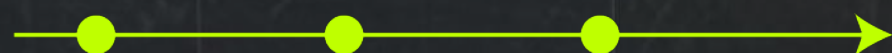


# MULTIPLYING

*the energy of the Russian Far East  
and the country*



We create modern energy solutions  
**for the largest projects in the Russian Far East**

# ABOUT THE COMPANY



Everything M1 does is the result of a professional team united by one goal: reliability in every kilowatt.



## **PROFESSIONAL STAFF: ENGINEERS, TECHNOLOGISTS, DESIGNERS**

All specialists undergo training at partner manufacturing facilities.



Business launched **in 2017**



**Over 3,000 m<sup>2</sup>** of facilities and a team of more than **70 specialists**



### **Full production cycle:**

Design bureau,  
Metalworking shop,  
electrical shop,  
Machinery and equipment fleet



### **Service Department:**

Commissioning, supervisory installation, Repairs, spare parts, maintenance

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sales@zavodm1.ru  
8 (800) 550 19 86



**ALEXANDER**  
**RESHETNEV**  
CEO

# GEOGRAPHY OF SUPPLIES



The company's geographic presence covers more

**THAN 50 CITIES ACROSS RUSSIA,**

primarily in Siberia and the Far East.

We operate where reliable autonomous solutions are especially critical — in regions with challenging climate conditions and limited energy infrastructure.

## OUR EXPERIENCE GOES BEYOND THE COUNTRY:

In 2025, we manufactured and delivered a 2,500 kVA transformer substation for export to Egypt.



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# **PRODUCTS AND SOLUTIONS**





# GAS ENGINE POWER PLANTS

Gas-fired autonomous power generation units. Based on internal combustion engines, they provide stable power supply with minimal operating costs.

## APPLICATIONS



### INDUSTRY

Power supply for industrial processes (food, chemical, metallurgical, oil and gas industries, etc.).



### COMMERCIAL AND RESIDENTIAL FACILITIES

Offices, shopping malls, hotels, hospitals, residential complexes



### TELECOM-MUNICATIONS

Power supply for base stations, communication hubs, and data transmission networks.



### AGRICULTURE AND POWER SUPPLY FOR REMOTE AREAS

Farms, pumping stations, irrigation systems, and other agricultural processes.

M1 Plant is the only enterprise in the Russian Far East manufacturing energy complexes based on gas engine units.

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## DIESEL POWER PLANTS

Autonomous power generation units using a diesel internal combustion engine as the prime mover

### APPLICATIONS



#### EMERGENCY AND BACKUP POWER SUPPLY

Uninterruptible power supply for critical facilities (hospitals, airports, telecom centers) in the event of a main grid outage.



#### REMOTE AND ISOLATED AREAS

Electrification of settlements and facilities outside centralized power grids.



#### MOBILE AND TEMPORARY FACILITIES

Power supply for construction sites, events (concerts, exhibitions), and other temporary facilities..

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# HYBRID POWER PLANTS

Energy complexes that generate electricity from two or more sources. Typically, this is a combination of renewable energy sources (solar, wind) with conventional generation and energy storage systems.

## APPLICATIONS



### AUTONOMOUS POWER SUPPLY FOR REMOTE AREAS

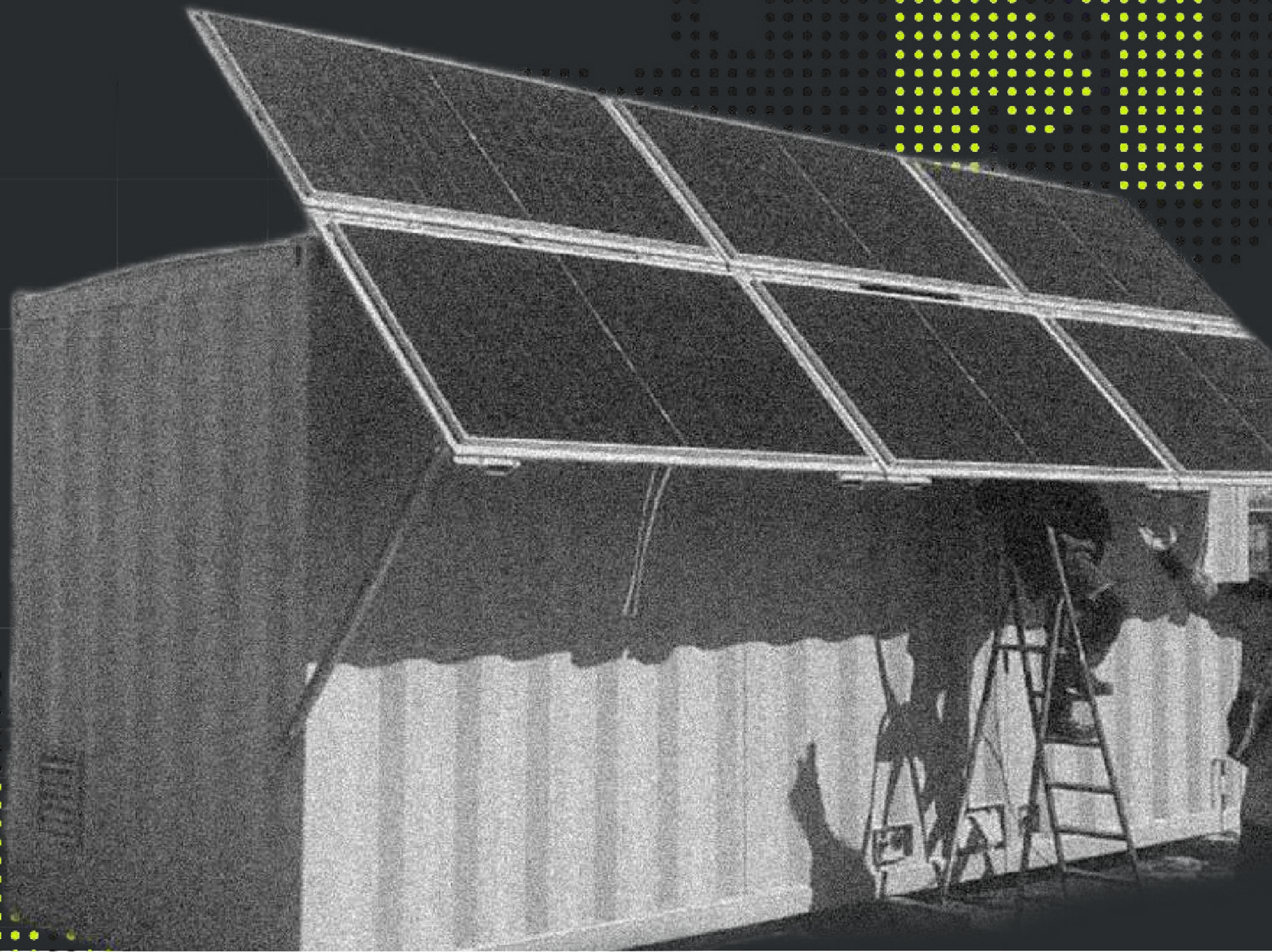
Settlements, villages, and small towns outside the unified power grid



