

Information technology

Area, strategic goals and metrics of 2025

1 IT development Implementation of domestic IT solutions and development of in-house digital projects Target - Strengthen the Company's technological sovereignty and expand the capabilities of its IT infrastructure Actual - We continued implementing projects for a manufacturing execution system (automated enterprise management system) and a domestic automated process control system - With more than 180 robots already in operation, we focused on scaling up their use and integrating them into key business processes - Work continued on implementing a domestic enterprise resource planning system (Global ERP) - The Intelligent Transport Logistics System project was launched	2 Development of artificial intelligence solutions to improve production efficiency - Computer vision technologies - Machine learning - Generative AI Target - Reduce industrial safety violations and prevent accidents and man-made incidents - Reduce unscheduled downtime of process equipment and improve process stability - Reduce routine tasks and increase labour productivity Actual - Launch of the Company's AI potential diagnostics project - Demonstration of the AIChemist AI solution to the President of Russia at the AI Journey international conference - Successful completion of pilot tests of a computer vision system to monitor hazardous zones of tipplers at the Kirovsky mine - Integration of AI agents into Russian heavy industrial automated enterprise management and enterprise resource planning systems - Development of an HR assistant based on the GigaChat generative model to accelerate hiring - Launch of three projects at the Cherepovets and Kirovsk sites, including PPE detection at the Mekhanik mechanical repair shop and conveyor belt defect detection at the Rasvumchorrsky mine (Kirovsk branch)	3 Cybersecurity Target - Maintain reliable and resilient IT infrastructure, and ensure the security of confidential information and personal data Actual - Improvement of information security event and incident management processes - Drills on rapid response to critical information security incidents in the IT infrastructure - Deployment of new information security tools - Training personnel in information security culture For more information on the Company's cybersecurity activities, see the Information Security section p. 296
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Awards

- ◆ PhosAgro Group won the AI Solution for Mining category at the Mining Industry 4.0 international competition with its Predictive Analytics project. The project uses a mathematical model to track ball mill performance across multiple parameters and predict potential faults before they occur.
- ◆ PhosAgro Group's production automation projects were winners in two categories at the prestigious Oil and Gas 5.0 awards. The manufacturing execution system (automated enterprise management system) won the special Effective Import Substitution category.
- ◆ Designed from the start as an industry-specific solution, the project has attracted strong interest and high praise from the oil, gas, and chemical sectors – confirming both its maturity and the wider demand for such digital products in Russian industry.
- ◆ Apatit also won an award in the Industrial Automation category for its project to replace the automated process control system with a domestic solution at the Cherepovets site.
- ◆ The implementation of the eXpress corporate messenger at PhosAgro Group earned a Digital Leaders Award 2025 in the Platform of the Year (Information Security) category at Moscow's Digital Time forum.
- ◆ The annual PIX Day 2025 conference became a key gathering for the RPA , BI , and process management community, with PhosAgro receiving a PIX Award 2025 in the Large-Scale Robotics in the Chemical Industry category.
- ◆ At the Russian Chemists Union Digital Chemical Triathlon plenary session, Apatit was awarded two diplomas: one for spreading best industry digitalisation practices in 2025, and the other for implementing a landmark project – a manufacturing execution system (automated enterprise management system) for a large chemical holding company.



¹ RPA – robotic process automation, a business process automation technology that uses software robots to perform routine and repetitive tasks.
² BI – business intelligence (dashboards, (dashboards, metrics analysis, etc.).



Denis Novikov
CEO of Apatit

We aim to make AI a core technology for all employees and integrate it into every business process. AI solutions – from predictive analytics to AI agents – are being embedded into all our import-substituted information systems.

Using artificial intelligence in production will boost finished product output, potentially adding hundreds of thousands of tonnes of mineral fertilizers and helping ensure Russia's food security.

