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Green Belarus News & Events in Belarus



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PARIS CLIMATE AGREEMENT DISCUSSED AT UN CONFERENCE IN BONN

The 23rd UN Climate Change Conference is held in Bonn, Germany on 4-17 November. The meeting is considering concrete steps in the implementation of the Paris Climate Agreement, BelTA learned from the Belarusian Ministry of Natural Resources and Environment.

Attending the conference and the sessions of its subsidiary bodies are 25,000 delegates from 190 countries, including Belarus.

Belarus became the 30th entry to the Paris Agreement on 20 September 2016. The Paris Agreement is aimed at the implementation of the UN General Assembly Resolution Transforming our world: the 2030 Agenda for Sustainable Development and envis-

ages promotion of ecological integrity, development of renewable energy resources, green economy, transfer of highly-efficient technologies, mitigation of climate change consequences and adaptation to climatic changes.

Under the Paris Agreement, all its signatories, including Belarus, will have access to economic mechanisms promoting the events aimed at reducing greenhouse gas emissions and increasing the greenhouse gas absorption from the atmosphere, and also the events to adapt the agricultural and forestry sectors to climate change.



BELTA,
9.11.2017

PLANS TO BUILD FIRST STAGE OF BELARUSIAN ANTARCTIC STATION BY 2019

The construction of the first stage of the Belarusian Antarctic station is supposed to be finished by 2019, BelTA learned from Aleksei Gaidashov, head of the expedition, on 8 November.

According to the source, the National Academy of Sciences of Belarus intends to finish building the first startup complex of the Belarusian Antarctic station within the next two years in order to start all-season projects as from 2019 and allow Belarusian polar explorers to spend their first winter in Antarctica.

The construction of the Belarusian Antarctic station began in 2015. The first facility — a three-section module — was assembled during the eighth expedition. The platform for the second module was installed during the ninth expedition in addition to some other structures. The polar explorers will install four new sections of the Belarusian Antarctic station during the tenth expedi-

tion. The expedition will leave Belarus for Antarctica in November.

Chairman of the Presidium of the National Academy of Sciences of Belarus (NASB) Vladimir Gusakov underlined the importance of the fact that Belarus explores Antarctica and carries out scientific research alongside other countries. "Many NASB institutes order specific researches to the polar explorers — researches concerning air, coastal waters, minerals, microorganisms. These researches have already produced results," he said.



A sendoff ceremony of the tenth Belarusian Antarctic expedition took place at premises of the History Institute of the National Academy of Sciences of Belarus on 8 November. Participants of Belarusian Antarctic expeditions met with members of the general public. Visitors were able to say a few words in person to the Belarusian polar explorers before they left the country for Antarctica.

A lecture to review ten years of Belarus' presence in Antarctica was arranged. The lecture reviewed the history of Belarusian Antarctic expeditions and the contribution of Belarusian scientists to South Pole exploration. International cooperation was touched upon as well as the construction of the Belarusian Antarctic station. Results achieved by Belarusian specialists were summed up and future prospects were outlined.

A film describing the work of the ninth Belarusian Antarctic expedition was screened with a focus on the modern state of affairs with regard to Antarctica exploration. Unique photos of Antarctic nature and of the daily life of Belarusian polar explorers were presented. Visitors were able to get first-hand information about such matters as atmospheric physics, biology, ecology, problems of global climate changes, geophysics, geology, critical services and logistics of polar expeditions.

The event was organized by the Central Scientific Library of the National Academy of Sciences of Belarus and the public organization Youth Education Center Fialta.

BELTA,
8.11.2017

BELARUS, UNDP TO DEVELOP COOPERATION IN ENVIRONMENTAL PROTECTION

Belarus and the UNDP will develop cooperation in environmental protection, BelTA learned from the website of the Ministry of Natural Resources and Environmental Protection. Belarus' Minister of Natural Resources and Environmental Protection Andrei Khudyk met with UN Resident Coordinator/ UNDP Resident Representative in Belarus Sanaka Samarasinha.

Andrei Khudyk expressed gratitude for assistance in the implementation of the green economy principles in



Belarus, which enabled to apply practical measures in all regions of Belarus in such areas as waste management, water resources, eco-tourism, biodiversity conservation, organic agriculture.

In an atmosphere of open and constructive dialogue, the parties reviewed a wide range of issues to further bilateral cooperation in environmental protection.

BELTA,
13.11.2017

TENTH BELARUSIAN ANTARCTIC EXPEDITION REVEALS STATION CONSTRUCTION PLANS

Polar explorers will install four new sections of the Belarusian Antarctic station during the tenth expedition, BelTA learned from the expedition head Aleksei Gaidashov on 8 November.

"The tenth Belarusian expedition will leave for Antarctica soon. We will stay there till late February — mid-March. We have plans for a broad range of scientific projects. The construction of the Belarusian Antarctic station will continue. This time we intend to install four new sections. They will include scientific labs, residential premises, and premises for sanitary and hygienic purposes," said Aleksei Gaidashov.

Among other things the expedition will carry out scientific projects in such areas as microbiology, ground-truth observations as part of the space program, geophysical monitoring, atmospheric composition, ultraviolet radiation, climate, ozone layer monitoring. Belarusian instruments will be used in the course of the research projects.

