

UEST



Sakhalin Energy



shutdown

A Pit Stop on the Sakhalin-2 Track



DEAR COLLEAGUES,

Our company has completed the Sakhalin-2 Integrated Gas System Turnaround. During the current COVID-19 pandemic, this was a strenuous test for all our assets and functions. We passed this test with flying colours.

Operating under the High Alert mode, the company has completed a large-scale maintenance campaign at the LUN-A platform, Onshore Processing Facility, Booster Station No. 2 and the LNG plant.

Excellent teamwork demonstrated by our professionals, both those who worked in the field and those who provided engineering, logistical, procurement and other types of support, undoubtedly played a pivotal role in our success. I would like to specifically commend the effective work done by the CEO Directorate and the General Coordinating Committee Secretariat. Having defined our priorities and in view of the importance of the company's operational targets, we focused our efforts on reaching one goal — completing critical equipment maintenance scope safely and on schedule. Such traits as being proactive, willingness to make strategic decisions and be personally responsible for driving the common goal, as well as the ability to quickly adapt to the changing reality are in the Sakhalin Energy Team's DNA.

Through the joint efforts of all GCC Task Forces and our asset teams we have managed to overcome many challenges related to disease control restrictions, rotational personnel transportation, as well as material procurement and logistics. Maintaining our assets virus-free, the company has made a lot of preparations and taken unprecedented steps to mobilise about 1,500 rotators. Additionally, taking into account our operational and maintenance plans, we have identified key positions by discipline and established a pool of back-up experts from among Russian nationals. A videoconference remote support system was promptly set up at the LNG plant. This system enabled real-time maintenance support from OEM representatives. Quite a few activities were completed for the first time, not only in Sakhalin-2 project's history, but also in Russia.

(the end is on page 2)

Read in this issue

The Goal Zero Is Achievable **Despite Restrictions**

The successful completion of the repair work on the entire integrated gas system in 2020 is evidenced by the "first drop" of LNG, which was produced at 5:15 a.m. on 15 July. Read details in interviews of assets managers

shutdown 2020...... 2-3

Avatars at the LNG Plant

An unusual online visit of the company's management was held at the Prigorodnoye production complex. Andrey Sharipov shared his impressions of a virtual engagement

digitalisation.....

Inspected by Sakhalin Energy

Sakhalin Energy conducted an unscheduled inspection of its oil and oil product tanks under the Sakhalin-2 project, to be 100% sure that they are operated in a safe manner. Gleg Vnukov spoke about the inspection process

industrial safety 10

It is not Mere Arithmetic

Developing Russian Content is one of Sakhalin Energy's key focus areas, including subsea engineering operations

russian content...... 16

Bear Stories

The Sakhalin Oblast is well-known in Russia and far beyond not only for oil, gas, salmon and some other special features, but also for its brown bears. Our colleagues have experience of meeting bears in the wild. Read stories about bear encounters and also comments of our expert, Timophei Zvezdov, Head of the Environmental Monitoring and Biodiversity Conservation Subdivision

environment 20

About 550 000 man-hours were worked under the 2020 turnaround campaign

read more on pages 2-3

CURRENT EVENTS

June

Trainings on how to save marine mammals were provided to volunteers and rescuers by the "Boomerang Club" and the initiative group for marine mammals' assistance "Friends of the Ocean" under the "Sakhalin: Man and the Sea (North)" project with the support of Sakhalin **Energy**

July

The Healthy Generation tournament in Korsakov was supported by Sakhalin **Energy as part of the Korsakov Sustainable Development Partnership Council**

July

Special Charity Event "Help Get Ready for School!" began in Sakhalin Energy, with the main objective to help children in difficult circumstances including those caused by the COVID-19 pandemic

July

The "Memory of the Heart" exhibition was opened in the Nevelsky Museum of History and Local Lore. It is the second exhibition project organised by the Sakhalin Regional Art Museum with the support of Sakhalin Energy in honor of the 75th anniversary of the Great Victory

14

July

In the framework of the cooperation with the regional Healthcare Ministry Sakhalin Energy provided 40 oxygen concentrators to Sakhalin Regional

VESTI

(the beginning is on page 1)

Corporate Temporary Accommodation Facilities (TAFs) have become a critical link in our operational chain. As people were self-quarantined there for 14 days, it was important to make sure that time was put to good use. We managed to turn this challenge into an advantage by arranging training coursed for TAF residents and giving them an opportunity to review maintenance plans prior to the extended "pit stop".

As a result, people would get up to speed more quickly and save time once they found themselves at our assets.

In addition, we used the two-week period to detect any instances of acute respiratory disease early. Consequently, the incidence of such disease at our remote assets has been close to zero. Another factor to consider is that the Sakhalin-2 project employs people from virtually every Russian region. Travelling to an area with a different climate and constituted an invaluable contribution to our success.

crossing several time zones could be and additional health challenge; thus, being self-quarantined at a TAF allows rotators to accommodate these changes and get ready to

Of course, safety had remained one of our topmost priorities throughout the campaign. Therefore, every person involved had to act responsibly. Even though quite a few members of the team participated in a Sakhalin-2 turnaround campaign for the first time, the entire scope was performed without a single lost time incident. Thanks to remote asset management and our HSE managers and supervisors who ran onboarding sessions for the green hats, we ensured a great level of personal Goal Zero engage-

It should be emphasised that support from our shareholders, the Russian Party, our buyers and contractors

Maintaining its reputation as a reliable energy supplier to Asia-Pacific in this challenging environment, Sakhalin Energy has ensured business continuity and safety across all assets. The experience the company has gained in the process is hard to overestimate and will help us to respond to any future developments, devise non-conventional solutions and operate safely and in a rational way, maintaining our key priorities and strategic growth objectives.

We have resumed LNG production, but still have to perform maintenance at our PA-A and PA-B oil production platforms. Even as the COVID-19 pandemic remains a challenge, the company continues to successfully meet its objectives and run an efficient business. I am certain that our highly proficient team is capable of reaching ambitious goals and meeting the challenges of our times.

> Sincerely, Roman Dashkov Chief Executive Officer

> > shutdown 2020

Pit Stop on Sakhalin-2 Track

The Goal Zero Is Achievable Despite Restrictions

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ALEXANDER SINGUROV. DEPUTY PRODUCTION DIRECTOR, HEAD OF THE PRIGORODNOYE PRODUCTION COMPLEX

- We have successfully completed all mechanical operations and commissioning as part of the shutdown of Train 2 at the LNG plant.

The successful completion of the repair work on the entire integrated gas system in 2020 is evidenced by the "first drop" of LNG, which was produced at 5:15 a.m. on 15 July. We have clearly structured our work, taking into account the number of employees involved and completed work orders, and finished the work three days ahead of the approved schedule. This is the best performance indicator.

Despite all external and internal resource constraints, we did a great deal of work: we upgraded a 2K-1420



The liquefied natural gas plant in Prigorodnoye

axial compressor of Train 2, performed a mid-life repair of Frame 7 gas turbines, replaced a C-1351 carbon-based mercury adsorbent, did much work to maintain shut-off and control valves and inspect pressure vessels, maintained electrical equipment and instrumentation, and much more. 834 employees from 19 companies (Sakhalin Energy and contractors) were engaged in the work. About 330 thousand man-hours were worked at the LNG plant in all types of activities. In total, we opened over 740 flange joints and performed a large number of complex hoisting operations.

The 2020 shutdown will be remembered for many things, especially the restrictions related to the COVID-19 pandemic, the switch to rotational shift work, long shifts and working days, mandatory two-week self-isolation, limited resources, and accumulated fatigue. But I wish this period

> would be remembered more for our achievements in the field of occupational and industrial safety. As part of the shutdown, we achieved the Goal Zero in all HSE indicators. The credit for this goes to every employee! We demonstrated our expertise and great commitment, following the motto "One for all and all for one!". We performed all the work according to our priorities: safety, quality, and only then the schedule.

> We have faced several challenges in the past two years and have consistently proved that we are able to respond to any challenge and work in difficult conditions. This year has brought us another test the oil crisis and COVID-19 have made major adjustments to our plans. At the same time, such crises are the best way to test the strength and unity of



Getting thoroughly ready before the shutdown activities, LNG plant

our team. We have passed this test. This is an indisputable fact for me: our team is capable of acting quickly, efficiently and safely, which is the most important thing! I would like to express my deep gratitude to everyone who has directly or indirectly participated in this shutdown, as well as to everyone who ensured the stable operation of Train 1. I am proud to state that each operation has been performed safely, professionally, efficiently and ahead of the schedule.





The central control room at the LNG plant

shutdown 2020

Pit Stop on Sakhalin-2 Track

MARAT REZYAPOV, OFFSHORE ASSETS MANAGER

— We all remember the challenges we had to face at the preparatory stage of the shutdown. In several months, we revised our work plans and adapted them to the current conditions, new realities of life. We had to abandon some events altogether.

In the dramatically changing environment, our integrated team has done the job in a careful and well-coordinated way. A significant contribution to the preparation and implementation of the work was made by the Lunskoye-A shutdown preparation team, the Engineering and Maintenance Department, the Production Engineering Department, the Supply Chain Management Department and all support services — all of them did a perfect job. The new scope of work was well thought out. The necessary materials and equipment were delivered on time, this is a critical thing for the offshore platform. Moreover, we prepared all service contracts, mobilised people with all safety certificates available and the necessary trainings undergone, and we issued permits and related documentation for the work. All these measures were completed by the start of the shutdown.



The participants of technical activities at the LUN-A platform

High-quality preparation and a positive team spirit were key to the successful implementation of the new plan. Most importantly, we implemented all the measures in a safe and professional manner. Successful launch of the LUN-A platform is the best proof of their high quality.

The Goal Zero is our particular achievement during the shutdown this year. We have demonstrated that it is possible to work without injuries, without leaks, without lost time

incidents, and even without any unreported cases. We have demonstrated how to work in an absolutely safe way — for both people and equipment, and the production facility as a whole.

After the shutdown was over, we have been receiving only positive feedback from all participants in the process. This means high-quality preparation and interaction between all units of the company. But now it is important for us to make a general conclusion: to consider what lessons we can learn and how we should respond to all future changes in order to have a margin of safety. This would minimise the number of adjustments to our initial plans and allow us to manage internal and external resources in such a way as not to depend on any external factors.

We have recorded successful completion of the shutdown of the Sakhalin-2 project gas infrastructure and are moving forward. This is only the first step for offshore platforms, a start to the season. Our "pit stop" is continuing: we plan to work on the Molikpaq platform in early August, and then proceed to the PA-B platform. I am sure that, with our team of professionals, we will perform every operation at the highest level!

DENIS LUTSEV, ONSHORE ASSETS MANAGER

- Summing up the results of the shutdown, we have to wonder what the word "planned" means. We have managed to deliver on our plan, but it was significantly different from our vision at the beginning of the year. Recently, facing the worldwide effects of the "corona crisis", many prominent people (including Ole Myklestad, Production Director) recall the words of Mike Tyson, a famous boxer. When a reporter asked him about his plan for a fight against Evander Holyfield, Tyson said: "Everybody has a plan until they get punched in the mouth". The pandemic has been a huge blow to our plans. Looking back, I feel proud to work with the onshore assets team and the entire team of Sakhalin-2 project. I believe that we have perfectly regrouped and adjusted our actions and shortterm plans, while keeping the focus on the main things: the Goal Zero, quality and continuous improvement, reliable production. At the same time, we do not forget about the key to tomorrow's success: developing the staff and working on the future of the project.

Each shutdown is unique in its own way and does not always depend on the duration or scope of the work. Due to extended rotational shifts, we had to reckon with fatigue of our workers who were on shift for a long time. Nevertheless, we completed a critical set of measures to ensure the reliable operation of the Onshore Processing Facility (OPF) and Booster Station 2 (BS2). We faced real challenges and coped with them perfectly. This demonstrates an outstanding commitment of our team.

As for the pace of the shutdown, we initially agreed that we would be moving at the pace of the Goal Zero. When safety is a priority, we try to take our time, carefully

think through each step, and assess potential risks. As a result, we perform our work not only safely and efficiently but also ahead of schedule. When people are not under pressure of time, they significantly reduce the risk of mistakes and incidents that would make them stop, discuss, and rethink something. Certainly, the focus on safety is closely associated with related indicators, such as quality, scope of work, and schedule.

For the OPF, the shutdown involved alternate repairs of two trains with a 12-hour interval and the total duration of about a month. The main operations that determined the duration and criticality of the project included replacement and inspection of internal devices of the separator in the low-temperature gas dehydration system, replacement of a tube bundle of the main heat exchanger in the condensate stabilisation system, maintenance of high-voltage transformers of the main gas booster compressors, welding repairs in the production area, and modifications to pipelines for future integration of the OPF with the compressor station. Besides, a standard set of technical measures, including maintenance of safety critical elements, replacement of valves, dismantling and replacing the thermowells, was in the work scope. We have replaced components of the variable-frequency drive control system in the pipeline booster compressor, which can be recognised as one of the outstanding achievements of the shutdown. This high-tech operation was performed by the OPF specialists together with their colleagues from the Engineering and Maintenance Department, without recourse to foreign contractors representing the original manufacturer of the equipment.

We had extra difficulty in dealing with BS2, because it the first time we inspected check valves and a heat exchanger of gas air-cooling units. Specialists of the Engineering and Maintenance Department were of great help to us, especially in the flange work quality assurance and in solving various current issues, both directly at the station and remotely from Yuzhno-Sakhalinsk.

The OPF and BS2 teams successfully, ahead of schedule and without harm to the staff's health and the environment, completed all the tasks assigned, thereby ensuring safe and reliable operation of onshore assets. Such results were achieved thanks to well-coordinated teamwork of all employees engaged and careful supervision over the most critical operations. Moreover, by adjusting the schedule on the basis of the current situation, we could reallocate the resources in a timely manner. One of the key success factors was that the staff arriving at our production facilities efficiently used their time while staying at Temporary Accommodation Facilities: we prepared and implemented special plans of training and preparation for shutdown during self-isolation of both our permanent employees and temporary workers being mobilised for the shutdown.

After the successful start-up, I am proud of the excellent teamwork and grateful for the opportunity to work in this team, contributing to the better production performance of Sakhalin Energy. Summing up, we will, as usual, learn lessons from both successes and identified areas for improvement. By following the principles of continuous improvement, we will become even stronger and be ready for new plans and new challenges.



Cycle musketeers at the OPF during the turnaround



The team of winners – OPF

shareholders

Five Highlights of the Year

Interview with Alexey Miller, Chairman of Gazprom Management Committee, on outcomes of Shareholders Meeting.

— Mr. Miller, the outcomes of Gazprom's Shareholders Meeting were announced today. Could you please tell us what are your five highlights from last year?

— It was an extremely eventful year for Gazprom. If you want me to choose just five highlights, I would certainly start with the development of the resource base. We expanded our capacities at the new gas production center in Yamal, which is of key importance to our country. In 2019, we followed up the development of the Bovanenkovskoye field by starting to develop the Kharasaveyskoye field, which is located farther north and is unique in terms of reserves.

A second highlight was the successful operation in the autumn/winter season. Our performance was confident as usual, thanks in large part to underground storage facilities. In 2019, we brought their deliverability to an all-time record of 843.3 million cubic

annual replenishment of the resource base. Thanks to geological exploration activities, our reserve replacement ratio consistently exceeds 1. It has been like this for the past 15 years, and it will remain so in 2020. Yamal accounts for the bulk of the new reserves. This year has already seen a discovery of another major field in the region, which we named 75 Years of Victory.

At present, Gazprom's investment activity is primarily focused on Yamal and the East. In Yamal, we continue the pre-development of the Kharasaveyskoye field: in June, as planned, we started production drilling there. Recently, we began building a comprehensive gas treatment unit. We welded and laid one-fifth of the connecting gas pipeline to Bovanenkovo. As early as 2023, first gas from the field will be fed into the Unified Gas Supply System.

We have a very heavy workload at the Kovyktinskoye field in the Irkutsk Region.

The annual General Meeting of PAO Gazprom's shareholders was held by absentee voting on June 26. Shareholders from Russia and several foreign countries took part in it. The Meeting approved the 2019 Annual Report and the annual accounting/financial statements for 2019, adopted a resolution on profit allocation, and agreed on the dividend per share amount being RUR 15.24. Thus, RUR 360.784 billion will be allocated for dividend distribution (30% of profit payable to the PAO Gazprom shareholders according to International Financial Reporting Standards). FBK was approved as PAO Gazprom's auditor for 2020. Besides, the Meeting approved the revised Regulations on the Internal Audit Commission along with amendments to the Articles of Incorporation and the Regulations on the Board of Directors. Following a vote, a new Board of Directors was appointed, its membership being the same as the former one. Viktor Zubkov was elected as Chairman of the Board of Directors and Alexey Miller as its Deputy Chairman.

meters per day. As a result, the reliability of our gas supplies in winter reached a new level.

Clearly, a third highlight goes to our projects in external markets. We enhanced our export potential and launched not one but two new export corridors — TurkStream and Power of Siberia. This means even more reliable supplies to the West in parallel with the implementation of long-term strategic agreements with China in the East.

Russian gas processing projects are the fourth highlight. Their significance for Gazprom has been growing tremendously in recent times. Last year, we passed the halfway point in the construction of the Amur Gas Processing Plant and kicked off the project in Ust-Luga. Both of those facilities will join the ranks of the largest facilities in the world. I would also like to single out the successful project finance deal for the Amur GPP. The EUR 11.4 billion transaction is the largest deal in the history of Gazprom.

