting public attention, and implementing specific projects aimed at protecting this invaluable natural heritage. It will also help all of us become more conscious and caring toward our common home — planet Earth, and its greatest treasure — Baikal.

Elena Sharoykina

Chair of the National Committee of the UN Decade on Ecosystem Restoration

This section is about people for whom the nature of Baikal has become their calling, the central purpose of their lives. Scientists, entrepreneurs and invested citizens unite for a shared purpose: to explore, safeguard and share the delicate beauty of the Baikal region. From scientific expeditions to forest protection programmes, each effort here is a step towards the future. This is a tale of the relentless efforts of those who unravel the mysteries of their homeland and enlighten us on our delicate balance with nature.





[3.1]

Caring for Climate

Responsibility for nature demands action. This section highlights initiatives that tackle significant issues, from climate change adaptation plans to rectifying environmental harm and restoring forests.

Climate change now profoundly affects ecosystem health, a stark reality of our times. Responsible businesses, in partnership with the state and society, are shaping and executing strategies to adapt to these shifts. In 2021, En+ set an audacious goal: to achieve net zero emissions by 2050.



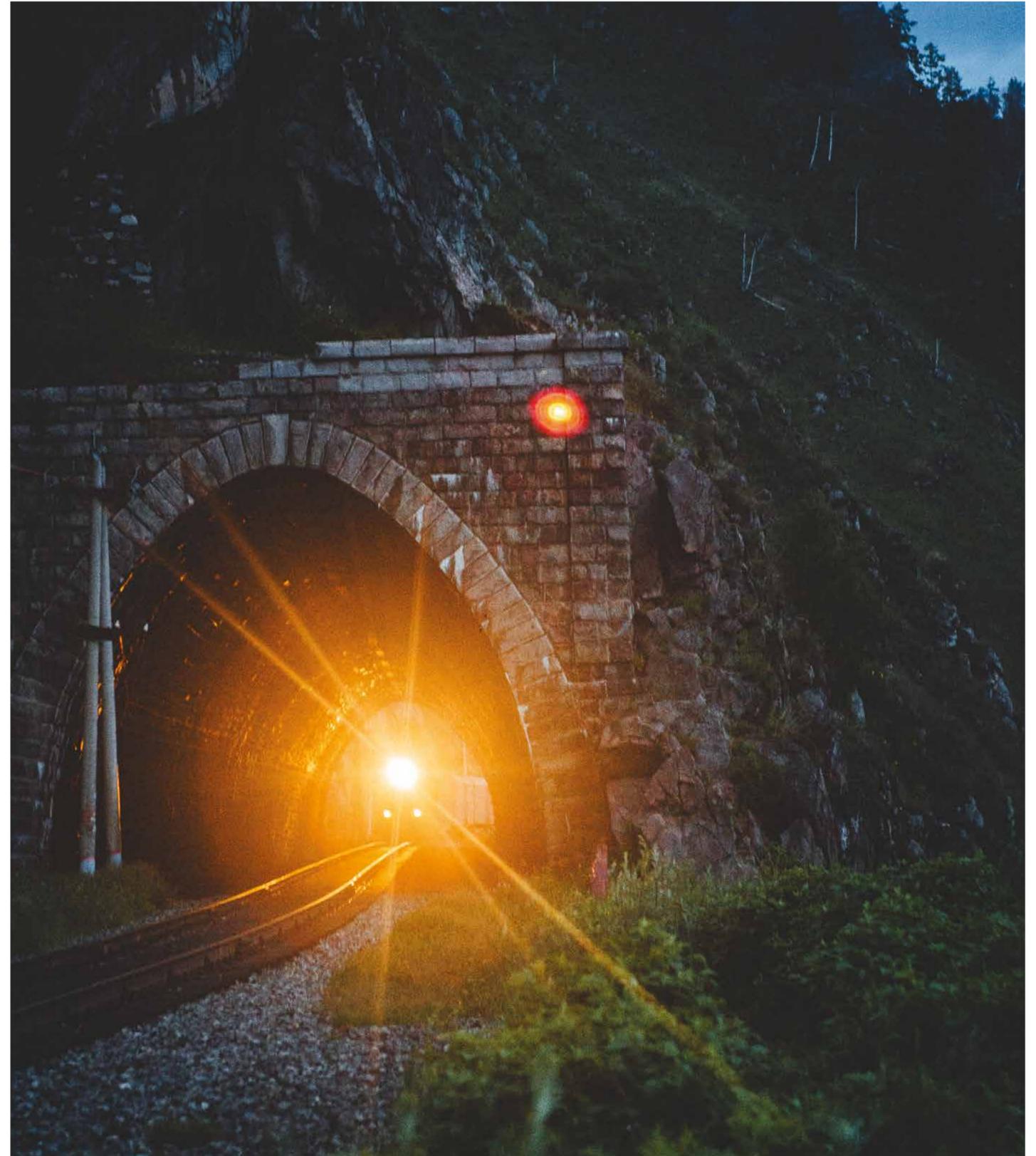
Since 2007, En+ has pursued the 'New Energy' programme — a groundbreaking project aimed at modernising its key hydropower plants. By replacing turbine impellers and updating other equipment, the Company boosts plant efficiency, producing more clean electricity annually from the same water volume. Some USD 300 million in engineering and strategic investments are helping unlock the new potential of hydropower.