The expedition cargo is already on its way to Antarctica on board of the Akademik Fedorov ship. The ship is on the way to Cape Town,

South Africa. "In order to increase our window of opportunity and extend the research time, one month, we've decided to send a group of four people to Antarctica in advance. The group will reach the base by air. They will depart Belarus within the next few days. Another group of three people will leave for Cape Town on 24 November. It will join the Russian Antarctic expedition on board the Akademik Fedorov ship there and will travel to the expedition base together with the cargo," remarked Aleksei Gaidashov.

The tenth Belarusian Antarctic expedition includes seven people: the expedition head Aleksei Gaidashov, the engineer-radio operator Maksim Gorbatshevich, the engineer-mechanic

Aleksei Zakhvatov, the engineer-geophysicist Pavel Shablyko, the machines and mechanisms operator and repairman Artur Ivashko, the buildings and structures support technician and repairman Vladimir Nesterovich, and the medic Dmitry Kovko. Four of them have already been to Antarctica before.

The construction of the Belarusian Antarctic station began in 2015. The first facility — a three-section module — was assembled during the eighth expedition. The platform for the second module was installed during the ninth expedition in addition to some other structures.



BELTA,
8.11.2017

BELARUS' NATIONAL STRATEGY 2030 IN SYNC WITH UN SUSTAINABLE DEVELOPMENT AGENDA

More than 70% of the tasks on the UN sustainable development agenda is reflected in Belarus' national sustainable development strategy up to 2030, Belarus' Deputy Economy Minister Alexander Chervyakov said at the seminar "Sustainable Development Goals - implementation at the national and regional levels", BelTA has learned.

Alexander Chervyakov stressed that the Belarusian government has developed a system for short-, medium- and long-term periods. We assessed the sustainable development goals for compliance with our policy documents. Today, more than 70% of the tasks on the SDG agenda is reflected in the current national sustainable development strategy up to 2030. Naturally, these goals and objectives are also reflected in the country's program of social and economic development in the current five-year plan, and annual forecasts. I would like to note that all policy documents starting 2018 will embrace the ideology of sustainability adopted by the United Nations. Today we are conducting a pilot project at the regional level: we are developing annual plans for development of the regions which will reflect the SDG approaches," Alexander Chervyakov said.

The deputy minister is in charge of the interdepartmental working group on economy at the Council for Sustainable Development. "The plan is one, and we need to strive to live in harmony between ecology, man and economy.

Many problems remain unresolved, therefore the fundamental task for the mankind is to ensure integrated sustainable development," Alexander Chervyakov said. In this regard, all countries develop their policies in the light of global approaches. Belarus' Council for Sustainable Development analyzed all 17 Sustainable Development

Goals. Alexander Chervyakov elaborated on those with the economic component.

Goal No. 2 relates to the eradication of hunger, ensuring food security and agricultural development. Belarus is implementing the fourth state program on development of agriculture and made great advances. The country is self-sufficient in food. Belarus is also an export-oriented country, one of the largest suppliers of dairy products. "We seek to improve the quality of agricultural products, make them more environmentally friendly. Part of the strategic measures will focus on financial recovery and ensuring profitability and efficiency of agricultural enterprises. Thus we will solve the issues of adequate wages of workers in this field. The financial sustainability of the agricultural enterprises is our key challenge in the near term," the deputy minister said. Goal No. 8 is about the promotion of sustainable economic growth and employment with a decent level of pay.

"Without modernization of enterprises, improving good governance or trained personnel it will be difficult to ensure competitiveness, economic growth and productive employment. Therefore, the Belarusian government has adopted a number of policy documents: the state program of innovative development, to support small and medium-sized enterprises and others. The result we expect is the increased share of innovative products with high added value and productivity growth," Alexander Chervyakov noted.

An important objective on the UN agenda is Goal No. 9 regarding the development of reliable infrastructure, promoting industrialization and innovation. Employment will be ensured only through investment in the upgrade of traditional industries of economy and development of new industries. "Under the five-year plan, we are set

to increase investments up to 12%. This is about \$80 billion. Over 70% of investments will be directed into the modernization of existing facilities and setting up new ones. The third part will go into housing and social projects," the deputy minister noted.

Sustainable Development Goal 10 is focused on reducing inequality within or among countries. It is about differentiated development within and among regions. "We are being guided by it in building the regional policy based on complementary vectors. The first one is to set up centers of economic growth in cities and regional centers with economic potential. We plan to develop 62 such centers across Belarus. This is more than a half of the country, with over 6 million population, which accounts for 62% of Belarus' exports and 68% of the country's investments. The second vector is the creation of jobs outside the economic growth centers within hour's reach. This will require well-developed modern infrastructure," Alexander Chervyakov said. The regional industrialization plan developed by the Economy Ministry will be the major tool of the policy. The plan relies on three blocks. The first one is to determine the priority types of economic activities, technological niches, and to map out corresponding projects to business. The second one is to distribute the selected projects taking into account the specifics of the regions, their personnel, manufacturing and resource potential. The third one is to develop a package of stimulus measures for the implementation of projects at the national and regional levels. The approach will help efficiently use financial resources.

