Together with our clients it’s our mission to shape the world of tomorrow, by providing them with first-class engineering and consulting services in energy, water & infrastructure.”
Your partner in energy, water & infra

Energy
- Renewables (Solar, Wind, Biomass)
- Energy System Consultancy
- Digital & Decentralised Energy Solutions
- Hydropower
- Nuclear
- Thermal Energy
- Transmission & Distribution
- Gas & LNG

Water
- Coasts & Estuaries
- Reservoirs & Dams
- Flood Protection
- Water Transfer
- Water Treatment and Supply
- Irrigation
- Dredging Consultancy
- Offshore Infrastructures

Infrastructure
- Smart & Complex Buildings
- Transport & Mobility
- Urban Design & Master Planning
- Energy Efficiency
- Environmental & Social Programs
Offering value throughout the complete lifecycle

1. Pre-investment
   - Master Plans & Policy Studies
   - Due Diligence
   - Pre-Feasibility & Feasibility Studies
   - Basic Design
   - Power System Development & Economics
   - Environmental Impact Assessment & Licensing

2. Implementation
   - Detailed Design
   - Front-End Engineering Design
   - Owner’s or Lender’s Engineering
   - Quality Assurance
   - Project & Contract Management
   - EPC Management
   - Commissioning

3. Operational
   - Strategic O&M
   - Simulators & Training
   - Operation Support
   - Modification, Renovation, Lifetime extension

4. Decommissioning
   - Dismantling
   - Waste Management
   - Soil Remediation
   - Site Redevelopment
TRACTEBEL – offers high level of expertise

- Pure engineering and consultancy profile
- Integrated approach of the power & gas sectors
- Independent expertise in all technologies
  - Independence from any equipment supplier
  - Business experience with all competitive providers & contractors
- High level expertise through operational experience
  - Knowledge of all relevant technologies
  - Access to Operation & Maintenance feedback since part of GDF SUEZ
  - Active participation in R&D programs
- Local presence through Regional Companies in 33 countries
  - Top class quality guaranteed by the Headquarters
- Broad scope of services including EPCM as an alternative to EPC
  - Engineering, Procurement, Construction and Management of investment projects in a multi-contracts approach with a bonus / malus formula
TRACTEBEL in Romania

Key Information

- Active in engineering for power and infrastructure since 1997
- Employees: 125 (end 2015)
- Relevant certifications in Romanian market:
  - ANRE for design of electrical installations
  - CNCAN certification for design in nuclear field
  - Social responsibility
  - Railways, airports, etc.
  - ...............+ others
- Markets:
  - Romania – core, traditional
  - Europe: Bulgaria, Albania, Moldavia, Montenegro, Serbia, Belgium
  - Other continents: Africa (Ghana, Liberia, Congo, Ivory Coast), Middle East (KSA, Oman, Qatar)
  - Asia (Philippines, India, Thailand)
Products and services

- Power Transmission & Distribution
- Power System Consulting
- Thermal Power Generation
- Renewable
- Energy Efficiency
- District heating
- Motorways & Roads
- Hydro-technical works
- Water, wastewater networks & plants
- Railways
- Gas

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Project Development

- (Pre-) Feasibility
- Due Diligence
- Conceptual Design
- Contract Specifications

Construction Management

- Owner’s Engineer
- Project Management Consultancy (PMC)
- EPCM (Multi-package PMC)
- Basic and detailed design

Asset Management

- Energy & Environment
- Risk Management & Safety
- Renovation Projects
- Operator Support Systems
- Management System
- Power System Analysis
Clients and partners

CLIENTS

Sector actors
- Transelectrica, Electrica, Enel, EoN, CEZ
- Hidroelectrica, Nuclearelectrica,
- Termoelectrica, Electrocentrale, other generators
- Romgaz
- Ministry of Transport, River Administrations, Water Operators, etc.
- Terna CRNA GORA (Albania & Montenegro), Statnett (Norway), Eandis (Belgium) etc.

