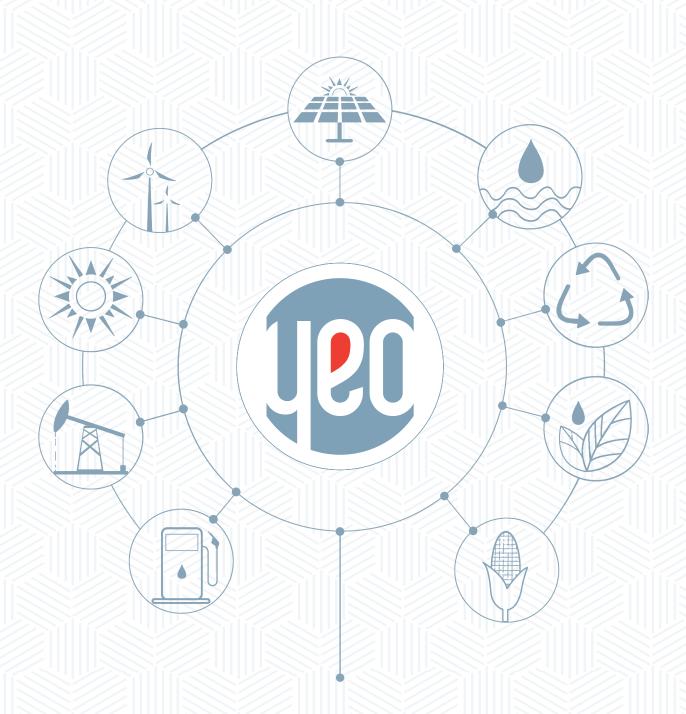
Saving energy today for a brighter tomorrow!



ONE STOP SOLUTION Automation & Electrification







YEO is dedicated to deliver turnkey solutions to energy sector players for complete plant construction and/or complete package in electrification & automation of power plants. Our aim is to make renewable energy affordable, efficient, and secure, contributing to build a greener world for the benefit of present and future generations.

The power industry is leading a profound transformation that is being driven by digitalization. Smarter energy is a key driver to a smarter future. By providing new technologies and flexible systems YEO GROUP enable customers to access to safe, reliable and low-cost electricity.

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"Our flexibility and fast decision making organisation bring each project to a punctual conclusion, safely and within budget"

goal.

Since the first step I recognise that my We value our customers' needs and major investment would be people. I work shoulder to shoulder with them have focused on attracting the best as YEO team. We see our customers professionals to YEO and built the as partners and strive for them to see dynamic, competent, highly motivated, us not just as a service provider, also and reliable team. "The power comes from as a reliable long-term partner and inside." Any company is only as strong as solution provider. Our flexibility and the people who bring it to life. Companies fast decision-making organisation bring do not create products, deliver services or each project to a punctual conclusion, solve problems - people do. Behind every safely and within budget. With our great success there is a great team. We act as project management experience we one with a unifying vision and common provide the best solution, process the implementation phase quickly, and react flexibly to changing needs.

FOCUSED FAST FLEXIBLE



My message would be lacking without a look forward to the future. The efforts of our international operations continue to focus on expanding our markets. YEO has a long-term international growth strategy; its goal is to grow and succeed in the international arena as the international leading EPC contractor for clients ranging from traditional state owned utilities to

independent power plant developers.

Tolunay Yıldız CEO & Founder

YEARS EMPLOYEES **EXPERIENCED ENGINEERS**

INTERNATIONAL **OFFICES**





Our solutions ensure availability, quality, performance, and reliability of the energy supply for Independent Power Producers around the world. For renewable power plants, YEO's solutions are customised to both the local environment and the specific needs of our partners. From the early development stages to securing financial solutions up to plant construction, YEO is the ideal partner to IPPs and ensures you get the most from your investment in the long term.

ABOUT US

YEO was established to provide innovative civil works, high voltage lines, substations, medium-Energy is YEO's core business. Over the years, supplied. renewable energy has become the primary focal point. Renewable energy projects range from solar, Vast experience gives YEO the flexibility to deliver electricity production.