The New Energy programme annually prevents the release of millions of tonnes of CO₂ by replacing coal-fired power. This is the Company's deliberate effort to combat climate change and enhance the quality of life in its key cities. The New Energy programme has garnered widespread acclaim globally. The company's involvement in the UN Energy Compacts and its recognition at the World Water Forum demonstrate that its strategies align with the highest international standards.

Rapidly identifying and locating fire hotspots is crucial for combating forest fires. The most effective approach combines space monitoring, ground surveillance and automated video systems. This system swiftly identifies fires at an early stage, pinpoints their exact locations and promptly alerts emergency services.

The project has already demonstrated tangible benefits in the Irkutsk Region. Through the remote monitoring system, forest fires are quickly detected and extinguished. Technology proves to be effective, reducing fire areas by at least 15% and minimising harm to forest ecosystems.

The initiative, launched by Rosleskhoz and En+, showcases how advanced technologies, particularly AI, can enhance forest protection and mitigate the threat of widespread fires.

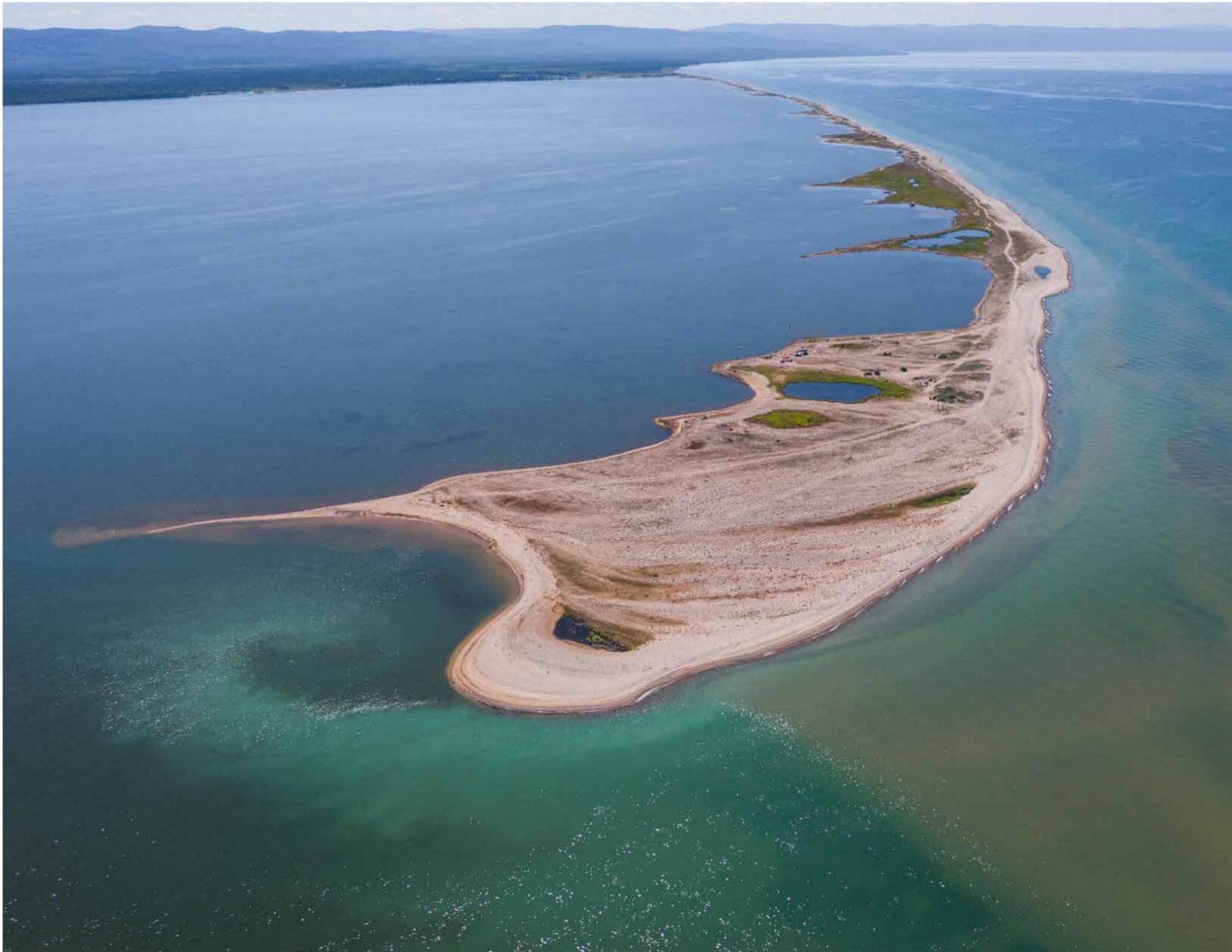




In the Irkutsk Region, railway workers are planting young trees — both deciduous and coniferous — along the paths where forest fires once ravaged the land. In Buryatia, workers from the East Siberian Railway are transforming popular eco-trails like Tankhoi Versta into lush, green