### REMOTE INDUSTRIAL FACILITIES

Mines, exploration and drilling sites, and temporary camps located far from infrastructure.

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## BLOCK-MODULAR

6/0.4 kV and 35/6 kV

## TRANSFORMER SUBSTATIONS

Ready-made modular systems for power conversion and distribution. Delivered fully assembled and ready for rapid connection.

### ADVANTAGES



#### COMPACT DESIGN AND EASE OF TRANSPORTATION

Facilitates installation in confined spaces.



#### MOBILITY

Ability to be transported and installed at a new location.





## TIGR GAS-INSULATED SWITCHGEAR

12/24/35 kV

## TIGR METAL-CLAD SWITCHGEAR

12/24/35 kV

Ready-made modular systems for power conversion and distribution. Supplied fully assembled and ready for rapid connection.

### ADVANTAGES



#### COMPACT DESIGN

Significantly reduces the required footprint and volume of the switchgear.



#### MULTIFUNCTIONALITY

Busbars, circuit breaker, disconnectors (including earthing disconnectors), and current transformers are integrated into a single enclosure.



#### RELIABILITY AND ENVIRONMENTAL RESISTANCE

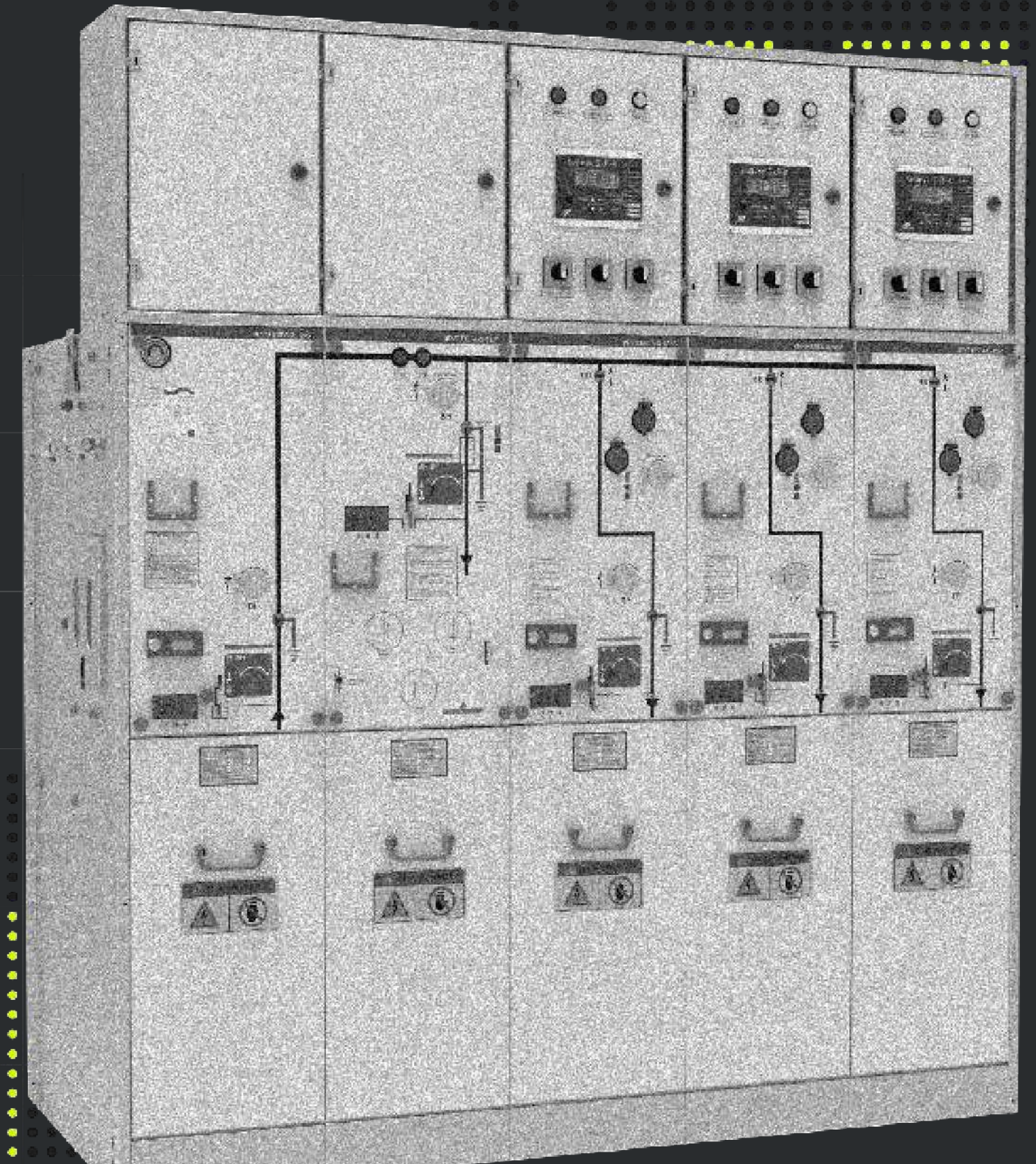
Stable operation under harsh environmental conditions, including seismically active areas and highly polluted environments.