Strategy

Strategic IT priorities

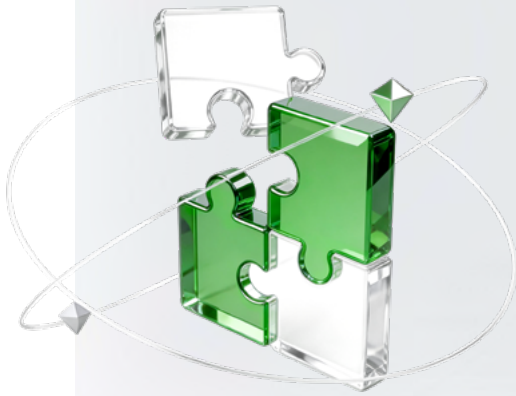


Phase out foreign-made IT assets and replace them with domestic equivalents, taking into account:

- operational risk priorities:
 - priority 1: corporate information systems, system software, and IT infrastructure critical to production and business continuity.
 - priority 2: corporate information systems, software, and IT infrastructure no longer supported in Russia.
 - priority 3: corporate information systems, software, and IT infrastructure to be replaced as needed.
- economic feasibility;
- success of long-term programmes;
- measures to mitigate and minimise risks associated with the use of foreign products (work, services) in the Company's operations;
- risk assessment tools for exceptional cases where no domestic alternative exists, involving the procurement of foreign products (work, services) and their use in the Company's development projects and ongoing operations.



Shift the Company's IT focus towards domestic products (work, services).



Targets:

80%
replacement of imported hardware and software, with user satisfaction maintained at 90%

AI transformation

PhosAgro Group is pursuing its own AI transformation strategy, actively integrating AI into key production, service, and corporate business processes.

The Company is improving efficiency through both ready-made Russian generative AI solutions and an internal ecosystem of AI solutions – including those based on import-substituted information systems – to drive comprehensive transformation. By developing its own infrastructure and AI solutions, the Company ensures the complete security of its commercial, production, and internal data, while also gaining independence from foreign software and building its own data assets. This enables us to create end-to-end digital production and company-wide business processes powered by AI, materially strengthening our competitive position.

Key development areas include machine learning, video analytics, and generative AI. Large language models, including Sber's domestic GigaChat Max, are deployed within the Company's internal IT systems.

The flagship AI transformation project – Diagnostics of AI Potential in PhosAgro Group – audits AI readiness across 16 business areas and produces a heat map to prioritise AI projects by cost, impact, and speed of implementation.

