

ASIAWATT Engineering co.

ASIAWATT Engineering Company was established in 2000 with the aim of providing consulting and implementation services in the field of increasing efficiency, troubleshooting, energy management and optimization, management, design, implementation and supply of equipment for industrial projects including energy consumption optimization projects, heat recovery projects in the oil and gas industry, petrochemicals, electricity and renewable energies in the country.

The company has succeeded in carrying out numerous studies, designs, supplies and implementations in the field of increasing production efficiency, optimizing energy consumption and establishing an energy consumption management system in various industries and centers throughout the country by obtaining the necessary specialized training, attracting experienced experts and using the experiences of energy optimization specialists inside and outside the country.

Activities of ASIAWATT Engineering Company:

ASIAWATT Engineering Company can act as an EPC company in all projects. In addition, the company's expertise is capable of performing all contracts in various formats.

- Implementation of production and energy consumption management plans and projects
- Development of software related to process optimization and energy consumption
- Holding training courses related to energy consumption optimization
- Study and implementation of projects based on new energies and technologies
- Improvement of systems and creation of databases
- Conducting relevant research activities and studies
- Management and control of industrial and research projects
- Design of lighting systems and supply of related equipment
- Design, procurement and implementation of natural gas quality and energy measurement system
- Design, procurement and implementation of FOG method for increasing gas turbine power
- Supply, installation and commissioning of various power generators and microturbines with CHP cycle
- Design and implementation of industrial automation and BMS systems
- Supply of equipment for industrial projects including oil, gas, petrochemicals and power plants
- Implementation of Turn Key projects in line with the company's activities
- Design and implementation of industrial production line efficiency improvement plans
- Design, procurement and implementation of online energy monitoring system for power plants
- Design and implementation of heat recovery systems

ASIAWATT Engineering co.



- 1 Energy management in the industry
- 2 energy management in power plants and oil and gas
- 3 Energy management in building
- 4 Energy Service Company (ESCO)
- 5 Establishment and implementation of ISO50001
- 6 Renewable energies
- 7 Energy Audit



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Energy management in the industry

Energy auditing in industry refers to a set of activities that lead to the determination of the quantitative and qualitative status of energy consumption in industrial units and the provision of methods for optimizing energy consumption.

The main stages of energy auditing are as follows:

- Extraction of accurate information from quantitative and qualitative electrical, thermal, mechanical, production and process parameters
- Processing of collected information
- Identification of energy consumption values and methods and determination of special energy consumption
- Collection of information related to energy consumption
- Analysis of information and conclusion
- Providing effective solutions for optimization and energy consumption
- Organizing the energy management unit
- Required training for the implemented reforms

ASIAWATT Engineering Company employs innovative methods to optimize energy production and consumption in various industries, power plants and refineries and has successfully implemented many projects in this field. Given the volume of activities and projects carried out, this company can be considered the most active company in the field of energy.



Energy management in the industry



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

energy management in power plants and oil and gas industries

Energy auditing enables the identification of the strengths and weaknesses of existing systems, equipment and processes and determines the potential for standardization and optimization of ener-

Some of the relevant power plant projects and activities that this company can offer are:

- Conducting feasibility studies and designing steam power plants
- Conducting technical and economic feasibility studies for power plant retrofit projects
- Feasibility studies and design of FOG system for increasing the efficiency of gas power plants
- Design and implementation of online energy monitoring systems for power plants
- Preparing a plan to replace old gas turbines in the electricity industry
- Feasibility studies and design of simultaneous production systems for electricity, heat and cooling (CCHP, CHP)

ASIAWATT Engineering Company is one of the consulting companies ranked by the Planning and Budget Organization in the field of power generation. It has more than 15 years of experience in designing, engineering, supervising and implementing projects related to energy production and consumption, especially in the country's power plant sector, and has carried out several projects in this field.



energy management in power plants and oil and gas industries



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson Mandela
(Jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

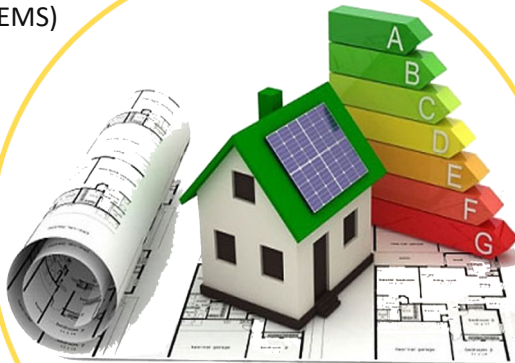
Energy management in building

Taking necessary actions to investigate the current energy performance of the building, identifying energy waste points, design errors in various parts of the building, separating energy consumption and waste, and ultimately calculating the distance of building energy consumption from desirable conditions defined in national and international standards and providing solutions to reduce energy consumption.