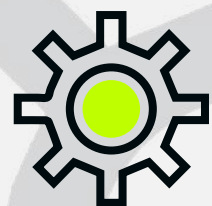
#### HIGH SAFETY LEVEL

Explosion-proof and fire-safe design.

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# SERVICE DEPARTMENT



We provide a full range of services — from equipment selection to commissioning and ongoing maintenance.



**SERVICE DEPARTMENT CONTACTS:**  
88004440122  
[service@zavodm1.ru](mailto:service@zavodm1.ru)



# ON-SITE CONSULTATION

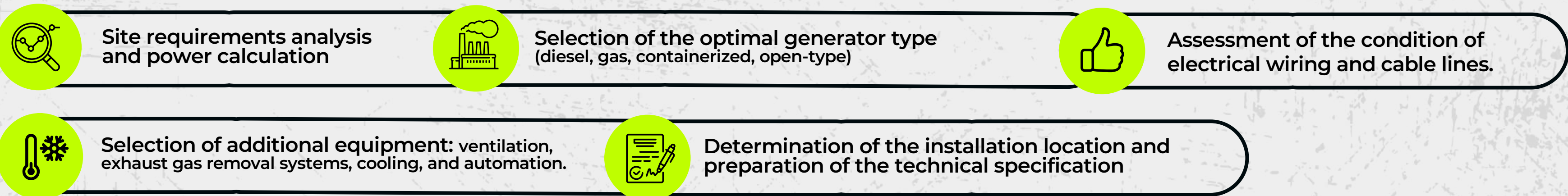
We help you save money before purchasing equipment



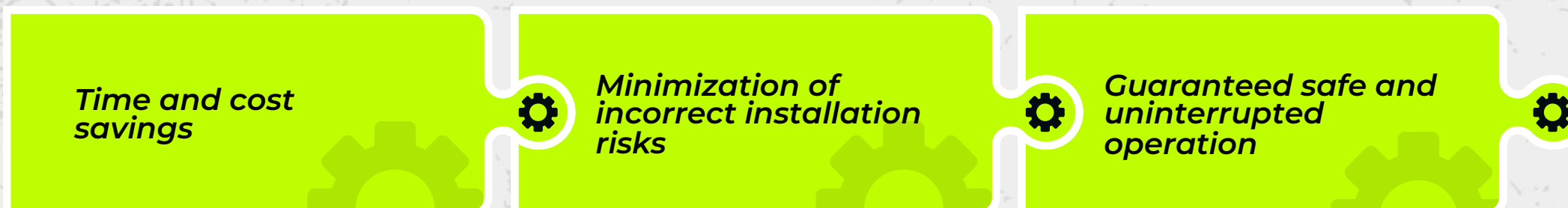
Even with an abundance of information available online, selecting the right generator equipment still requires an on-site visit by a specialist.

We carry out an expert site assessment to eliminate errors in equipment selection and installation.

## 5 STEPS OF THE CONSULTATION



## BENEFITS





# DIAGNOSTICS AND REPAIR

We identify issues that cannot be detected without testing



Comprehensive testing of generators up to 1.25 MW

We perform comprehensive diagnostics and testing of power systems at a factory test facility, including load tests up to 110% of the rated capacity

## WE CARRY OUT WORKS

- Inspection of the condition of all components and assemblies;
- Testing under various operating modes;
- Preparation of a technical report with test protocols;
- Identification of hidden faults and provision of repair recommendations;
- Maintenance and repair prior to seasonal operation.

## ADDITIONAL SERVICES

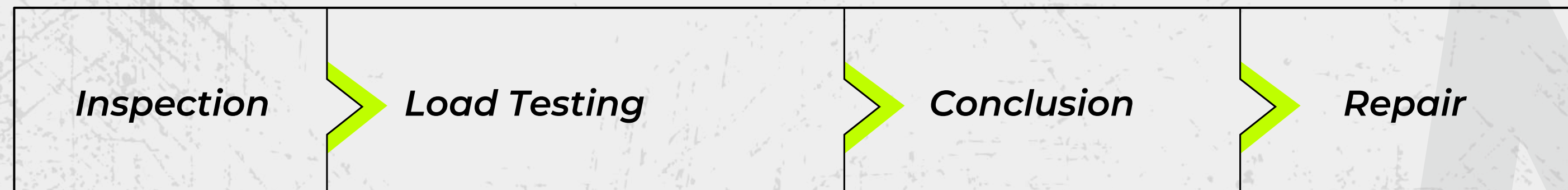


Ability to provide online streaming of controller readings



72-hour commissioning run-in of new diesel generator sets

## DIAGNOSTICS STAGES





# SUPERVISION OF INSTALLATION

Installation under expert supervision ensures long service life of the generator



Шефмонтаж — это технический надзор и авторский контроль монтажа оборудования

Мы следим за качеством работ на каждом этапе, чтобы оборудование служило долго и без перебоев

## OUR OBJECTIVES



Verification of installation work compliance with manufacturer requirements



Preparation of as-built documentation



Verification of correct connection of auxiliary systems: fuel, ventilation, and automation systems



Optimization of technical solutions for long-term and trouble-free operation

## RESULT



Minimization of breakdown risks caused by installation errors



Confidence in correct equipment configuration and connection



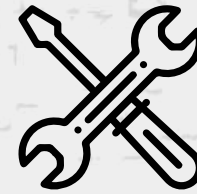
Ability to operate even in harsh climatic and technical conditions