My fifth and, I suppose, last highlight is our financial performance. Gazprom remains steady in its work. The Company is very durable, as evidenced by our dividends We are going to pay out RUB 360.8 billion, essentially the record-breaking level of last year, despite the challenging situation that is currently facing the global economy at large and the energy sector in particular.

— Has this challenging situation affected the Company's projects in any way? What are the current plans and what is Gazprom working on?

- Gazprom has a clearly outlined goal-setting system. Among our goals is the

We continue to build wells. This year, we are starting to construct the first CGTU and the section of Power of Siberia stretching from Kovyktinskoye to the Chayandinskoye field.

Active work is being done at the Sakhalin gas production center: this year, two wells will be hooked up at the Kirinskoye field.

As our geographic reach keeps expanding, the gas we are extracting keeps changing in composition. We are producing

Gazprom Group's deal to attract project financing for the construction of the Amur Gas Refinery (AGR) worth EUR 11.4 bn received the Russian Export Finance Deal of the Year award during the annual TXF Perfect 10 Export Finance Deals of the Year. Earlier this year, in May, the transaction was recognised by Proximo as the 2019 Best Deal in Europe, Middle East and Africa in the Eurasian Oil and Gas category. This high rating emphasizes the quality of its structure as well as its importance for the international financial community.

increasingly more multi-component, ethane-containing gas. This refers to not only the new eastern fields — Chayandinskoye and Kovyktinskoye — but also the deeper-lying deposits in the Nadym-Pur-Taz region of Western Siberia.

This is the tangible reason for the significant enhancement of our processing activities. In the East, we are building the Amur Gas Processing Plant. In the West, we are constructing the complex in Ust-Luga.



These facilities will be among the largest in the world. Moreover, the Amur GPP will be the biggest global producer of helium, while the complex in Ust-Luga will have the largest output of liquefied natural gas in Northwestern Europe. And, of course, processing generates added value, which means a sizable additional monetary flow.

As regards our work in the European market, we continue providing reliable gas deliveries to our consumers. We hold our position as the largest exporter there. The period the gas market is going through today is not an easy one. There are difficulties for all of its participants, but we have a larger reserve to withstand any challenges. Gazprom has a whole range of significant advantages, such as a robust resource base, a

For instance, China is continuously ramping up both gas consumption and gas imports

— In general, how would you assess the potential for cooperation between Gazprom and China?

— The potential is very high. China's demand for gas will grow at a very high pace. Last year, gas consumption in China grew by almost 10 per cent, thus exceeding 300 billion cubic meters. In 15 years, the demand for gas in the country may double.

Today, Gazprom is supplying gas to China via the Power of Siberia gas pipeline. In just a few years, we will increase the supply volume to 38 billion cubic meters. The supplies via Power of Siberia will grow faster than both the imports of LNG

The first production well was drilled in the Kharasveiskoye field in the Yamal Gas Production Centre. Well 4051 will be drilled to a depth of 2,540 m. It is the first of eleven wells in cluster 5. There are plans to drill 16 wells in 2020.

The Kharasveiskoye field is the second field after the Bovanenkovskoye base field in the Yamal Gas Production Centre created by Gazprom. Gas production will start in 2023 with a design production level from Cenomanian and Aptian deposits of 32 bcm of gas per year. Later on, the company will develop deeper Neocomian and Jurassic deposits. The field development project covers 108 years of production, with gas to be produced until 2131.

well-balanced trading portfolio, along with flexible conditions of supplies and modern tools for trading. That is why we step up our cooperation activities even at this time; for instance, we have just signed a new longterm contract for gas supplies to Greece.

Speaking of the financial situation, Gazprom maintains a high level of stability and reliability. By the beginning of this year, we accumulated a significant liquidity cushion amounting to over USD 22 billion across the Group. Investors show a great deal of trust in us; this year, we placed two issues of bonds in US dollars and euro, and two ruble bonds, all of them on very favorable terms. On Monday, we are going to close one more deal in US dollars.

According to all of the "Big Three" international agencies, i.e. S&P, Moody's and Fitch, Gazprom's long-term credit ratings remain unchanged, whereas the ratings or the rating outlooks for many foreign oil and gas companies have been lowered by at least one of those agencies.

By the way, a decline in gas demand is not a universal trend for foreign markets.

and the gas supplies from Central Asia to China.

I would like to note that Gazprom and its Chinese partners are currently negotiating an increase of gas supplies via the Power of Siberia pipeline by 6 billion cubic meters, i.e. to 44 billion cubic meters of gas per year, as well as the ways to arrange gas supplies from Russia's Far East, along with the construction of Power of Siberia 2 and the western route. Considering all of this, we can say that in the foreseeable future the volume of pipeline gas exported to China will exceed 130 billion cubic meters, which is comparable with our supply volumes to the traditional markets.

- As for gas grid expansion in Russian regions, what is the main item on your agenda?

—The main item, of course, is the task set by the President of Russia as regards the implementation of the gas supply and gas grid expansion programs in Russian regions. We have been given totally clear timeframes for the stages and completion: the years 2024 and 2030.

Source: Gazprom.ru

Shell Russia Head: We Will Not be Put Away by Uncertainty

Shell Russia's Chairman Cederic Cremers has spoken to TASS about oil prices, Nord Stream 2 and new projects.



- Oil producers have faced an unprecedented drop in demand this year. Do you think, Mr. Cremers, this can accelerate energy transition and decarbonisation process and make an oil peak consumption closer?
- I think that the crisis and the pandemic of COVID-19 clearly put a lot of pressure on our industry energy demand has dropped, and the impact on the economies around the globe is very real. I do think this volatile market will be with us for a while. We do not expect that there will be a recovery in oil prices or the demand of the products in the medium term. However, we do expect that it will recover in a longer period.

Therefore, whilst this crisis will have an impact, we do believe that in the slightly longer term those much broader trends of energy transition will take over again. It is difficult to say at this stage how much the behavior of consumers will change, will people get back to the same level of commuting as in the past or not, and therefore will it provide an opportunity to accelerate even more the energy transition. I can only say that the trend for energy transition was there before the crisis and will be there once we come out of it.

- When you say "medium term", what exact time period are you talking about? Is that some two-three years or several months? Does that mean we will not see previous prices around \$60 per barrel during this time period?
- We believe that both hydrocarbon prices and product prices will remain at lower levels than pre-crisis in 2021 and, possibly, towards the end of 2021. That's certainly what we are using as our basis for planning.
- Do you think this will encourage energy companies to shift investments from oil to gas or renewables? How this will affect Shell's investment?
- We had to adjust our expenditure, indeed. In our operating expenditures, we are expecting to spend about \$3-4 billion less than we did in 2019, in the next twelve months. It also applies to some difficult decisions for people. For example, we have also decided that nobody in our global company will be getting performance bonuses over this financial year 2020. On top of that, we are reducing our capital expenditure from \$25 billion to \$20 billion this year, that is about 20% reduction.

However, the degree that each Shell business is contributing to this cut is different. Our upstream business is contributing about 45% of that reduction in expenditure; our downstream business -30%, and our integrated gas including LNG and new energies business are contributing only 25% of this saving. Therefore, whilst all of them are reducing, we do see that the relative impact is different and is also related to the long-term shift in our industry.

- Are these reductions applicable to your activities in Russia?
- Yes. It has also impacted our activities in Russia, absolutely. When I talked about our operating expenditure, this is something we were driving through across all our activities and all places. For example, we have had to reduce drilling expenditure in our joint ventures in Russia. Also, we had to change the pace and aspirations of some of our new ventures unfortunately as a result of the current external environment.
- $\boldsymbol{-}$ Are you talking about your joint ventures with Gazprom Neft?
 - Yes, that is correct.

- As we know, Shell had to quit from one of them. Are you going to halt the rest of the projects?
- Whilst we had to reduce the pace of our growth ambitions, Russia remains the country of strategic focus for Shell where we pursue growth in both existing and future businesses, including oil projects together with Gazprom Neft.

If you are referring to Meretoykhaneftegaz joint venture, then yes, unfortunately, we had to cancel that. The deal was not completed and had some ongoing uncertainties. Within the challenging external and financial environment, we could not maintain that uncertainty. That was very sad to leave that venture.

However, answering your question, it does not mean that we are stopping other projects, both existing and growth with Gazprom Neft. We continue to work strongly on our Salym Petroleum Development joint venture. In March, we closed a transaction to expand the area of operations of Salym by acquiring a license for Salymsky-2 block from Gazprom Neft.

Moreover, we continue engagements with Gazprom Neft about establishing a new joint venture, which is a frontier exploration prospect in the north-east of the Gydan peninsula. This is a joint venture that will cover two license blocks.

So, the short answer is that we continue our joint projects and we will continue to build that partnership with Gazprom Neft

- Can we hope that you will make some announcement soon?
- Yes, if we are able to finalize that in the next weeks or months that probably could be an announcement. We all are looking forward to it.

This expected to be an oil-producing venture. Of course, still in the exploration phase, with high risk, high investment. However, that expected to be a long-term oil venture, that we will see operating for decades.

- Anyway, we know Shell mostly as a gas company. This market is not doing well now too — we see a drop of demand and prices. How long do you think the recovery of gas market will take?
- Yes, you are absolutely right. We have seen that the economic slowdown reduced both gas and LNG demand across the globe. This is a large drop compared to the projections that we had just a few months ago. What is probably important that it will take a little bit of time for the demand to come back to the previous projections that we had in terms of demand growth, but we do see continued growth. This is not about fundamental demand destruction, but this is about a slower pace of growth in the near term.

Nevertheless, we do not see that the fundamentals of the LNG market have changed. We do believe that over the next 10 to 20 years an annual average growth rate of 4% per year is realistic. It will remain the fastest growing sector in the hydrocarbon space. That means that if you look at this annual rate between now and 2040 the market will double in LNG.

- However, it was reported that customers might reject up to 60% of LNG supplies in July. Do you think that Shell and Sakhalin-2 project may face this problem in upcoming months?
- We certainly are not seeing in our actual operations that kind of percentage that you are mentioning. It is standard in our industry that long-term contracts always include some volume flexibility for buyers they exercise from time to time, as the market conditions change.

Yes, we had some of our LNG customers who had some deferments of specific cargoes just in short term due to full tanks or full inventories. However, the overall number of such cargoes is relatively small, very manageable for us operationally and within the normal bandwidths.

On the LNG side, we have not had to reduce the production at all for any of these reasons. We can remarket these cargoes relatively effectively in the market. Sakhalin-2 has a very privileged position in the Asia Pacific market being very close to the key markets: Japan, Korea, China, Taiwan. In addition, it has always been a very strong and reliable partner for its customers. It has a very strong reputation in the market. We continue to be effectively placing many of the cargoes that we produce, including additional spot cargoes, into the market.

- As we mentioned Sakhalin-2 project, do you think that plan of its expansion could be delayed due to the current crisis?
- It is a great question. Our overall ambition to expand Sakhalin-2 remains unchanged. I still believe it is the most logical way to expand the LNG capacity on the existing industrial site in the Far East. The exact timing and pace will undoubtedly be impacted by what we are seeing in the short term right now.

Reality is that these projects have lifetimes of decades, more over than 20-25 years. They tend to be less dependent on short-term cycles and economic impact, but more on the longer-term trend including what I have mentioned earlier in terms of what is our long-term outlook for LNG markets.

- You have said Shell believes in the gas market. How this can affect your interest for new projects in Russia? For example, Novatek is going to start looking for new partners for its next LNG project in a few years. Could it be interesting for you?
- I believe that in the future Russia will be one of the few most competitive supplies sources for LNG demand growth.
 The share of Russian LNG will continue to grow compared to the past.

The combination of our strength in the LNG market and strength of Russia in the gas market remains something we are very interested in. We are open to different opportunities in Russia whether within our existing or new partnerships.

- In general, how do you see the future of Shell in Russia, let us say in ten years? How the Shell's portfolio will look like?
- Where we are today, with all the uncertainty it is not always easy to predict the world ten years ahead, it is even difficult to predict 18 months away. However, let me give a couple of thoughts on this. Therefore, we start from the next 18 months.

Of all the energy companies working in Russia today, Shell actually has the most diversified portfolio. We are active not only in LNG and in upstream oil business, but we are also very strong in downstream. We are proud that Shell logo is present everywhere from Saint Petersburg to Sakhalin, if you look across Russia.

On the downstream side, we are striving to become the number one customer choice both in premium lubricants and in fuels. On gas and LNG, we remain very keen to see how we could grow together with Russia whether it is expansion of Sakhalin-2 or new projects and partnerships. With oil we are primarily focusing on the larger Western Siberian basin, starting from Salym and then right up through the North into Gydan.

Sometimes I see comments that the current crisis or energy transition or other things could force Shell exit Russia. But our presence is quite broad in different sectors of the economy, and we are looking to stay here. Russia will continue to be a country of strategic importance for us.

If I look a little bit further ahead in your 10-year question... I am quite convinced that as a company we will not be put away by the uncertainty in the next ten years. We'll also be on the lookout for new opportunities where we might grow. There are things like E-mobility or LNG for road and marine fuel. In addition, hydrogen is a market that can grow during the energy transition and where Russia can play an important role.

- As you have mentioned Europe, I cannot skip the question about Nord Stream-2 project. Shell is one of the investors in it.
 As we know, the Nord Stream-2 will not receive any exemptions from the European Gas Directive. Do you think there is still any possibility to adapt the project to the 3rd Energy Package?
- As you have said, Shell is just a lender to the project. The Nord Stream-2 operating company holds the core discussions with the German regulator. I can only reiterate that once the project is completed, it will become critical for the European Union in the sense of providing reliable access to natural gas at very competitive prices.
- However, as an investor, are you concerned about receiving dividends, benefits from the project due to delay?
- We do not receive dividends. We are a lender, not a shareholder. But just to be clear, I will not be a good businessperson if I don't worry about [the delay]. Again, in our industry many things that we invest in are long-term and there are long-term risks associated with them. So, the most important thing is that the pipeline would be completed, and this is more important than the exact timing.
 - Source: https://tass.com/economy/1172749

digitalisation

Digital Twins

How is it possible to ensure high-quality engineering and technical support during a scheduled shutdown in the time of a pandemic? By applying custom solutions and digital twins! Head of the Engineering and Maintenance Department Evgeniy Udovenko and Head of the Equipment Monitoring Subdivision Alexander Krivosheev tell the Vesti about Sakhalin Energy being one of the first companies in Russia to have launched a large-scale project to implement real-time remote support systems – digital twin workstations.

EVGENIY UDOVENKO, HEAD OF THE ENGINEERING AND MAINTENANCE DEPARTMENT

- These systems allow production facilities to perform work in such a way that the other project participants (for example, colleagues in the office, representatives of equipment manufacturers or Shell technical support engineers) can take part in the process remotely, getting a complete picture of what is being done and having an opportunity to give advice to facility staff or answer their questions in real time.

The epidemiological situation has dramatically changed our approach to the organisation of work at production facilities. Long before the start of the scheduled shutdown, we realised that it would be very difficult or even totally impossible for our key foreign contractors to participate in the work directly. Accordingly, it was essential to find a solution that would enable carrying out the planned repairs of critical equipment, even with limited technical support. Therefore, we had to make a quick decision on creating an infrastructure that would support all available methods of remote expert support.

In cooperation with experts from the contractor organisations servicing the equipment of the LNG plant, we resolved many urgent problems and settled the fundamental issues of online support. It was necessary to take into account the difference in time zones, the technical

features of connection, the need to synchronise the work of different expert groups and, most importantly, to develop a shared opinion on various issues. I must admit that there were a lot of issues to address at the preparation stage; now that we have completed the planned work, I can say with confidence that the system has fully justified itself.

At the moment, we are appraising the necessity and the possibility of its introduction at other Sakhalin Energy production facilities. This is a natural phase of the digitalisation process. Such equipment can be used with maximum benefit not only when performing large scopes of scheduled repairs, but also during online inspections, working visits, as well as in

work on pressure vessels and other mechanical equipment. This does not mean that the engagement of experts and single-discipline specialists will be rejected completely. There are technically complex works related to the setting up and debugging of equipment, in the execution of which the participation of certified specialists is important. Nevertheless, the development of digital strategies involves minimising the presence of vendor representatives wherever possible.

I want to emphasise that this is just the first phase. We, engineers, consider ourselves to be the key players and essentially the drivers of ideas related to the technical support of business processes. Today the Engineering and Maintenance Department is developing a strategy that will act as a kind of technological accelerator for the Production Directorate in the next four to five years. No one can make an accurate epidemiological forecast for the next year. Still, we must ensure the reliability and safety of our production in all possible global development scenarios. This means carrying out scheduled shutdowns in full scope and in any conditions.



Smart helmets at work



 $Smart\ helmets\ allow\ to\ make\ repairs\ with\ online\ engineering\ support\ from\ all\ over\ the\ world\ locations$

ALEXANDER KRIVOSHEEV, HEAD OF THE EQUIPMENT MONITORING SUBDIVISION

— We had planned to use remote support helmets and tablets anyway, but the pandemic forced us to expedite the actions and implement the project within two months, even before the start of the scheduled repairs.

So we worked in two areas simultaneously: arranging of wireless communications in enclosed premises and procurement of necessary equipment.

First, with the participation of the IT team, the LNG plant technical and design teams, we promptly began laying a fibre optic transmission line to the machine rooms. This is the most important element in arranging wireless communications for decades to come. In parallel, we worked on the creation of a temporary network infrastructure inside the machine rooms, taking into account all major aspects and minor details, as well as the urgency of the task. All team members were totally focused on the assignment, given its high priority. As a result, we were able to connect and test the Wi-Fi network two weeks before the shutdown.