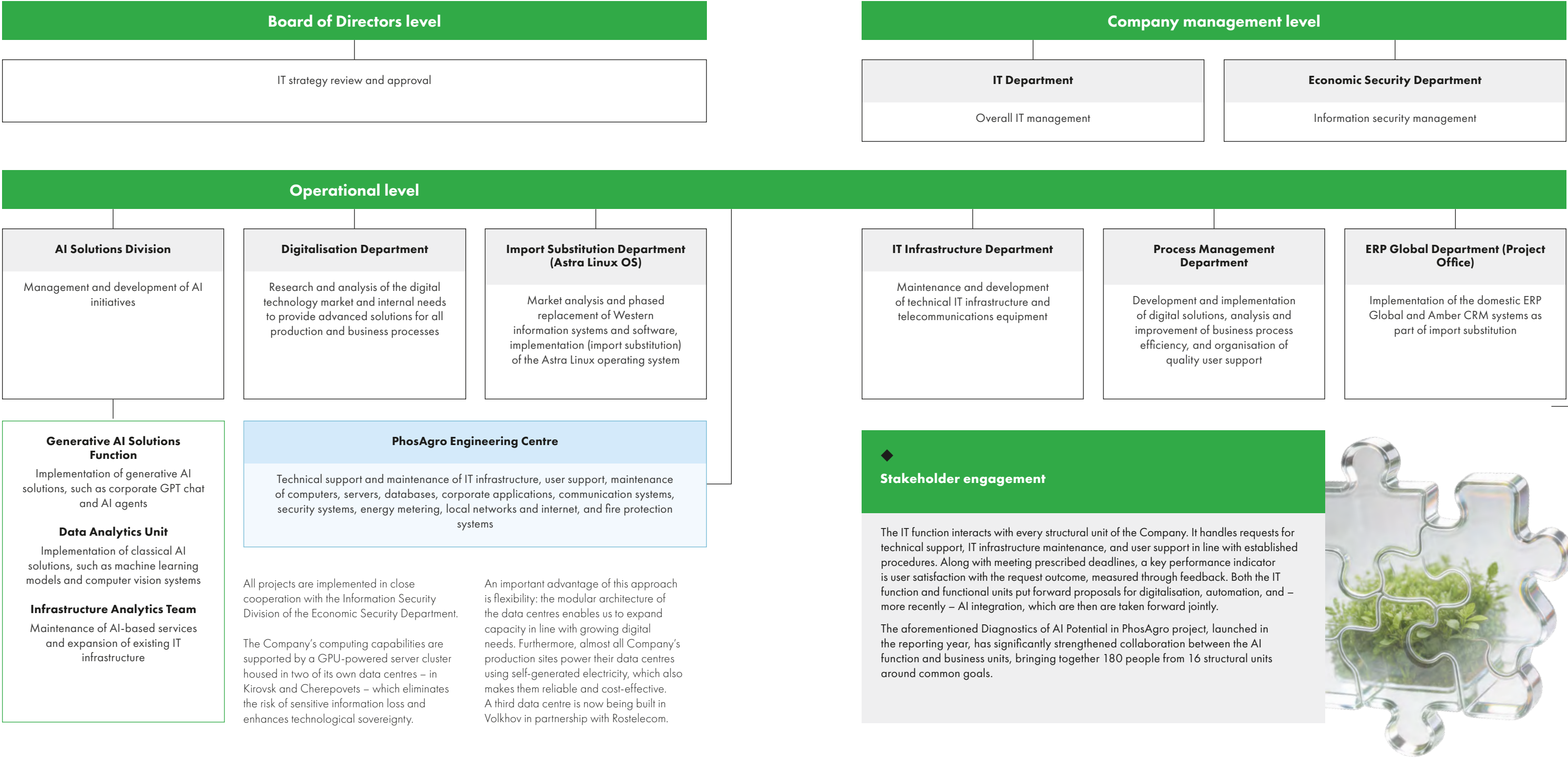
For more information on the Diagnostics of AI Potential in PhosAgro Group project, see the Strategy section

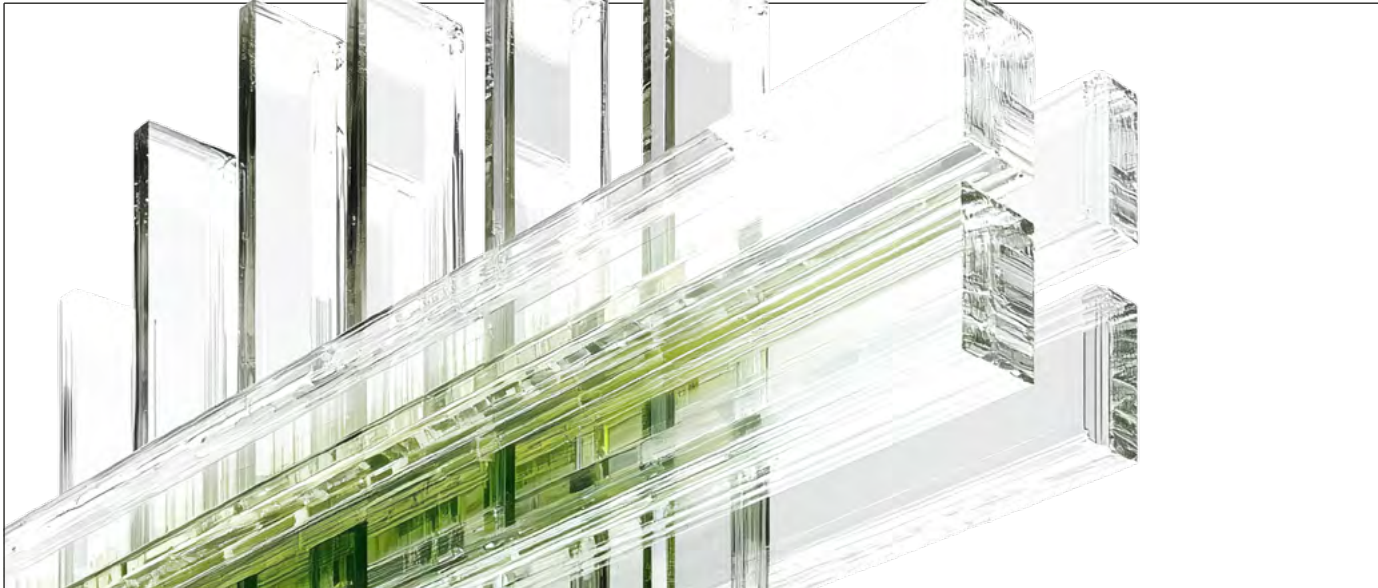
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Management approach

