AFFORDABLE CLEAN ENERGY

A ECO GROUP OF COMPANIES

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AFFORDABLE CLEAN ENERGY

ABOUT US

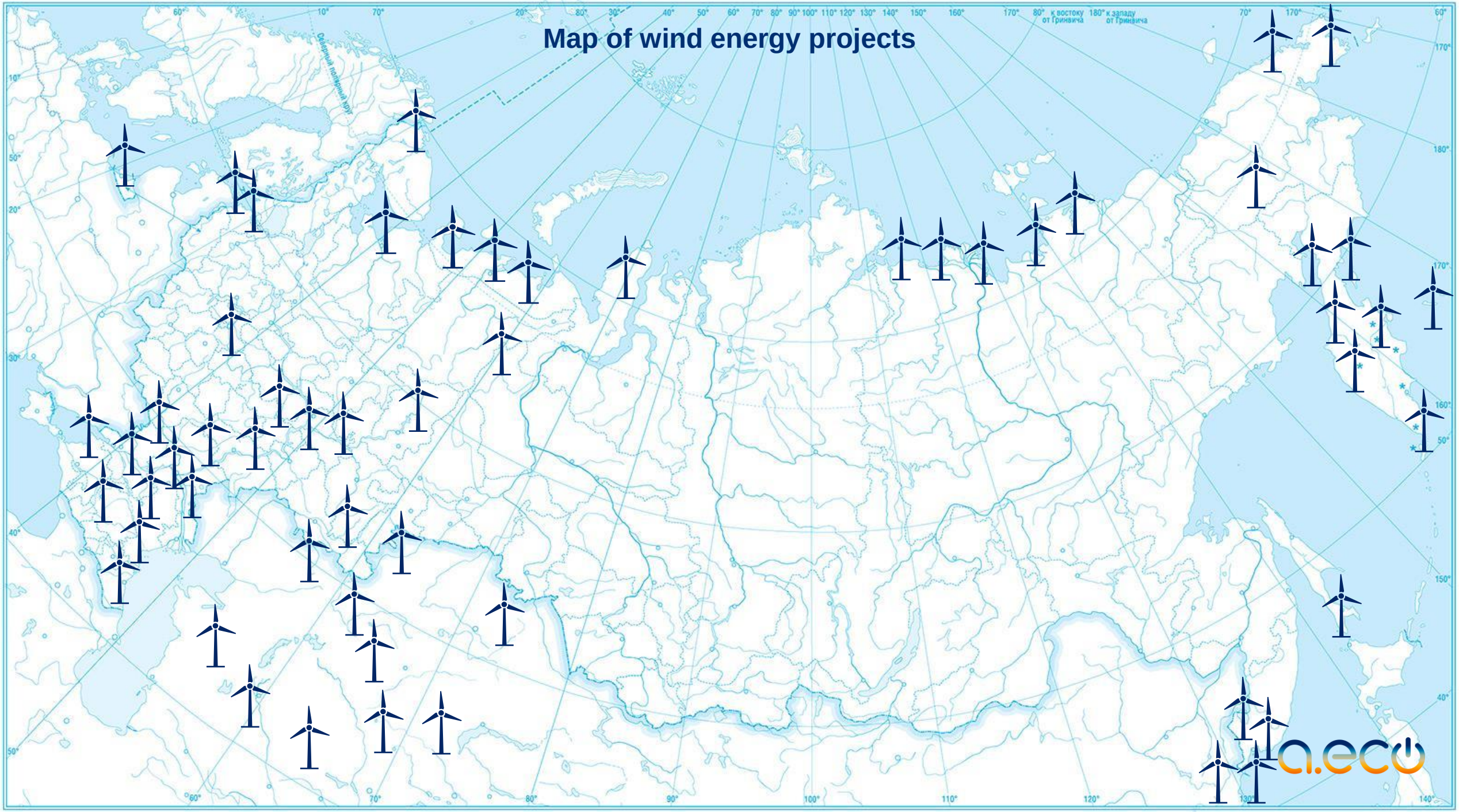
Private engineering group of companies located in Russia, Kazakhstan and UAE successfully works in the field of renewable energy since 2007

- Over 400 completed projects
- Grid-connected and off-grid solar and wind power plants
- For private households and industrial consumers
- Wind resource assessment: over 220 wind farms (over 5,000 MW)
- Wind met masts: over 100
- Feasibility studies: 17 wind farms (458 MW)
- Basic and detailed design: 9 wind farms (49.7 MW)
- Construction and installation works: 8 wind farms (18 MW)

WIND ENERGY
-
FROM IDEA TO OPERATION

- Site selection
- Wind monitoring
- Wind energy yield assessment
- Micro-siting
- Environmental impact assessment
- Feasibility studies
- Design and detailed design
- Wind turbines supply
- Construction and installation
- Commissioning
- Technical due diligence of wind projects
- O&M of wind turbines

