





About Us

Since the foundation of EMTA in 1974, our mission was to be one of the most respected companies in the Power Generation, Distribution & Transmission, Transportation sectors in worldwide. As a preferred and prequalified supplier of governmental and major private sector investors in Turkey, EMTA has accomplished many significant domestic and international projects in a relatively short time.

We have a flexible approach from single disciplinary services up to turn-key projects. Our core objective is to create added value for our customers by supplying a "One Stop Shop" concept, which includes consulting, engineering, execution, commissioning, project financing, built & operational services, spare part management and after-sales services under one contract. This gives our customers a strategic advantage to control their project investment plan with the support of a reliable and experienced EMTA ENERGY team.

The Company aims to keep its position as a leader in the Turkish market and enlarge its business portfolio in focused foreign markets. Clients recognize EMTA ENERGY has a high levels of project commitment coupled with professional standards making it an ideal partner for future projects.

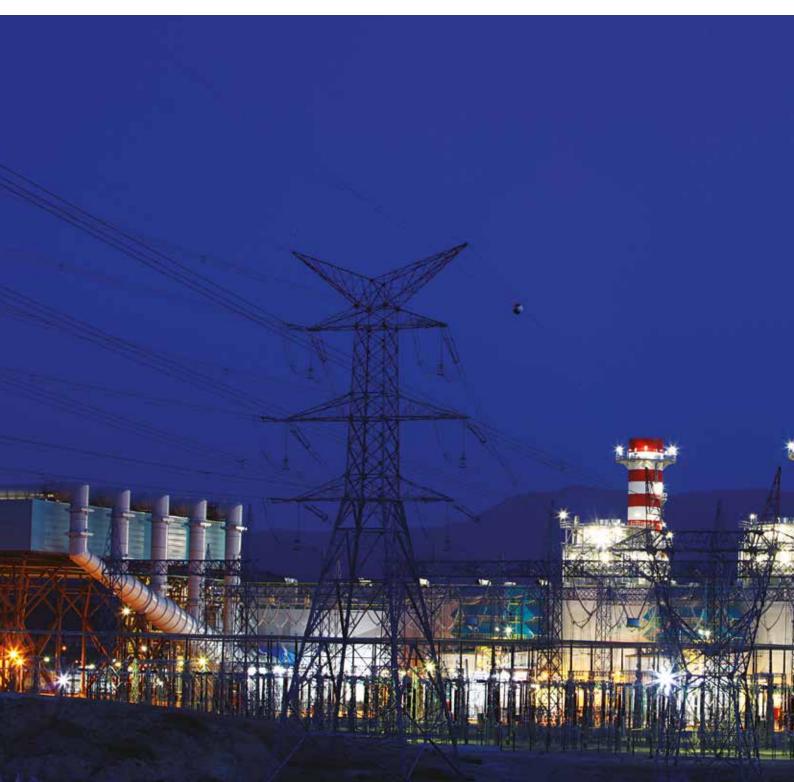




One Stop Shop: EMTA ENERGY

EMTA ENERGY provides comprehensive project services: E.P.C.M. (Engineering, Procurement, Construction Supervision and Project Management), as well as TURNKEY projects. Whether it is design and construction of a new plant, modification or extension, we adjust our services to meet with the specific requirements of worldwide procurement, international financing and computer communication networking.

Our services extend to independent and national transmission lines and substations as well as those associated with new power generation, Oil & Gas, Industrial facilities such as Textile, Cement, Pulp & Paper and many others. We have designed and commissioned more than 50 substations and 500 kilometers of overhead lines.



Engineering

EMTA ENERGY brings together professionals with numerous years of consulting and engineering experience in: process, civil, structural, mechanical, piping, instrumentation and computer sciences. Stepping beyond our traditional strengths, we provide a high level of engineering and construction services to various market segments.



Procurement

EMTA ENERGY provides procurement services as required for project execution, in close coordination with its clients. The extent and scope of procurement services provided by EMTA ENERGY are closely matched to project needs and client requirements.