GRI 3-3

IT governance structure





Risks and opportunities The following strategic risks affect our IT objectives: 4 HR risk 11 Information security risk 13 Regulatory risk			for more information, see the Strategic Risks section	p. 72
IT-specific risks:				
◆ risks associated with heavy investment in AI technologies, equipment, and personnel, alongside the fast pace of obsolescence and the challenge of maintaining relevant competencies up to date;			◆ risks associated with restrictions on the operation of foreign software and IT infrastructure, as well as the insufficient maturity of new domestic solutions;	
			◆ risks associated with substandard or scarce historical data, as well as challenges of data harmonisation and integration when implementing AI.	
The Group develops corrective measures as necessary and unlocks opportunities to mitigate those risks. Below you can find more information about what we do on this front, including:			• ensuring enhanced quality and cost efficiency of software and IT infrastructure implemented as part of import substitution; • leveraging opportunities to streamline production processes driven by the innovative nature of IT projects (robotics, AI, big data, etc.); • improving industrial safety and occupational health, reducing negative environmental impact, streamlining logistics, and forecasting market drivers through more effective data analysis, machine learning, and predictive analytics.	

2025 metrics and highlights

IT development

1

IT projects completed in 2025¹

Fully domestic MES-class system

- Full replacement of the foreign OSIsoft PI automated enterprise management system with the domestic ZIIoT automated enterprise management system at Apatit's Cherepovets site of Apatit. The new system offers mnemonic diagrams, reports, data storage, calculations, business processes, and production object models (over 1,000 in total).
- This is the first fully domestic MES-class system for a large chemical holding company. The project was implemented by PhosAgro together with Tsifra Group, with grant support from the Skolkovo Foundation.

Replacement of the Avaya (US) telephone exchange core with domestic Protey PBX

The new exchange is deployed at 13 sites in Cherepovets and 6 in Kirovsk, with a total capacity of 17,000 subscribers. Call recording and billing systems were also introduced, along with a fault-tolerant cluster.

Replacement of Cisco firewalls with Continent firewalls

This gave the Company a unified standard for connecting its branches, enabling flexible and efficient network segmentation management at the site level with zero information security incidents.

Installation of the eXpress corporate communication and mobility platform (replacing Skype for Business) on secure servers inside the Company's network

With over 6,000 registered users, the platform provides full control over data flows and the ability to connect external users.

Implementation of a domestic automated process control system

Deployment of a domestic cross-platform distributed automated process control system at the Cherepovets production site. The fully Russian hardware and software solution increased performance and reduced equipment downtime.

An interactive 3D tour

Completion of an interactive 3D tour (360° view, compatible with VR headsets) showcasing production processes at the Cherepovets site.



For more information on IT projects implemented in 2025, see the [Strategy section](#)

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IT projects in progress

- ◆ PhosAgro Group is a member of the Chemistry and Pharmaceuticals industrial competency centre (ICC). In this capacity, it acts as the anchor customer for the projects to introduce an intelligent transport logistics system and a digital model for power supply systems, both of which receive state co-financing through the Skolkovo Foundation.
- ◆ A data centre construction agreement has been signed with Rostelecom in Volkhov.
- ◆ The rollout of the domestic Global ERP system (replacing Oracle eBS) continues, including integration with Sber's GigaChat large language model.
- ◆ The migration from Microsoft products to domestic software – Astra Linux OS, the R7 office suite, and a domestic directory service – is ongoing.
- ◆ A VR tour of the mining and beneficiation operations at Apatit's Kirovsk branch is being developed.