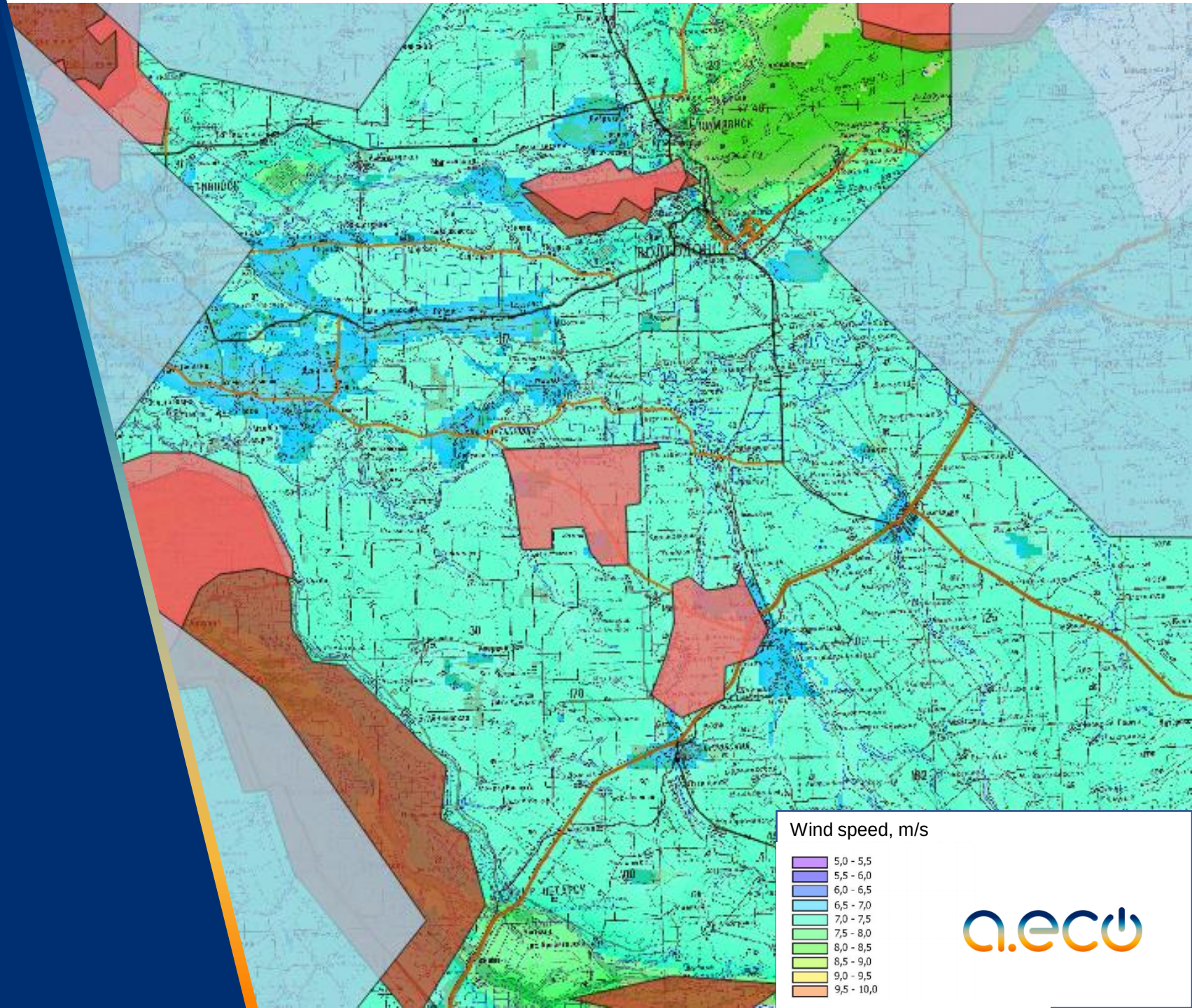
Map of wind energy projects



SITES SELECTION

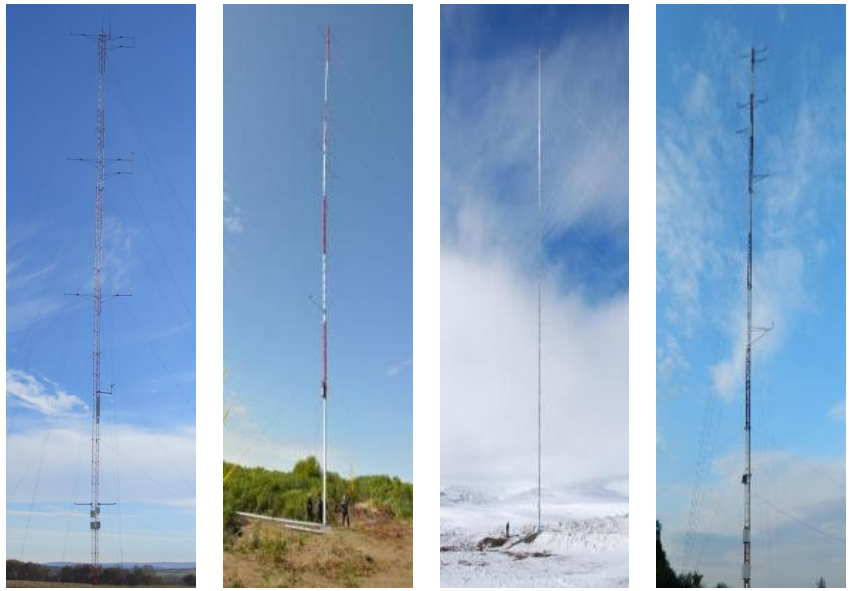
Criteria:

- Wind energy resource
- Transport access
- Grid connection
- Status of land plots
- Construction conditions
- Restrictions of aviation services
- Environmental restrictions



