The principle of work of the electric transformer The reader usually comes to the question of how the electric generator is able to convert kinetic energy into electrical energy that is transmitted in the form of a moving current, and the answer lies in an important physical process called the process of electromagnetic induction, where the movement energy is converted into electrical energy in the presence of the magnetic field Simply, the presence of an electric current means the presence of a magnetic field around it, and the opposite is also true. And others, and its use in applying electromagnetic induction and generating electricity from its application to the available magnetic field.