As far as power plants are concerned, YEO's turnkey projects include engineering, works management,

solutions in the industrial automation sector in the voltage networks and processing centres, and early 2000's in Istanbul. By increasing experience their subsequent commissioning. We assume and knowledge of young and dynamic team, YEO the responsibility for the complete engineering, became a leading EPC and turnkey contractor supply, manufacture, delivery to site, installation, in Electrification & Automation of power plants. commissioning, testing, and quality of the plant

wind, biogas/biomass, hydro, and geothermal adaptable renewable solutions for IPPs that maximize return on investment.

YEO SOLAR Turnkey Solar Plants



YEO Solar has entered the renewable

energy sector and has rapidly implemented various projects.

Yeo Solar is a fully forward-integrated and comprehensive EPC solutions provider. Being part of the YEO Group, YEO Solar benefits from direct access to specialist engineering capabilities from other associated subsidiary companies to provide clients with innovative engineering solutions and resources as well as a wide spectrum and integrated range of services.







ROOFTOP SOLAR SYSTEMS







07 Group Companies

ISSElectrical & Automation EPC Solutions



ISS is a branch of YEO, established in Azerbaijan for the purpose of expanding YEO's services and solutions to industrial sectors in Azerbaijan and other CIS countries.

We offer tailor-made solutions for both new and existing plants – from small scale compact units to large scale facilities in the major utility sectors.

As a branch office of YEO, our services include Power & Sub Distribution Panels, MCC and PCC Panels, Relay Control Panels, AC/DC Panels, PLC Panels, Instrumentation Panels, Mimic Panels, Network Cabinets, Drives, Motors, Control Software [PLC, SCADA, DCS, RTU, HMI], assembly, commissioning and preventive maintenance.

As a system integrator and general contractor, we plan and realise complex automation projects and offer planning, software development, project realisation and maintenance as a one-stop shop. Our corporate goal is to provide added value to customers, to improve continuously product and service quality, to increase customer satisfaction, to maintain social responsibility, to become your preferred partner first coming into mind with expert staff and customer oriented service approach.











INSTRUMENTATION





YILMAZ İNŞAAT Construction Engineering & Civil Works



Yılmaz İnşaat (YI) is leading expertise in residential, commercial, industrial and civil construction projects.

We have extensive experience in the field of heavy reinforced concrete and steel structures. Since our founding in 1997, we have completed a range of projects including the construction of heavy industrial facilities (cement plants, etc.), energy facilities, and residential buildings, shopping centres, offices, hotels, high-rise buildings.

Our team carefully plans for every project keeping safety, time, cost, and quality as a project's top priorities. We know how important it is to have your project finish on time. As Yl's team, we aim to build relationships that will last throughout today, tomorrow and into the future.

From project conception to completion, YI delivers quality, customer-focused, flexible and cost-effective solutions to the clients. We have the project management experience and the network of trusted suppliers and contractors to make our clients' vision a reality. In the past, we have completed a range of commercial, industrial and residential projects in Istanbul and beyond, and continue to develop our broad portfolio.



INDUSTRIAL CONSTRUCTION



CIVIL CONSTRUCTION



RESIDENTIAL CONSTRUCTION





YEO Global Network

YEO is strategically focused on growth and positions itself internationally as a turnkey solutions provider for industrial plants. We continue to expand our international network, strengthen our international partnerships, and broaden our focus on a global level.

INTERNATIONAL PRESENCE

- AZERBAIJAN
- ▼ ETHIOPIA
- GERMANY
- IRAN
- SAUDI ARABIA
- **■** UAE
- ▼ TURKEY
- ▼ TURKMENISTAN



The efforts of our international business development operations continue to focus on expanding our markets. YEO has a long-term international growth strategy; its goal is to grow and succeed in the international arena as the international leading EPC contractor for clients ranging from traditional state owned utilities to independent power plant developers.



