

ENERGY INFRASTRUCTURE



The Energy infrastructure is the skeleton or backbone of the economy of a society.

It aims to ensure the production, storage and distribution of energy for transportation, domestic life and productivity of a society so that it grows and develops.

Ensuring energy for human life ensures water, energy, health and welfare, as almost all human activities depend on electricity and the use of fuels.

The design, construction and operation of energy infrastructure must occur in a comprehensive, effective and safe manner to ensure that they meet current needs of society without compromising that future generations can meet their own needs.

A smart and effective infrastructure construction in costs and operation guarantees the lowest access to energy by the company, directly impacting the quality of life of individuals consuming their products (due to the reduction of the costs of goods and services and increase competitiveness industries and markets)

Currently the world's power generation is based on the use of fossil fuels, ie the conversion of chemical energy stored in carbon bonds of these substances to the execution of a job for a specific purpose.

This energy conversion involves the release of carbon to the environment and potential damage to its natural balance, so every day there is the challenge of developing power generation that is not carbon based.

Not only power generation represents a challenge for energy infrastructure, but also storage and distribution should be performed efficiently and clean, preventing loss of heat and energy, providing more flexibility and ensuring energy harnessing for future generations.

The energy infrastructure is divided into three interrelated segments which are electricity, oil and natural gas.

The electricity segment includes electric power generation and transmission, storage and distribution. Among these elements are the power plants that use the washing, storage and combustion of coal and nuclear energy, natural gas, hydropower, oil and energy from the sun, wind, ocean surface currents, energy geothermal and other sources.

Electricity infrastructure also include electricity networks, transmission systems and high voltage grid, substations, local distribution stations and energy storage applications like water storage, batteries, chemical storages and others .

The oil segment includes extraction wells, refining and transportation as pipelines, fleets, boats and trucks.

The natural gas segment includes the transmission of natural gas, made from extraction in fields, refining, pipeline construction, storage terminals and urban distribution networks.

Source: <http://www.artinaid.com/2013/04/energy-infrastructure/>