"The creation of high-performance jobs is the key for the efficient employment policy. We view this area as one of the priorities in the SDGs economic component," Alexander Chervyakov said.

BELTA,
15.11.2017



SAMARASINHA: BELARUS COMMITTED TO ACHIEVING SDGs BY 2030

Belarus will definitely achieve the Sustainable Development Goals by 2030, UN Resident Coordinator/UNDP Resident Representative in Belarus Sanaka Samarasinha said at the seminar "Sustainable Development Goals - implementation at the national and regional levels", BelTA has learned.

According to Sanaka Samarasinha, Belarus achieved almost all Millennium Development Goals by 2015, despite some pessimistic expectations. The country has a good potential to move forward. "I see the commitment of Belarus to achieving the Sustainable Development Goals since this work began a long time ago. By January 2016, when the SDGs officially came into force, we held a large campaign Express UN-70. Every region signed a declaration of commitment to the SDGs. In addition to the post of national coordinator Belarus has even set up the Council for Sustainable Development which works on four tracks. Belarus' official report on the progress towards achieving the SDGs received positive feedback from other members of the United Nations," Sanaka Samarasinha said.

He stressed that Belarus has a high human development index. Coupled with the serious approach of the government, all the structures which have been established in the country and the conditions that were initially laid out, this gives guarantees that all the objectives and indicators of the SDGs will be achieved.

"We must do everything so that no one is left without attention. To cover all groups that are at risk, we need to know their needs. For that we need the reliable data, robust monitoring mechanisms. It is necessary to ensure the access of vulnerable groups to services of the same quality enjoyed by all other population groups," Sanaka Samarasinha noted.

To achieve the SDGs, funding is necessary as the resources of the states are not enough, Sanaka Samarasinha said. "Here I see a signifi-

cant role for the private sector. The second important area is innovation. What technologies will be used in 2025? It is the private sector that knows it better. The third area is young people. How will the world look like in the future? We will not be able to ensure its stability if we fail to take into account the views of young people who will live in the future. And finally, all countries of the world must work together. For example, Goal No. 17 is about partnership. Each country has accumulated a huge potential and experience. Here the UN will play an important unifying role and help the countries exchange this experience," Sanaka Samarasinha noted.

The seminar "Sustainable Development Goals - implementation at the national and regional levels" is running in Minsk on 15 November. The seminar focuses on the development of the national system of indicators to monitor the SDGs, their implementation in the economic, environmental and social fields, the main approaches to the national strategy for sustainable socio-economic development of Belarus in the context of the SDGs. The publication "Belarus' starting positions with regard to the Sustainable Development Goals" and the national versions of the UN SDG logos were unveiled during the



event.

The seminar will be held as part of the program "Support to the National Coordinator on Implementation of Sustainable Development Goals and Strengthening the Role of the Parliament in the Implementation of Sustainable Development Goals" which is financed by the UN Development Program. The Ministry of Foreign Affairs is the national executing agency. The project partners are the Council of the Republic of the National Assembly and the National Statistics Committee of Belarus.

BELTA,
15.11.2017

ANDREA WIKTORIN ENVIRONMENTAL PROTECTION REMAINS AN IMPORTANT AVENUE OF EU-BELARUS COOPERATION

Environmental protection will remain among the top-priority avenues of EU-Belarus cooperation, Head of the EU Delegation to Belarus Andrea Wiktorin said at a press briefing dedicated to the launch of the new paper manufacture in Borisov on 21 November.

The large-scale EU-financed project "Supporting the transition to a green economy in Belarus" is nearing completion. It is carried out by the UNDP in cooperation with Belarus' Natural Resources and Environmental Protection Minis-



try. "We are now discussing the priorities of further cooperation with Belarus. I believe that we will keep working together in environmental protection, especially in the fight against climate change," Andrea Wiktorin said.

In her opinion, the project carried out in Belarus was a success. Andrea Wiktorin is glad that the partner ministries have been actively promoting innovative development. "We support model projects and initiatives which can be launched in other Belarusian regions. The projects combining

environmental and economic components are aimed at changing consumer habits," Andrea Wiktorin clarified. She liked many of the 23 initiatives implemented in Belarus, especially the one to set up a farm to breed grouse.

The pilot initiative to launch the production of office paper from waste at the paper mill of the Department of State Signs of Belarus' Finance Ministry in Borisov also makes part of the project "Supporting the transition to a green economy in Belarus". The EU's funds were used to fit the manufacturing facility (built in 2016) with additional components and mechanisms to create a full-fledged waste paper recycling line. As much as €860,000 was earmarked for cutting-edge Italian-made equipment. The whole project is estimated at €5 million. Over the last two years, the EU allocated €12 million for Belarus' transition to a green economy.

BELTA,
21.11.2017

BELARUS, UKRAINE TO DISCUSS PROTECTION OF TRANSBOUNDARY WATERS ON 22-24 NOVEMBER

The eighth governmental meeting on the agreement between the Government of Belarus and the Cabinet of Ministers of Ukraine on the joint use and protection of transboundary waters and also the meeting of the working group on water quality protection and control will be held in Belarus' Mozyr on 22-24 November, BelTA learned from the website of the Belarusian Ministry of Natural Resources and Environmental Protection.