SMART <u>IETW</u>ORKING

DIGITAL TRANSFORMATION

The power industry is leading a transformation that is being driven by digitalization. The ways of power transmission & distribution are fundamentally changing. Digitization and advanced automation is significantly changing the power generation market.



FOSTERING AUTOMATION TO IMPROVE PLANT PERFORMANCE

BIG DATA

ROBOTS

Nowadays power generation, influencing enormously the natural resources and environment, is not possible without a high degree of automation. Process control systems used for the automation of power stations must meet particularly high requirements for increased availability, large functional range and decentralized architecture. It requires a comprehensive portfolio of physical and digital technologies, products and solutions that allow us to actively build our energy future.



Areas of Expertise



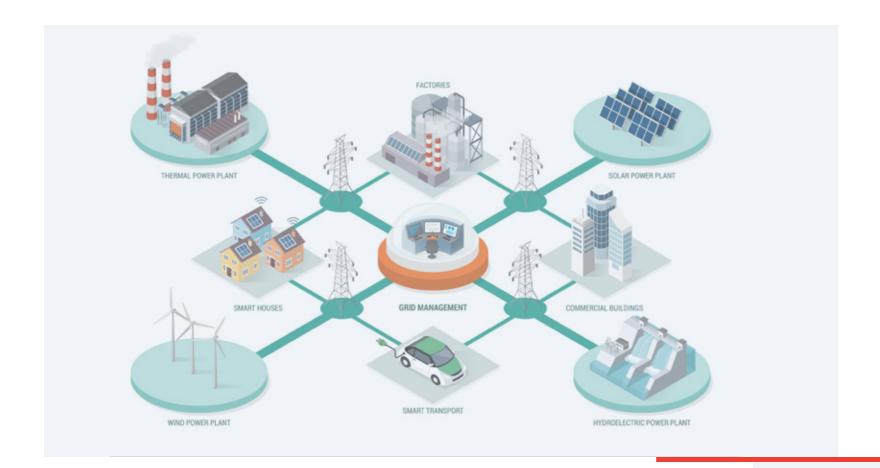
plants to electrical substations to end users, we provide our services to generate, transmit and distribute electricity where it is needed. Our engineers have the know-how and experience to transmit electricity to customers in a reliable, cost-effective and sustainable way protecting the environment.

Our customers benefit from solutions tailored to meet their specific needs and prevailing market conditions. From advanced power stations to smart grid technology integration, electrical substations and transmission lines, our offering is focused on delivering a highly reliable, efficient and flexible operational outcome for our clients.





POWER TRANSMISSION & DISTRIBUTION



END-TO-END SOLUTIONS

- HV/MV/LV overhead or underground power transmission and distribution networks
- Transmission and distribution substations
- Substation automation
- Short circuit calculations
- Detailed design of switchboards, motor control centres, drives and power distribution equipment
- LV, MV and HV cable jointing and termination

- Switchgear, protection and instrumentation, testing and calibration
- Fibre optic jointing and termination
- Digital data transmission networks
- SCADA: energy control, management, and supervision
- Remote Terminal Units (RTU), power meters, communication gateways

INTEGRATED SOLUTIONS

YEO provides services in planning, design, tender document preparation, contract negotiations, supervision and commissioning for electricity transmission and distribution projects. Our specialists have extensive knowledge and experience in designing power transmission lines and electrical substations, as well as construction management during the installation of overhead transmission lines and underground power cables.

DESIGN, CONSTRUCTION & COMMISSIONING

- System planning and concept and feasibility studies
- Tender preparation and evaluation
- Design & Engineering

- Procurement management
- Project management
- Construction and commissioning



SUBSTATION - ONE STOP SOLUTION

Our substations are delivered, tested and commissioned to meet the most demanding criteria of safety and security.

YEO is your ONE STOP SOLUTION Provider for turnkey substation construction. We take responsibility for the complete turnkey services including project management support, material procurement and management, quality assurance, testing and commissioning. We have a team of qualified and experienced engineers for protection and control, telecommunication networks, customized control systems, remote terminal units, substation and distribution automation.