Construction

EMTA ENERGY schedules construction activities to start concurrently with the design effort. EMTA ENERGY manages all aspects of construction site operations, providing tight contractor supervision and quality control. Construction is scheduled for execution in the shortest time and at minimum cost.

EMTA ENERGY offers construction management or supervision solely in the construction phase of the project, as well as part of engineering services within the frame of overall EPCM responsibility.

Management

Project management and coordination are key factors in ensuring the successful execution of projects, and guarantee their completion within budget and schedule. EMTA ENERGY's project managers provide a focal point of authority and communications for the client's team and have prime responsibility for achieving project goals. EMTA ENERGY's project manager monitors progress and coordinates all efforts in engineering, procurement, construction, schedule, cost control, quality and risk management.

Our Solutions

Power Generation

EMTA ENERGY has gained proficiency in energy systems evaluation, design & construction and places this experience at the disposal of its clients. EMTA ENERGY provides services for small energy plants as well as for large electricity production units. EMTA ENERGY has executed a considerable number of successful energy conservation studies and projects.

EMTA ENERGY's experience encompasses systems such as:

- Modernization
- Energy saving studies
- Steam boilers
- Compressed air
- Cooling systems
- I&C systems
- Maintenance
- Electricity productions units
- Automation systems (PLC, DCS, SCADA, BOP)
- Waste Heat Recovery Technologies

The company has significant capability on the following power plants:

- Single cycle
- Combined cycle
- Co-generation
- Gas
- Oil
- Coal
- Renewable



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Transmission & Distribution

EMTA ENERGY have realized many electric & automation systems in energy transmission and distribution with success by using reliable products, intelligent electronic devices. We are capable to do following items.

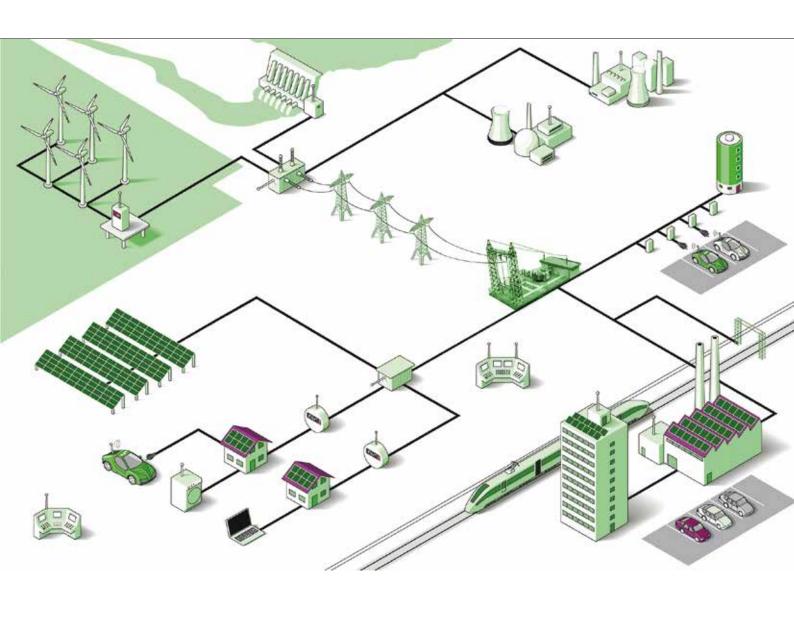
Automation Systems

- Up to 500 KV substation automation
- SCADA systems
- Remote Terminal Unit (RTU)
- IEC61850 applications
- Power plants TEİAŞ and RTU communication solutions

Electric Systems

- Protection on energy transmission & distribution lines
- Primary/secondary field performance tests
- High voltage underground or overhead lines in all voltage classes up to 750 kV in projects ranging from a few kilometers of line to entire systems.
- In air-insulated (AIS) and gas-insulated (GIS) substations for electric utilities and industrial installations range from 6.3 kV to 550 kV.









