



# ENERGETRANS PROJEKT

ENGINEERING COMPANY



## DEMINING



ENERGOTRANSPROEKT has been operating in the Russian market for more that 15 year & has vast experience in providing services for territory exploration surveys and mine clearance operations

## Type of Services

- 🔦 Design works – territory exploration for the presence of mines & explosives
- 🔦 Mine clearance operations - UXO & demining
  - UXO & Demining operations are carried out by means of:
    - hand clearance technique
    - mechanical mine trawling & destruction method
- 🔦 Explosive ordnance destruction



Russian market leaders among  
**ENERGOTRANSPROEKT** key Clients:

- “Russian Highways” State Company
- Federal Road Agency “Rosavtodor”
- PJSC “ROSSETI”
- JSC “Russian Railways”



To attain BEST RESULT and to provide HIGH QUALITY services ENERGOTRANSPROEKT:



- engages highly trained & qualified personnel
- employs advanced individual detectors for explosive remnants
- uses certified personal safety equipment
- applies necessary machinery, mechanical mine trawling & destruction devices, modern equipment & gear for its staff
- possess with wide opportunities for material & technical base and for medical equipment





# CLEARANCE METHODS

For territory mine clearance operations (UXO, demining) ENERGOTRANSPROEKT uses combined method that includes:

-  Remote mechanical demining with the aid of controlled robotic systems
-  Manual mine clearance with mine detectors

## Method's advantages:

- ✓ Gives maximum safety whilst demining large territories
- ✓ Reduces the time for demining without compromising the quality



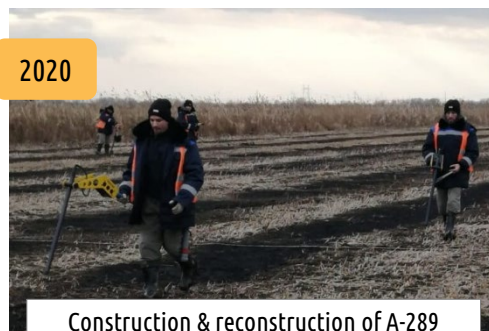
ENERGOTRANSPROEKT has solid experience in respect of exploration and mine clearance services provided to major Russian transport and energy companies. Proven track record of completed projects:

2021



Reconstruction of M-4 "Don" highway from Moscow to Novorossiysk, section 715-777 km, Voronezh region

2020



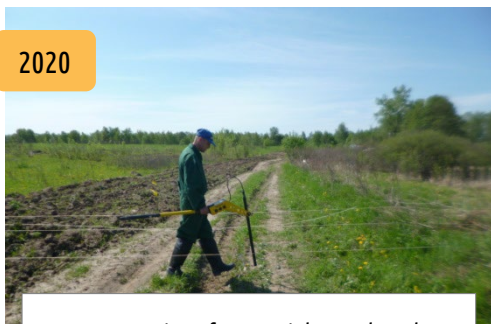
Construction & reconstruction of A-289 highway Krasnodar-Slaviansk-na-Kubani-Temryuk A-290 highway Novorossiysk-Kerch, 2 stage

2020



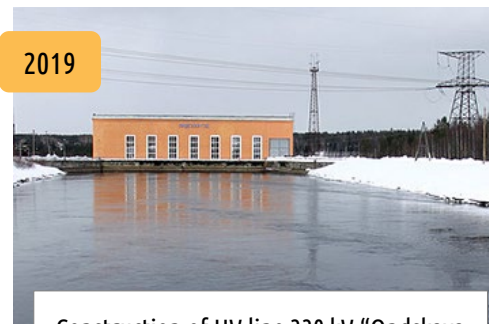
Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 4 stage, section 224- 347 km, Vladimir region, Nizhniy Novgorod region

2020



Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 3 stage, section 116 – 224 km, Vladimir region

2019



Construction of HV line 330 kV "Ondskaya HPP" – Substation 330 kV "Petrozavodskaya", length 278 km

2018



HV line 220 kV Novovoronezhskaya NPP-2 - Buturlinovka with substation 220 kV Buturlinovka

## List of current and completed projects on exploration & UXO clearance:

### 2021

- Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 4 stage, section 224- 347 km, Vladimir region, Nizhniy Novgorod region
- Construction & reconstruction of A-289 highway Krasnodar-Slaviansk-na-Kubani-Temryuk A-290 highway Novorossiysk-Kerch, 2 stage
- Reconstruction of M-4 "Don" highway from Moscow to Novorossiysk, section 715-777 km, Voronezh region