spaces. However, the work doesn't conclude with planting. For several years, experts remain engaged to ensure the seedlings take root and flourish. Russian Railways is thus addressing the environmental impact on the Baikal region that inevitably results from modernising the BAM and Transsib projects. Railway expansion must in no way harm the environment of the Baikal region.

Climate change is not a distant danger; it is a pressing challenge to our planet's resources. En+ was the first in Russia to thoroughly evaluate climate risks for its hydropower plants on the Angara in the Baikal basin. Utilising cutting-edge hydrological models, experts peered into the future, projecting scenarios for 2030, 2050 and even 2100. Estimates indicate a significant decline in water levels flowing into Lake Baikal. To address this, the Company has implemented a range of strategies, including altering hydropower plant operation modes and deploying advanced forecasting systems. With the collaboration of the Irkutsk Hydrometeorological Centre and the Institute of Water Problems of the Russian Academy of Sciences, the Company has developed a cutting-edge system for real-time prediction of water inflow into Lake Baikal, based on a physical and mathematical model of the catchment area.

Climate change transcends boundaries; nowhere is this more evident than in the Baikal basin, a unique ecosystem connecting Russia and Mongolia. En+ recognises that this task is too great for one entity alone. Therefore, it helps form alliances to tackle the challenge collaboratively.