№1 IN RUSSIA AND CIS IN WIND MEASUREMENTS AND ENERGY YIELD ASSESSMENT

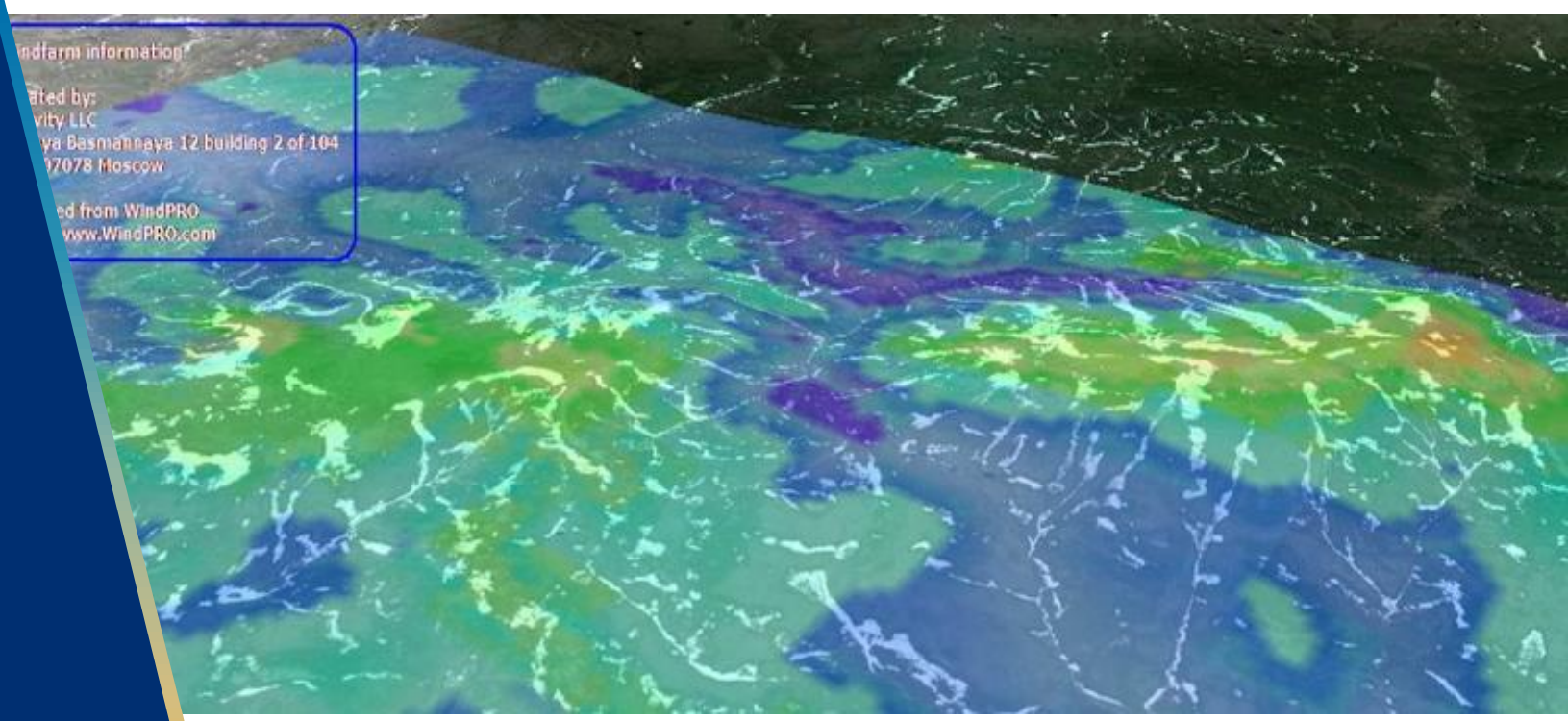
- Carrying out wind measurements in accordance with IEC 61400-12, IEC 61400-50-1, MEASNET
- Over 100 met masts installed up to 120 m high, including 11 masts above the polar circle
- Official dealer of Ammonit and NRG
- Projects in Russia, Kazakhstan, Uzbekistan