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# COMMISSIONING AND START-UP WORKS

We start up and commission generators to ensure reliable operation from day one



Commissioning is the final stage of equipment installation that determines its reliability

## COMMISSIONING SCOPE

- 1** Configuration of power plants in accordance with the project design and the manufacturer's requirements
- 2** Verification and adjustment of electrical parameters
- 3** Monitoring of protection and interlock systems
- 4** Load testing up to 75% of rated capacity
- 5** Testing of synchronization systems
- 6** Training of personnel in equipment operation

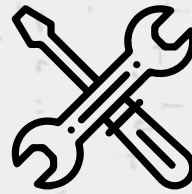
## 5 STAGES OF COMMISSIONING





# TECHNICAL MAINTENANCE

Scheduled maintenance — extending the service life of your equipment

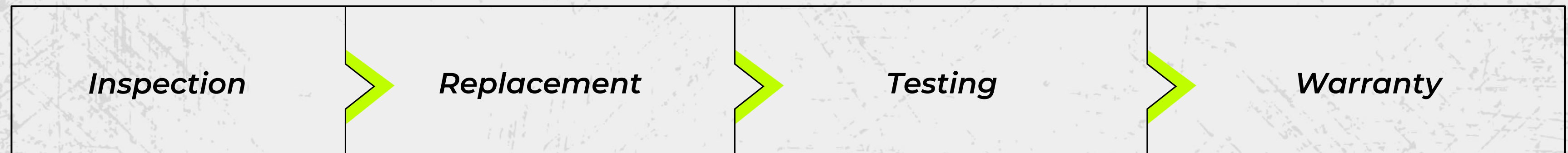


Timely maintenance ensures uninterrupted operation and reduces repair costs

## OUR OFFERING

- 1** Scheduled maintenance every 250–300 operating hours
- 2** Replacement of consumables and worn components
- 3** Inspection of the operation of all systems
- 4** Use of original spare parts and high-quality materials
- 5** Warranty for all types of work

## ЦИКЛ ТО





# PEOPLE. PRODUCTION. ENERGY.

***EVERYTHING M1 DOES***

is the result of a professional team united by one goal: reliability in every kilowatt.



# **PROFESSIONAL TEAM**

Experienced specialists with many years of hands-on practice handle tasks of any complexity. Our in-house foreign trade department ensures fast delivery of equipment from abroad. Service engineers provide 24/7 support, and all employees undergo training at manufacturing facilities.



**Departments: Sales, Procurement and Foreign Trade, Project Execution**



**Design Engineering Department**



**Electrical and Technological Personnel**

## OUR PARTNERS



# DIRECT SUPPLIES FROM GLOBAL BRANDS

We select equipment from leading brands based on project requirements, delivery timelines, and operating conditions



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# FROM NUMBERS TO RESULTS

## ***WE ARE PROUD***

We are proud not only of our production performance, but also of the real solutions that operate across Russia and beyond.



## **BLOCK-MODULAR**

Egypt

# **TRANSFORMER SUBSTATION**

*2 × 2500 kVA with GIS*

A modern solution for reliable power distribution.

Supply for an industrial customer in Egypt.

A set of two anti-vandal “Sever” type containers (40 ft) was manufactured for power distribution with a total capacity of 2 × 2500 kVA at a voltage level of 11/0.4 kV.

The scope includes gas-insulated switchgear (GIS), an automatic transfer switch (ATS) system based on a PLC, as well as remote monitoring and control for real-time operational supervision.

## **TECHNICAL SPECIFICATIONS**

- Rated capacity: 2 × 2500 kVA    ▪ Voltage: 11 / 0.4 kV
- Busbar current: 4000 A    ▪ Container ingress protection: IP65
- Medium-voltage switchgear: GIS with SF<sub>6</sub> gas insulation
- Air filtration system: G4 (fine particulate dust)
- Operating temperature range: -10 to +50 °C
- Seismic resistance: 9 points on the MSK-64 scale
- Fire hazard class: C0    ▪ Fire resistance rating: Class II

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**A RELIABLE SOLUTION FOR OPERATION IN  
HARSH CLIMATIC CONDITIONS**

**COMPLETED PROJECTS 2025**

## **8 MW POWER UNIT FOR A DATA CENTER**

An 8 MW power unit based on Jichai L20V190ZLT-2 gas engine generator sets.

An energy complex with a total capacity of 8 MW was implemented for a large industrial customer.

The system is based on four Jichai L20V190ZLT-2 gas engine generator units, each rated at 2 MW.

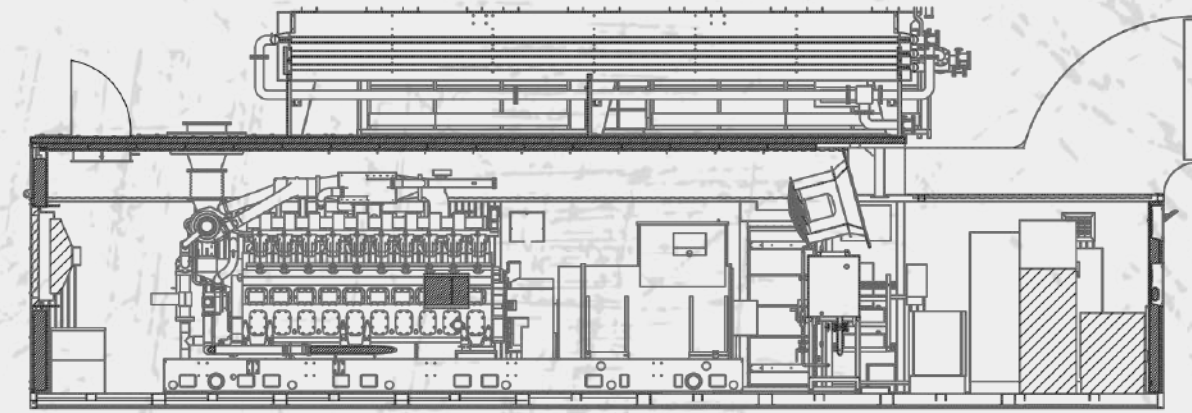
The power plant provides reliable power supply for technological process lines under high loads and continuous 24/7 operation.