[3.2]

Ecosystem Conservation

How to achieve harmony between humans and nature? This section highlights projects that embody the quest for harmony with Lake Baikal's unique world. Here, we cut trails that lead us to nature, all the while respecting its delicate balance. Here, nature reserves are born, safeguarding a fragile equilibrium. Here, businesses stand as steadfast allies to nature, nurturing the vitality of rivers and forests. Ice crossings bring people together in their passion for the lake, while eco-comics teach children the importance of each species. These initiatives demonstrate that protecting the ecosystem is a journey of self-discovery. These are tales of profound reverence for nature becoming a transformative creative energy, changing both ourselves and the world around us.



Striking a balance between economic growth and environmental preservation is one of the foremost challenges of our era. Strategic Environmental Assessment (SEA) is an advanced tool that allows development plans to seamlessly integrate with ecosystem conservation from the outset. En+ supported the Zapovedniki Eco-Centre in launching its inaugural project to evaluate social and environmental issues in Baikal using SEA mechanisms. The findings sparked a fruitful exchange between the public, scientific community, and authorities, addressing the urgent need to protect the great lake's ecosystem.

Rosatom, through its subsidiary the Federal Environmental Operator, is working to clean up Lake Baikal. They are addressing environmental hazards left in the Baikalsk Pulp-and-paper Mill's waste pools. The active phase of the Mill's waste reclamation using special technologies was the culmination of years of dedicated scientific research. Simultaneously, a massive cleanup operation is underway in Usolie-Sibirskoye to remove hundreds of tonnes of mercury from the former Usoliekhimprom site. This involves dismantling hazardous facilities and preparing for the opening of a unique eco-technology park dedicated to processing mercury waste.

Rosatom announced a shift from emergency actions to building a lasting system for environmental safety. Across our nation, people are witnessing the transformation of abandoned industrial sites into thriving nature restoration hubs.



En+ Group has developed and is executing a comprehensive biodiversity conservation initiative. Let's explore some of its tracks.

Conservation of river-based biodiversity is a crucial aspect of managing hydropower plants. En+ is executing a biodiversity conservation programme on the Angara hydropower cascade. This initiative focuses on studying, preserving, and restoring the plant and animal populations in the Angara River basin. The programme was founded on extensive scientific research into biodiversity in the Angara hydropower influence area. Experts from various fields, including ichthyologists, zoologists, ornithologists, soil scientists, and botanists, contributed to this comprehensive study. To aid fish populations, vast areas of artificial spawning grounds have been created in the reservoirs of the Angara hydropower cascade. In partnership with research organisations, a project was launched to secure conifer branches in water where fish release their eggs. This initiative aims to revitalise populations of pike, perch, bream and carp. Measures are being taken to preserve and restore animal and plant life; environmental education and outreach programmes are underway.

The Company backs the public fish protection inspectors from Rosrybolovstvo on their inspection trips during the Baikal omul's spawning season to ensure the fish's safety. In 2023, inspections were carried out on the Bratsk Sea. Starting in 2024, this practice expanded to the Irkutsk and Krasnoyarsk reservoirs. By 2025, the initiative was extended to the rivers of Buryatia.

Environmental comics have emerged as a hit new format for environmental education. En+ employees, in collaboration with Irkutsk designers, have created comics about two endangered Baikal species — the steppe rat snake and the Mongolian toad — that resonated with young people of the region. The comic emphasises the significance of every species in the ecosystem, even those less appealing to the eye.

Highways made of steel are evolving into eco-arteries. Russian Railways has introduced a unique initiative to protect the wildlife of the Khamar-Daban mountain range. The Company's efforts centre on reindeer, moose, wild boars and other inhabitants of the Baikal forests. To support these animals, the company arranges regular deliveries of 750 kg of feed and salt to artificial salt licks. Simultaneously, a cutting-edge component of the project is underway: modern video recorders, camera traps and navigators have been delivered to environmental agencies in the Irkutsk Region and Buryatia. These tools will aid in monitoring rare species populations and combating poaching. The initiative has garnered enthusiastic support from the global transport community, recognised as a model of sustainable industrial development in natural landscapes. Train collisions with animals pose another significant challenge for Russian Railways. Traditional methods like fences and eco-ducts for animal crossings are still used. However, modern tech is increasingly being incorporated. This includes ultrasonic devices, as well as light and noise installations.



