

Coal junior

Coal is a fossil fuel just like oil and natural gas. In contrast with these, however, coal is a solid fuel. Coal, oil and natural gas have different origins and dissimilar aspects. In fact, oil and natural gas are formed from the remains of microscopic aquatic organisms (plankton, molluscs, corals etc.) that settled on the ocean floor and were covered with sediments over millions of years, while coal is made up of the organic remains of plants that lived millions of years ago and whose structure and shape, albeit modified, are still identifiable with the help of a microscope. These plants, buried under layers of sediment, were transformed into coal by a very slow process that, with the help of heat and pressure, deprived them of the moisture they contained. The environment favourable to coal formation is the vast coastal plains, with lagoons or swamps, where abundant vegetation developed in the past due to the hot, damp climate.

The Coal Era began around the mid-17th century. Until then wood was the most utilised source of energy, but an excessive exploitation of the woods brought about the progressive destruction of forests in most European countries. With the Industrial Revolution, coal became the most important source of energy because it fuelled the boilers. Until 1960 it was the most used fossil fuel; then it had to face competition from oil that was easier to extract and to transport. Today coal is extracted in mines and is mainly used in the production of electrical energy and in the steel industry. In fact, coke, a solid compact fuel that is produced heating coal at a high temperature, is used to produce steel.