Secondly, we organised urgent procurement of digital devices in mid-March. It was not difficult to predict that this kind of equipment would be in high demand among large industrial companies, so we quickly arranged purchases from several vendors, thus significantly reducing the risk of delayed goods delivery and accelerating the arrival of the first items.

From the very beginning, it was assumed that the LNG Rotating Equipment Subdivision would be the key user of the devices, so its specialists got down to thinking through the procedure for using the new equipment. Soon it was clear that we would need not only helmets and tablets but also stationary cameras. We then used them primarily for constant broadcasting of video to administrative offices in order to receive timely engineering support. In addition, we streamed videos to representatives of the equipment manufacturers (MAN Turbo and General Electric) whenever it was necessary to show them the overall picture of the repair work.

As regards the architecture and the working environment of this solution, remote support helmets are devices basically used for video conferencing. In fact, this is a portable computer designed to be placed

on a helmet. A person wearing such a helmet can control this computer with voice commands and broadcast the video image of what he sees himself; at the same time, he can hear and see the necessary information from remote participants. For example, we need to hold a video conference with the participation of remote expert engineers and an employee at a production facility who is carrying out technical operations with the compressor and needs to clarify some points, request support, or, on the contrary, show his progress or work details. For this purpose, we create a virtual room; all conference participants enter it, using a special password, and begin working online. This is actually an ordinary video conference except for a single difference - one of the participants is streaming a video of what he sees, rather than of himself.

Additionally, helmets are equipped with a small screen attached at the carrier's eye level, which allows him to see the same video conferencing window, but in a shared mode. Any of the participants can make a note on the screen, and the field employee will see it. For instance, if an engineer says: "Please look at this device" or "Please switch this lever" and marks the indicated part in red, the operator will see exactly

which device or part the former is talking about. This feature makes it possible to avoid mistakes and misunderstandings during complex technical operations.

We have already begun experimenting with other types of work, too. We used a similar connection during work on electrical equipment: an expert of ABB, a contractor organisation, who was on the Lunskoye-A platform, Electrical Engineer who was at the LNG lant, and Chief Power Engineer who was in the Yuzhno-Sakhalinsk office, worked together through a virtual room (Read about it in the next issue of the Vesti newsletter. — *Editor's note.*)

This system offers tremendous opportunities. In addition to those described above, it can be used for training during rare, unique technical operations performed as part of scheduled shutdowns or during complex repairs of high educational value. Remote support helmets can be used by experienced employees to live stream the course of their work to a virtual conference room, simultaneously shared by many observers. Additionally, stationary cameras can be used to record the whole repair process."

By Marina Moruga

digitalisation

Avatars at the LNG Plant

Prigorodnoye production complex was attended by Cederic Cremers, Country Chairman Shell Russia, Ole Myklestad, Production Director of Sakhalin Energy, and Jane Alcock, Head of HSE, during an unusual online visit.

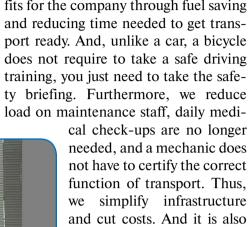
They were welcomed by Alexander Singurov, Head of Prigorodnoye PC, and Andrey Sharipov, Head of HSSE Subdivision, wearing digital remote communication helmets. Andrey shared his impressions of a virtual meeting with management.

 We communicated with the use of special equipment - RealWear re-

a long time. After the first sessions for contractors, it became evident that the system can be used on a permanent basis by making it a part of safety induction training for all production employees.

We are planning to develop this centre in the future and install booths to operate explosion-proof equipment, (these devices help to track down the use of transport). These are huge benefits for the company through fuel saving and reducing time needed to get transport ready. And, unlike a car, a bicycle does not require to take a safe driving training, you just need to take the safety briefing. Furthermore, we reduce

> additional physical exercise and a contribution to a healthy life style!



Stopping at the second

train where scheduled turnaround was in progress, we told our guests in much detail of the coal absorbent replacement project and then moved up to the preliminary and main refrigerant compressor's deck. We were welcomed on site by Alexey Soshnikov, Head of LNG

duction infrastructure in the company allows to effectively unite the virtual and physical world, making optimal use of time, resources and opportunities of the production site. It is important for us that augmented reality technology is an opportunity to make decisions in real time and, as a result, to create a feedback loop between planning and production, taking into account the inherent principle of "Prevent and eliminate, rather than respond to the consequences". progress with repairs and supports many other tasks. We have just recently started to use this equipment (just before

Cederic Cremers, Country Chairman

Shell Russia: "Taking into account the fact that the situation in the world

is developing very dynamically, the

practice of forming a "smart" pro-

the turnaround) but can see a very satisfactory result. These tablets and video helmets are used to continuously communicate with the manufacturer's engineers who can assess the work progress in real time and provide recommendations for maintenance team. The official visit ended in the administrative building by the overview of production performance of Prigorodnoye

PC in the first six months and the review of safety and reliability KPIs. Alexander Singurov provided the summary of the challenges the production facility had to overcome during COVID-19 pandemic and spoke about measures currently taken at the LNG plant to prevent the infection.

After the main part of the event, virtual guests noticed high achievements of workers. Cederic Cremers commented that reliability and performance indicators of the Sakhalin-2 LNG plant were among of the best in the world. Ole Myklestad underlined that the main



The participants of the online visit – Cederic Cremers, Ole Myklestad, Jane Alcock

mote communication helmet. It is notable that a person wearing this helmet is called an "avatar" and many people start joking about making a new episode of this famous Hollywood film but about Sakhalin-2. And even though it was a virtual visit, site "visitors" had a toolbox talk. We conducted it in a new temporary shelter built just in a couple of months before scheduled turnaround, the so-called Visual Onboarding.

The central part of the shelter is taken by booths with the recent safety information including Sakhalin Energy's life saving rules, operations in confined space, use of personal protective equipment, and work at height we carry out during scheduled shutdown. All booths imitate real production situations. We have construction scaffolds you can climb and practice fastening techniques and a unit that demonstrates work in confined space with all related risks, and a structure with items which may potentially fall from height (DROPS). Furthermore, the booths also display heavy lifting special tools and tools to proceed with lifting without using hands, as well as special ties to fixate manual tools and prevent them from falling. After a toolbox talk, participants must practice knowledge at a special booth where they are asked to identify various risks and intervene. Besides, we practised proactive identification of potential threats using the Bow-Tie diagramme. Just imagine: company management answered questions and helped to identify potential threats online.

Visual examples yield instantaneous results and are remembered for

Ole Myklestad, Production Director: "The introduction of "smart helmets" is a small but very important stage in creating a digital platform for the new format of the company. Since the safety of personnel is one of the company's priorities, it is a great opportunity to remotely monitor compliance with safety regulations at work and monitor the movement of employees in different work areas, which is especially important during scheduled maintenance work. This approach is an important step towards zero injuries and the digitalization of business processes within the framework of the Sakhalin-2 project".



Ole Myklestad joined video conference from his office in Yuzhno-Sakhalinsk



The employees ride tricylces at the Prigorodnoye production complex

flange connections and possibly equip a separate classroom using 3D learning technologies and a virtual room where augmented reality can be used to assemble and disassemble equipment.

The next item in the agenda was visit of LNG plant production area. All meeting participants had visited the LNG plant before but that time we rode tricylces from the administrative building to the second train. The tricycles were accessed via electronic key holders took us on a virtual tour around the deck and demonstrated current progress in gas turbine repair and modifications of the axial compressor.

Then Konstantin Nazarevich, Graduate Rotating Equipment Engineer, continued the tour. He demonstrated the performance of a tablet that is used for real-time recording of electronic data on equipment in the system on site, create notifications, account for current

Rotating Equipment Subdivision. He task of the company, namely safe and reliable operation of all production facilities, was maintained at an excellent level, also thanks to the implementation of the smart helmets. As he wrapped it up, they would be perfect with similar gloves for handshaking, the only aspect missing during a virtual production tour. Who knows, they might come in the future!

> Prepared by Marina Moruga, Marina Semitko

cover story

Lessons of Isolation

"Learn, Learn, Learn!" Vladimir Lenin, the revolutionary and founder of the first socialist state in the world history, advised to his contemporaries and bequeathed to his descendants. Even earlier, Anton Chekhov, the writer who is especially close to the hearts of Sakhalin residents, wrote the same words: "...We must study, and study, and study". Wise people do not give bad advice. Following it, Sakhalin Energy pays special attention to staff training.

COVID DOES NOT PREVENT YOU FROM LEARNING!

"Previously, much of the educational process took place in a classroom format. However, COVID-19 profoundly changed this model and made us significantly speed up our efforts to introduce distance education and e-learning, such as online courses and webinars," says Yakov Pyak, Head of the Professional Learning Subdivision.

According to Yakov, shift personnel entering Sakhalin had to spend two weeks in self-isolation at Temporary Accommodation Facilities (TAF). The company provided them with training opportunities so that they could use this time effectively and profitably.

IT'S A MATTER OF TECHNIQUE

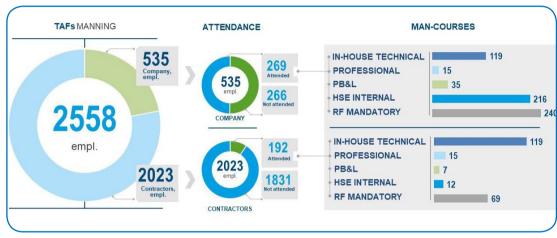
For this purpose, we did a great deal of work in the shortest possible time under the leadership of the Human Resources Directorate and together with variall TAFs for printing. They were sent to users electronically and additionally uploaded to the company's internal website, the COVID-19 section.

Some TAFs found it difficult to access the corporate network training materials and received training materials on USB flash drives (purchased specially for them), as well as through a managed file transfer system (MFT) that allows downloading the resources to personal mobile devices.

NEW FORMAT

In general, all units of the company re-

sponsible for the staff training process got used to the new reality in a short time.



Personnel trainings in TAFs' statistics from April till June 2020

ous organisational units of the company. For example, we created a catalogue of online and offline training events in key areas: mandatory, industrial, and professional training – 394 courses in total. We prepared a user manual on connection to IT services and applications for training. Files with the manual were distributed to

According to Tatiana Darmeshkina, Head of the Industrial Training Centre (ITC), they converted 29 ITC training courses from classroom to webinar format in just a week, using such software as Cisco Jabber and WebEx. "The ITC instructors continued to conduct classroom courses on weekends, while supporting the business and staying at the LNG plant. Later, when preparing for the turnaround of the plant, they also underwent a 14-day self-isolation before entering the facility and at the same time conducted courses from their TAFs," Tatiana adds.

The HSE Training Subdivision operated on a similar principle. "We have agreed to conduct 15 online courses. Some HSE courses (for example, the Observation and Intervention) were converted to the online format," says Anna Mikhailyuta, Head of the Subdivision.

In turn, the Professional Learning Subdivision provided users with access to the

> Skillsoft Distance Learning System so that they could take courses on general business competencies (350 courses).

LEARNING THE LESSONS

As a result, more than 1,500 people were trained in April and May alone. Self-isolated employees readily seized the opportunity to do something interesting and useful.

Since self-isolation before entering production facilities has become a standard corporate practice, the company will continue to

use the well-established model for training the staff at TAFs. Moreover, it is now quite clear that the model will remain valid even after the end of the pandemic. This is perhaps one of the best lessons that Sakhalin Energy has learned from the difficult situation!

Pavel Ryabchikov

Voting on the Amendments

From 25 June to 01 July, voting on the new amendments to the RF Constitution was held all over the country. Sakhalin Energy employees also participated in the historic event.

The company's management team kept the organisation of the voting process at the production facilities under special control. In total, about 1,400 Sakhalin Energy employees and contractors holding Russian citizenship performed their civic duty. The personnel of the Onshore Processing Facility were the first to express their civic position – they voted on 21 June; on 22 and 23 June, voting was held for the employees of the LUN-A, PA-A and PA-B offshore oil and gas platforms, and on 23 June – for the staff engaged in the construction of the OPF compression station. Nogliki camp was engaged in elections on June 24, and on June 29 the voting was completed at Prigorodnoye PC.

According to Lyudmila Khimchenko, a member of Precinct Electoral Commission No. 67 and Deputy Head of the Prigorodnoye Production Complex Equipment Repair and Maintenance Workshop, the members of the Korsakov District Electoral Commission provided significant assistance in organising the voting. Although the anti-epidemic measures in force in the company prevented them from coming to the asset in person, the experts gave recommendations remotely and sent all necessary guidance materials. The voting process on site was arranged by the company personnel staff which in accordance with the law were included in the precinct electoral commission.

"For me, it was an entirely new experience, but I believe that we coped with all tasks successfully. In particular, the work of the commission was organised in such a way as to ensure that both the day and the night shifts had an opportunity to vote. We have conducted a quality information campaign: informed colleagues in advance on the date and time of the event, collected voting applications (which is a mandatory requirement for residents of other regions of Russia), and promptly addressed all emerging issues", Lyudmila said.

In Prigorodnoye, voting was held over two days -28and 29 June. On the last day staff coming to the plant from 2 week mandatory self-isolation in temporary accommodation facilities TAFs joined their colleagues in voting. As for those who are still under observation in the TAFs, they also had an opportunity to express their civic position. Ballots were accepted there on 29 and 30 June. For this, the company had developed a special voting algorithm that excluded the possibility of voters contacting with one another, and also ensured the sterility of the premises.

According to experts, organising the voting process at the offshore oil and gas platforms - Piltun-Astokhskoye-A (Molikpaq), Piltun-Astokhskoye-B and Lunskoye-A was the most difficult part of the work.

"Bad weather conditions and dense pack ice in Nabil Bay, which made it completely impossible for vessels to navigate, left us no choice – the ballot boxes and the documents necessary for voting had to be sent by air," said Vadim Panin, Sakhalin Energy Logistics Manager.

According to him, the authorised employees and the Aircraft Operations Group coped with the important assignment excellently: everything necessary for voting was safely delivered to the platforms despite the thick fogs. Moreover, special care was taken to disinfect the cargo - it is a mandatory requirement during the COVID-19 pandemic.

"Everything went without a hitch, very well-organised, with all safety requirements met. Despite the scheduled shutdown and the hectic activity on the platforms, people found time to express their opinions by voting," said Marat Rezyapov, Offshore Assets Manager. "This voting



Electoral Commission at the OPF



Voting on the PA-B

was characterised by the highest attendance in the entire history of the platforms. I sincerely thank the election commissions, all those who helped in the organisation of that process, and those who came to express their civic po-

Pavel Ryabchikov



corporate culture

You are not Alone

Let's take as a starting point the Sakhalin Energy's commitment to comply with high ethical standards of doing business and interacting with stakeholders. There is a practical question involved here: how to do it?

In social psychology, there is a phenomenon called "the bystander effect". The essence of this is that if you find yourself in a critical situation, the individuals are less likely to offer help when there are other people present. Of course, there are some exceptions, however, in support of the bystander effect the news more often tells about a lone hero who nobly saves lives of other people or blames collective passivity resulted in human casualties.

It seems paradoxical. As compared to an individual, a group always has more resources and less risks in providing help. Why the salvage statistics is not in favour of a group?



The thing is that interference in situations which do not relate to us directly is psychologically complicated process. If we are the only witnesses of somebody's trouble, we can experience fear and doubt, we can run away, but the at the same we would realise that nobody else is there to help, so we act against our own fears. If we watch someone's trouble together with other people, there could be less fear, but the sense of personal responsibility would be diminished, thus creating a collective stupor: everybody sees the trouble, but everyone expects another to help.

In the context of corporate business culture, the bystander effect manifests itself as a failure to act when observing violations or abuse by colleagues. There are more complications as compared to a random emergency situations involving strangers. It takes much more courage to make a remark or attempt to suppress inappropriate behaviour of people with whom one has good relations and continues to work. This is a critical human factor that represents the biggest threat and challenge to the culture with high ethical standards.

Various policies, standards and procedures can be implemented, but their effectiveness would eventually depend on personal choice and actions of each of us. Personal choice cannot be delegated and controlled without violating fundamental human rights and freedoms, however, we can create an environment and conditions in which you will receive all the necessary support in order to act responsibly.

Slogans and moralism aside, we would like to remind you that Sakhalin Energy has professionals and instruments to support you and your right to display responsible and active position.

Internal Audit Subdivision

safety

Is my Home my Real Castle?

Remote work is a notion that until recently it was rare in Russia and rather belonged to the domain of hipsters. However, today it suddenly became a fact of life for the majority of office personnel.

This new remote reality became a source of inspiration for multiple jokes and philosophical contemplations. It also increased the likelihood of home accidents. Though it is hard to outline any statistics on this topic, our colleagues and friends share their stories, which make us look from another angle at the famous saying of Sir Edward Coke "My home is my castle". Are we really safe at home?

Here is one story from one of our colleagues, "I had one of my the most serious traumas at home. This happened when I was getting ready for my exam at the university. I was so deep in the process of studying the material that I lost track of time and spent a couple of hours in the same position on my chair until I could not feel my legs. When I tried to get up, my legs were numb. I flopped on the floor, twisted my foot and to make it complete, hit my head against the corner of the closet. A fabulous scene for a comedy resulted in the long recovery of ankle, head bump accompanied with black eye at the exam. Since then, I am very careful about my breaks during home work."

"Sometimes, when I work from home, I throw myself into a task and forget about time, especially when I am on my own. Hunger pushes me to put water on the stove for lunch and the next thing I know is the water boiled-off or it smells

something burnt. I can't count how many times I had to clean my stove after pasta boiled over the pot," shares her experience another colleague.