The waters of the swift river,
Giving us both light and heat,
Must never be depleted.
Preserve them,
All the wealth of life singing within

In 2024, the Talovaya wetland near Slyudyanka gained the designation of a natural site of regional importance. Ornithologists discovered 236 rare and endangered bird species in the Talovaya wetland: Siberian, common and hooded cranes, bar-headed and swan geese, and others. This place is one of the two habitats of the Siberian salamander and Siberian wood frog along the Circum-Baikal railway. The Irkutsk Regional Branch of the All-Russian Society for Nature Conservation spearheaded the initiative to establish a regional-level protected area, with the backing of the Ministry of Natural Resources and Environment of the Irkutsk Region. Scientific support came from researchers from Irkutsk, funded by Russian Railways.

For decades, the Baikal Nature Reserve has demonstrated that protecting nature begins with small actions. The organisation is not only safeguarding a distinctive ecosystem but also transforming the daily lives of Baikal's residents by implementing an eco-friendly lifestyle system. A waste separation system has been implemented in the reserve. En+ is advancing the Zero Waste initiative, enhancing the reserve's separate waste collection system, establishing new collection points, boosting the supply of recyclable materials and raising awareness among local residents and visitors. Solar panels, local waste treatment facilities and a natural gas-powered vehicle fleet are now part of the reserve's operations. Every possible avenue is being explored to lessen the strain on Baikal's delicate ecosystem.



Founded in 2003, the Great Baikal Trail Association brings together those who go beyond mere admiration of Lake Baikal and actively work to preserve its nature. Over the years, thousands of dedicated individuals have cut hundreds of kilometres of environmental trails, including the renowned Listvyanka–Bolshiye Koty route. They have revitalised dozens of springs and undertaken many environmental initiatives — from planting trees to restoring natural habitats. However, the Great Baikal Trail Association is concerned with more than just pathways. It nurtures eco-leaders, creates accessible paths for people with disabilities, conducts eco-classes and implements corporate volunteer initiatives. The approach is simple: we can only protect Baikal through collective action, by caring for springs, enlightening tourists, constructing wooden decks to shield the soil from damage, and more. Each project is a step in preserving Lake Baikal's unique nature for Future Generation. Participation is open to all: one simply has to pick a date from the volunteer schedule and come with a desire to improve the world. "Nature preservation is about people," says the Association".

The story of plastic begins in 1856 when English inventor Alexander Parkes secured a patent for parkesine, a nitrocellulose-based synthetic material. Since mid-20th century, plastic has woven itself into human life, but it has also, sadly, affected the aquatic world. In 2022, En+ launched the Baikal Plastic-Free Alliance, aiming to bring together business leaders, non-profits, scientists and educators. The swift formation of horizontal connections fostered a climate of trust, enabling the successful execution of numerous initiatives to rid the natural world of microplastics.

Lost fishing nets pose a grave danger to Baikal's biodiversity. Plastic debris not only pollute the environment but also endanger the lake's distinctive wildlife. Every year, the Baikal Plastic-Free Alliance undertakes an environmental expedition to retrieve nets from the depths of Lake Baikal. Each year, they remove kilometres of nets and hundreds of kilograms of debris, helping keep the lake clean.

Man is the sum of his habits, most of them shaped in childhood. A responsible approach to waste management should be ingrained as a natural habit from a young age as well, starting in school. The Baikal Plastic-Free Alliance focuses on engaging the younger generation. Members of the Alliance teach classes across schools, educational centres, and children's summer camps. The Alliance held a contest for schoolchildren from the Republic of Buryatia on the best videos on the issue of plastic pollution in Lake Baikal.