HV SUBSTATION

- Turnkey substation solutions
- Gas insulated switchgear for substations (GIS)
- Air insulated substations (AIS)
- Hybrid gas insulated switchgear (HGIS)

PRIMARY EQUIPMENT

- Circuit breaker
- Disconnectors
- Voltage transformer
- Current transformer
- Surge arrestor
- Line trap



SECONDARY EQUIPMENT

- Relays panel
- Local control panel (LCC)
- AC distribution panel
- DC distribution panel
- Grid communication panel
- RTU Panel
- AVR Panel
- Metering panel

AUTOMATION AND PROTECTION

- Energy SCADA solution
- IEC 61850 applications
- Parallel Redundancy Protocol (PRP) applications
- Hot-Swap Redundant (HSR) applications
- Metering panel



END-TO-END SOLUTIONS

ENGINEERING, DESIGN & PROJECT MANAGEMENT

- Surveying, geotechnical investigation
- Civil / Electrical / Geotechnical works
- Comprehensive international EPC solutions & turnkey project management
- Flexible organization delivering scalable solutions with a local & global approach
- Procurement management, storage
- Transportation, receiving and inspection
- Inventory control and onsite logistics

PLANT CONSTRUCTION & CIVIL WORKS

- Site civil work, erosion control, and reclamation
- Foundation installation
- Post-tension concrete tower supply and installation
- Turbine installation and mechanical completion
- Electrical collection systems
- Transmission line installation
- Substation construction
- Monitoring and control system, substation SCADA system
- Communication network installations
- Testing and commissioning



WIND POWER PLANTS

Turnkey Plant Construction YEO's turnkey concept include engineering, works management, civil works, high voltage lines, the supply and assembly of electrical equipment in substations, medium-voltage networks and processing centres, and their subsequent commissioning.

From initial planning to commissioning, we set our standards for scheduling, cost management and quality. At all levels we leverage advanced technology and workflows, our knowledge and expertise allow us to add value.





ENGINEERING & SERVICE

- Surveying, feasibility study & site selection
- Permitting procurement
- Geotechnical investigation
- Power systems analysis & grid integration studies
- Procurement from tier 1 class suppliers
- Civil / Mechanical / Electrical design
- Solar PV design
- Commissioning, tests & start-up

MECHANICAL WORKS

- Piling test
- Static calculation and approvals
- Fixed & tracking construction
- Rooftop & unique Construction
- Construction installation
- PV panel installation

ELECTRICAL WORKS

- Substations
- Inverters (Central & String)
- MV/LV Power Network
- Communication Networks
- SCADA & Protection Systems
- Central Power Plant Monitoring System
- Grid Connection

CIVIL WORKS

- Route survey
- Access roads & platforms
- Foundations
- Substations & control buildings construction
- Cable trenches

SOLAR POWER PLANTS

Turnkey Plant
Construction

YEO delivers turnkey solutions to all solar projects varying from Roof-Mounted,
Building Integrated Systems to Ground Mounted Large Scale Power Plants. We
deliver all phases of project including electrical, mechanical and architectural designs,
procurement, logistics, field installations, project management. In addition to the
SCADA systems required per Turkish Grid Code, we deliver our clients with a custom
designed software for plant monitoring.





END-TO-END SOLUTIONS

- Planning, financing, and construction
- Grid connection and biomass supply
- Operational management
- Complete engineering package
- Procurement and project management
- Sourcing of relevant equipment suitable for the type of biomass
- Construction of the plant
- Monitoring and control system, SCADA system

- Control systems, HMI and communications systems
- Unloading and loading stations (raw material / final product)
- Storage and processing facilities
- Tank farm
- Offices, maintenance bays, roads and infrastructure
- Substation and relevant electrical equipment
- Optimization of existing biogas plant



BIOGAS/BIOMASS POWER PLANT

Turnkey Plant Construction

We offer turnkey solutions and custom services for biogas projects in agricultural, industrials, and communal application. YEO has designed, constructed and commissioned turnkey biogas plant. Our biogas plants run on renewable raw materials or on waste materials such as chicken dung and organic waste. YEO funds, designs, constructs and operates turnkey biogas-to-energy projects for animal farm owners using waste manure to produce electricity and eliminate wastewater discharges. The farm owner enters into a Joint Venture Agreement with YEO, and shares revenues generated from the sale of produced electricity.