Municipalities & local authorities

International donors
- EBRD, BEI, Phare, RAEF, TACIS

Others
- Investors, project developers
- Industrial consumers
- Engie Business Units

PARTNERS

Romanian companies
- Contractors:
  - Energomontaj, Electromontaj, Technoservice…
  - Vectra, Glacial Prod, SCIM, Argos International, Viarom Construct, Dimar…

International companies
- EPC players: ABB, GE, Siemens, Jacobsen Elektro…
- Contractors: Strabag, Astaldi, Tirrena Scavi…
- Consultancy companies:
  - COWI, BEA, Ecorys, Enviros, Dentons, Iberdrola…
  - ACCIONA, Louis Berger, WSP, AECOM, Safege…
Power Generation & Energy Efficiency
Competencies in consultancy and energy efficiency

- General concept and analysis
- Energy audits: industrial, buildings (incl. certification)
- Investment evaluation
- Cost - benefit analysis
- Risk analysis
- Environmental studies, EIA
- Application for project financing
- Tender documentation
- Market studies: electricity, CO2, green certificates, fuel
- Electricity and heat tariffs
- Energy market operation and regulations
- Site investigation
- Specialised software
RELEVANT PROJECTS

Power Generation

- Thermal power plants
  - Coal fired, gas fired
  - Cogeneration scheme or condensation
  - Part of utilities, of industrial plants, or of municipal plants
- Modernisation, extension of existing power plants with new units
  - Up to 200 MW/unit
- New power plants
  - Up to 660 MW/unit
- Modernisation of part of the installations in a power plant
  - Utilities
  - Mechanical part
  - Electrical part
  - FGD
  - Start-up installations
  - Licensing and permitting according to the legislation
RELEVANT PROJECTS
Renewables and District Heating

• Renewables
  • Wind, photovoltaic, biomass, micro-hydro
  • Concept, Due diligence, EPC-M missions
  • Design for wind farms, photovoltaic farms
  • Related power systems consulting
  • Related connection to the grid
  • Permitting, licensing

• District heating
  • Master plans and strategies for municipalities to identify optimal solution
    for heat supply
  • Transmission and distribution networks, thermal stations
  • Complex projects, including cogeneration
RELEVANT PROJECTS
Energy efficiency and consultancy

- Large experience in IFIs projects
- General consultancy for energy efficiency
- General consultancy related to energy market, energy project development
- Energy audits: Buildings / packages of schools, blocks, administrative buildings
- Energy audits: Industry / thermal, electrical
- Energy performance certificates
- Consultancy for project identification and development, market studies
- Consultancy for applications for EU financing
- Economic and financial analysis of projects
- Energy master plans: Medias, Deva, Brasov, Alba county
- Consultancy for small and medium cogeneration for industry/ municipalities
- Heating strategies for municipalities
RELEVANT PROJECTS

Water and waste water

- Water supply networks
- Waste water networks
- Pumping stations
- Treatment plants
  - Hydraulic modelling
  - Structure calculations for reservoirs and other concrete structures
  - Investment evaluation and cost benefit analysis
  - Bills of quantities
  - Site surveys
- Projects related to large communities, in regions
RELEVANT PROJECTS
Technical expertise

  — EEFF
  — RoSEFF
  — MFEE

• Technical expert for EBRD – GEF – Project (Opening the market for private ESCOs)

• Local partner for IEE projects

• Large experience in coordinating international projects (power generation and energy efficiency)

• Experience in projects based on EU funding, Jaspers applications etc.
OUR STRENGTHS

- Large portfolio of products and services
- High level expertise
- References all over the world
- Modern and efficient tools
- Project management
- Flexible and acting tailored to client needs
- Computer based design
- Language capabilities: Romanian, English, French, etc.
- Member of the international group ENGIE
Expertise offering for cooperation

We are open for cooperation in various actions under H2020:

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<td>EE-09-2016-2017: Engaging and activating public authorities</td>
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<td>EE-16-2016-2017: Effective implementation of EU product efficiency legislation</td>
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<td>EE-24-2016-2017: Making the energy efficiency market investible</td>
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<td>EE-22-2016-2017: Project Development Assistance</td>
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<td>EE-04-2016-2017: New heating and cooling solutions using low grade sources of thermal energy</td>
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<td>EE-07-2016-2017: Behavioural change toward energy efficiency through ICT</td>
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<td>EE-02-2017: Improving the performance of inefficient district heating networks</td>
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<td>EE-11-2016-2017: Overcoming market barriers and promoting deep renovation of buildings</td>
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<td>LCE-04-2017: Demonstration of smart transmission grid, storage and system integration technologies with increasing share of renewables</td>
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Thank you for attention!

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