The meeting will consider the need to increase the usable storage capacity of the Beloozersk water-supply system of Dnieper-Bug Canal, and to introduce amendments to the rules for its use. The parties are



also expected to consider the issue of changing the status of water management facilities in connection with the demarcation of the state border of Ukraine with Belarus.

The working group will take stock of the progress in monitoring surface and groundwater at transboundary sites, inter-laboratory analyses conducted in 2017, and discuss and approve plans for joint selection and inter-laboratory comparisons for 2018.

BELTA,
16.11.2017

INTERNATIONAL MERCURY MANAGEMENT PROJECTS TO BE LAUNCHED IN BELARUS

The international technical assistance projects "Ratification and early implementation of the Minamata Convention on Mercury" and "Development of Minamata Convention on Mercury Initial Assessment in Belarus" will be carried out in Belarus, Deputy Natural Resources and Environmental Protection Minister Alexander Korbut noted at an introductory seminar on the two projects, BelTA has learned.

"In 2014, Belarus signed the Minamata Convention on Mercury. This was an essential step showing that our country pays great attention to this problem and takes measures to prevent the negative impact of mercury on the environment and human health. The next steps are the ratification and early implementation of the convention in Belarus. The international technical assistance projects are meant to meet these goals," Alexander Korbut said.

Claude Altermatt, Head of the Office of the Embassy of Switzerland in Minsk, pointed out that the Minamata Convention on Mercury came into effect in August 2017. It has been ratified by over 50 countries so far. "We hope that Belarus will join their ranks soon," the diplomat added.

"The result of the implementation of the international technical assistance projects in Belarus will be an assessment of the current situation

in mercury management in Belarus. We should evaluate the consequences and advantages of ratifying the Minamata Convention on Mercury and define the key lines of action towards putting the convention into practice. This will hone the mercury management system in Belarus and mitigate the negative environmental impact of mercury," remarked Olga Volkova, Deputy Chairperson of the public association Environmental Initiative.

The international technical assistance projects "Ratification and early implementation of the Minamata Convention on Mercury" and "Development of Minamata Convention on Mercury Initial Assessment in Belarus" are to be carried out within two years and a half by the public association Environmental Initiative.

The Minamata Convention on Mercury is a global treaty to regulate the anthropogenic emissions of mercury and

mercury compounds. The document regulates all the fields where mercury can possibly accumulate, including its supplies, extraction, the manufacturing of mercury-added products, emissions into the atmosphere, the dumping of mercury-containing waste into water facilities, and waste management.



BELTA,
13.11.2017

BELARUS PREPARING STRATEGY FOR MANAGEMENT OF SPENT FUEL FROM NUCLEAR POWER PLANT

Belarus is preparing a strategy for the management of the spent fuel arising from the nuclear power plant, reads the national report on the implementation of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, BelTA has learned.

It contains a summary of the actions taken in the country to implement the recommendations issued following the fifth national report.

Belarus continues to work to improve the legal framework in the field of management of radioactive waste and spent fuel and to bring it in line with the IAEA governing documents, taking into account the recommendations issued following the IAEA Integrated Regulatory Review Service

(IRRS) mission in 2016. Work is underway to introduce changes and additions to the law on radiation safety of the population. The country has developed and approved the technical normative legal acts establishing requirements for safe management of radioactive waste.

The strategy for the management of radioactive waste from the Belarusian nuclear power plant was approved in 2015. Work is underway on the preparation of the strategy for the management of spent nuclear fuel and on the strategy to handle radioactive waste from all areas of economic activity.

BELTA,
10.11.2017

PLANS TO BUILD FIRST STAGE OF BELARUSIAN NUCLEAR POWER PLANT RADIOACTIVE WASTE BURIAL SITE BY 2028

Plans have been made to build the first startup complex of the Belarusian nuclear power plant's radioactive waste burial facility by 2028, BelTA learned from the national report on fulfilling the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. The report has been presented before the International Atomic Energy Agency (IAEA).

According to the source, high level waste will be stored at premises of the Belarusian nuclear power plant as long as the power plant remains in operation. Low level waste and intermediate level waste will be refined and stored at the Belarusian nuclear power plant's radioactive waste storage facility for ten years.

After the temporary storage period is over, the waste will be moved to the burial facility for storage and/or burial. In line with Belarus' radioactive waste management strategy there are

plans to build the first stage of the radioactive waste burial facility by 2028.

The Energy Ministry and the nuclear and energy research institute Sosny have signed a contract on developing the conceptual design of the burial facility for storing and burying the

radioactive waste (except for high level waste) that will be generated in the course of operation and decommissioning of the Belarusian nuclear power plant on the basis of reference technologies and existing designs.

The Russian R&D group Eleron (part of the Russian state nuclear energy industry corporation Rosatom) has been subcontracted to design the radioactive waste burial facility.

The work will result in the conceptual design of the entire burial facility and the actual design of the first stage of the facility. The flowchart for organizing the construction work (stage by

stage) will be prepared as well as a draft proposal for working out the justification of investment to build the radioactive waste burial facility.