These are just a couple of examples, which could have had a worse ending. Once again, they prove that we ourselves are the main source for most hazardous situa-

tions. We feel safe at home, and usual for work attention and concentration have a reverse side (we either can dive too deep into a task or be way too relaxed). These are the moments when pasta is burning, legs are being twisted, electrical devices get broken, gas leaks, knives fall, and apartments get flooded.

Of course, new reality asks for new recommendations and new precautionary formats, which might help avoiding such situations. However, the only one that works "practice make it perfect." When working from home you must always remember of self-discipline and self-management. Daily routine, regular breaks, sport exercises, attention — these



are the integral elements of the success formula which help not only in your career but in preventing home accidents.

To make our home a real castle we should stick to the Goal Zero at home as well: take care of our own safety and the safety of those around us, intervene into the unsafe situation (immediately get rid of possible risk sources and fix any disorders), recognize and control risks (know what to do to reduce consequences if something has happened).

On Sakhalin Energy's internal website in COVID-19 section you can learn more about possible home safety hazards and safety recommendations.

Evgenia Diamantidi

<u>award</u>

Gaining Momentum as Journalists



A little more than 10 years ago, in June 2010, the company hold an unusual ceremony: the first winner of the I Am a Journalist contest was awarded a challenge cup. At that time, the contest became a new tool for employees, which helped them share news, achievements, and outstanding events in their unit's activities. It still remains an effective method, but on a completely different scale.

Over these years, the terms and conditions of the contest have not changed. For each piece of news, authors get some points, which are included in the overall team score of their directorate or department. The winner is determined by the total score for publications per round. Over the years, only the appearance of the challenge cup changed: initially, it was a metal installation in the form of a scroll and a golden feather, heavy enough so that it had been always difficult for the winners to hold it in their hands. A plastic version that replaced the metal cup was very convenient to use, but it did not stand the test of time. Early in the year, we presented a figurine of a worker with a megaphone — a new look for new records and achievements. Every three months, the cup is passed to the next winner, thereby maintaining the spirit of sportsmanship and open competition.

It should be admitted that only few got into the game at first. Sometimes it takes a while to get used to and develop a taste for the game. In 2010, we received only about 50 applications. This year, we have got more than 250 newsbreaks (on average, one piece of news per working day). All of them come from you, employees of the company, who are always willing and ready to share useful information and interesting events in their work with their colleagues, and to publish their stories, as widely as possible, on internal and external communication resources, such as the daily news bulletin, external website, internal website, Vesti corporate newspaper, and even releasing information to the mass media.

Now, the most important thing is that: among the publications in April—June 2020, the Production Directorate won by a large margin (89 points). This is the highest result in the history of the contest. We are especially pleased that together we have achieved this record in the anniversary year of the contest. In this round, the most popular topics highlighted in corporate sources and mass media included the 2020 turnaround, the use of high-speed vessels for transporting shift personnel to offshore platforms, and the successful completion of a major shift rotation in the difficult epidemiological situation.

We promised our readers to announce the top three winners to support the spirit of the contest. We keep our word: the Technical Directorate ranks second and the HSE Department closes the top three. We congratulate the winners and wish everyone success in the next rounds! Please send your new articles to ea@sakhalinenergy.ru.

Marina Moruga

industrial safety

Inspected by Sakhalin Energy

Many of you know about the recent process emergency in Norilsk involving the loss of containment of a diesel fuel tank which resulted in the release of more than 21 thousand tonnes of fuel into the environment, causing irreversible damage. Consequently, Sakhalin Energy immediately decided to conduct an unscheduled inspection of its oil and oil product tanks under the Sakhalin-2 project, to be 100% sure that they are operated in a safe manner. Gleb Vnukov, Head of Industrial Safety Subdivision, spoke about the inspection progress.

The company operates hazardous production facilities (HPF) subject to ongoing multi-level production control aimed at ensuring facility safety, emergency prevention and readiness to respond in case of an emergency. Company specialists

perform annual scheduled inspections of HPFs and related units, sites, areas and technical devices, check documentation and staff to make sure they meet the requirements established by Russian industrial safety laws.



Oil tanks at the Prigorodnoye production complex

Check-lists were developed for all operations at the facilities (e.g., drilling operations, pressure equipment, hoisting equipment, main pipelines, etc.) to facilitate scheduled inspections.

In order to implement an unscheduled inspection decision, the company has urgently developed special check-lists aimed at fulfilling the task. They included about 350 Russian legislative requirements to support safe operation of tanks and are split into three blocks.

The first block (general requirements) included the inspection of all documents needed for tank operation, as well as inspection of the qualifications of staff operating the tanks based on established requirements.

The second block (technical conditions) included the inspection of the reliability of tank design, safeguards, dike, circuit breakers and auxiliary equipment.

The third block (operations) included the inspection of staff compliance with the process, as well as the completeness and quality of maintenance, repair and diagnostics of the tanks during operation. Developed check-lists were submitted to the specialists of the Onshore Processing Facility (OPF) and Prigorodnoye Production Complex since these facilities are involved in the operation of large oil and oil products tanks. As an example, the volume of two tanks at the Oil Export Terminal is 200,000 m3. This is enough to fill 80 Olympic-size swimming pools.

Onsite specialists have clearly and regularly handled all items based on checklists, issued tank inspection reports when they received an official request from the Sakhalin Rostechnadzor Department to conduct unscheduled inspections of the tanks. Again, Sakhalin Energy's professional team were ahead of the curve!

By the time they received Rostechnad-zor's request, they were already ready to report the work completed: Sakhalin-2 tanks were operated strictly in compliance with the requirements outlined in process regulation, drained and filled in a completely automated manner, the tanks had no defects that affected their safety and employees were properly qualified.

Furthermore, there is special emergency response equipment at the facilities, external emergency rescue units have been formed and emergency action drills for employees are conducted on a regular basis."

Recorded by Marina Moruga

One Web Page – An Ocean of Information

The Industrial and Fire Safety, Blowout and Emergency Response Department now has its own web page on the company's internal website. Specialists of the department have done an immense amount of work: they collected and systematised relevant information, overcame various obstacles and resolved different issues, and even worked outside their working hours. They confidently assert that the result is worth all this effort: the web page has contributed to an increase in the performance of the department and the company's numerous employees who interact with it.



Anton Kuznetsov

"The work was quite difficult. One of the challenges was translating a considerable part of specialised documentation (all information is presented on the web page in two languages, Russian and English). Thankfully, our colleagues — translators — helped us cope with the task. We are very grateful to them for their assistance!" says Anton Kuznetsov, Engineer of the Industrial Safety Subdivision. "I would also like to thank Valeria Eliseeva, a Web Technologies Specialist. We would not have coped with the job without her professional support and advice."

According to Anton Kuznetsov, the web page contains all possible information related to the activities of the department. For example, you can learn about its organisational structure, mission and values. The 'Useful Information' section contains links to different pages and subsections: 'Legal and Regulatory Documents', 'Internal Policies and Procedures', 'Forms and Templates', and 'Schedule of Learning Events'.

The 'Legal and Regulatory Documents' tab presents the Russian regulatory legal framework in the area of industrial and fire Safety, blowout and emergency response. To access the current versions of the documents, it is recommended to use the Consultant Plus programme, following the instructions on the page.

In the 'Internal Policies and Procedures' subsection, you can find the company's regulatory documents related to the department and download work instructions with knowledge-test questions for employees of hazardous production facilities.

On the 'Forms and Templates' page, there are dozens of templates for documents which are mandatory for the operation of hazardous production facilities. The templates are arranged by the department subdivisions and sections.

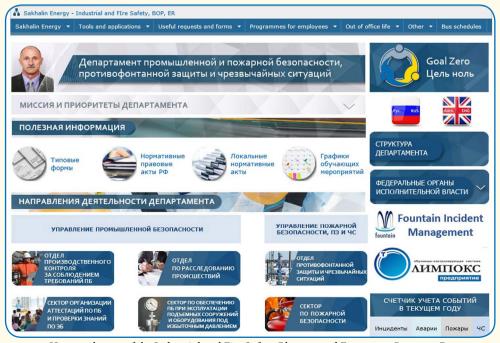
Each section and subdivision of the department has its own page, where they present detailed information about their main activities, contact details of employees, additional materials, answers to frequently asked questions and explanation of how to use the Fountain Incident Management and OLIM-POKS systems.

In a word, everything that previously had to be found out from the department staff by

inquiring different specialists or plunging into the ocean of regulatory information is now available on a single web page. As you may guess, this is very convenient: it saves people loads of time and effort!

Moreover, the materials on the web page will be updated on an ongoing basis. In this respect, the department employees rely on the help of visitors to the web page. Therefore, if you find an error or wish to make a comment or suggestion, please go to the 'Feedback' section. There you can also ask questions regarding all activities of the department.

Pavel Ryabchikov



Home web page of the Industrial and Fire Safety, Blowout and Emergency Response Department



learning and development

New Professional Horizons

Congratulations to the 2017 Intake Traineeship Programme Graduates on the completion of an important career stage and the beginning of a new step in their profession! We are ready for the 2020 Intake!

During the first phase of Sakhalin-2 project implementation, the company set itself the task of staffing its production facilities with qualified Russian workers. For this purpose, Sakhalin Energy developed and launched the Traineeship Programme (hereinafter, the Programme). In the 17 years of the Programme, a considerable number of production employees have received training and acquired qualifications necessary for furthering their professional career.

In June 2020, thirteen trainees successfully have completed the programme, five are promising young operation technicians, two enthusiastic instrument technicians, three full of energy electrical and three powerful mechanical tech-

The 2020 graduates have completed the programme in unprecedented conditions. Nonetheless, they coped successfully with the task and showed excellent results, despite the challenges of the COVID-19 pandemic.

The team of the Human Resources Directorate expresses sincere gratitude to the colleagues from the Production Directorate, who consider the Programme to be a reliable source of skilled employees, provide comprehensive support in its implementation, make an invaluable contribution to the training and professional development of young professionals.

All thirteen trainees from 2017 Intake were recruited into the various projects at the company's production assets. This serves as a proof that the graduates are properly qualified and recognised for their high professional and personal

According to Sakhalin Energy HR Director Alexander Sheykin, the successful completion of the programme was the result of the trainees' persistent hard work and their desire to get professional knowledge and skills, the experience and mastery of TTC trainers, as well as the cooperation of all company departments serving for trainees professional growth – all this ensured the quality of the

training process and the transformation of trainees into young professionals.

Even though we cannot meet our graduates in person and hold a traditional graduation ceremony this year, nothing can stop us from congratulating them in another format.

The trainees who completed the Programme while working on the rotational shift were congratulated by the teams and managers of the production facilities. All graduates were presented with memorable gifts – books with an address and parting words from Ole Myklestad, Production Director, and Martin Rouws, Deputy HR Director.

We also wish all our graduates' success in their professional development in a safe work environment!

Meanwhile, the campaign to intake new participants in the 2020–2023 Traineeship Programme is gaining momen-

The beginning of selection campaign was announced at the end of May. In the short period since then, over 250 CVs have been sent to the SEIC-Traineeship-Programme@sakhalinenergy.ru inbox. The specialists of the company's Technical Training Centre carefully and thoroughly studied each resume for compliance with the Programme participation requirements. More than 50 applicants have received invitations to interviews, which will be held from mid-July to mid-August in a brand-new mixed format of face-to-face and remote attendance. Based on the interviews results, HR specialists and technical experts will assess the candidates' knowledge of the relevant discipline, analyse their personal and business characteristics, and determine their development potential. Trainee candidates who have demonstrated the best results will be enrolled in the Programme and start training in early October.

Svetlana Verbina

Requirements for a trainee candidate:

- RF citizenship;
- basic secondary / higher professional education in oil and gas / technical disciplines;
- · vocational certificate in electrician, operations, mechanical and instrumentation trades;
- physically fit for a job at an oil and gas facility;
- scoring at least '4' according to the Russian knowledge assessment system;
- taking Sakhalin Energy's Internship Programme may be a benefit.



2020 graduates

"The experience I have obtained during my Traineeship: Programme is surely priceless, and it wouldn't be like that if not for the team who were always ready to support us and the experienced mentors who can share their knowledge in a clear and understandable manner. We were extremely lucky both with the former and the latter."

Alexey Panov, **LUN-A Operations Technician**

"The Traineeship Programme is a great springboard giving a powerful start both for graduates and experienced professionals. All stages of the programme are important and each step helps to strengthen the theoretical technical knowledge, unleash the potential and gain professional skills. The Programme develops high-level professionals who can successfully compete at the labour market. The experience gained at the state-of-the-art assets of Sakhalin Energy is very valuable."

Dmitriy Osilidchuk, LNG Mechanical Technician

"When I joined the Sakhalin Energy Traineeship Programme I felt like an inexperienced sailor embarking on a great journey. At first it is hard, you have lots of questions, but once the journey ends you will have gained priceless experience and obtained a multitude of advantages. I would like to express my sincere gratitude to the entire team of the Technical Training Centre as well as the entire OPF team for their help and support throughout this journey."

> Andrey Melekhov, **OPF Operations Technician**

Case Battle

In the June issue of the Vesti, we talked about "Professional training 2.0", a new online project in which the company took part for the first time. It is high time to share the results.

This year we asked students to solve six case studies in several areas: Chemical Engineersecond year of the Bachelor's programme to the last year of the Master's programme took part in the contest. Some of them want not only to get an internship at our company, but also to join us as an employee in the future. Some students come from universities which we have not interacted yet (for example, the Nizhny Novgorod State Technical University n.a. R. E. Alekseev and Kozma Minin Nizhny Novgorod State Pedagogical University).

In total, the company received 19 papers. A number of papers focused on the expansion of the LNG plant. Students did a very good job: they considered many options to develop the resource base, and used modern risk insurance methods (Bow Tie and Swiss Cheese). It is immediately clear that they have long been interested in both the LNG topic and our company's activi-

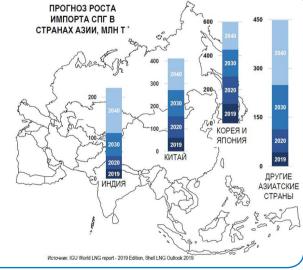
Sakhalin Energy specialists carefully studied all the proposed solutions. Then, ing, Geology, Economics and Construction, Sergey Korovin and Dmitry Litus made and HR Management. Students from the comments on each case study in 30-minute teleconferences. The project culminated in an online event at the end of July. All 19 students attended it. During the event, specialists from the Human Resources Directorate talked about the Sakhalin-2 project and the opportunities that the company offers to young specialists. Colleagues from the Technical and Production Directorates, who evaluated the case studies, shared the specifics of their work. At the

> "Professional training 2.0" is a joint federal project of the Russia - Land of Opportunity autonomous non-profit organisation (ANO) and the All-Russia People's Front. It is a modern mechanism of interaction between an employer and a student: the former uploads case studies (to be solved) online, and the latter sends their solutions.

РЫНОК СПГ

Основные тенденции рынка:

- □ К 2040 г. Азия останется доминирующим импортером СПГ Лидеры-импортеры – Япония и Корея
- снижают потребление СПГ, по сравнению с 2018 годом в 2019 объемы снизились на 5.6 и 3.8 млн т соответственно:
- Открываются новые рынки сбыта страны АТР не входящие в ОЭСР; □ К 2040 году Китай станет ведущим
- □ Среднегодовой рост рынка СПГ в Азии 5,4%



LNG train construction project, Lead by G.S. Melnikov, student of FEFU

end of the cycle, students received prizes and gifts.

We thank all students for interesting solutions, and the organisers of the project for the invitation to join. Special thanks to our colleagues Anna Platonova and Dmitry Litus, who not only created engaging case studies, but also supported us up to the final stage of the contest.

"Working with students is an important area of the company's activities. By participating in such processes, the company can identify potential candidates for technical positions, and set the desired direction for the development of future engineers. By solving case studies, students get an idea of their future job and find practical application of theoretical knowledge", says Dmitry Litus, Reservoir Engineer.

The company plans to hold the event twice a year and will be likely to need new case studies this autumn. If you have any ideas and suggestions that you can formulate as an assignment for students, please contact Maria Nikolaeva.

Alexander Morogov

75th anniversary of the Victory



The memories are like pattering, incessant rain, the memories are like neverending icy snowflakes

What do these words of the headline mean? They mean that the memory cannot be awakened by an order, it cannot be prescribed by dates and national holidays. It is in the heart of everyone. We commemorate our fathers, grandfathers, great-grandfathers, grandmothers, mothers, soldiers and homefront workers – veterans of the Great War. The Immortal Regiment continues its march on the pages of Vesti newspaper. The memory of your soldier is not only (and more than) a victorious march in a united column.

The men of glory never die, Oh, memory, rise up in a guard of honor! Vladimir Lugovsky

LUISA KHETAGUROVA TELLS THE STORY OF LIFE OF MAJOR GENERAL MIKHAIL DZILIKHOV:

My family carefully keeps the memory of our great-grandfather. My father told me the story of his life, which my dad heard from his grandmother (my great-grandmother) Olga. I will do everything in my power to keep this generation link going.

Great-grandmother Olga's older brother, Mikhail Babuevich Dzilikhov was born in 1916 in the village Alagir in Northern Ossetia. The great-grandmother told us that all children in their big family were used to farm labor since early years, each child having his or her own duties. Mikhail was a romantic young man. He



loved watching sunrise and sunset, he understood what the grass and leaves were whispering, he knew what the river songs meant. Marvellous nature of Digoria ravine, high mountains, turquoise streams, diamond splashes of waterfalls, everything inspired Mikhail to compose poetry. Only many years later the friends and the family found out that the man was writing poems. Mikhail graduated Alagir Middle School with distinction and was enrolled to the labor faculty of Pedagogic Institute of North Ossetia. He planned to become a teacher in rural area, however, the fate was otherwise.