### **TECHNICAL SPECIFICATIONS**

- Total capacity: 4 × 2 MW
- Rated voltage: 6,300 V
- Automation level: Level 3 (GOST R 50783-95)
- Dimensions: 14,000 × 3,500 × 3,200 mm
- Design: containerized, adapted for northern climatic conditions

### **RELIABLE OPERATION UNDER YEAR-ROUND USE AND LOW-TEMPERATURE CONDITIONS**

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## **HYBRID POWER PLANT**

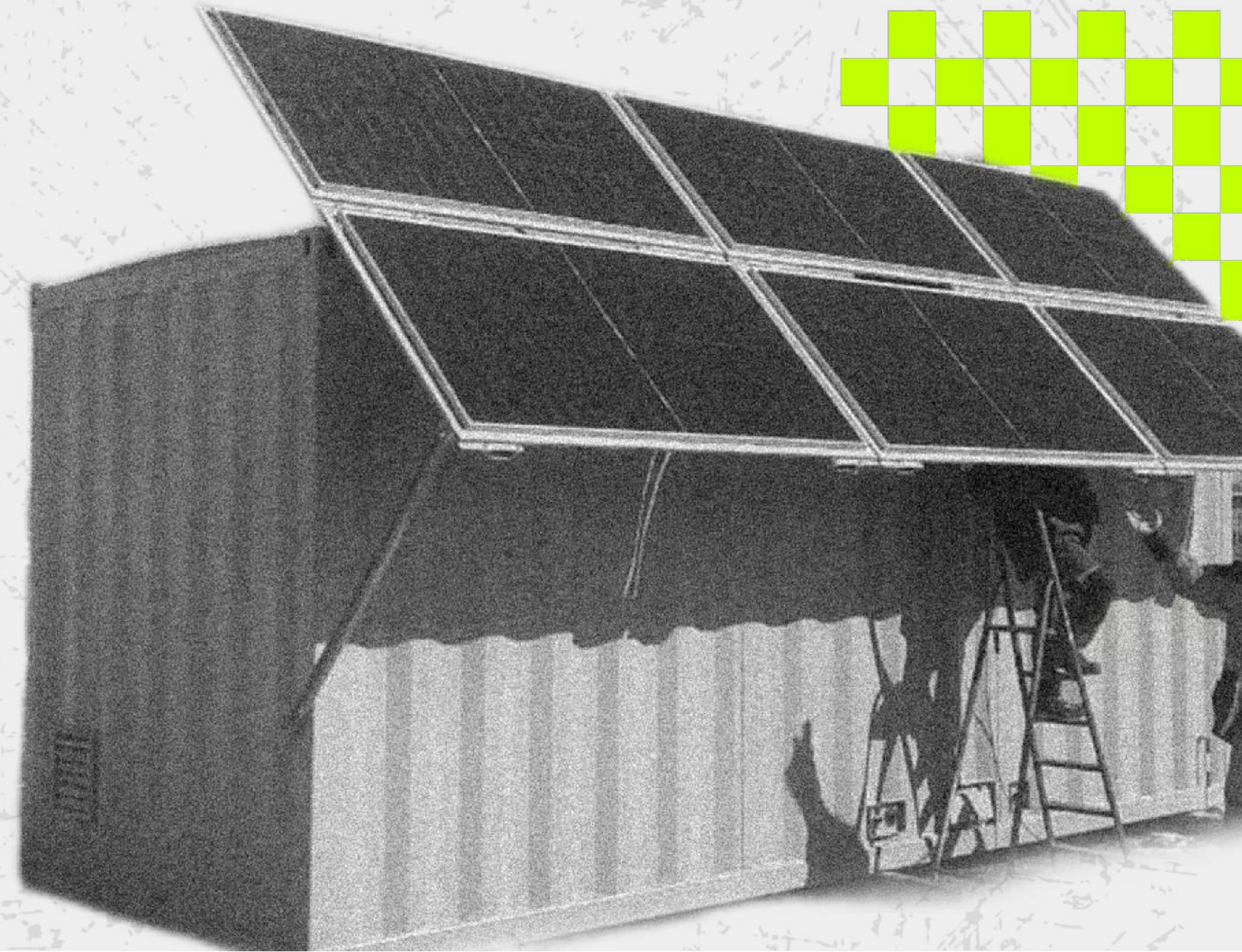
Modern solutions for autonomous power generation.  
A hybrid solar power plant with energy storage systems.  
A hybrid energy complex combining solar panels and battery energy storage systems has been designed and implemented.

The plant ensures autonomous operation without external power sources for up to 7 days.  
An intelligent control system is implemented to balance the load.

### **TECHNICAL SPECIFICATIONS**

- Number of units: 3
- System capacity: AGM batteries 24 × 200 Ah; solar panels 6 × 200 W
- Containers: "Sever-6" fully welded containers
- Autonomous operation time: up to 7 days

**ECO-FRIENDLY SOLUTIONS FOR REMOTE REGIONS: MINIMAL EMISSIONS, RELIABLE POWER**





## 2.4 MW POWER UNIT

A modular complex for backup and autonomous power supply based on Cummins KTA38-G5 diesel generator sets

An energy system was implemented for an industrial customer, incorporating three diesel power plants with a capacity of 800 kW each. The complex is complemented by an operator control room with a MODBUS monitoring system and a 0.4 kV low-voltage switchgear (LVSG). The project was designed and manufactured within a very short timeframe to ensure critical power supply.