Once the nuclear power plant is decommissioned and dismantled, intermediate level waste and low level waste will be moved for burial to the radioactive waste burial facility.

In line with the strategy on managing radioactive waste of the Belarusian nuclear power plant there are plans to consider the advisability of building the facility for burying high level radioactive waste in deep geological formations. A set of scientific research projects will be carried out to work out methods for handling high level radioactive waste. The final decision on how to handle high level radioactive waste will be made after the research projects are completed.

The report also reads that in line with the Belarusian-Russian intergovernmental agreement on building the nuclear power plant, spent nuclear fuel, which was acquired from Russia, is to be returned for processing to Russia on the terms the sides will determine by a separate agreement.

BELTA,
10.11.2017



BELARUS' REPORT ON SPENT FUEL, RADIOACTIVE WASTE MANAGEMENT SUBMITTED TO IAEA

Belarus' national report on the implementation of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management has been submitted to the IAEA, BELTA learned from the Nuclear and Radiation Safety Department of the Belarusian Emergencies Ministry (Gosatomnadzor).

The sixth report has been prepared by Gosatomnadzor, in cooperation with other stakeholders. In accordance with the international obligations, Belarus has sent the report to the IAEA. The document is also available in open access on the website of Gosatomnadzor.

The sixth national report contains a list of spent fuel and radioactive waste treatment facilities in Belarus, the information about the state policy and practices in this field, the legislation, implementation of the recommendations issued following the previous report and other information. The document contains the information on the developments in 2014-2017.

In accordance with established procedure, the countries that have ratified the Convention examine the national reports of other contracting parties, formulate questions, and give answers to the questions. The national reports will be reviewed at the IAEA in May-June 2018 in the course of a review meeting of the contracting parties to the Joint Convention.

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was adopted in 1997. Its aim is to support a high level of safety of spent fuel management and radioactive waste management worldwide through strengthening national measures and international cooperation, including technical cooperation in the field of security. The convention was ratified in Belarus in 2002 and came into effect on 24 February 2003.

BELTA,
10.11.2017

NEW MODE OF TRANSPORT IS BECOMING AN OBVIOUS PRIORITY

Minskians are enjoying stylish electric buses, operating quietly across the city, offering a comfortable and pleasant ride, but can these compete with classic trolley buses and buses, since they must rely on charging stations?

At Transport Week, recently held in Minsk, specialists talked much about the future of public transport, with lively discussion focusing on electric buses. Boasting undeniable advantages, the latest innovation also has clear drawbacks. With enhanced comfort and convenience, for all categories of citizens, including those with disabilities, each can carry 153 passengers, and can operate at temperatures of -40C to +40C.

Oleg Bytsko, chief designer at Belkommunmash, tells us that the vehicle uses 3.8 percent less energy per kilometre than trolley buses (using the same routes) though is comparable with buses. However, it's definitely more environmentally friendly.

The major problem is that it's very difficult for the new buses to 'catch up' once they begin to run

behind schedule, since they need recharging every 25km (taking 5-6 minutes each time).

Their energy consumption also varies with the weight carried. Mr. Bytsko notes that his company aims to reduce the weight of its electric buses. However, he's aware of the need to keep costs down. "We wouldn't use lighter but more expensive materials, such as glass-reinforced plastic, as customers primarily judge by price."

It is possible to reduce the weight of transport without raising the final price, if the state offers preferences, believes Belkommunmash's chief designer. He mentions that Belarus is keen to promote the use of electric vehicles and create related infrastructure. However, he tells us,



"Passenger electric cars are viewed by the state as more of a priority but we need tax privileges for the development of our public transport."

Discussions are ongoing regarding the necessity of a new attitude towards ecologically friendly urban transport, with economic feasibility to the fore. Is the speed and mobility of diesel and gas buses more important than the environmental friendliness of electric buses, which are dependent on charging stations? According to preliminary forecasts, the launch of a single electric route raises the cost of several bus routes.

The Minsk Times,
2.11.2017

RESOURCES WAITING FOR INVESTOR

Non-traditional sources of energy are still a rarity for us and each new wind powered unit is a true event, while a small 'plantation' of solar batteries is a sensation. No-one would argue against the fact that the green economy must be developed in our country and much money should be invested in such projects. However, do these investments always give the necessary return? The answer is no. Nine years ago, a source of warm water was discovered in the suburbs of Brest and it was decided that water from the geothermal well could be used to heat the greenhouses of the Berestie factory. They hoped that the ambitious project would pay for itself in a maximum of seven years. However, the potential of the well hasn't been fully realised. Our reporter attempts to shed light on the situation.

Heat from beneath the ground

Cucumbers, tomatoes, peppers, eggplants and even roses are being grown in the Berestie greenhouse facility. The squares greenhouses cover 22 hectares and each year millions of cubic metres of natural gas are necessary to heat them.