Mikhail's personality contained a strange combination of two extremes: the romantic one and the realistic one. In 1930-s the world was at the verge of a major war. As they say, *Inter arma silent Musae* (When arms speak, muses are silent), so Mikhail joined the Red Army. In 1938 he became a cadet of Ordzhonikidze Infantry School of the Order of the Red Banner*. At school, at the labor faculty, at the military school, Mikhail showed brilliant results. Upon graduation he stayed at the military school as a platoon commander. Mikhail hoped to teach boys and girls and now he was training future army officers.

In July 1942, practically the entire school was sent to the Stalingrad Front. My great-grandfather joined the battle for the heroic city with his platoon. He commanded a mortar battery, and then a cadet company of riflemen of Ordzhonikidze Cadet Regiment, included in the 64th Army of the Stalingrad Front.

The memories of colonel Dado Muriev, "He dared to advance at night with groups of gunmen to the enemy's rear, thus disorganizing the command at Nazis' bases. The brave actions caused losses in the enemy's forces, while our command got important intelligence data..."

The book "Brave Sons of Ossetia"

In September, Mikhail was severely injured in a combat and was sent to recover. After recovering Senior Lieutenant Dzilikhov went back to the Stalingrad Front to command a mortar company, and then an infantry battalion.

In addition to the Battle of Stalingrad, Mikhail Dzilikhov participated in the retake of Voronezh and Kursk**. Military historians believe that Voronezh provided a helping hand to Stalingrad, as Hitler's troops had to fight in two fronts, while the battle for Voronezh hindered considerable number of enemy forces. The unit under command of the Senior Lieutenant Mikhail Dzilikhov received more than one accolade from the commanders for their heroic actions in defeating the enemy.

In May 1943, Dzilikhov was badly wounded again and was sent to recover in Saratov. While his wounds were still fresh, Mikhail was eager to come back to the front. However, the command ordered him to go to Kuybyshev to teach at an infantry school. Mikhail's combat experience, warship expertise, organizing skills, and pedagogical talent were in demand for training army commanders. His role as an assistant head of the School's training department soon produced results. Mikhail Dzilikhov's know-how allowed to improve the process of training military staff.

In October 1944, Captain Dzilikhov again addressed the command with an earnest request to allow him to go to the front. Being an executive officer of the rifle regiment, Mikhail fought on the western bank of the river Vistula. In January 1945, the 69th Army, which included the 218th Riflemen Regiment under Mikhail Dzilikhov, broke through a farreaching defense of the enemy, liberating Polish cities of Radom, Lodz, as well as hundreds of settlements.

By the order of Supreme Commander dd. January 16, 1945, troops participating in the battles for Radom received commendation, and in Moscow 20 artillery salutes of 224 guns were fired. The liberation of Lodz and other cities and towns was celebrated with 24 artillery salutes of 324 guns.

In April, troops of the 69th Army crossed the river Oder south of Berlin. The memories of colonel Dado Muriev, "In these combats, Major Dzilikhov, being Deputy Commander of the 221st Guards Rifle Regiment, headed the offensive operation with vanguard units. Their heroism and courage ensured successful accomplishment of combat missions in challenging circumstances".

The Victory Day came, but the Soviet forces had to remain in defeated Germany for some time. On July 5, 1945, Mikhail Dzilikhov was appointed a military commandant of Heiligenstadt. A combat officer was not happy with being appointed to an administrative position. Well, one cannot disobey orders. However, the new role was not so simple. It wasn't easy to maintain order, fight looters, keep the town residents safe, and prepare for winter with the lack of provision, water and fuel. Mikhail Send us your stories about the war veterans at ea@sakhalinenergy.ru



Dzilikhov remained a commandant until February 15, 1946.

My great-grandfather managed to capture a German Sturmbannführer, Alfred Vogel, as well as retrieve two metal boxes containing spy files which were to be taken to the south-west of Germany to Harz mountains by the order of Heinrich Himmler himself. These and other facts are described in Mikhail Dzilikhov's documentary "To the Frontier of the World". We keep this book in the family archive.

After returning to the homeland, Mikhail Dzilikhov was a division commander of the Transcaucasian military district and a military commissar at Stavropol military enlistment office. In 1959, he graduated full course at Frunze Military Academy.

In the final years of his life, my great-grandfather was a director of Dubrava health center in Pyatigorsk. The center was built under his management. Mikhail's German friends from Heiligenstadt visited Dubrava health center several times. 25 years after the Victory, Mikhail Dzilikhov was in his turn invited to the German town where he served as a commandant in wartime.

My great-grandfather was awarded with the Order of the Red Banner, two Orders of the Great Patriotic War, 1st class, the Order of the Red Star, and nine medals for his service in battle. He died only 6 six months before the 40th anniversary of Victory. So, that was my great-grandfather, Mikhail Babuevich Dzilikhov.

* Since its establishment and until the end of the World War II, the school has trained thousands of well-qualified commanders for the Red Army. When the situation at the front was especially dire, the school sent over 5 thousand cadets and over 2 thousand political officers to the front.

** The Soviet soldiers entered the Kursk region in January, 1943. On January 28, 1943, they encircled a large group of the enemy's forces at the village Kastornoye. On February 3, 1943 the troops of the 60th Army under the command of Ivan Chernyakhovsky seized Cheremisinov, Shchigra and Tim. By the end of February 6, they reached the outskirts of Kursk. After fierce assault on February 8, 1943, Kursk was retaken.

Prepared by Elena Gurshal

figures and facts

No Other Land Beyond Volga

On July 17, 1942, near the rivers Chir and Tsimla, vanguard units of the 62nd and 64th Armies of the Stalingrad Front met units of the 6th German Army. Thus began the Battle of Stalingrad, one of the major battles of the World War II. It lasted 200 days and nights and ended with defeat of Hitler's army on February 2, 1943.

BACKGROUND

After Barbarossa plan has failed ending in Germans' defeat at Moscow, Hitler's army started preparing for a new assault in the Eastern Front. On April 5, 1942 Fuhrer issued a directive describing the objective of the summer campaign: to capture the oil-bearing regions of the Caucasus and to reach the river Volga in Stalingrad area. On June 28 the Nazis began advancing rigorously by taking Donbass, Rostov, Voronezh. Stalingrad was an important communication hub connecting central regions of the country with the Caucasus and Central Asia, while river Volga was a major traffic artery for Caucasian oil. The surrender of Stalingrad could be catastrophic for the Soviet Union.

75 thousand Stalingrad citizens volunteered to the front. Labor squads, fighter battalions, militia detachments were hurriedly called to defend the city. On night between August 23 and 24 the labor battalions of the tractor plant, Barrikady plant, Krasny Oktyabr factory, and other industrial enterprises arrived to defend Stalingrad.

The enemy has made new crossings across the river Don to move one more infantry division with tanks to the eastern shore. The enemy advanced to Kalach town. The battle was getting more and more fierce.

Several units of the Stalingrad Front attempted to strike back, however, they lacked both tanks and aviation. By mid-September, the German Army forced its way into

the city center, and combat continued on the streets. It took Nazis weeks to capture a single street, a single building.



THEIR HEROISM IS IMMORTAL

The guards' attention was focused on one of the houses standing a little away from the other buildings. This building has been crucial in the defense of the area. Guards of

Sergeant Yakov Pavlov with three soldiers were sent to scout. Wounded soldiers of the Red Army and the combat medic, Kalinin were in the building. Kalinin was sent to the regimental headquarters for help. He passed the message, however, until reinforcement

"...Some persistent assaults on houses lasted for hours. Men fought by their walls, in barely holding rooms and corridors filled with broken bricks, where the fighters tripped over loose wires, among crumpled metal bedframes, kitchenware and other paraphernalia", wrote Vasily Grossman in his "The Battle of Stalingrad" documentary.

Hitler strived to execute the plan within a week by engaging the notorious Friedrich Paulus' 6th Army, that crossed the Europe, fought in Poland, Belgium, and France, as well as the 4th Tank Army under command of Hermann Hoth. The group included 13 divisions, about 270,000 men, 3,000 guns and about 500 tanks.

As for the USSR, the Stalingrad Front was to resist the German Army. The Stalingrad Front was established by the decision of the High Command on July 12, 1942.

DEFENSIVE PHASE

The strategic defense lasted 125 days (from July 17 to November 18, 1942).

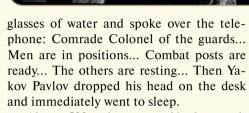
The armies of Don and South-Eastern Fronts with the support of the Volga Warship Flotilla forces carried out the operation. As the combat continued, the Soviet Army acquired additional forces of South-Eastern Front command, five commands of combined arms army, and two commands of tank armies, as well as 56 divisions and 33 brigades.

On August 23 the German tanks approached Stalingrad. On the same date a large formation of Nazis' planes attacked the city. Their air strikes have never been more powerful. The bombing continued for several days without stop. Oil tanks of the Soviet Oil Syndicate, buildings and houses... everything was on fire. The glow of the gigantic fire was visible dozens of miles away. Thousands of people lost their home, many died under wreckage. Stalingrad citizens fled to the left bank of Volga.

arrived, the scouts had to endure a violent battle on their own.

Every way to the main fighting line passed through Pavlov's house, as they called this building. Pavlov's house was the land mark for scouts sent on a mission. Commanders wrote in their reports: northwest of Pavlov's house; 200 yards away to the left from Pavlov's house, etc.

The heroic garrison fought against the enemy for 58 days straight. At dawn, October 13, the enemy opened heavy artillery fire; the assault began at 8 a.m. Nazis' infantry advanced at the square, while tanks attacked the house from behind a group of buildings to the right. The planes bombed the only way to the house. By the evening of October 15, the combat subsided. Sergeant Pavlov went to the cellar, gulped three



Almost 500 tanks were used in the assault on Stalingrad. German air force dropped about one million bombs on the city.

In the August air battles at Stalingrad, pilot Viktor Rogalsky and a group of storm troopers covered the crossing of the river Don. His plane got hit buy the enemy's AA projectile and caught fire during one of the rounds. Rescue was not possible. So, Viktor Rogalsky directed his ablaze plane to the group of Nazis' tanks. His comrades-in-arms witnessed as the burning planed pierced the German convoy. 20-year-old hero destroyed almost a dozen tanks before meeting his own death.

At a station west of Stalingrad, the po-

litical commissar of an independent company of anti-tank rifles of the guard, Gerasimov, with two combat crews covered the departure of a unit to new positions. Twenty German tanks were heading to the trenches, where Gerasimov's riflemen were. They allowed the enemy to get as close as 50-75 yards away. A few guards destroyed 10 tanks, making other machines flee. Eight out of ten heroes died game.

General commanding officer, Ivan Ilyich Lyudnikov, remembers

the most strenuous days of Stalingrad defense, "Six men were holding the defense. In a day, only one was left (I don't remember his name, unfortunately). The trench was Z-shaped, so the hero placed his comrades' rifles in positions, loaded the guns and prepared grenades. He was going from rifle to rifle, firing and throwing grenades in different directions. On his own, the soldier fought like a squad of men. He fought all day long. In the evening the man reported to the unit commander saying that he feels a bit lonely and wouldn't mind a little company".

The enemy hoped for a blitzkrieg, however, Nazis choked on the 62nd Army's defense, spending over a month to rip their way through. Over this period, the enemy

In fierce defensive battles, not only the enemy's offensive power has been destroyed with depletion of the main striking group of the German army in the southern wing of the Soviet-German front, the Soviet troops now had everything they needed to move to a counterattack.

advanced only 43 miles ahead, and the average offensive rate did not exceed 1.5 miles a day

By mid-September, Hitler's newspapers were reporting on Stalingrad in a completely different tone than in August. They had to admit that the battle at Stalingrad was not going to end promptly.



Early autumn passed in fighting. On September 12 the combat proceeded to the streets of Stalingrad. The city was defended by the units of the 62nd and 64th Armies. The Germans made four attempts at assaulting the city, one after another. By November, nearly the entire city was invaded by Nazis, despite the resistance. Only a little piece of land along Volga was maintained by our soldiers.

Prepared by Elena Gurshal based on materials from shtorm777.ru web-site, the book by A. Stupov and V. Kokunov, "62nd Army in Battle

for Stalingrad", and other internet sources. *To be continued...*

assets

How to Tame the "Beast"

In summer, most people go to the country to cultivate their gardens, while cities have a lot of work to do: housing development, road and building renovation. This is a busy season for gas and oil workers as well. Egor Levkovsky, Onshore Pipelines Right-of-Way Manager, talks about the way the company deals with landslide areas.

- Egor, the Trans-Sakhalin pipeline system of the Sakhalin-2 Project has a total length of about 1,600 kilometres. How do you identify landslide areas? Do you use any special methods?

Yes, of course. The pipeline system of our project is one of the longest unified systems not only in Russia, but also in the world. We use the Deming Cycle, a widely accepted technique in HSE, for right-of-way management activities, including identification and elimination of landslide hazards. This technique is widely used wherever it is necessary to establish a continuous improvement process.

Monitoring or control is one of its stages. Our job is not only to identify changes that can directly or indirectly affect the integrity of the pipeline, but also to plan the hazard elimination, while optimising the cost/time to benefit ratio. What is the most important, you need to do your work safely, without injuries and damage to the environment,

es, human economic activities. As I've mentioned, the occurrence of landslides largely depends on the geological structure and terrain of the area. By analysing the combination of these two factors and using corporate databases, geomatics specialists can identify hazardous areas. In addition to steep slopes and related moisture containing rocks, one of the most important factors contributing to the formation of landslides is the presence of groundwater. Overlying layers are usually displaced along the groundwater table.

This factor is more difficult to deal with. In geological terms, Sakhalin is a fairly young region; it is still developing. Despite the knowledge of the island's groundwater, the nature and distribution of specific aquifers are highly variable and require a more detailed field study. The Makarov District is one of the most difficult areas in this regard. Landslides are also recorded in the Dolinsk and Korsakov Districts.



The pipeline right of way, strengthening the landslide area, Makarov district

with all necessary permits and approvals.

If we talk about factors or, in general, about reasons that can have a negative effect on the operation of pipelines, they can be divided into two categories. The first one includes everything that is related to human activities. The second one includes influences of the natural environment. The worst combination of geological, terrain and weather conditions creates landslide areas on the right-of-way.

They are characterised by large rock masses which are displaced under gravity along the slope. The process is activated by erosion of slopes, excessive moistening, seismic shocks and, in some casWe use comprehensive monitoring to identify hazardous areas. We regularly fly over the entire pipeline route by helicopter throughout the year. Moreover, twice a year — in spring after snow melt and in autumn during the rainy season — employees of the Pipeline Maintenance Depots make walking rounds of the right-of-way to monitor external erosion phenomena.

The landslide itself is an interesting "beast". In order to identify it visually, you need special knowledge. Employees of our Geomatics Department have the relevant competencies. They know well the pipeline route and geological processes. Based on the terrain and its



changes, the presence of cracks on the surface, and a number of other criteria, they make a conclusion about the state of previously identified areas.

Unfortunately, geologists cannot determine with absolute accuracy when the time comes for critical landslide activity. They can only identify the activation or acceleration of this process. Today, a landslide may sleep, but tomorrow it can come to life and start moving at a double rate.

— You've said that you use a register to record all changes in the area and mark landslide areas. Could you give more details about it?

 Yes, we have a special register with about 30 landslide areas. Most of them were identified at the construction and pre-construction phases. But if we find new areas, we supplement the register.

In this database, landslide areas are marked using a traffic light system. Red means that further corrective steps need to be considered. Green means that only monitoring is required. This allows us to allocate efforts and resources properly. For example, if we get the same monitoring data as last year, this means that the area is not changing. It remains in the green zone. For areas located in the red zone, we develop anti-landslide measures and implement special projects.

– When do you start repair work?

- As soon as a landslide area turns into the red zone, we usually assess its state and develop a repair plan. Although there is still some time left, we are committed to acting proactively.
- How, then, do experts study landslide areas?
- After hazard identification, we provide information on the area to a specialised design organisation so that they study it in detail and develop anti-land-slide measures. Then special engineering surveys are performed in accordance with construction standards and regulations. Specialists of the institute visit the site, drill wells, extract a core, and localise groundwater. In the laboratory, they determine the physical and mechanical composition of extracted cores, and conduct a series of physical and mechanical

studies to calculate the adhesion coefficients for the identified rock layers.

– What does the adhesion coefficient of rocks mean?

— Imagine geological rocks as an open sandwich. The slip plane is the butter, and cheese is moving on its surface. The desired coefficient shows how firmly the butter adheres to the cheese. In some cases, you need a large mass of earth to move the cheese. In other cases, almost any activity (such as tremors in the earth's crust, or movement of a truck) can trigger the process. In fact, this coefficient determines the severity of the situation and, eventually, how much resources the company will spend to strengthen the landslide area.

— What technologies and practices do you use for strengthening?

— It all comes down to two tasks: drainage (draining the slip plane) and fixing the unstable soil mass to stop its movement. We use special trays, geomembranes and slope breakers for surface drainage, and perforated pipes for underground drainage. Soil masses are fixed using a retaining wall. Reinforced concrete piles are drilled into bedrock, installed, and connected to each other by a reinforced concrete wall. By the way, the mountainous part of Sochi was built using this method.