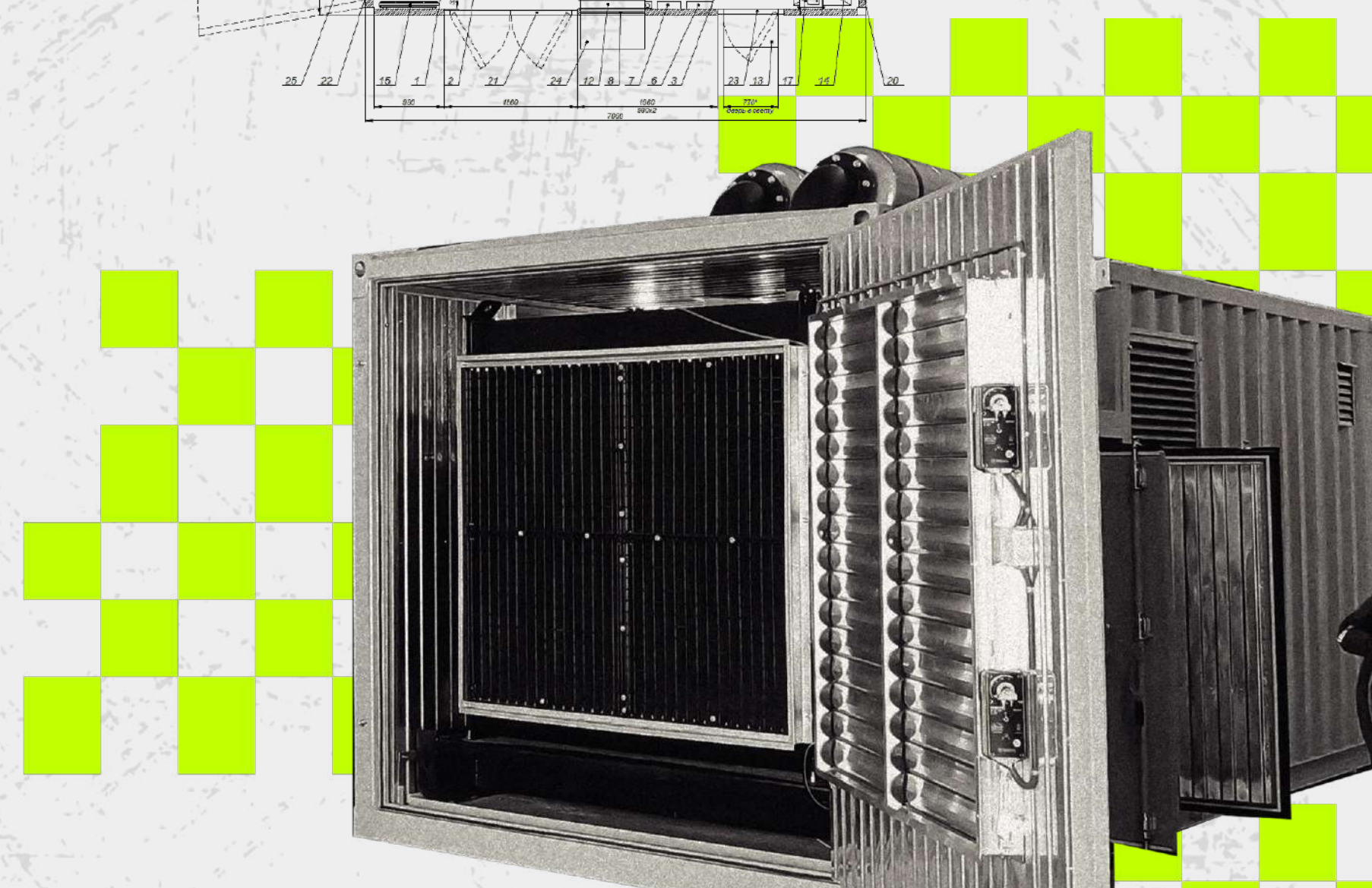
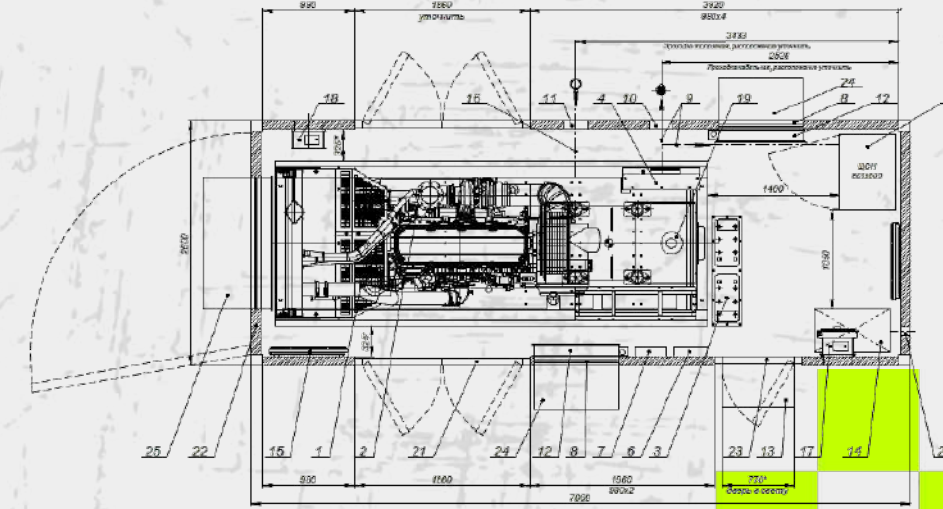
### SYSTEM COMPOSITION

- 3 × ДЭС КТ-1100GF на базе Cummins KTA38-G5 в контейнерах «Север»
- Операторная контейнерного исполнения с пультом управления
- Распределительное устройство НКУ-0,4 кВ
- Система аварийного слива топлива и теплоносителей

### TECHNICAL SPECIFICATIONS

- Total system capacity: 2.4 MW
- Voltage: 0.4 kV    ▪ Frequency: 50 Hz
- Containers: insulated, fully welded "Sever-5" containers