"In 2008, a search Vychulkovskaya well #201 was drilled around the greenhouse facility. No oil or gas was discovered; however, a source of warm fresh water was unearthed at a depth of 1km. The well was given to Berestie. It was planned to use water whose temperature reaches 25°C to heat the greenhouses. In 2010, a geothermal station with a capacity of 1MWt was launched," says engineer Tatiana Nikolova. The scheme is as follows: water from the well is sent to the heat-exchange unit and with the help of propylene-glycol and Freon gives its warmth to the water from the greenhouse's heating system.

Its temperature rises to 60°C — more than enough to create comfortable conditions for the growth of vegetables and flowers. However, then a question appears: what to do with the water raised to the surface and which has already given its heat? It's suitable for drinking even without additional purification. One option

is to supply water to Brest's water supply system. The capacity of the well is 1,000 cubic metres of water daily — enough to provide one seventh of the city's needs.

Initially Brestvodokanal showed interest in the 'green' project and even recommended deferrisation station be constructed. The station was built and, in line with Brestvodokanal's technical conditions, a 'cut' was made, a calibrated meter and a shutter were installed and everything was ready for the supply of water to the city but it turned out that the city doesn't need it. The reason is simple: water and sewage utilities can buy water from outside organisations only if they lack water themselves. However, Brestvodokanal has five water supply inlets and 77 wells, with around a half of these used. So, there's obviously no lack of water. Then what should be done?

"We can use it to water plants in the greenhouses. There's no need to heat it in winter and this is also a saving. However, during the heating season plants require minimum watering and we are unable to use all the water raised from the well, while in summer 1,000 cubic metres is not enough, as we need 5 times more. We have to then use the water supply inlet in Mukhovets," explains Ms. Nikolova.

Saving is apparent

The situation is rather curious: thanks to the warm water from the thermal source, Berestie could save up to one million cubic metres of natural gas annually. However, the water used to heat greenhouses (after it has given its heat) should somehow be used. The city doesn't need this water, let alone the business, which doesn't need it either in such quantities. It seems criminal to allow thousands of cubic metres of pure fresh water to flow into the river: water management is strictly regulated in our country.

Tatiana Nikolova takes a small folder which contains a draft construction project of the workshop to bottle fresh water, developed back in 2012. They failed to find an investor for the project, however. It's a pity, because the establishment of this workshop is likely to be the only way out of the current situation.

"We sometimes joke: a regional airport is close to Berestie, so perhaps water can be delivered to the United Arab Emirates or Qatar by plane. It is very expensive there.

There are currently about 120 geothermal installations in the country, including in privately-owned cottages and buildings. Primarily they are installed in facilities that are away from central heat pipelines and other communication lines.

Reference

The heat of the Earth's crust is used in 78 countries of the world, with 24 countries having learnt how to generate electrical energy by using underground steams. There are now around 5,000 geothermal units in Estonia, while this figure exceeds 40,000 in Switzerland and 300,000 in Sweden.

Moreover, water from our well is unique because it's completely protected from any external influences at a 1km depth, as ground water doesn't penetrate so deeply. In a word, we are open for cooperation and hope to receive help from investors."

Research by scientists from the Belgeology Republican Unitary Enterprise confirm that our country has huge potential to develop geothermal power engineering. In all regions, water with a temperature of 8-9°C occurs at a shallow depth of about 100m. In the most heated crustal blocs, at a depth of 4-5km, the temperature reaches 110-115°C (not far from Rechitsa and Svetlogorsk).

Such temperatures are enough to generate warmth for heating buildings and constructions, as well as to use in agricultural and industrial production. However, to find geothermal sources wasn't the most difficult thing. The main task is how to realise their potential and to settle the conflict between traditional and alternative power engineering. The solution to this still needs to be thought out.

By Pavel Losich

Belarus Magazine,
01.11.2017

NEW BOOKS ON ENVIRONMENTAL PROTECTION PUBLISHED IN BELARUS

New books on environmental protection that came out in the Year of Science in Belarus were presented by Vladimir Andriyevich, Director of the Petrus Brovka Belarusian Encyclopaedia publishing house, at a press conference in Minsk on 20 November, BELTA has learned.

Here are some of the books that can draw the interest of a wide audience: 50 Unique Protected Areas of Belarus, Aggressive Plants: Invasive Species in Belarus, Big Encyclopedia of the Little Professor: Flowers of the Homeland, and also books from the series Belarusian Children's Encyclopaedia (Protected Plants of Belarus, Protected Animals of Belarus, and Trees of Belarus).

The book 50 Unique Protected Areas of Belarus holds a special place, Vladimir Andriyevich said. The large-format artwork is dedicated to the most valuable protected areas in Belarus, including the biosphere reserve, national parks, national and local game reserves. The publication was prepared on request of and with financial support of Belarus' Information Ministry.

The 400-page album is published in Russian and English, added Larisa Yazykovich, editor-in-chief of the Petrus Brovka Belarusian Ency-

clopedia publishing house. It features numerous photos made using cutting-edge technologies, which have never been released and circulated before. Virtually every site mentioned in the book has an international protection status. The book provides detailed maps to each of them alongside complete lists of plants and animals included in the Belarus Red Book and registered in these protected areas.