There is another interesting method anchor fields. We used this method to fix a landslide at the 420th kilometre of the pipeline. In this case, a huge amount of soil gets stabilised by means of the so-called "string bag", instead of a wall, which serves as a barrier to moving soil masses. Small-diameter metal anchors are drilled 10–15 meters into the landslide body at a spacing of 2–3 meters, covering its entire area deeper than the slip plane. Then soil masses are fixed from above with steel ropes anyd special galvanised mesh in several layers. The topsoil is placed as the last layer to reduce the risk of erosion. Although this method is cheaper than the previous one, it requires a lot of experience and special equipment from the contractor. Unfortunately, it is not always possible to find this equipment on Sakhalin.

— If you have completed the construction and repair of a landslide area, you will not return to it any more, won't you?

Not quite true. After construction, installation, and repair, the landslide area is included in the green zone. Then we need to keep the structure in good working order. We inspect and maintain it regularly. For example, we clean the drainage trays.

— Do other units of the company support you?

- Certainly. Our work is greatly supported by the Engineering Department, the Geomatics Division, the HSE Department, the Compliance Division, the Corporate Security Department, and other directorates of the company. Together, we are able to successfully address even the most challenging problems.

By Alyona Olovyanishnikova



continuous improvement

Preventing Muda from Harming Gemba, or the Power of Small Steps

We present a series of articles that focus on the core elements, tools and techniques of continuous improvement, as well as examples of their practical application at Sakhalin Energy. The words in the headline may sound a little strange. Nevertheless, people who are familiar with business processes understand their meaning perfectly well; those who are only discovering this area should read the article attentively: we will try to explain everything in detail.

After the end of World War II, William Edwards Deming arrived in Japan (with almost destroyed economy) with a suggestion to "work and think in a new way". The Japanese quickly adopted his ideas about production management based on quality control, frugality, and cyclical decision making. Later, Deming's followers significantly expanded his ideas and created a philosophy that combined the industriousness, patience, aptitude for contemplation and pursuit of perfection, characteristic of the Japanese, with commercial rationalism.

All this created a strong basis for the philosophy of continuous improvement—kaizen, which emerged some time later. The complicated Japanese terms, which can sometimes bring a smile to one's lips, added an oriental flavour to the new theory. Every day hard-working, persistent Japanese people go to gemba* to look for muda** and eliminate it. That is, they go to their workplace to look for and eliminate wastes and everything else that interferes with effective production. Along with the Japanese, the entire progressive world is engaged in continuous improvement, because kaizen has long proven its high efficiency.

Continuous improvement can be described as a philosophy that is integrated into the culture of a company at the operational level. It is a process where one improvement entails another more. Normally, these are only small improvements in the working processes rather than large-scale projects. This phenomenon can be called "the power of small steps".



A kanban board with cards, representing "small steps"

Any process consists of jobs that add value for the end user, and those that only consume resources. The latter are called "wastes", or muda, according to the kaizen terminology, in CI we also specify it — Non-value added activities. Therefore, identifying and reducing wastes in the production, management and business processes in general are the basis for continuous improvement.

One of the wastes which are the easiest to notice and understand is "waiting" — the time when equipment or personnel are idle, waiting for something. It is mainly caused by inconsistency and lack of coordination between different units, insufficient speed, irregularity or failure in the supply of documents, raw and other materials, waiting for the completion of the equipment operation or approval cycle, inad-

equate equipment or personnel performance. This leads to a general decrease in productivity, an increase in the amount of time to manufacture a product and, as a result, to personnel demotivation.

Now let us proceed from theory to practice. First you will see how the principles of continuous improvement contributed to the issue of awaiting on the Sakhalin-2 offshore platforms. Ilnur Khuziakhmetov and Denis Oleynik, Operational Excellence Engineers from LUN-A and Molikpaq

platforms, respectively, will tell us about it.

"Coordination of work and communication between the departments are essential to efficient production activities. Using the gemba method, we discovered that the way in which work permits were issued in the morning was a common issue across the platforms. These documents are essential for the safe performance of work and require careful verification and specif-



ic actions. Work permits are to be issued before the start of work, so platform staff spent an hour and a half every day waiting to receive them, which led to ineffective loss of working time.

The organisation of work on each platform has its own specific features; for this reason, different methods were used to solve the problem of idle time spent waiting for work permits. The common things for all the platforms were the structured approach and the continuous improvement tools such as Go See/Gemba, DILO, SIPOC, and Fishbone.



Ilnur Khuziakhmetov

number of personnel. It had a significant impact on the overall efficiency of production activities. To resolve the problem. it was decided to revise the structure of the working day. It was clear that measures had to be taken to coordinate the work of the departments. To this end, a general plan for the shift was introduced, in which representatives of each discipline have to indicate the teams they

need to interact with for the issue of a work permit.

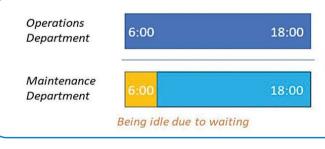
The elimination of the period, when employees were waiting for the issue of work permits, has freed up to 6,500 man-hours per year (equivalent to the labour costs of three employees), helped to do away with rush usually observed at the beginning of the shift and thus improve safety.

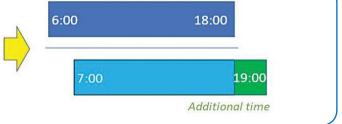
Our key to success is observation in the real place where work done and commitment of all participants in the work processes to the common cause.

Improving the company's business processes means that, in addition to their functional activities, all employees are constantly looking for ways to optimise them. Continuous improvement is a process aimed at improving our day-to-day performance on an ongoing basis and in all respects."

In this article, we have analysed only one type of wastes — idle time due to waiting. We can make a whole list, adding







 $Solution\ implemented\ on\ the\ PA-B\ platform$

PILTUN-ASTOKHSKOYE-B

The analysis showed that, at the beginning of the working day, the Maintenance Department normally waited for the Operations Department to complete the morning shift handover and equipment check. It was decided to establish different schedules for these units so that the shift of the Maintenance Department would begin an hour later. As a result, its employees can start work almost immediately, without wasting any time.

LUNSKOYE-A

The procedure and schedule of morning meetings in the Operations and Maintenance Departments were revised; the number of participants in the meetings was reduced; a "live" document and an overview plan called structured day, were created to ensure well-coordinated work of all the departments on the platform.

PILTUN-ASTOKHSKOYE-A (MOLIKPAQ)

The work permit waiting issue was of special concern on the Molikpaq platform due to the large scope of work and overproduction (production of goods or services in larger quantities than needed by the customer, unnecessary employee actions and motions, about the work site, search for information, excessive transportation (moving materials over longer distances and more often than necessary), inventory (accumulation of stocks above the necessary or required levels), over-processing (imparting properties and qualities that the consumer does not need), defects (manufacture of defective parts and their subsequent correction).

As you can see, we still have a lot of issues to discuss. If you have any examples of waste reduction or the use of continuous improvement tools, please contact SEIC Continuous Improvement SEIC-FD. Today is the best day to start the changes; now is the best moment for it.

- Prepared by Svyatoslav Zaitsev, Alina Sin, Elena Gurshal * Gemba means "a real place". This term is used to refer to the area of direct work production, or, in particular, the place where value is for the consumer.
- ** Muda means "waste, unjustified costs", that is, any activity that consumes resources, but does not create value for the customer.

russian content

It is Not Mere Arithmetic

Under the Production Sharing Agreement, Sakhalin Energy has committed itself to maximising the use of Russian workforce, materials, and equipment. The utilisation of Russian Content in 2019 was 91% in man-hours and 84% in materials and equipment. Developing Russian Content is not mere arithmetic but one of Sakhalin Energy's key focus areas that spans across multiple disciplines of the Sakhalin-2 project, including subsea engineering operations.

The Sakhalin shelf is marked by water depths ranging between 40 and 50 meters and adverse metocean conditions. In such a challenging environment where the Sea of Okhotsk waters are covered with ice floes and hydrocarbons are produced from fixed offshore platforms, subsea engineering operations have attained a sole-source status. According to geomatics manager Vladimir Kashpurovich, Sakhalin Energy arranges the work in collaboration with the Russian companies participating in the Corporate Vendor Development Programme, which helps Russian businesses improve their competences and increase their involvement in the Sakhalin-2 project while adhering to stringent environmental and occupational safety requirements.

For instance, Sakhalin Energy has been cooperating with PetroGasTech Shelf Service to conduct safe and efficient visual inspections of its offshore assets using a remotely operated underwater vehicle (ROV). "Those are our eyes and hands that provide us with information about the condition of our pipelines, gravity-base structures, jetties, and the related subsea infrastructure. The ROV is fitted with manipulators capable of handling various tools, such as devices for measuring the cathode potential of underwater steel structures in order to assess the reliability of the cathode protection system responsible for corrosion prevention," says Vladimir Kashpurovich.

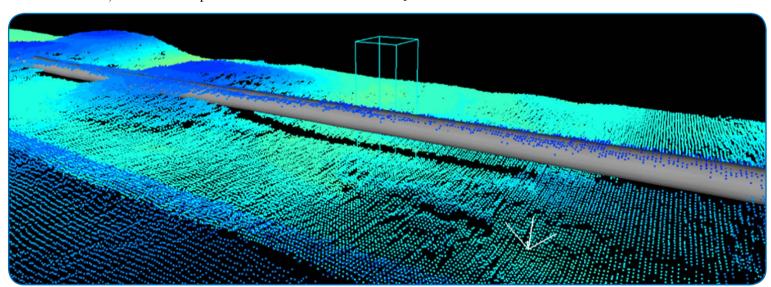
The ROV's advantages do not stop there, though. The tree-tonne heavy machine with detachable auxiliaries is used to clean the biofouled grilles of the life support water intake systems at the platform substructure level, which are used, among other things, to feed water to the firefighting pumps. The trajectory of the remotely operated vehicle capable of moving both vertically and horisontally is fully floodlit to enable high-quality video shooting. Another feature offered by the ROV is the ability to gauge the thickness of walls, such as the walls of the tanker loading unit at the Prigorodnoye production complex. The equipment can be deployed 24/7, which may be especially useful at night.

"The company maintains a strict control hierarchy when it arranges and conducts subsea engineering operations. In the first place, whether such operations would make practical sense is always decided in conjunction with the company's TAs and managers who are in charge of subsea equipment integrity. If a favourable decision is taken, the second step will be the Sea of Okhotsk can be conducted during the ice-free season: from late May or early June until storms set in around October or November. Since 2019, subsea engineering operations involving the deployment of both ROVs and divers have been performed simultaneously from a single multi-purpose vessel, MS Yevgeny Primakov, lasting two months a year. Formerly, however, several vessels had been required to conduct the operations separately. We have optimised the duration of our seasonal work by mobilising the personnel and equipment to a single vessel.

"Besides, we use the same very vessel to monitor and, where necessary, stabilise our subsea pipelines. This kind of subsea operations focuses on the proper and precise identification of the so-called 'pipeline free spans'. To pinpoint the free span locations, a dual-head Multi-beam Echo Sounder (MBES) mounted on the ROV is used in combination with the video stream from its three cameras. Having analysed the hydrographic and video data related to free span identification, we stabilise such free span zones



Remotely operated underwater vehicle



Visualisation and identification of pipeline free spans

to make plans as to how it can be done, with the ROV or by a hydrographic survey. Divers will only step in if the required scope cannot possibly be completed by employing less risky methods. In some cases, the ROV is used in conjunction with diving operations, especially where just deploying the ROV is not considered sufficient to perform maintenance of one or another element of an offshore asset," clarifies Mikhail Nekrasov, Head of Subsea Engineering Operations and Metocean Surveys.

The annual subsea engineering campaigns in by pouring coarse crushed stone. This is tioning system. To make sure everything is done properly, we finalise the process by an as-built hydrographic or bathimetric survey," notes Anton Trush, Head of the Subsea Surveys Subdivisions.

The digital models of the seafloor obtained through the hydrographic surveys are a reliable source of information used to pinpoint the potentially hazardous objects from the outside, e.g. anchors in the direct vicinity of offshore pipelines or tyres near the Prigorodnoe offshore jetty that can prevent a tow boat from safely handling an arriving LNG carrier.

According to Vladimir Kashpurovich the subsea engineering requirement of Sakhalin Energy are based on the current RF regulatory documents and the recommendations of the international organisations.

Besides, Sakhalin Energy takes part achieved through the ROV-subsea posi- in improving the RFs regulatory requirements governing subsea engineering operations. Specifically, the company adapts its shareholders' best practices in the field of offshore surveys, implements a programme for the harmonisation of international standards and guidelines, and participates in the panel of the RF Ministry of Labour and Social Security for the development of new occupational safety rules for divers.

Taking into account Sakhalin Energy's priorities governing Russian Content, the exchange of experience and cooperation with contractors in the field of import substitution along with the implementation of the best practices are the guarantee of the company's successful implementation of its current objectives.

Source: the Gas Industry Magazine



Multi-purpose vessel, MS Yevgeny Primakov



russian content

The Great Potential of New Projects

"When it comes to partnering with Russian companies, you should be prepared for long-term painstaking work," says Oleg Yakovlev, Head of Engineering Subdivision of the Projects Delivery Department.



— In 2018, the Committee of Executive Directors positioned Russian Content development as one of the key tasks for all units of the company. What is the development potential for Russian Content in upgrading equipment and retrofitting projects, in your opinion?

— During implementation of a project, we have to consider its integration with the whole process chain and be very detail-oriented in choosing new equipment and materials, while paying attention to all possible risks. This is imperative because the process flow of the Sakhalin-2 project does not include backup trains, so if any component fails, it will lead to a partial or complete halt of production, which will result in financial losses for the company.

You also have to keep in mind that Sakhalin-2 facilities were designed and constructed largely based on international standards and using foreign equipment, materials and technologies. On the one hand, use of machinery from the world's leading manufacturers has ensured excellent reliability and fail safety of production, but, on the other hand, it set a certain barrier for Russian Content development, as all procurement of direct substitutes of equipment and materials for the project should comply with international specifications. Add to that the small volumes of procurement and the fact that we contact Russian companies at the tender stage or shortly before, when there's not much time to carefully examine the prospects of using domestic solutions and coordinate all the deviations. All this limits the opportunities for large-scale engagement of Russian companies in tenders for equipment upgrades and retrofitting projects at the existing assets, and this is why we keep on buying foreign equipment, whose design does not need to be tweaked.

Based on my experience on the OPF Compression Project, I can say that, when it comes to partnering with Russian companies, you should be prepared for long-term painstaking work. To develop Russian contractors, Sakhalin Energy needs to allocate certain resources and investments. To this effect, it is necessary to assess beforehand the future material and equipment needs, as well as the volume and frequency of procurements.

In this regard, I believe that new projects have big potential. For example, it is estimated that, at the design stage, the Russian Content of LNG Train 3 Project will reach

67% of the total costs.

— What actions and steps does your Department take today to increase the number of projects with Russian Content?

— Our current undertaking is a large-scale project to change the contractor hired for engineering and technical maintenance and design services from an international company, Production Service Network Sakhalin (PSNS), to a domestic one, the Gazproektinzhiniring (GPI) Design Institute. In addition to that, we are actively collaborating with the Russian Content Team. Since 2019, we have been working with GPI to find Russian substitutes for the shut-off and control valves we're using.

Furthermore, we initiated the creation of a company-wide Approved Vendor List. Today, the domestic manufacturers that passed audits in 2016–2018 as part of the LNG plant expansion project are being added to this list. Simultaneously, we are working on creating uniform qualification requirements and creating a universal e-questionnaire for Russian companies.

At the beginning of 2020, we launched a pilot initiative aimed at examining and implementing Russian solutions (which have proven themselves in actual production) at early stages of project preparation. This initiative was developed in cooperation with the Russian Content Team. In July 2019, its concept was approved by the Committee of Executive Directors. Next year, we plan on fully integrating it into the company's existing procedures.

— Could you give more details about how this initiative works?

 We look at the planned projects for the equipment upgrades and retrofitting and choose the ones that are at early preparation stages. Then we assess them comprehensively in terms of their potential

for application of Russian solutions that fit Sakhalin Energy's criteria. At the same time, we try to identify possible obstacles to Russian Content development and think of ways to eliminate them. For example, if a project calls for compliance with international standards or specific testing that cannot be carried out in Russia, we ask ourselves whether we can forgo them and use Russian technologies. Based on the results of that comprehensive assessment, we fill out a specially designed Russian Content Check List, which is then presented to the company management. If the proposed requirements are approved, they are integrated into the project from its inception, and this will allow for maximising the engagement of Russian companies at the materials and equipment procurement stage.

Over the six months that we have been implementing this initiative, opportunities for application of Russian solutions have been determined in a number of projects. Now, they are undergoing approval within the company.

As part of this initiative, we have created a database of Russian specifications that systematises approved and already implemented domestic solutions. You can find a link to this database on the Intranet page of the Russian Content and Supplier Relationship Team. Such a database will not only make it possible to avoid unnecessary examinations of similar solutions, but will also ensure their successful implementation and replication at different company assets.

In my opinion, such systematic approach, in conjunction with consistent standards and the engagement of GPI in the project work, will pave the way for the steady growth of projects with Russian Content.

By Virginiya Lakomova

Sharing Experience Online

On 19 June, the Russian Content Development and Supplier Relationship Team participated in the 15th Annual Neftegazsnab-2020 Conference. Given the ongoing pandemic, it was decided to host the reputed industry event online. The speakers' presentations were streamed on the Conference's YouTube channel and social media.

ence is a great platform for SCM managers and experts from the largest oil and gas companies to communicate with their partners from among manufacturers. Representatives of the oil and gas industry speak

The Annual Neftegazsnab-2020 Conference is a great platform for SCM managers and experts from the largest oil and gas about the supplier selection process, tender procedures, and answer questions from participants.