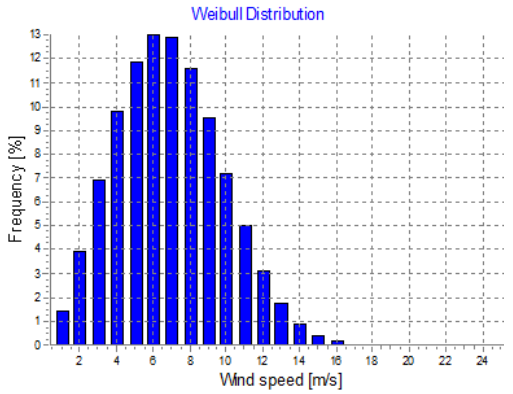


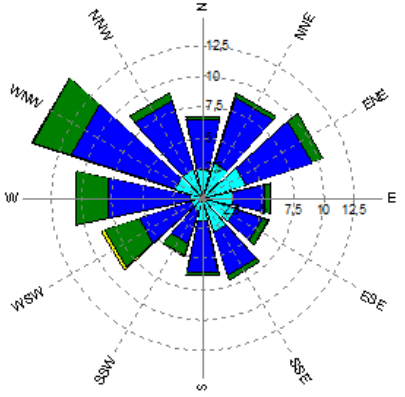
WIND ENERGY CALCULATIONS

Energy yield assessment using WindPRO/WAsP software

- Maps of the distribution of average wind speed, wind energy and wind power output
- Weibull distribution
- Wind roses by frequency, average velocity, and energy
- Vertical wind profile
- Extreme wind speed
- Turbulence
- Annual power output
- Losses and probabilities







windPRO

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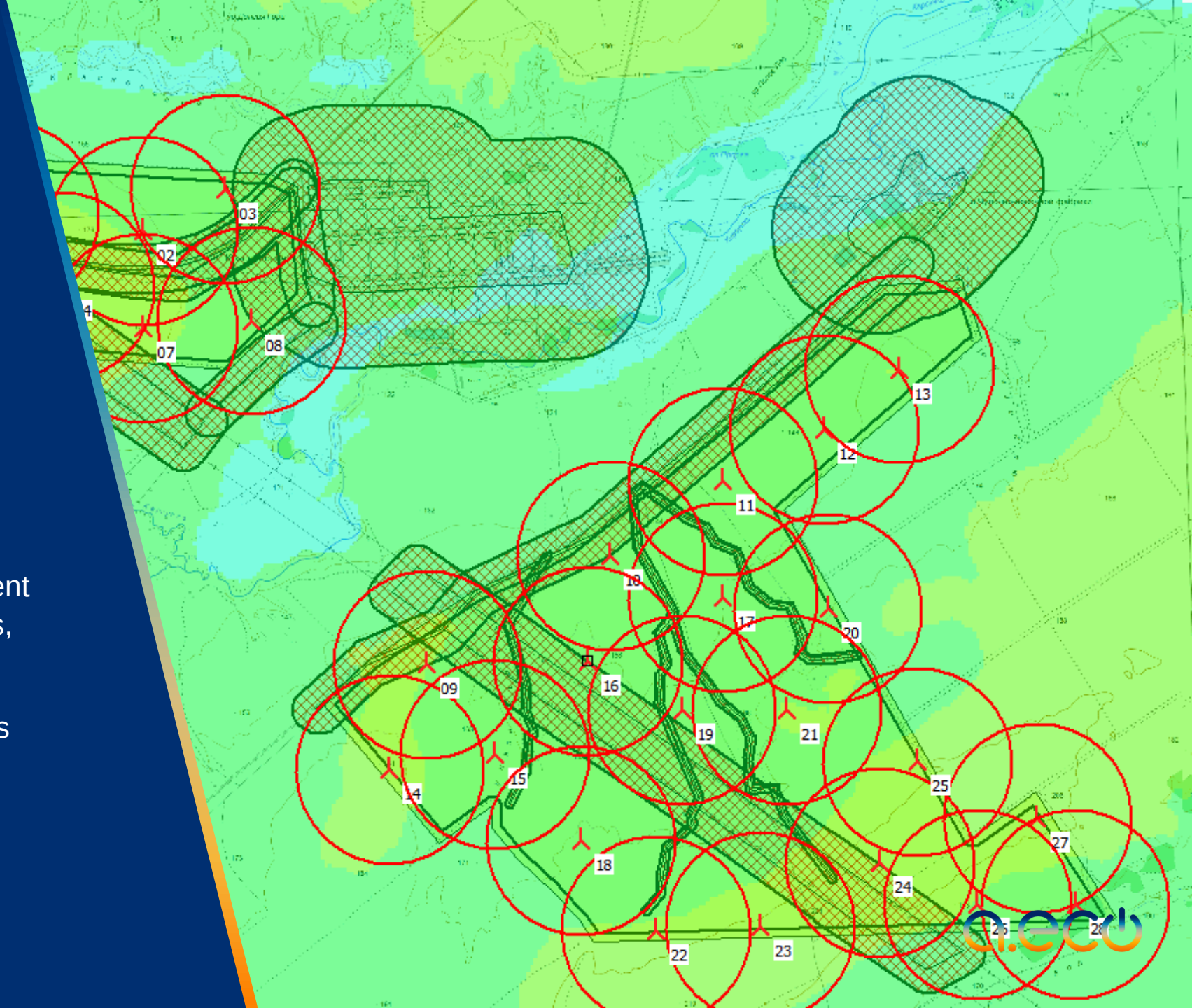
MICRO-SITING