The Irkutsk National Research Technical University, in collaboration with the Alliance, organised a hackathon titled The Plastisphere is Not Our World, aimed at exploring innovative solutions to address the growing problem of plastic pollution in waterways. Student teams from Irkutsk universities showcased innovative projects aimed at combating consumerism, extracting microplastics from ecosystems, and fostering a circular economy.



In fifty years, or perhaps a hundred more,
Your great-grandson, playing crouched on the shore
With Baikal's pebbles, will find no plastic sack,
No faded, empty chip bag,
No ancient, empty cola bottle
On the shores of Listvyanka, Kultuk,
And maybe even Severobaikalsk...
How boring, really...
Or is it wonderful?



Message from FAO

The Future Economy is born where respect for nature becomes a fundamental prerequisite for development. Lake Baikal is one of the few places on Earth where this simple yet vital truth can be appreciated with particular clarity.

Today, as the world searches for a new paradigm, Baikal is emerging as a true laboratory of sustainable development. This is where economic models are being created that do not merely take environmental limitations into account, but turn them into the very foundation for growth. Circular economic practices, green energy, eco-friendly tourism, innovative technologies for recycling and reusing resources — all of these are not abstract concepts, but tangible initiatives already transforming the region.

The most important feature of these projects is their ability to generate values without destruction of the environment. This is a proof that economic success does not contradict environmental protection — on the contrary, it directly depends on it. Local startups and enterprises demonstrate how economic efficiency, technological progress, and environmental responsibility can go hand in hand.

For the Food and Agriculture Organization of the United Nations (FAO), the positive case of the Baikal region is especially significant. Sustainable food systems, the rational use of natural resources, the reduction of losses and waste — these FAO priorities find a vivid and inspiring embodiment here. The projects presented in this chapter are not only local achievements but also universal signposts for building an economy when people and nature do not stand in opposition but evolve together.

The importance of Lake Baikal should not be underestimated in the context of Sustainable Development Goal (SDG) 6 — ensuring availability and sustainable management of water and sanitation for all. FAO places special emphasis on sustainable water resources management, as no other SDGs can be achieved without it.