The services that this company can provide include:

- Building energy label
- Visiting the building and identifying energy waste points in the building and providing solutions to prevent it
- Performing detailed energy audits and providing solutions to improve energy performance and reduce building energy consumption based on ISO50002 standard.
- Providing energy consulting services and designing buildings with optimal energy performance (LEB) and near-zero and zero-energy buildings (NZEB - ZEB) using active and passive solar systems based on national building regulations, standards, and international codes.
- Designing, providing, installing, and commissioning building energy management systems (BMS - BEMS)

Asiawatt Engineering Company has designed and implemented energy management systems in buildings to reduce energy consumption. These systems include sensors and controllers whose task is to control different parts of the building and measure variable information and then analyze the system and adjust it under the best conditions of operation.



Energy management in building



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(Jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Energy Service Company (ESCO)

In an Energy Performance Contract (EPC), the project contractor receives the project implementation costs from the savings generated. Energy service companies can be responsible for maintaining all or part of the equipment during the project's lifetime in addition to installing equipment.

ESCO project are as follows:

- Investment Grade Energy Auditor (IGEA)
- Identification and evaluation of energy-saving opportunities
- Design and engineering of project details
- Project management in all stages including design, implementation and monitoring
- Project financing
- Personnel training for operation and maintenance services
- Guaranteed achievement of predicted savings
- Providing measurement and verification plan for energy consumption reduction based on international protocols such as IPMVP.¹

"Asiawatt Engineering Company" is one of the active energy service companies in the field of implementing energy consumption optimization projects in the form of ESCO in the country and has succeeded in implementing multiple energy service projects in this format for the first time. The company is ready to investigate and implement energy efficiency-based projects in various sectors such as



Energy Service Company (ESCO)



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Establishment and implementation of ISO50001

The deployment and implementation of the ISO50001 energy management system is a way to monitor the process of improving and using energy and things such as setting goals, periodic improvement and optimization programs, task allocation, determining energy performance and evaluation are provided to senior managers.

The main stages of energy management system implementation are as follows:

- Creating a culture of consumption pattern correction for proper use of energy
- Developing/reviewing the organization's macro policies on energy management
- Designing/reviewing the organizational structure, human resources and financial resources required for energy management
- Preparing an awareness and training program for personnel on energy issues
- Creating an energy database
- Creating a monitoring and periodic reporting system
- Preparing checklists and developing periodic energy audit programs
- Identifying and assessing technical and economic opportunities for energy savings.

Asiawatt Engineering Company is one of the active companies in the field of energy consumption optimization and management. With the help of experienced experts and extensive hardware and software facilities, it has the ability to implement and implement an energy management system based on ISO50001 standard. It has carried out several projects in the field of construction and large industries such as steel, tile and greenhouse.



Establishment and implementation of ISO50001 ISO50001



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Renewable energies

Using modern technologies to provide the required energy from unlimited renewable resources such as sunlight, wind, waves, etc. will reduce energy consumption and dependence on fossil fuels and improve the quality of life on Earth.

The services that this company can provide in this field include:

- Technical and economic feasibility studies of renewable energy and environmental projects
- Consultation and design for small and medium-sized power plants
- Consultation in the field of recycling and waste management
- Consultation in the field of greenhouse gas monitoring and management strategy development
- Consultation related to clean development mechanism and CDM projects
- Design and implementation of combined power plants, micro wind turbines, Off Grid and On Grid photovoltaic cells.

AsiaWatt Engineering Company has expanded its consulting services in the field of renewable energy as a new and growing market in Iran. With experienced experts, the company provides design services, feasibility studies and technical and economic justification for renewable and clean energy projects.



Renewable energies



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Energy inspection

Considering the significant share of energy consumption in the industrial sector and the need for optimal use of it for production and in line with the implementation of the “Energy Consumption Pattern Reform Law”, energy consumption standards have been developed with priority given to the share and position of the industry in energy consumption in the country.

Some of the areas of inspection of this company (processes in the energy industries) are as follows:

- Lead and zinc concentrate, primary lead and zinc ingots
- Cement - Energy consumption standards in production processes
- Energy consumption standards and technical specifications in the production processes of primary plastics and synthetic rubber.
- Thermal and electrical energy consumption standards and technical specifications in the production process of glassware and glass containers.
- Sugar - Energy consumption standards in the production process.

Asiawatt Engineering Company, as one of the leading companies in the field of energy services and developer of several energy consumption standards in various industries of the country, has a qualification inspection certificate from the National Qualification Confirmation Center of Iran.