### 2020

- Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 2 stage , section 80 – 116 km, Vladimir region
- Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 3 stage, section 116 – 224 km, Vladimir region
- Construction of M-12, High-speed road "Moscow-Nizhny Novgorod – Kazan, 4 stage, section 224 - 347 km, Vladimir region, Nizhniy Novgorod region
- Construction of High-speed road Moscow-Saint Petersburg, section 58-685 km, 3 stage - 149 – 208 km
- Construction & reconstruction of A-289 highway Krasnodar-Slaviansk-na-Kubani-Temryuk A-290 highway Novorossiysk-Kerch, 1 stage

### 2019

- Construction of HV line 330 kV "Ondskaya HPP" – Substation 330 kV "Petrozavodskaya", length 278 km
- Reconstruction of M-4 "Don" highway from Moscow to Novorossiysk. The far western by-pass section of the Krasnodar city
- Construction of HV line 330 kV "Ondskaya HPP" – Substation 330 kV "Petrozavodskaya", length 278 km
- Modernization of the contact system at Kiziterinka station

### 2018

- HV line 220 kV Novovoronezhskaya NPP-2 - Buturlinovka with substation 220 kV Buturlinovka
- Construction of HV line 330 kV "Ondskaya HPP" – Substation 330 kV "Petrozavodskaya", length 278 km





## Mine clearance machinery (UXO):

No	Title	Characteristics & Applications
1	MV-2 HONEY BUDGER	<ul style="list-style-type: none"> <li>• Compact EOD robotic system for use in harsh terrains with difficult access</li> <li>• Mechanical Ground Preparation &amp; Demining</li> <li>• Deep Interrogation Tasks</li> </ul>
2	MV-4 SCORPION	<ul style="list-style-type: none"> <li>• Multi mission EOD robotic system and mine clearance</li> <li>• Resistant to all AP mines detonations and UXOs of similar intensity</li> <li>• Mechanical Ground Preparation &amp; Demining</li> <li>• Sustains AT mine explosions</li> </ul>
3	MV-10 BISON	<ul style="list-style-type: none"> <li>• Heavy-duty EOD robotic demining system with double tool: front-positioned flail tool followed by a rear tiller</li> <li>• Mechanical Ground Preparation &amp; Demining</li> </ul>
4	MVF-5 TUSK	<ul style="list-style-type: none"> <li>• Multi-mission, heavy-duty, robotic system for emergency response</li> <li>• Survey &amp; Reconnaissance</li> <li>• Obstacle Removal on Path of Intervention</li> <li>• Firefighting</li> <li>• Rescue Support Operations</li> </ul>
5	XLPD GROUNDHOG	<ul style="list-style-type: none"> <li>• Compact robotic dozer is a very low profile remote-controlled machine</li> <li>• Withstand the most severe working conditions in mining industry</li> <li>• Narrow reef &amp; Room and pillar mining</li> </ul>



# EQUIPMENT

Deminers use certified personal safety equipment and advanced individual detectors for explosive remnants



Protective helmet with visor



Bulletproof vest



Metal detector Vallon



Modern communication technologies



Deminer's kit



Multichannel metal detector  
MAGNEX



Metal detector Ferex



Metal detector Shonstedt



Metal detector for underwater  
works MAGNEX



Metal detector MAGNEX

ENERGOTRANSPROEKT is focused on safety protection measures for deminers during mine clearance operations as well as on services quality assurance & control

All works are carried out in strict accordance with the rules, norms and international standards:



Strict compliance with environmental protection measures




In 2014 in cooperation with the Geneva International Centre for Humanitarian Demining, Russian version of International Standards for Humanitarian Demining (IMAS) was translated & published





**ENERGOTRANSPROEKT** holds all necessary **licenses & certificates** for the successful and efficient performance :



**ENERGOTRANSPROEKT** - is a member of the Russian “Expert Union” engaged in expert work in the field of the protection of the population and territory from emergency, industrial, fire and environmental situations




### **LICENCE for industrial explosive operations**

Issued by the Federal Environmental, Industrial and Nuclear Supervision Service of Russia (ROSTECHNADZOR)



#### **Certificates:**

- 
1. Quality Management System Certificate ISO 9001-2015
  2. Environmental Management System Certificate ISO 14001-2016
  3. Health and Safety Management System Certificate n OHSAS 18001-2007



## ENERGOTRANS PROEKT

Research and Design Institute of Energy and Transport

Yaponskiy Dom Business Centre  
15, Savvinskaya Naberezhnaya , 119435, Moscow  
Telephone / fax: + 7 (495) 269-87-66  
E-mail: [info@energoproekt.ru](mailto:info@energoproekt.ru)