This year, due to the pandemic, the Conference took place in an unusual format: the speakers gave their presentations remotely,

Программа развития российских поставщиков

Зтап 2
Амагия рынка по
прорятеным направления
Одная отвещають российских поставщиков о
прорятеным направления
Одная отвещають поставщиков о
произремия
Одная поставщиков о
произремия
Оставшиков россий
Оставшиков распольного рисского рука и выпольного рука и

 $\label{the company spoke about the vendor development programme\ at\ the\ online\ conference$

from the confines of their homes or offices, while the viewers asked their questions in the comments section in real time.

Sakhalin Energy was represented at the Conference by Dmitry Dubik, Lead Specialist of the Russian Content Development and Supplier Relationship Team. His presentation was entitled "The Supplier Development Programme as a Procurement Localisation Tool".

Dmitry listed Sakhalin Energy's most impressive achievements in Russian content development from the past few years and spoke about how the company cooperates with domestic manufacturers in order to develop their competencies and increase the share of their products and services used for the Sakhalin-2 project.

The subject of the presentation was chosen for a reason, as creating conditions for import substitution and supply chain localisation is one of the key tasks of the SCM Department. Russian companies play an important role in this process: it is their willingness and dedication to improving their approach to production and work quality that truly makes the difference.

The Vendor Development Programme, launched in 2007, has helped our company to accumulate considerable experience suc-

cessfully working with Russian manufacturers that demonstrated high levels of compliance with international standards of quality and safety and contributed significantly to the efficient work of the unique oil and gas project.

Over 130 representatives of various energy companies took part in the online event. Many of the Conference's attendees showed interest in joining the Vendor Development Programme, inquired about what kind of support the company provides to Russian manufacturers today, how supplier pre-qualification and selection processes are organised, and so on.

Participation in these kinds of events is very important for the Russian Content Development Team and the SCM Department as a whole. It is a great opportunity to have open, direct dialogues with representatives of the domestic oil and gas sector, during which we can state our company's needs and learn first-hand about relevant challenges and the leading technologies of potential Russian partners. Efficient communication with domestic suppliers is important both at the initial stage of cooperation as well as for future work together. Therefore, the Team plans to keep participating in similar conferences in the future, as well as to host round-table discussions with Russian suppliers.

> Russian Content Development and Supplier Relationship Team

analitics

Applying Artificial Intelligence in Oil and Gas Industry

The oil and gas industry has been going through certain changes in recent years. The current decline in prices for oil and other commodities pose a serious challenge to producers and prompts them to seek new innovative solutions: ways to improve the efficiency of both current operations and strategic planning. Artificial intelligence (AI) is one of these ways.

computer systems to simulate human intelligence in performing various tasks, such as learning, reasoning, self-correction, etc. Two key areas prevail in the oil and gas industry: machine learning and data analysis. Based on machine learning, computer systems can learn and interpret data without human involvement, while improving their performance through iterations of specific operations. This allows companies to better control complex internal processes and quickly respond to problems that people cannot predict.

It is worth noting that this trend has emerged in the last decade, primarily due to miniaturisation and reduction in prices of data storage and processing devices, datafication of corporate processes (continuous logging, quick conversion into a processable format).

Machine learning is successfully used to simulate various situations. Depending on the input data, the system chooses the most suitable template for predicting certain events.

The only thing an artificial neuron does is receive signals from many inputs, process them in a unified manner, and transmit the output to many other artificial neurons, that is, it does the same thing as a biological neuron. Connections between artificial neurons are called synapses. The synapse has a single parameter: the weighting factor. Depending on its value, a particular change in information occurs when it is transmitted from one neuron to another. It is thanks to this that the input information is processed and converted into output data. Neural network learning is based on experimental selection of such weighting factor for each synapse.

Most advanced machine learning algorithms, artificial neural networks (ANNs), are based on the principle of biological neural networks.

ANN-based computer systems are used very widely. Below are only a few of the problems from the oil and gas industry which can be successfully solved by such systems.

GEOLOGICAL DATA INTERPRETATION

ANNs are used to predict various geophysical parameters (for example, such reservoir properties as porosity and net pay) or to plot well log curves. Machine learning is also used in geophysics to interpret logging data and seismic prospecting data, determine the lithological

In a broad sense, AI is the capability of structure and boundaries of geological features, to analyse water saturation and permeability.

> Analysis of geological data is extremely important to assess oil and gas occurrence in the areas under study. Artificial neural networks make it possible to analyse a geological section based on seismic survey data. If artificial intelligence is applied in this area, it improves the efficiency of geological exploration work, increasing the speed and accuracy of the work and reducing its cost.

OPERATION OF FIELDS

Artificial intelligence is also applied in operation of fields. Smart fields (also called "digital fields") are a good exservice life may cost millions of roubles. This is why it is so important to evaluate equipment and predict its failures, in order to ensure that its loading, maintenance, and safe operation are properly planned. Sufficiently accurate prediction of failures based on machine learning can ensure high operational reliability, safety, and economic efficiency of industrial facilities.

PRICE FORECASTING

Forecasting has become another application for artificial intelligence. Significant decline in prices of minerals (including oil, coal, and many metals) has created a demand for better methods of analysis. Artificial intelligence opens

 automatic selection of the optimal model.

AI-based methods make it possible to search through a much larger number of models, while the machine can apply various combinations of methods at the same time (for example, neural networks in conjunction with the support vector machine). In this case, it becomes possible to choose not just from a larger absolute number of models but also from a larger number of various types of models. As of today, a number of AI-based methods have been developed to forecast prices, but neural networks remain the most popular one. Thanks to the fact that neural networks can work with complex, multi-format, and even incomplete data, they are suitable for working with non-linear, non-stationary, and volatile series, including commodity prices.

Artificial intelligence can generate new knowledge based on available in-



ample. They imply remote management up new opportunities for describing formation and automate routine proof oil and gas production facilities and and predicting events in both financial cesses. The key advantage of this methstaff, by using various artificial intelligence methods (including machine learning, ANN, genetic algorithms, fuzzy logic, etc.). Automation of the process improves the efficiency of the field development: it reduces costs while increasing the production rate (due to higher energy efficiency, higher productivity of equipment and staff), optimises the management process, and contributes to openness and transparency of the information. According to a study by the Cambridge Energy Research Association (CERA), production rates of smart fields are 2-10% higher than those of "non-digital" fields.

Wrong decisions to withdraw industrial equipment from service or, on the contrary, to unreasonably extend its and commodity markets. The strength of analytical AI-based methods is their ability to simulate the behaviour of market players as accurately as possible and to represent social aspects of economic relations. Very often, commodity companies develop their own models to forecast prices of the raw materials being sold. Most of these models are based on traditional econometrics, such as multivariate regression models. The key advantages of AI-based methods over traditional econometric models include:

- contextual processing of information;
- adaptability and learning ability of the models;
 - tolerance for errors;
 - no need for data pre-processing;

od is that its applications are not limited to the problems described above. Based on available structured data and ideas for their interpretation, machine learning can be used to solve various applied problems.

Therefore, artificial intelligence methods have a number of advantages over traditional approaches and can become an appropriate tool for improving the operational efficiency, especially in the oil and gas industry.

Prepared by Maxim Bakulin, based on articles: Improving the Efficiency of the Oil and Gas Sector and Other Extractive Industries by Applying Methods of Artificial Intelligence, by P. Kaznacheev, R. Samoilova, and N. Kjurchiski; Anomaly Detection in Mechanisms by Using Machine Learning, by A. Dyakonov and A. Golovina



environment It's not a Sprint, it's a Marathon

"I know why the coronavirus appeared. It is because the planet is choking on all the garbage" – that's the guess made by the 5-year-old daughter of Roza Galimzyanova. Mom might not completely agree with the girl, however, she has her own set of rules for managing waste.



- Even before going to university I was concerned with environmental matters. Yuzhno-Sakhalinsk can hardly be called

a beacon of environmental awareness. The waste dump alone says a lot! That is why I went to Sakhalin State University to study Environment and Natural Resources Management. My work since then has somehow been connected with this field. I have also handled waste man-

I have certain rules in my everyday life too, for example, I always sort waste. There's a company in Yuzhno-Sakhalinsk that accepts paper, plastic and aluminum for recycling. By the way, the details are published on the Sakhalin Energy web-site. I also came up with the idea of what to do with food waste: I give it to my relatives who feed it to their hens. I realise that living in an apartment is far more problematic in this sense. My family and I live in a house. The regional center recently started introducing garbage bins for sorted waste, which is only drops in the bucket, but I hope for ing me) work from home. As such, we

the best. Some houses in the residential complex "Zima Highlands" use food waste disposal systems. For many families in the city it's an exotic thing, rather than a simple home appliance.

Of course, I use reusable shopping bags when I go to the store, but here we have another problem: fruits and vegetables are sold in plastic bags. Today I asked my husband and daughter to get some fresh vegetables... and the shop packed them in plastic. When we want to buy a small pastry, they have to put it in a giant plastic box... It's not easy to change the situation, yet, it's possible with persistence and the help of the government and businesses.

Some countries have taken decisive measures to cut the use of plastic drinking straws. And it has produced great results! It shows that it is actually easy to stop using drinking straws. Our office has also replaced plastic straws with the paper ones. Another experimental project requiring further improvement is separate waste collection during the outdoor corporate events. Only few people are ready to abandon old habits and follow new rules.

Presently, many employees (includ-

don't print as many documents as before - e-copies are enough. Also, at home I rarely use sticky notes, which we use at work all the time - a notebook is OK for me. We should think about cutting the use of disposable pens and markers. For example, in Germany they recycle stationery, which will take years to decompose in normal circumstances. I decided to get a metal pen with disposable ink holders (they are not easy to recycle either, but at least they are smaller).

Teaching people to manage their waste the right way is not a sprint, it's a marathon. It's hard, it's complicated, yet, it's not impossible. Begin with small steps: start sorting waste at home and at work. I suggested to my daughter we stop buying plastic balloons, as they live too short and decompose too long, not to mention that they can harm birds and animals. I'm happy that she pays attention to what I'm saying. She never throws garbage on the ground and sometimes she picks up the trash someone has left. She's got her own opinion about environment, as you can see by what she's thinking about coronavirus.

By Elena Gurshal

Bear Stories

The Sakhalin Oblast is well-known in Russia and far beyond not only for oil, gas, salmon and some other special features, but also for its brown bears. In the island region, you can meet with these big clubfoot predators in the forest, on the seashore or by the rivers, in the fish feed mills, near the landfills and – believe it or not – at the door of your own home. What is more, such encounters do not always end well. Almost every year, the media publish news about people injured or killed as a result of bear attacks. Our colleagues also have experience of meeting bears in the wild. We collected several stories about bear encounters and also comments of our expert, Timophei Zvezdov, Head of the Environmental Monitoring and Biodiversity Conservation Subdivision.



STORY ONE

Anna Nekrasova, Specialist of the Analytical Subdivision: "I first met with a bear eight years ago. It happened in summer, during a fishing trip with my friends and relatives. We made camp in the vicinity of Pyatirechye village. I decided that it was not interesting to fish alongside with men, since they would catch all fish and nothing

would be left for me, so I went up the river bank. For some reason, I thought there were more fish up there. I am not sure whether it was really so, but the nook I eventually found was nice – cosy and quiet.

The sound of the rippling water was relaxing; I was fishing, enjoying the process immensely, and everything went well until I noticed a bear on the other bank of the river. The peace I had felt a minute before was gone in a flash. Instead, I was seized with panic.

Of course, I knew the rules of behaviour when meeting a bear, but in the real situation all this theoretic knowledge vanished from my mind. My fishing rod fell out of my hands and I started running away, screaming at the top of my voice.

When the bear (which, incidentally, was not very big) heard my scream, it stood up on its hind legs, then unexpectedly turned around and ran away. Never before had I seen anyone climbing a fairly steep slope of a volcanic

hill so quickly. Later I was explained that, most likely, it was a young animal for whom our encounter was as shocking as it was for me.

I think this is what saved me then. If it had been an adult bear, the story could have been much sadder.

My second encounter with a bear occurred quite recently – at the beginning of this summer. My friend and I decided to go to the seashore near Prigorodnoye production complex in the evening after work. When we arrived, we chilled out on the beach for some time, but then it started to rain and the other people began to gather their things, preparing to leave.

When we were packing our things, without much hurry, we heard someone shouting that there were bears nearby and that everyone had better leave as soon as possible. Honestly, we did not pay much attention to the warning – we thought it was just a joke. Could there be any bears in such a crowded place? So we calmly got into the car, drove off and suddenly saw three cubs on the road near a bus stop. There were a lot of vehicles there, and people started shooting videos of the animals. I could not resist doing the same, either, and made two recordings from the car. By the way, they can be seen on the Internet now.

Local residents who were nearby said that the cubs had been seen in the area for two days already and did not seem to be afraid of people. The meeting with the cubs did not frighten me much, but, to tell you the truth, I was anxious to avoid coming face to face with the mother bear. I know for a fact that nothing is more dangerous than a mother

protecting her children. Therefore, we decided not to push our luck and shortly left the area.

To sum up, my two encounters with bears were equally memorable, if different in emotional intensity. Frankly speaking, I don't really fancy a third one!"



EXPERT OPINION

Timophei Zvezdov: "In the first case, it was a typical encounter of man and bear which could have ended in tragedy. Anna found herself alone in a place of possible occurrence of bears. She did not have any means of protection or bear deterrents. In this situation, the size and age of the beast do not matter. Most bears have an inborn fear

of man and will try to avoid meeting with people. What we must remember is that bears often use paths along rivers. They can be resting or eating prey just a few metres from a trail. The ripple of flowing water drowns out all sounds at a large distance, which increases the risk of an unwanted encounter. When travelling in such areas, it is necessary to stay in a tight group, have means of bear deterrence, and produce as much noise as possible.

USEFUL TIP

Keep in mind: in case of a random encounter with a bear, your life and, probably, the life of the bear depend on your actions. When visiting places with possible presence of bears, having a set of bear deterrents is an absolute necessity. Move only in groups and never stay or walk around alone!

In the second case described, we can see a fairly typical situation when bears come out into areas which attract them with the smell of food or where animals are fed by compassionate people. In such cases, bears can quickly lose fear of humans and become a serious threat, even for people in cars. How can you avoid danger? My advice is simple: when on a hike or a picnic, do not leave food or garbage on the ground; put food in airtight containers; should a bear appear at the campsite, leave the area immediately."

P. S. Dear readers, we are sure that you have many more stories about your encounters with bears and other wild animals. If you are willing to share them, please e-mail to ea@sakhalinenergy.ru.

By Pavel Ryabchikov To be continued...

500 Calls to a Friend

The employee survey dedicated to the quality of information sharing on the company's anti-coronavirus efforts - both the process and information content – was completed at Sakhalin Energy almost three months ago, in mid-May.

The survey summary, as well as information about its individual sections, are published on the external and intranet websites of the company. Both websites are updated regularly based on constant feedback.

Today we will focus on the dedicated telephone line, which can be used in case you have any questions. The hotline number is +7 (914) 759 47 11. The line is multichannel, and the calls are processed by several Corporate Affairs employees on duty, so you can reach the number any time from any place.

You can find a link to the hotline, as an information channel on any issue related to Sakhalin Energy's anti-coronavirus efforts, in each of the statements from the General Coordinating Committee, on the company's websites and in other information re-

Some days there are 15 or more calls. By the end of July, the hotline operators had received a total of over 500 calls. The number of answers, however, is much higher, as there could be several questions for one call.

All enquiries are recorded in the call log and are colour-coded depending on the topic they relate to. For example, calls concerning the decrees of the Sakhalin Oblast Governor on measures to combat the coronavirus are highlighted in grey; questions related to the stay of personnel in the temporary accommodation facilities are marked in green; questions about medical care and COVID-19 testing – in orange, and so on.

As a result, the call log looks like a multi-coloured zebra crossing. The colour marking helps us to see immediately what topic was especially relevant and when, and what areas are of special concern.

COVID-19 test laboratories in Yuzhno-Sakhalinsk: Invitro, tel. 60 53 33; Hemotest, tel. 24 71 00; Meddiagnostika, tel. 77 01 22.

A lot of calls are received from Sakhalin Energy employees who are staying at Temporary Accommodation Facilities (TAFs) for a 14-day isolation period before going to work at the production facilities. In most cases, they ask whether care packages are allowed. So, the rules are very strict there, and it is prohibited to take anything either from or to the temporary occupants of the rooms. The list of things that can be transferred in case of emergency is very short and includes they need most of all and what information only documents, hygiene items, medicines, and means of communication.

Our advice to everyone who is going to the rotational shift is as follows: read the brochure for TAF residents carefully before leaving for the shift. This will save you much misunderstanding later on.

The majority of the calls are in the grey area in both senses. As it was mentioned above, the grey colour is used in our log to mark questions about the procedure for entering the Sakhalin Oblast. Everyone has noticed that the regulations have changed several times since March. The especially relevant topic for people who still take a risk of going on vacation is what rules apply to those who arrive in the territory of the re-

Apart from questions, there are comments and suggestions. At the beginning of the quarantine, many of them concerned food in the TAFs, as the menu was being compiled and finalised. One of the topics that we received very emotional feedback on was the requirement for personnel working in the territory of the Zima Highland Residential Complex to undergo testing for COVID-19, imposed in June. Being tested every two weeks is a nuisance indeed, but these precautions were dictated by the epidemiological situation on the island.

Not only do the hotline operators receive feedback and answer questions – they also ask questions to callers. In contrast to incoming calls, our mini-survey only applies to TAF residents. We ask them only two questions: what information resources survey

they lack. The purpose of this mini-surveying is to optimise the amount of information provided.