¹ Software fully deployed and running efficiently.

Development of artificial intelligence solutions to improve production efficiency

2

AI projects in 2025

Predictive analytics for ball mills

The solution was successfully deployed at the apatite-nepheline beneficiation plants of Apatit's Kirovsk branch, with other sites, including the Kirovsk branch and the Cherepovets site, now seeking to adopt it.

For more information on the project, see the Strategy section	p. 62
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250 Horizon video analytics system

Designed for industrial safety and occupational health tasks, the solution detects the presence of personnel in hazardous zones. Pilot tests have been completed.

For more information on the project, see the Industrial Safety section	p. 193
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AI assistant to streamline HR operations

In 2025, the Company developed an HR assistant using Sber's GigaChat generative model to accelerate hiring. Active testing of the system and collection of feedback from HR departments is underway.

For more information on the project, see the People Development section	p. 166
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Agro Calculator algorithm update

At the request of PhosAgro-Region, the algorithm was refined with new models based on agronomist data and generative AI functionality to respond to agronomists. An API for external service integration has been developed, and the system is being prepared for pilot operation.

For more information on the project, see the Customers and Product Management section	p. 112
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Internal corporate GPT chat

The service has been deployed, and its functionality is being expanded and developed.

For more information on the project, see the People Development section	p. 163
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AI technologies have been integrated into the Russian automated enterprise management system

Integrating Sber's GigaChat Max large language model was the next step after the system's commercial launch.

For more information on the project, see the Strategy section	p. 62
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Boiler unit emergency simulator for the heat and power plant

Pilot operation has been completed, and commercial operation has begun. The computer simulator is designed for emergency training on boiler units at the heat and power plant.

Predictive analytics for ball mills	p. 236
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- A mineral fertiliser product flow model is under development. A single-period DAP model and system dashboards for calculation visualisation have been created.
- An information system is being developed to boost the efficiency of 4.0 MPa steam generation and distribution at Apatit's nitrogen facility.
- For AI-related tasks, the Company uses local Russian models such as GigaChat Max and T-Pro, as well as open-source models, including Qwen, DeepSeek, and others.
- The first digital flotation assistant models have been developed at ANBP-2 in Apatit's Kirovsk branch.

Machine learning: three projects were launched in 2025:

- Employee detection in hazardous zones of tipplers at the Kirovsky mine (Kirovsk branch)
- PPE detection at the Mekhanik mechanical repair shop
- Conveyor belt defect detection at the Rasvumchorsky mine (Kirovsk branch) – a real-time video system that identifies belt defects and highlights potential tear risks.



Training in IT and AI

3

In 2025, the AI Solutions Department created training courses on:



prompt engineering and generative AI



data labelling for video analytics

so they can act as clients for AI solutions, helping tailor new products and services to real production needs and operate them effectively.

Collaboration with universities and vocational colleges on AI

Plans are underway to launch an AI lab at the Apatity branch of Murmansk Arctic State University, focusing on computer vision, machine learning, and generative AI. Students will gain hands-on experience through practical cases and tasks from Apatit. Around 25 first-year students will start their training at the new lab in 2026.

The Company is also engaging with vocational colleges. Work is underway to bring IT students into applied projects for the Company.

Training in information security

Ensuring information security is the responsibility of each employee. To this end, the Group regularly holds events to raise employee awareness of information security issues and develop practical skills to deal with modern threats. In 2025, the Company held drills on responding to computer incidents for production staff and employees in charge of the automated process control system.

The materials are available to all PhosAgro Group employees on corporate portals.

Our current priority is to bring both managers and line staff on board with using AI.

As part of the AI potential diagnostics project, 180 participants from various business lines took part in workshops on applying AI across different areas of the Company's operations.

The Company knows that without business process owners and lead specialists, AI solutions will not be truly effective or widely adopted. That is why 17 key areas have been identified, each with its own business-led product team made up of managers and specialists from production and shared services units. Alongside their regular work, these employees are actively building their AI skills