The book is intended for a wide readership. It is of interest in terms of environmental education, tourism, and recreation. It was written by Belarusian scientists, specialists of the R&D Center of Belarus' National Academy of Sciences Natalia Yurgenson, Vladimir Ustin, Yelena Shushkova, and Dmitry Grummo.

The series of books on Belarus' natural heritage can be continued, said Nikolai Svidinsky, head of the department for biological and landscape diversity of the Natural Resources and Environmental Protection Ministry. As of 1 January 2017, the system of Belarus' protected areas comprises over 1,300 sites.

*BELTA,
20.11.2017*

BUILDING THE NATION AND WORLD TOGETHER

Twenty-five years ago, Belarus became the first post-Soviet state to establish UN Representation on its territory

Belarus has always been a leading proponent of the UN ever since it helped form the world body as one of its 51 founding members. While continuing to lead global efforts on important issues such as disaster response, the fight against human trafficking and a vocal advocate of middle-income countries within the UN, it is rightly becoming known as a regional champion of the Sustainable Development Goals (SDGs).

Together we have focused on a whole range of issues for 25 years in Belarus: from addressing environmental challenges and the fall-out from Chernobyl to fighting HIV and TB; from dealing with migration and refugees to combating human trafficking and domestic violence; from supporting economic growth and working with entrepreneurs to empowering marginalised groups such as women, children, and the elderly. This partnership for development has yielded significant results. Belarus has practically achieved almost all the Millennium Development Goals, especially reducing poverty from almost 42 percent in 2000 to 5.7 percent by 2016. Belarus is currently ranked 52nd out of 186 countries by UNDP's Human Development Index.

But our work is not complete. As in other middle-income countries around the world, Belarus too faces challenges in ensuring that the most vulnerable have access to services and opportunities just as much as everyone else. We have to do more to ensure the rights of the 561,961 people living with disabilities in the country are protected, respected and fulfilled. We can do more to prevent suicides especially among children. We can do more to prevent new cases of HIV infection among teens, which has increased in the past year. We can do more to reduce the number of death causes by non-communicable diseases such as cancer and cardio-vascular diseases, which currently account for 89 percent of all deaths in the country. We can do more to increase the life expectancy of men — currently 66.5 (11.5 years less

than women). We can do more to ensure protection of the thousands of refugees, asylum seekers and displaced persons who have fled conflict from Ukraine, Syria, Afghanistan and elsewhere. We can do more to support the 21 districts in Belarus that are still considered the worstaffected by the Chernobyl disaster. We can do more to support small businesses. We can do more to protect bio-diversity, promote responsible consumption and waste management. We can do more to ensure energy efficient housing and transport and switch to clean energy.

The Belarus National SDG Council is now leading an initiative to align the SDGs and national priorities and strategies. As we support these efforts, we need to seize the opportunities that new technologies offer and innovate development solutions that anticipate future scenarios. We need to think more creatively about how to promote meaningful public-private partner-

To do all this effectively it means understanding that different people require different development solutions. Treating people the same way through our assistance when they are unequally positioned inherently reinforces inequality. We need to make more effort to collect and analyse disaggregated data so that we understand these differences. This is what the world meant when we committed together to "leave no one behind" in achieving the 17 SDGs.

Moreover, instead of limiting ourselves to fulfilling human need we must look at realising human potential. This means spending more effort to understand what capacities different people have and what capacities we can help them to build. We need to understand where they can get to someday, no matter who or where they might be right now.

Looking to the future, the importance of our global work through the UN is more important and more urgent than ever. As conflicts, terrorism, nuclear weapons, inequality, natural disasters and climate change threaten our very existence. As we ramp up our efforts around the world, let us also recommit to continue our collective work making a tangible difference in Belarus.

Let us redouble our efforts through the UN to use international and national expertise and the convening and facilitating role of the organisation to ensure that nobody is really left behind and that everyone not only participates in achieving the SDGs, but also that these goals are achieved for everyone — especially the most vulnerable.

Everyone's voice is important. Everyone's dream must be celebrated. Everyone's fears must be addressed. Everyone's vulnerability must be recognised. Everyone's potential contribution must be accounted.

Through a mutually respectful dialogue that seeks to understand each other we will no doubt create a better world for our children than we found ourselves. The world we want through the United Nations we have.

*The Minsk Times,
2.11.2017*





SUPPLEMENT "NEWS & EVENTS IN BELARUS" TO THE DIGEST "GREEN BELARUS".

http://ecoinfo.bas-net.by/ecology-belarus/ecology_news_in_Belarus.html

The supplement was established in 2013 as an informational and educational resource that can be freely accessed by all users interested in ecology and environmental problems.

It is a digest of the most important news and events.

Published once a month.

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EATING SANDWICHES IN THE MORNING AND RUNNING IN THE GARDEN

Nature favours: almost forty percent of Belarus is occupied by forests. Considering twenty thousand rivers and ten thousand lakes, it is for a good reason that our country is often called 'Sineokaya' (Blue-Eyed). Unsurprisingly, rural ecologically friendly agro-tourism is developing with immense speed.