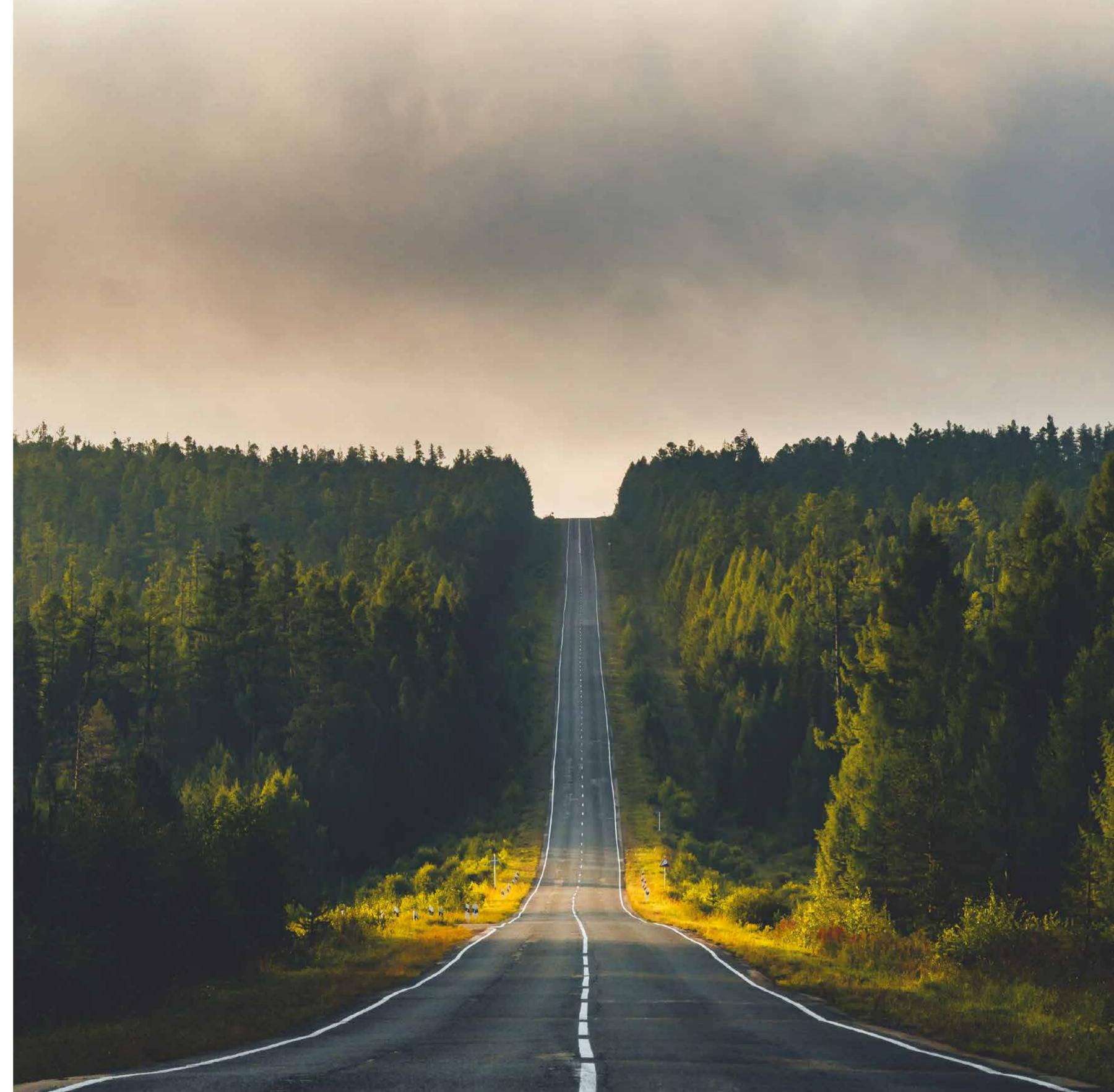
FAO develops international standards for efficient water use, promotes reducing the water footprint of agriculture and advances systems for water quality monitoring and pollution prevention. These approaches find a strong resonance in the Baikal region, where the aquatic ecosystem is not only a natural wonder but also a vital foundation for life, livelihoods and the economy. The region is producing unique practices of careful water stewardship — from the use of clean technologies to the creation of closed-loop production systems that prevent discharges into the lake.

The Future Economy at Baikal is an economy of creation, not consumption. Such an economy can become a solid foundation for a world capable of living in harmony with itself and with the planet.

Oleg Kobiakov

Director, FAO Liaison Office
with the Russian Federation

What are true values? The Future Economy addresses this question in a novel manner. This section showcases projects that create values while preserving the environment. It will explore business ventures rooted in circular economy principles, eco-tourism, and sustainable energy solutions. These stories capture the essence of the entrepreneurial spirit and profound patriotism birthing resilient and thriving development models.





Sber has introduced a unique accelerator programme aimed at nurturing technology projects with the potential to transform the future of the Baikal region. It is more than just training — it is a ready-made success kit for entrepreneurs. Dive into everything from expert lectures on marketing and finance to access to private banking APIs and investors. Participants gain personal mentors, access to test beds, and connections with industry leaders.

In the ESG realm, the project concentrates on several key areas: monitoring, controlling, and predicting GHG emissions and removal; carbon capture, utilisation, and storage (CCUS); AI-based decarbonisation model development, training, and inference processes; and exploring alternative energy sources, carriers, and efficiency.