- Maximizing output
- Minimization of turbulence
- Minimization of flow deflection
- Minimization of surface slopes
- Respect for restrictions on placement near infrastructure: buildings, roads, power lines, pipelines
- Respect of sanitary norms in places with regulated noise indexes
- Optimization of construction works



ENVIRONMENTAL IMPACT ASSESSMENT

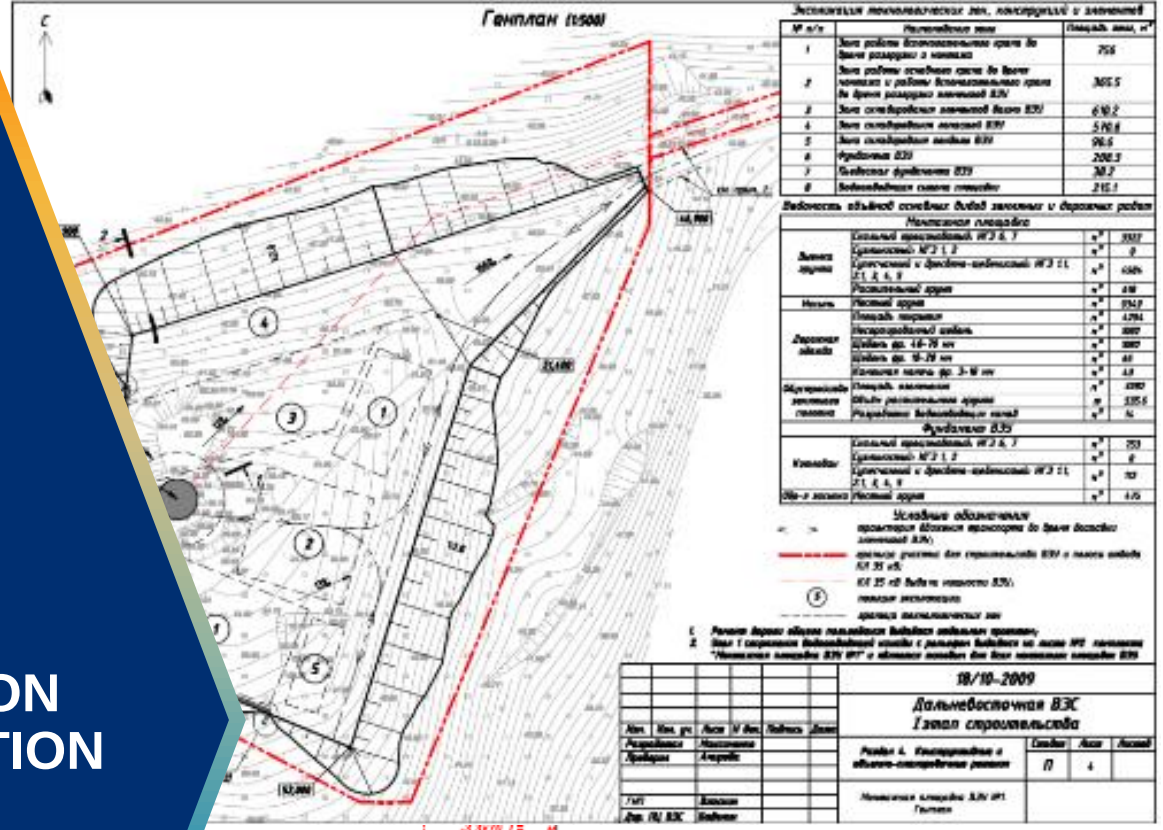
An assessment of the impact of wind power plants on:

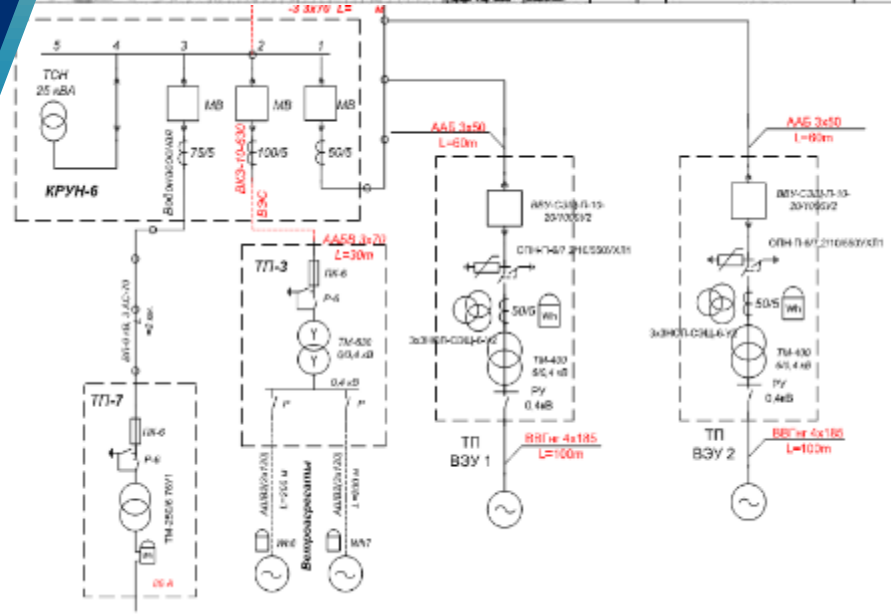
- geological environment
- soil environment
- water environment
- atmospheric air
- flora and fauna

With the calculation of:

- shadows
- noise impact in accordance with Russian and international norms.

CONSTRUCTION DOCUMENTATION





- Engineering surveys
- Development of basic and detailed design,
- Budget documentation
- Construction permission
- Grid connection agreement
- State expertise

WIND ENERGY

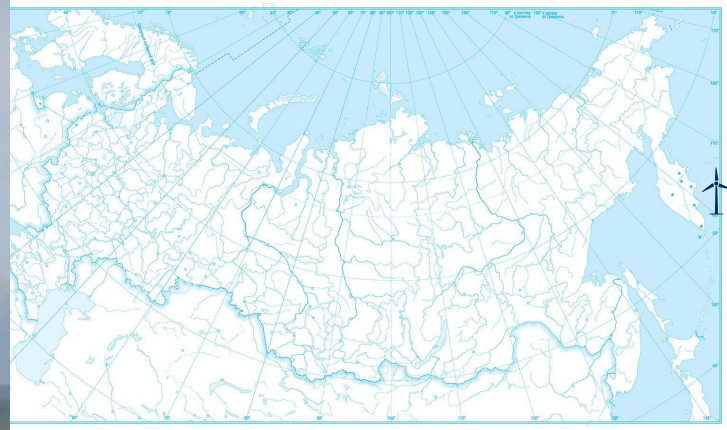
COMPLETED PROJECTS

Wind-diesel system with two Vergnet 275 kW wind turbines

Bering Island, Kamchatka

Customer: OJSC "Mobile Power Engineering”