State shoulder

In 2006, there were only 34 agricultural homesteads registered in Belarus but, at present, around 2,300 operate — with the Vitebsk and Minsk regions in the lead. The secret of success is simple: the hard work and traditional hospitality of the owners. State support is also a great aid. According to the Decree of the President of the Republic of Belarus as of June 2nd, 2006 'On Measures for the Development of Agroecotourism in the Republic of Belarus', loans for construction of an agromansion are provided on a preferential basis for the period of up to seven years, with a possible deferral of payments for a year.

"Citizens who permanently reside in rural areas can work in the field of agroecotourism on a declarative principle — paying a one-off annual fee. The sum is not large at all: around \$10. Agromansions are fully exempt from taxes and other mandatory payments," Yelena Perminova, the Director of the Tourism Department at Belarus' Ministry of Sports and Tourism, explains.

It is now clear why rural houses are opening in a geometric progression. "This is beneficial for everyone," believes Valeria Klitsounova, who heads the Country Escape Belarusian Association of Rural and Ecotourism. "Villagers enjoy an additional opportunity to earn money while local authorities and the region in general registers an increase of funds, infrastructure development and the creation of new jobs. In turn, tourists get the chance to spend their vacation interestingly and with little expense in an ecologically friendly environment."

Each homestead has its own flavour and colour. Some hosts have preserved and reproduced local traditions and cuisine, while others offer active rest — fishing, hiking and scenic walks.

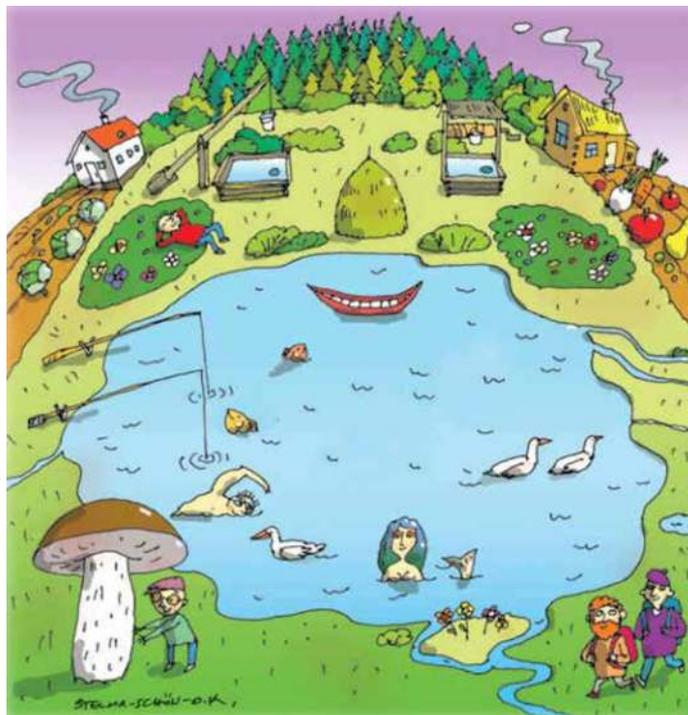
Please the forest host and find Zazyvka

Khutor Yedishki homestead near Vitebsk is among the few in Belarus with its own petting zoo: sheep and horses. A hedgehog family also lives here, with a mother, father and babies. Children are delighted with these live spiny beasts.

Another interesting homestead is Be-

lovezhskoe Pomestie near Brest; it borders the national park. Holidaying here is like time travel: guests can get personally acquainted with the traditions and lifestyle of our ancestors. The restored wooden hut recreates a 19th century rural house down to the smallest detail. Food is cooked in a true clay oven, according to old recipes.

Those relaxing in agro-mansions near the Berezinsky Biosphere Reserve are envied. The reserve is thoroughly imbued with myths and the number of sacred places, legends and fairy tales is enormous. Not long ago, the Centre of Mythological Tourism opened here and tourists on the exciting journey along the mysterious route are accompanied by author of the idea — Victor Boiko. Dressed as the mythological Bolotnik, he describes the unique Belarusian nature — using the mythological characters: Leshy, Polevik and others. Guests should under no circumstances go deep into the forest as they might meet Zazyvka — a forest spirit in the image of a beautiful naked girl. She will fascinate the unwary and carry them away to the dense forest and then disappear — mockingly laughing as she bids them farewell...



Those wanting a spine-tingling experience can enjoy a night-time excursion to the mysterious world of forest spirits where strange characters come alive with sound and visual installations.

300 thousand people spent their holidays in Belarusian mansions last year — including 90 percent of Belarus-

ians and 10 percent of foreigners from 74 states (including 24 thousand Russians)

Belarus' introduction of five-day visa-free regime promotes significant growth in number of US tourists, Charge d'affaires at the US Embassy to Minsk, Robert Riley, tells journalists.

"The five-day visa-free regime, introduced by Belarus, promoted significant growth in US citizens' visits to Belarus. My family has invited two groups of friends who've already visited the country," notes Mr. Riley.

Regarding introducing a visa-free regime for Belarusian citizens wishing to visit the US, he says, "Anyone aware of the US visa system knows that it's a long and complex process to join the list of states whose citizens don't need a visa to arrive in America. It relies upon investigations by numerous state authorities. It's not impossible that we may discuss this with the Belarusian government but the process is lengthy and complex."