The project aims to transform innovative ideas into viable business models, making the Baikal region a model region for sustainable development. The programme has already accelerated several startups from idea to initial sales at an unprecedented pace.

Water comprises about half of our bodies. Perhaps this is why what we drink holds a special, almost sacred significance. Here are a few figures from the operations of the Legend of Baikal water extraction and bottling plant: the extraction pipe plunges 400 metres below water surface; the water contains 12 milligrams of dissolved oxygen per litre; the bottling line stands 10 metres from the lake's edge. Baikal's uniqueness lies in its perpetually replenished supply of exceptionally pure water. Extracting and bottling Baikal water is one of the most environmentally friendly and natural business ventures for the great lake. It offers any inhabitant of our planet the chance to experience a piece of Baikal.



[4.1]

Circular Economy

What if waste is not the end, but the beginning? The projects in this section demonstrate that waste can be transformed into valuable resources. Discover how industrial waste, discarded glass, and worn-out packaging are transformed into art, energy, and valuable new products. These are examples of creative thinking that not only help protect Lake Baikal's distinctive character but also foster an economy where nothing is wasted, and everything finds a new purpose.



The RE.FABRIC project encourages conscious consumption, enhancing lives and the environment through the 'Zero Waste' philosophy.

The primary goal is to foster the creation of eco-friendly products and services in waste sorting and recycling. The project curates educational programmes and workshops for aspiring entrepreneurs and start-ups, honing their talents in sustainable business and innovation. RE.FABRIC helps build collaborative platforms where people can share their experience, work together, and embark on joint ventures.

In the social sphere, RE.FABRIC supports foundations, collects items, aids animal shelters, sponsors charity projects, and fosters corporate volunteering. Furthermore, the organisation helps in the social adaptation and rehabilitation of children with disabilities.

This project is creating a community of dedicated individuals who are committed to environmental stewardship and social advancement.

Baikal faces a significant threat from residual lignin, a waste product of the previous Baikalsk Pulp-and-paper Mill's operations. Recently, it has been used to create hardscaping elements. The creators of the Ligningrad project not only make figurines from this material but also host workshops and educational events for the residents of Baikalsk.

Just because I say it once more,
The meaning will not fade.
To see the beauty in the world is not simple.
But harder still is to bring beauty back to the world



Give a new life
To a plastic bottle.
Let it, in a new cycle, become
The pen that writes these poems

The Angarsk-based Klever glass processing and decoration workshop has emerged as a winner in the En+ Grant Competition. The workshop is outfitted with glass melting and annealing equipment. It has perfected the technology for manufacturing street installations and trained skilled artisans. The project featured a competition for artisans to design luminous installations for the cityscape using recycled glass. The finest creations are brought to life and grace the urban landscape.

The arrival of big businesses in the region brings along not only new job opportunities but also modern environmental standards. Vkusno i Tochka is developing a holistic system of sustainable practices, exemplified by its production facilities in Irkutsk and Angarsk. The company embraces the principles of a circular economy, as tonnes of waste fryer oil are converted into a biocomponent for fuel. Recycled materials are used to create packaging. Cutting-edge resource-saving technologies have been adopted across the facilities, leading to substantial cuts in energy, water and oil usage.





Conclusion

Achieving harmony between humanity and the natural world is our most pressing challenge today. The Baikal region's sustainable future hinges on maintaining a delicate equilibrium. Progress must respect both the local residents and the distinctive ecosystem that gives this place its unique charm. This is not a compromise; this is the only genuine path to lasting prosperity.

Cooperation between business, society and government offers a clear path to harmony. It is founded on a fundamental truth: nature and human health are intertwined. This collaboration enables us to craft solutions that boost the economy, enhance living standards, and reduce environmental harm.

Creating a comfortable life today is essential for preserving our world for future generations. A delicate balance between saving our natural heritage and caring for each other is crucial for a prosperous future. This ensures the region's enduring beauty and prosperity for our descendants.



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