Our Solutions Util One

Transportation

In transportation below services have been given for many significant metro and tunnel project.

- Automation Systems
- DCS, PLC, SCADA
- Jet fan air conditioning systems
- Control systems for lightening, traffic signalization
- Energy supply and control with medium voltage units
- I/O panels & equipments
- Field supervision
- Commissioning

Environmental & Waste Water Treatment

- Solid & Underground Water Treatment
- Industrial Waste Water Treatment Plants (WWTP)
- Process Control for WWTP
- Industrial Solid Waste Treatments
- Aqua Pure Technologies(Innovative non thermal plasma technology solution for advanced oxidation process)
- Air Pollution
- Lextran (Advanced clean air solution)
- Biological Treatments with Activated Sludge
- Waste to Energy Units
- Water Desalination Projects
- Environmental Surveys: Risk Assessment, Professional Literature Surveys



Oil & Gas

EMTA ENERGY with his solution partners provides service in oil refineries industry and gained experience in the design of most refinery operating units:

- Atmospheric/vacuum crude units
- Visbreaking
- Reforming (Conventional and CCR)
- Hydrodesulpherization
- FCCU
- Sulphur recovery and TGT
- Alkylation
- Isomerization
- Dimersol unit
- Tank farm and blending
- LPG storage unloading/loading stations
- Utilities and others

We have successfully implemented instrumentation and control modernization and revamp projects of entire refineries and gas industries in several countries.

EMTA ENERGY offers specific know-how in:

- Tank farm design, including sophisticated controls and monitoring systems
- Expert consultation on overall refinery and Production unit layouts, and detailed design
- Advanced control of refinery units using multi variable predictive constraint control algorithms
- Gas storage facilities, off- gas compression
- Natural Gas Pipeline transportation and distribution stations





Engineering Procurement Construction **EPC**

Engineering Procurement Construction Management

EPCM

- Feasibility studies
- Risk analysis
- R&D (Chemical Technologies & Solvent Extraction)
- Pilots
- Design
- Basic Engineering

• Detailed engineering

Procurement

Lump Sum

Turnkey **LSTK**

- Construction
- Building Permits
- Management & supervision
- Start-up & commissioning
- Finance facilitation
- Operation & maintenance
- Mobilization & training

Build Own Operate BOO

Process Control Solutions

PCS

Build Own Operate

Transfer **BOOT**

Environmental Solutions ES



Qualified & Experience Team



Emta Energy combines teams of experts in the following engineering disciplines:

Process Design Civil and Structural Design Mechanical and Equipment Design

Piping

Energy and Power

Electrical Design Instrumentation and Control



Process Design

Feasibility studies.

Process development.

Process flow diagrams.

Engineering flow diagrams (P&I).

Equipment data sheets.

Interlocks design.

Controls definition.

Safety requirements.

Risk analysis.

Operating instructions.

Instrumentation and Control

Instruments specification.

Panel's design

Loop diagrams.

Hook up's.

Instrument layouts.

Control system specification.

Control system programming.

Mechanical and Equipment Design

Equipment specifications.

Detailed design of:

- Distillation columns.
- Storage tanks and pressure vessels.
- Heat exchangers.

Process reactors.

Finite elements analysis.

Bulk materials handling systems.

Civil and Structural

Infrastructure.

Site development.

Foundation and buildings.

Steel and concrete

structures.

Industrial drainage systems.

Sanitary and sewage.

Piping

Piping studies.

Plot plans equipment layout.

Plans and elevations (3D model).

Isometrics.

Piping stress analysis.

Materials take-off.

Energy and Power

Feasibility studies.

Heat and power

calculations.

Consulting and performance analysis.

Energy saving studies.

Energy conservation projects.

Energy systems simulation and

optimization.

Utilities systems design.

Electrical

Power supply systems.

One-line diagrams.

M.C.C design.

Lighting systems.

Grounding and lighting

protection.

Power generation.

Public address systems.



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