Activity LLC - general designer, general contractor



WIND ENERGY

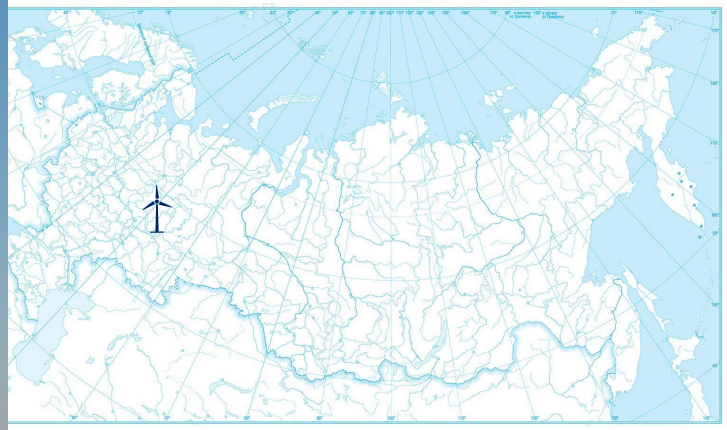
COMPLETED PROJECTS

Wind-diesel system with GHRepower 30 kW wind turbine

Oil field, Republic of Tatarstan

Customer: OJSC RITEK

Activity LLC - general designer, general contractor, equipment supplier



WIND ENERGY

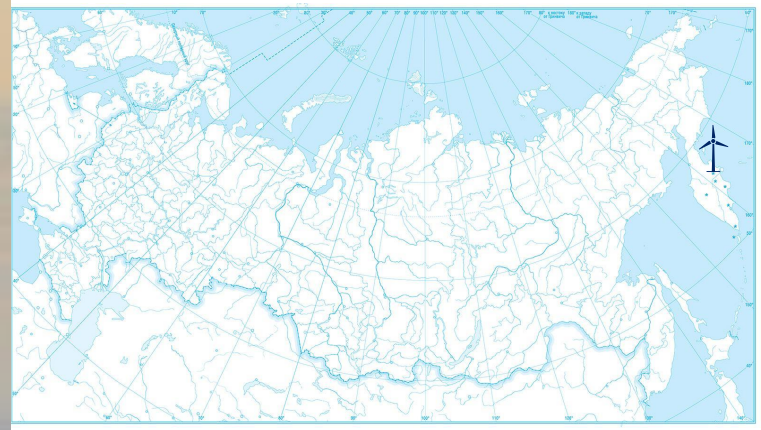
COMPLETED PROJECTS

Vergnet 275 kW wind turbine

Ust-Kamchatsk, Kamchatka

Customer: OJSC "Mobile Energy ”

Activity LLC - general designer, general contractor



WIND ENERGY

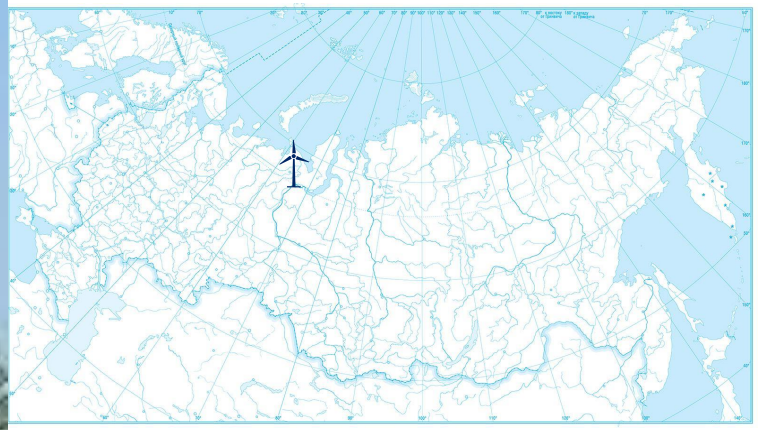
COMPLETED PROJECTS

250 kW Micon WTG in permafrost conditions

Labytnangi, Yamalo-Nenets Autonomous District

Customer: OJSC "Mobile Power Engineering"

Activity LLC - general designer



WIND ENERGY

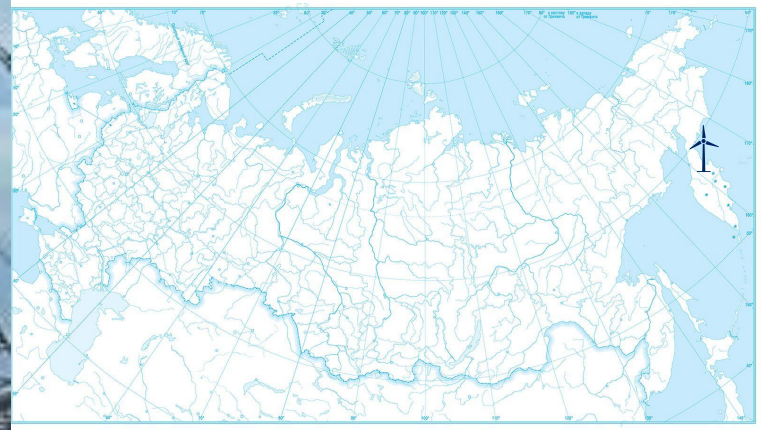
COMPLETED PROJECTS

Komai WTG 300 kW

Ust-Kamchatsk, Kamchatka

Customer: OJSC "Mobile Power Engineering”

Activity LLC - general designer, general contractor



WIND ENERGY

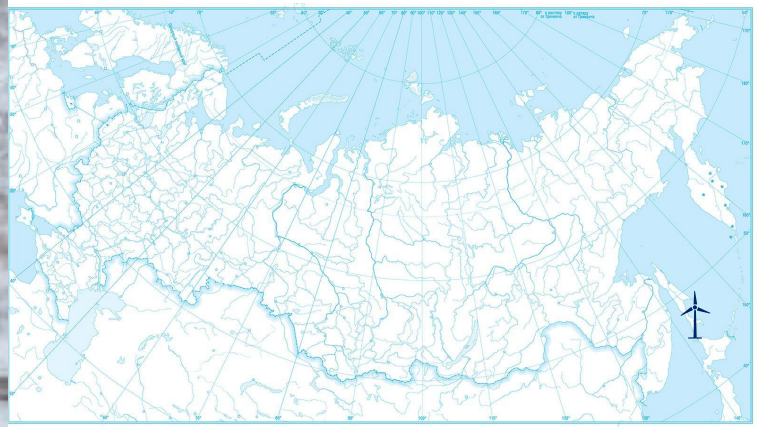
COMPLETED PROJECTS

Wind-diesel system with two refurbished 225 kW Vestas wind turbines

Novikovo village, Sakhalin

Customer: OJSC "Mobile Power Engineering”