Energy inspection



Energy Audit



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(Jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Some of the completed projects

- Design and implementation of the information monitoring system and energy consumption management in new and existing buildings EMIS-BEP, Vice Presidency for Science and Technology of the Presidential Office
- Implementation of the pilot project for optimizing energy and renewable energies in Tehran city buildings - Vice Presidency for Science and Technology of the Presidential Office
- Energy management and implementation of pilot energy optimization solutions in selected buildings in Tehran with the aim of developing the business model of energy service companies and market development feasibility of energy efficiency in selected buildings - Vice Presidency for Science and Technology of the Presidential Office
- Engineering consulting services and supervision over the commissioning of the expansion turbine unit - Shahid Salimi Power Generation Company
- Part one "Drafting regulations and management model for energy and water carriers (in mining units, mining industries, special zones, and projects) and designing and deploying an evaluation system and monitoring system for energy system performance" and "Part two: Deployment of ISO50001-2011 energy management system at IMIDRO headquarters" - IMIDRO organization
- Consulting services regarding the development, deepening, and upgrading of Kermanshah gas energy management system - Kermanshah Gas Company
- Energy audit studies of major industrial facilities of Masjed Soleyman Oil and Gas Exploitation Company - National Iranian South Oilfields Company
- A set of measures and activities to reduce energy consumption and costs in the central building of the Ministry of Economic Affairs and Finance - Ministry of Economic Affairs and Finance
- Payment of government non-refundable assistance for investment compensation / fuel savings subsidy to increase energy efficiency in building heating facilities - Fuel optimization
- Conducting studies and proposing proposals for energy optimization projects and greenhouse gas reduction to the Green Climate Fund (GCF) - National Iranian Copper Industries Company
- Comprehensive energy audit in Mehrabad International Airport buildings - Mehrabad International Airport.

Some of the completed projects



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

Building energy monitoring system (PASA)

The web-based energy monitoring system for buildings is an intelligent tool for delivering energy consumption and identifying energy-saving potentials in administrative, commercial, and residential buildings. This system is an efficient tool for organizations and institutions that have multiple and scattered buildings across the country and want to monitor and evaluate the performance of their sub-buildings in optimal energy consumption. In this regard, the PASA Energy Monitoring System has provided capabilities

Some of the features of the PASA Energy Monitoring software are as follows:

- Ability to monitor the energy performance of an unlimited number of buildings simultaneously in different parts of the country in a centralized manner.
- Ability to define different users with specific access levels to enter data and use the system.
- Periodic review of energy and water consumption changes and costs of buildings.
- Determining the rank and presenting the energy consumption label of the building.
- Providing complete information on the weather conditions of the building location over the past 5 years.
- Determining the baseline for building energy carriers based on energy consumption records and weather data.
- Providing various selective reports on building performance in energy matters.
- Ability to communicate with smart building control systems for monitoring and management purposes.



Building energy monitoring system (PASA)



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(Jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com

intelligent automation system for engine room

By employing the intelligent automation system of Asiawatt Engineering Company's engine room, in addition to optimizing maximum energy consumption, you can have permanent monitoring and comprehensive management of your engine room remotely.

Asiawatt's control solutions are based on the most technical methods and standards to ensure the proper performance of facilities.

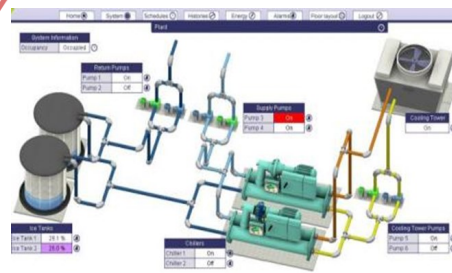
Our goal is to provide reliable and flexible customer service, increase efficiency while reducing costs, help preserve the environment, increase welfare and provide a safe and desirable environment.

The main advantages are:

- optimization and energy saving
- integrated management and monitoring of all engine equipment,
- reduction of breakdowns and maintenance costs

The main features of the system are:

- 1- Adaptive control of the output temperature of heating and cooling equipment (boilers, coil sources and chillers) by considering the preconditions.
- 2- Optimal control of pump performance with an approach to optimize energy consumption and reduce maintenance costs.
- 3- Comprehensive and centralized monitoring of all equipment including upstream electrical panels for integrated management and reduced troubleshooting time.



intelligent automation system for engine room



Address: 2nd Floor ,No 34, west
Arash Blvd, Nelson mandela
(Jordan) Blvd, Tehran, IRAN
Tel: 88778014-021
Email: info@asiawatt.com
www.asiawatt.com