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**THE COMPLEX IS READY FOR OPERATION IMMEDIATELY AFTER INSTALLATION. MINIMUM INSTALLATION WORK — MAXIMUM RELIABILITY**



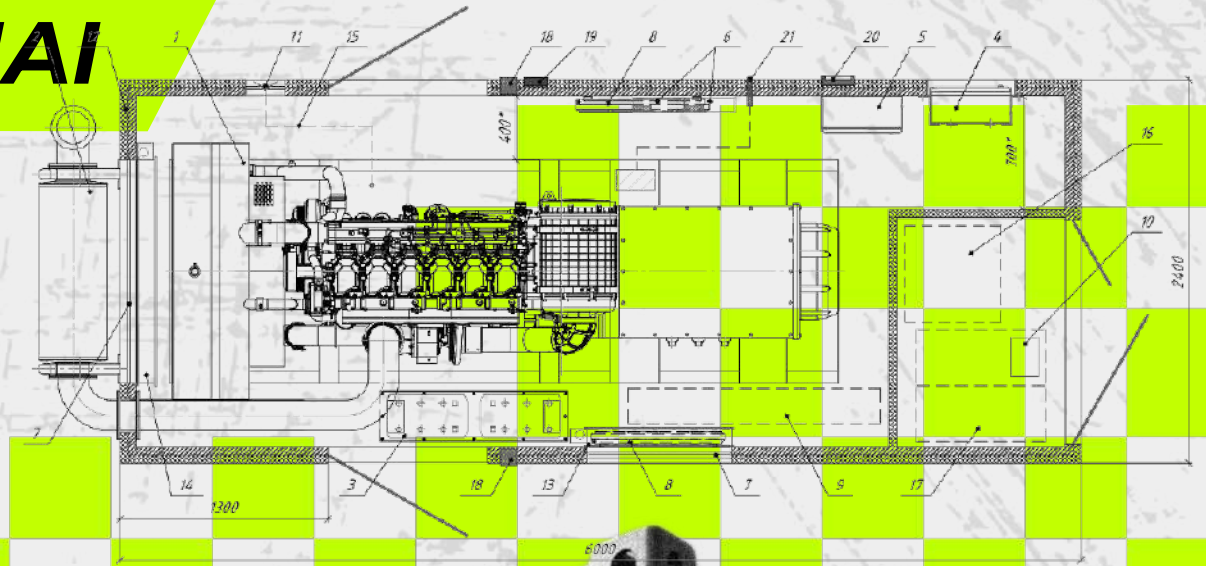
## MOBILE DIESEL POWER PLANTS BASED ON WEICHAI

Power where it's needed. Mobile power plants rated at 250 and 500 kW

Four mobile power plants mounted on chassis were manufactured and delivered: two rated at 250 kW and two at 500 kW.

The equipment is used for temporary power supply at construction sites and industrial facilities.

The mobile units provide rapid deployment and autonomous operation without connection to the grid.



### TECHNICAL SPECIFICATIONS

- Power rating: 250 and 500 kW
- Voltage: 0.4 and 6.3 kV
- Design: "Sever-5" and "Sever-6" containerized units
- Chassis: twin-axle trailer with stabilizing supports
- Commissioning time: up to 30 minutes