Activity LLC - General Contractor



WIND ENERGY

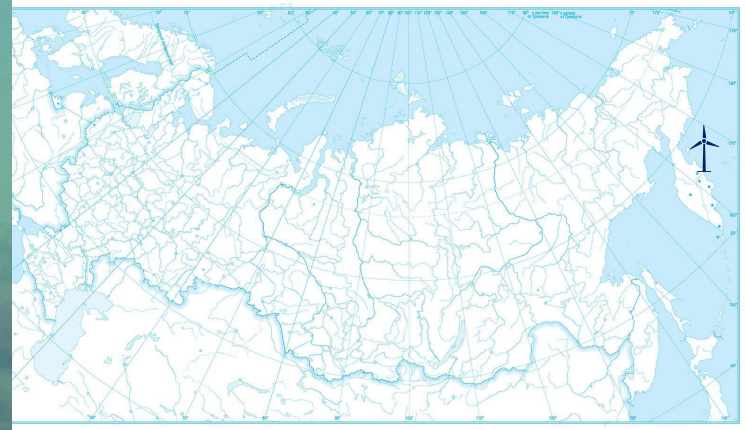
COMPLETED PROJECTS

Wind-diesel system with three 300 kW Komai wind turbines

Ust-Kamchatsk, Kamchatka

Customer: OJSC "Mobile Power Engineering”

Activity LLC - general designer, general contractor



WIND ENERGY

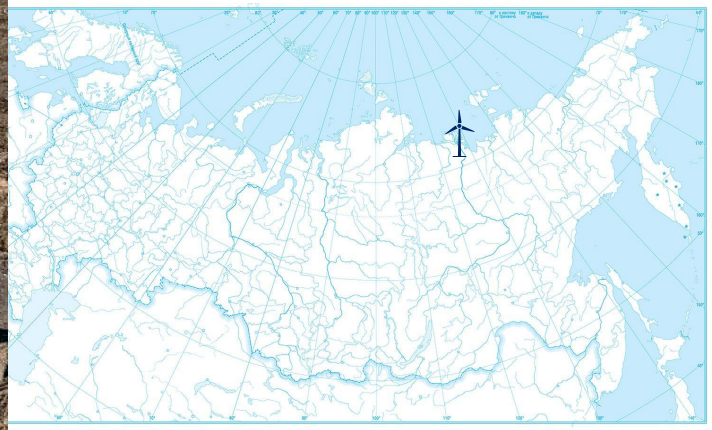
COMPLETED PROJECTS

Wind-diesel system with three 300 kW Komai wind turbines

Tiksi settlement, Republic of Yakutia

Customer: OJSC "Mobile Power Engineering"

Activity LLC - general designer, general contractor



WIND ENERGY

COMPLETED PROJECTS

15 MW wind farm with 25 AeroProfit 600 kW wind turbines

Tsagan-Aman settlement, Republic of Kalmykia

Customer: Breeze WPP LLC

Activitiy LLC – EPC contractor

SOLAR ENERGY

- More than 300 successfully completed projects
- Engineering, construction, equipment delivery
- Grid and autonomous solar power stations
- For private households and industrial consumers

CUSTOMERS

ЛУКОЙЛ НЕФТЯНАЯ КОМПАНИЯ

РусГидро НИИЭС

enel Green Power

AECOM

elawan energy

LAHMEYER INTERNATIONAL

HEVEL SOLAR

ЭСН Симбирская энергосбытовая номинация

КОРПОРАЦИЯ РАЗВИТИЯ УЛЬЯНОВСКОЙ ОБЛАСТИ

ПЕРЕДВИЖНАЯ ЭНЕРГЕТИКА

ВетроОГК группа компаний "Атомэнергомаш"

НОВАТЭК

t1 group

ЗОЛОТО КАМЧАТКИ

РИТЭК

intec GOPA International Energy Consultants

Fortum

Chevron

GE imagination at work Россия и СНГ

IFC International Finance Corporation WORLD BANK GROUP

MANAGEMENT

Alexander Badelin

2012 - present. - General Director of Activity LLC

2008 - 2011 - Director of the Project Center for Wind Power Plants JSC NIIES (PJSC RusHydro)

2002 - 2007 - Senior researcher at Fraunhofer IEE (Germany)

Education

- Dr.-Ing., University of Kassel (Germany),
- Master's degree in "Electric power systems", University of Karlsruhe (Germany),
- Engineer, Tomsk Polytechnic University, Department “Electrical Power Plants”

Ilya Brodsky

Chairman of the Board of Directors of Activity LLC

Director of Halcyon Global Opportunities

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