In conclusion, we invite you to call us any time. We will do our best to help you!

The hotline operators get help from many people in answering the callers' questions. Many questions are passed on to the **Corporate Health Section, the Logistics Group, the Human Resources Directorate,** and (most often) the coordinators at the **Temporary Accommodation Facilities, who** take appropriate action.

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Cure for Blues

The Ready for Labour and Production (RLP) sports tournament, held at the Prigorodnoye production complex, has come to an end. The tournament started on 1 June and finished on 11 July.

According to the organisers, the tournament was aimed at contributing to several objectives: to improve sports endurance of employees, to encourage them to take more exercise, and to help them lose extra weight. Since the initiative was aimed at promoting the healthy lifestyle and creating a favourable psychological climate in the team, the company readily supported it. Arrangements were promptly made for the delivery of exercise machines and gymnastics equipment to the gyms in the Yunona rotational shift camp, which made it possible to hold a proper tournament.

It was attended by about fifty employees of the Prigorodnoye production complex – representatives of both Sakhalin Energy and contractors. The sports part of the tournament included various events: running on a treadmill, exercising on a stationary bike, doing push-ups on the bars, floor pushups, flexibility exercises, strengthening the abdomen muscles, and pulling up on the bar. For each stage, competitors were awarded points, which were summed up at the end of the

Those who had decided to lose weight faced a challenging task, since the weekly weighing did not allow for compromises: if they lost less than 1,000 g by the end of the week, they would be expelled from the tournament. Those 17 people who took part in this competition did not disappoint their supporters: collectively, they lost more than 127 kilogrammes! One of the contestants lost 12.5 kg during the tournament, so now he can coach top models and pop stars who are constantly trying to lose weight.

The participants in sports competitions also set a number of records. Nurzhan Duisenbai, an employee of Cape Industrial Services (Sakhalin), could have got in the Prigorodnoye Guinness Book, if there was one: he did 132 push-ups! It was he who won the sports part of the tournament, having scored 1,053.7 points in different events. Igor Lim from Sakhalin Energy won the second prize (986.1 points), and Nurzhan's colleague Bekarys Mildabekov was the third (913.75 points).

Victor Usov, a coach, made a considerable contribution to arranging and holding the tournament. He provided consultation to the contestants, helped them to distribute the load properly when using sports equipment, and to keep to the as-

"It was an amazing experience," Victor says, "At the beginning of the tournament, we were afraid that many participants would drop out long before the finals. Though, the contestants became more and more enthusiastic and encouraged each other, trying to surpass their opponents and themselves. By the way, what do you think of Nurzhan's victory? 132 push-ups! That was incredible!"

Under normal conditions, the Ready for Labour and Production tournament would have been considered an ordinary competition. Given the present-day situation, it can be regarded as a successful example of coping with the challenges of the pandemic. It was a sort of cure for blues, a boost for a new working day.

By Elena Gurshal

sport











society

In the Global Agenda

Sakhalin Energy's social and environmental projects were included in the first Russian Voluntary National Review on the Implementation of the Sustainable Development Agenda until 2030.

On 14 July, Maxim Reshetnikov, the Head of the Russian Ministry of Economic Development presented overview at the United Nations High-level Political Forum on Sustainable Development in New York. "We have tried to show the best Russian solutions that we are ready to share with our partners around the world," mentioned the Minister in his report.

The document was drafted under the general coordination of the Analytical Center under the Government of the Russian Federation together with the Ministry of Economic Development, Ministry of Foreign Affairs, Rosstat (Russian Federal State Statistics Service) and other federal authorities and organisations concerned. Representatives of business entities contributed and shared their practices and initiatives related to Sustainable Development Goals (SDGs). This resulted in the publication of more than 40 successful cases of Russian enterprises, including the Sakhalin Energy practice. In particular, the experts noted the cooperation with indigenous peoples, including the application of the principle of free, prior and informed consent as contained in the UN Declaration on the Rights of Indigenous Peoples and the Biodiversity Action Plan.

In addition, the section "The Role of Business in Achieving SDGs" notes the company's participation in the UN international initiative for business — Sakhalin Energy has a high status of sustainable corporate leadership in the UN Global Compact on a par with 34 other international companies.

In the Russian Federation, the demonstration of progress towards SDGs has been adopted as a nationwide commitment. Such reviews shall include the opinions of indigenous peoples, civil society, the private sector and other parties concerned in accordance with national circumstances, strategies and priorities. Since 2016, more than 160 countries have submitted them.



The sustainable development goals were adopted by all UN member states in September 2015 as a world agenda until 2030, aimed at improving the well-being and prosperity of all the world population and protecting our planet. Sakhalin Energy's activities are included in this agenda — the company aims its efforts at respect for human rights issues in the areas of operation (engagement with the community, sustainable development partnerships, complaint resolution), compliance with occupational safety and health standards, biodiversity conservation, etc. The company's social and environmental practice proves that achieving SDGs is one of the priorities for Sakhalin Energy.

By Marina Moruga



The Harbingers of Digital Care

Care can be rendered in different ways. According to Seneca, a Roman philosopher, care benefits a person even if it is provided in the most unusual way. This can also be said about the digital care which children attending three establishments on the island will feel from now on thanks to Sakhalin Energy. Their projects were announced the winners of a special grant competition* launched by the company to mitigate the adverse effects of the coronavirus pandemic. Anna Lygina, Senior Specialist of the Social Performance Subdivision, tells us about the competition and the projects in detail.

- In early June, we announced the start of the Digital Transformation of Educational and Social Services grant competition, and a month later we selected the first winners. All of them had presented useful projects aimed at helping their establishments make a successful transition to remote work, which is a prime necessity in the present-day conditions.

According to experts, including the representatives of different non-commercial organisations and government bodies, as well the company employees, the Remote Access Rehabilitation project, developed and presented by the Preodoleniye Centre, was one of the best. The project provides for developing a web-resource that will help patients of the institution to continue sessions without attending the centre in person, so as not to interrupt the course of rehabilitation treatment. Thanks to the re-equipment of specialists' workplaces, they will have an opportunity to expand remote communication channels. In addition, creation of personal accounts integrated with the Rehabilitation Automated Information System (AIS) – an information and analytical system that has already been introduced in the Preodoleniye Centre – will allow its staff to interact with children with disabilities and their parents remotely.

Another winning project -Digital Care – is aimed at organ ising remote work with children suffering from recurrent illnesses · and children with disabilities who • receive instruction at home. The project was developed by the teaching staff of the Dachnoye village : school whose students will now : be able to study remotely and also participate in on-line conferences. What is more, the village school will have an opportunity to orgainise additional classes and consultations for gifted children. The : most important thing about this initiative is that its authors did not follow the line of least resistance and choose the solution when students are supposed to learn independently, visiting various Russian websites by using their computers. On the contrary, the emphasis is



on constant communication between the teacher and the student, which is of paramount importance in the learning process. Equipping four mini-studios will help teachers create high-quality video content for classes and consultations.

The Ogonek Social Rehabilitation Centre for Minors participated in the grant competition with the Path to New Opportunities project. After the project is launched, a mobile computer classroom will be created in the institution. This will allow its students to continue their studies and also participate in on-line contests and competitions outside their comprehensive secondary school which they cannot attend during the rehabilitation course at the centre.

Sakhalin Energy will provide financing for the implementation of the projects, provided that they are properly finalised, taking into account the experts' recommendations and comments. The grant pool for one project is 600 thousand roubles. The winners will be able to start implementing their initiatives as early as a few weeks after the announcement of the results. We hope that three winning institutions - our harbingers will begin the new academic year in September working in a new format. In the meantime, the grant competition continues: applications will be accepted in July, August, and September. Winners will be selected every month, so digital care will grow exponentially!

* For information about the conditions of participating in the grant competition, go to the 'Attention, Competition!' section at www.fondenergy.ru.

By Marina Semitko

The World through a Lens Photo Contest

This year's 'The World through a Lens' annual photo contest is drawing to an end. More the 220 entries have been submitted for the contest. We thank all participants for their efforts and enthusiasm.

Soon you all will be invited to participate in voting for the People's Choice Award. It will be held from 5 to 15 August in online format. Each supporter will have an opportunity to vote for their favourite contest entry and choose a winner in each category. You can view all pictures in the photo contest gallery on the company's internal website.

The winners and laureates of the contest will be determined by a panel of professional photographers. By voting, they will determine winners in eleven categories (the key ones are divided into sub-categories, "amateur" and "professional").

The award ceremony will be held in early September. Traditionally, it will be dedicated to the Oil and Gas Workers' Day which is celebrated in Russia on the first Sunday of autumn.

The winners of the photo contest will receive commemorative diplomas and prizes. There will be plenty of pleasant surprises for other participants, too. We hope that all our plans come true. We will inform you about the time, place, and procedure of the ceremony later.

The contest results will be published in the next issue of the Vesti newsletter.

We wish good luck to all participants!











Disinfection of Sfera BC



Coronatales: Ovations to the Winners

Coronatales corporate contest is closed and it is with great pleasure that we announce the results. First of all, millions of thanks to all the participants! The video is available via link. We are also grateful to the fans who took a minute to vote.

The most active were the fans of Olga Kuskova, Alexander Lukyanov, Sarah and Sahil Kiran, as well of Elizaveta Moreva. They showed solidarity and paved them the way to the Audience Favourite Prize.

Uneasy choice that fell on the shoulders of the organising committee and contest jury turned out to be the most difficult and the simplest at the same time. On the one hand, the biggest challenge was the diversity of participants to judge them by the same criteria. On the other hand, the unique character of every participant became the defining for the final verdict, i.e. everybody wins in his own nomination.

The award ceremony was held online. About 30 participants took part in it. The organising committee and the invited guests – Anastasia Makarenko (a journalist, blogger, storyteller, Head of Swiss Art Council Prohelvetia Moscow) and Pavel Shugurov (the famous Russia Far East



artist, Candidate of Science, art historian, Vladivostok) – presented at the ceremony and announced the winners.

Thanks again for this festival of creativity and imagination power. You gave us another chance to see that we are a super team!

Though the winners were announced just recently, the soul requires something new and creative. If you have ideas, what could be the theme of the next corporate contest, send your suggestions on the functional e-mail ea@sakhalinenergy.ru.

By Alyona Olovyanishnikova

WELCOME THE WINNERS:

Olga Kuskova, Best Work in the Mythological Battle Genre

Elizaveta Moreva, Best Computer Graphics

Hemish Kumar, Best Poem in English

Mikhail Efremov (2ps), Best Educational Cartoon

Tatiana Voropay, Best Bio-Art

Angelina Voropay (2ps), Best Island Story

Gleb Yusipov, Best Adventure Novel

Daria Nikulina, Best Abstraction

Vasilisa Kuznetsova, Best Romantic Graphic Story

Liza Putro, Best Graphics in Support of Heroes

Konstantin Kokorin, Olga Navalikhina, Andrey Nikolenko, Tatiana Derivedmid (2 ps),

Most Original Genre

Anna Gorlancheva (2 ps), Best Artistic Solution

Daria Furs, Ekaterina Schapova, Maria Nikolayeva, Best Interpretation of the Classics

Angelina Tsarkova, Best Mythical Sketch

Fyodor Ryabchikov, Best Fairytale Interpretation

Sofia Ryabchikova, Best Insightful Tale

Kristina Olovyanishnikova, Most Touching Drawing

Victoria Lagoykina, Best Glance

Natalia Lagoykina, Best Sententious Poem

Boris Novikov, Best Post-Modern Prose

Darina and Yaroslav Ganets, Best Knights Tale

Sarah and Sahil Kiran, Best Super Power Story

Egor Solovey and his family members (2 ps), Best Coronavirus Chronicle

Elena Serzhanina, Best Philosophical Work

Alexander Lukyanov, Best Victorious Work

One Hundred and Fifty Steps in History

anniversary

Our company's production assets are not only connected by the Transsakhalin pipeline system, but by an invisible thread stretching between the hearts of everyone involved in Sakhalin-2 project. Today we are working on the future of a colossal O&G project, honoring our past and our common history. Vesti newsletter is a modern book of chronicle, whose pages offer a review of the most significant events.

This issue of Vesti is its 150th, meaning that our readers have received a fresh issue one hundred and fifty times (if counting consecutively). Is this a large or a small number? It's really nothing for a regular newspaper with more than 300 issues per year, however, for a monthly corporate issue, with every section discussing routine and extraordinary events, victories and defeats, assets and the people of the Sakhalin-2 project, 150 issues is truly a landmark.

Journalists at major publishing houses sometimes condescendingly regard corporate media as something akin to a school bulletin. Sometimes this is justified, but not in the case of Sakhalin Energy's Vesti. We offer readers a new concept of corporate press focused on current matters, reviews of business practices, studies of specialists' expertise, assessments of efficiency of various financial, administrative, and marketing tools in the operation of Sakhalin Energy.

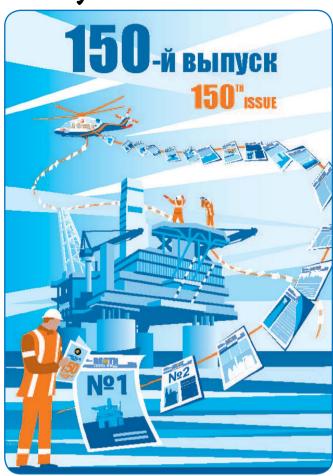
There's no rest for Vesti. However poetic it may sound, it is actually full of day-to-dayness. The first issues comprised four A3 pages. Now, 20 pages are not enough! Sometimes, to cover the events that are most significant for the company, we need 24 pages! The

digital version of the newspaper is available as well, since it is more convenient for some employees of the company (although a reader survey shows that they are not ready to abandon printed form completely).

The editors' first and foremost informal objective is to gain the readers' trust, to make them see Vesti as "their" press. Speaking about the editors, we have probably the largest staff among international media. As bureaucrats would say, the staff is wildly oversized. However, we are proud of this fact. Not only do colleagues form Corporate Affairs work on the issue, but also more than 2000 employees of Sakhalin Energy.

You are not only the providers of information, but also journalists, photographers, organizers of important events, and central figures of publications. It is impossible to imagine Vesti without your enthusiastic participation.

We sincerely thank everyone making every issue of Vesti possible: authors, editors, proofreaders, layout designers, photographers, pressmen, translators and all the colleagues who ensure that every newsletter is delivered to the remote industrial facilities of the project



After all, it's not without reason that our informal motto is "We make Vesti together!"

Editors office of Sakhalin Energy Vesti newsletter

Recognition by Professionals

Do you know many corporate newspapers whose regular journalists write breaking news and flashes...

This definition is especially important for the creators of any newspaper, and our edition is not an exception. Over the course of its existence, Vesti has gone through a period of formation and we are

happy that the edition's news arouses the genuine interest of not only our readers but also the fellow journalists from the leading media outlets in Russia and abroad.



SVETLANA SAVATEEVA, SPECIAL CORRESPONDENT OF THE INTERFAX INFORMATION AGENCY

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I would like to congratulate the newspaper on its anniversary issue! It is always a pleasure to open it knowing that you will find some interesting news, improve your knowledge of technology and other aspects of the work of such a multi-faceted company, and will be able to communicate with news makers on a higher level of understanding, or find some interesting historical facts. The newspaper's staff directs its attention to all aspects of the life of the company employees, ranging from professional growth to

creating a harmonious inner world. When you read the newspaper, you develop a feeling for the company's inner 'cosmos' and start feeling happy for the employees who are lucky to work for Sakhalin Energy.



ALEXEY NOVIKOV, DEPUTY EDITOR IN CHIEF OF THE FINANCIAL AND ECONOMIC INFORMATION SERVICE, INTERFAX INFORMATION AGENCY

Do you know many corporate newspapers whose regular journalists write breaking news and flashes? There are very few such newspapers in Gazprom, Sakhalin Energy's Vesti being one of such examples

You should not delay getting acquainted with each new issue of the newspaper until later because it tells the market moving news, and because it is competent and frank.

We see the high level of openness professed by the editorial staff (while understanding that corporate press is corporate press). And how the company find opportunities in difficult situations because the editorial office does not avoid difficult topics (which some of its Gazprom's 'sisters' would consider forbidden).

We do not feel any difference between the interests of business press and the corporate audience. This is because both are genuinely interested in efficiency and profitability. This is a newspaper of people who professionally engage in real creativity while arranging and optimising various business processes and maximising the revenues of the shareholders. It is evident from the newspaper how those people love their work, their island, and their country.

We would like to thank the multinational alliance of the project's shareholders for the corporate culture they created and to fervently wish other Gazprom group members to be inspired by those practices.



DINA KHRENNIKOVA, SPECIAL CORRESPONDENT OF THE BLOOMBERG INFORMATION AGENCY

The corporate issue of Sakhalin Energy's Vesti is a source of regular exclusive information about the company's operations. My colleagues from Bloomberg News and myself keep track of every issue of the newspaper in order to inform its readers of the turnaround plans, expansion of the LNG deliveries, and the company's work during the pandemic.



VITALY SOKOLOV, CORRESPONDENT OF THE ENERGY INTELLIGENCE INTERNATIONAL INFORMATION AND ANALYTICAL GROUP

I read Vesti not only to learn breaking news about the Sakhalin-2 project first-hand, but also to better understand how Sakhalin Energy sees itself in the ever-changing world and how it responds to new challenges. This is especially true in 2020. It is with special interest that I read interviews with the company's specialists that explain the nitty-gritty of the project and LNG exports, including the production processes and marketing strategies.

Prepared by Olga Moreva



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