**MOBILITY IS THE KEY TO RAPID SOLUTIONS. THE POWER PLANTS ARE READY FOR OPERATION ANYWHERE IN THE REGION.**



COMPLETED PROJECTS 2025

## MOBILE POWER PLANT

### 1,000 KW FOR THE SETTLEMENT'S MAIN POWER SUPPLY

A compact solution for industrial power supply

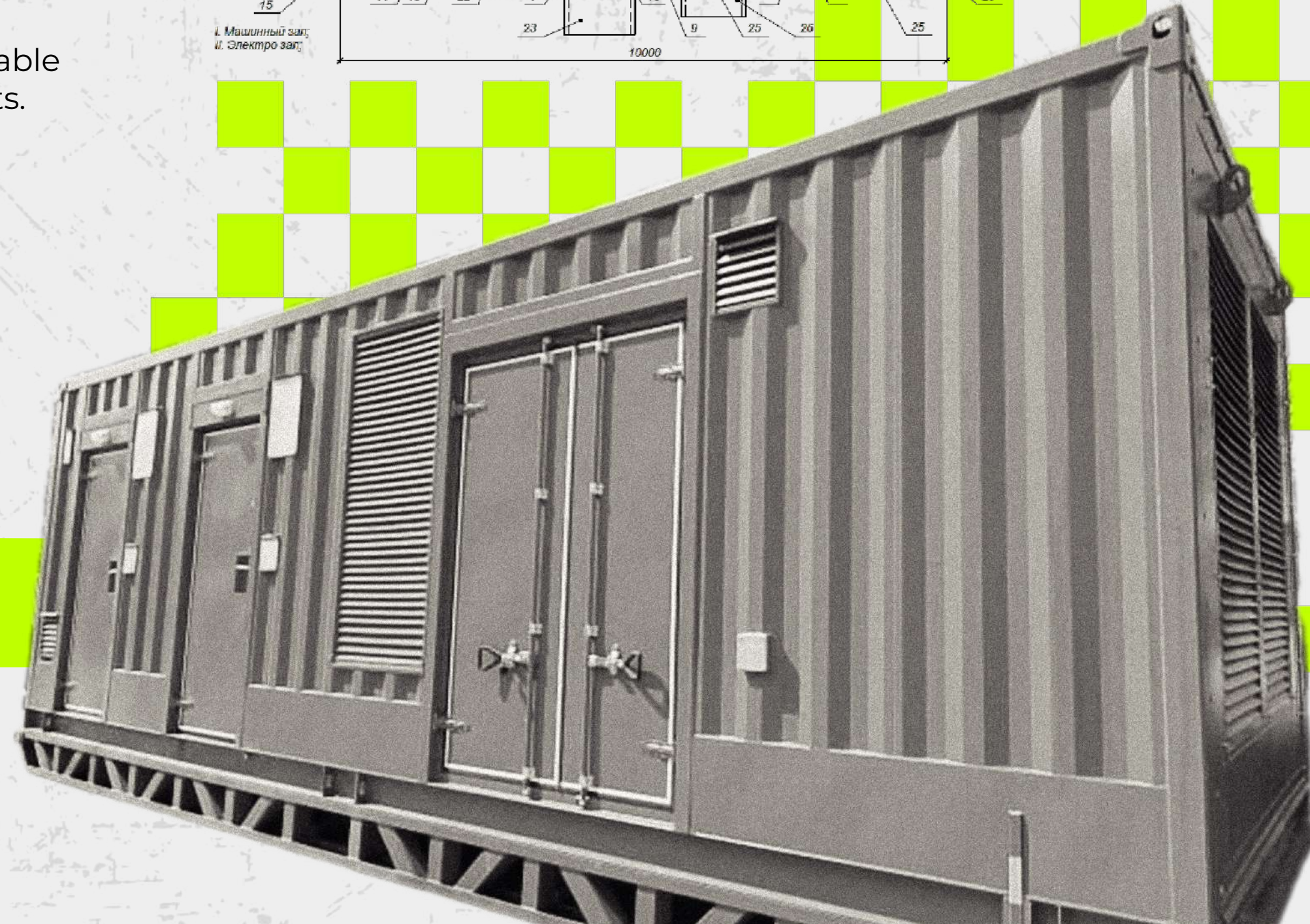
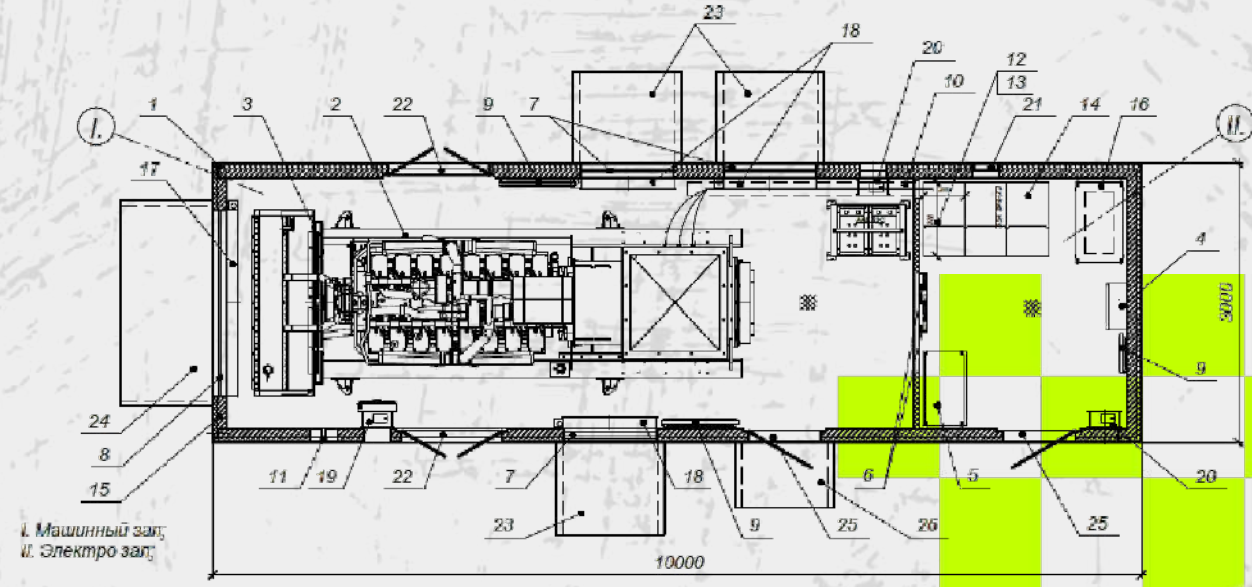
The power plant based on the Cummins KTA50-G3 engine ensures stable operation at low temperatures and under high reliability requirements.

#### TECHNICAL SPECIFICATIONS

- Power rating: 1,000 kW
- Voltage: 6,300 V
- Automation level: 3 (GOST R 50783-95)
- Dimensions: 10,000 × 3,000 × 3,200 mm

#### HIGH EFFICIENCY AND STABILITY UNDER ANY LOAD

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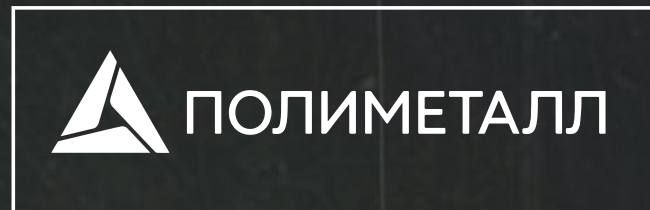
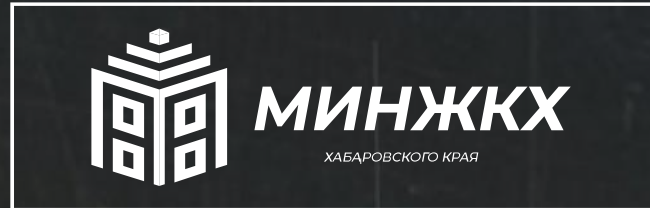


# ENERGY OF TRUST & PARTNERSHIP

***BY DELIVERING PROJECTS ACROSS RUSSIA,***

we have built strong relationships with leading energy, industrial, and infrastructure companies. Our expertise is proven not only by results, but also by the trust of our partners.

# THEY TRUST US



# CERTIFICATES AND QUALITY

The company is certified in accordance with Russian and international standards. All products undergo quality control and factory testing.



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# **LET'S START OUR COOPERATION TODAY**



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