ELECTRICAL

- Substation design
- MV / LV Switchgear basic and detail design
- Calculations for transformers, cables, cable tray, generator
- Short circuit calculation
- Earthing system
- Lightening protection system
- Power design
- Data, communication, CCTV, fire alarm design
- Detail engineering

SUBSTATION AUTOMATION SYSTEM

- Energy SCADA solutions
- IEC 61850 applications
- Parallel Redundancy Protocol (PRP) applications
- Substation design

PROCESS AUTOMATION SYSTEM DESIGN

- Control system topology design
- Configuration of hardware
- Control panel design
- Function descriptions and logic diagrams application
- Process flowchart design
- Instrument selection and design
- DCS Systems design
- PLC Systems design
- SCADA Systems design

POWER SYSTEMS DESIGN & APPLICATIONS

- Load flow analysis
- Short circuit calculations
- Relay coordination and selectivity
- Harmonic analysis
- Power quality analysis

GEOTHERMAL POWER PLANT

Turnkey Solutions For Electrification & Automation

Our service offering covers the complete scope of the plant's power and automation systems, from the distributed control and plant optimization systems to the instrumentation and emission monitoring systems. On the electrical side it covers the entire energy path, from electrical balance of plant to the substation and grid connection. We offer a full portfolio of life cycle management services.





ELECTRIFICATION

- Overhead lines design & engineering
- Underground network design & engineering
- Damage assessment & overhaul planning
- MDP, MCC Panel Solutions
- Protection & control system design & engineering
- System upgrading

SUBSTATION DESIGN

- Electrical, civil, steel structural design
- Safety & standards analysis and application
- Site development
- Grounding design
- Bus configuration analysis & design
- AC & DC Ancillary systems design

PLANT POWER SYSTEMS DESIGN & ENGINEERING

- Low & medium voltage power distribution design
- Site plant electrical installations design
- Hazardous area classification plans
- Underground conduit & cable tray design
- Motor & Drive specification design
- Power system automation engineering & design
- Grounding systems design
- Standby/emergency power systems

AUTOMATION

- DCS system
- PLC system
- RTU system
- SCADA system
- Network communication
- Automation systems of power plant



THERMAL POWER PLANT

Turnkey Solutions For Electrification & Automation

Automation system in a power plant ensures rapid adaptation of all its systems to variations in demand dictated by the electrical grid and the process energy system.

For thermal power plants, we offer complete engineering, programming, equipment supply, installation, testing and commissioning, including the integration of the automation system with the existing instrument and electrical systems of the power plant.





ELECTRIFICATION

- Substations
- MV Switchgears
- Transformers
- LV Switchgears, MCC Panels
- Emergency power generators
- Uninterruptable power supply
- Earthing & lightining protection
- Lighting systems
- Cabling & cable tray
- Data communication
- Analytical devices

AUTOMATION

- DCS Systems
- PLC Systems
- SCADA Systems
- Telemetry & communication system

PANEL SOLUTIONS

- Main Distrubition Panel (MDP)
- Motor Control Center Panels (MCC)
- Compansation Panels
- Frequency Convertor / Softstarter Panels
- RTU Panels
- DCS Panels
- PLC Panels



HYDROELECTRIC POWER PLANT

Turnkey Solutions For Electrification & Automation

YEO undertakes complete electrification and automation works for hydro power projects, on full turn-key basis. The company's flexibility in meeting customer requirements for hydro power plants, provides it with the capability to undertake projects from small run-of-river hydro up to large pumped storage plants. For large hydro projects we provide complete solutions for all electrical and automation works, while for small hydro projects YEO is able to provide the complete power plant on a turn-key basis, including civil works.





