



WEBINAR

Title

Energy: what is it?

Expert

Prof Sergio Carrà

Abstract

The lesson introduces Energy and the related energy issues. Professor Carrà answers the apparently simple question: *What is energy?*

Starting with the definition of energy by Isaac Newton, the lesson goes through the different forms of energy and focuses on thermal energy and thermodynamic systems. The relationship between energy transformations, degradation and entropy is explained. Furthermore, the lesson analyses the different energy sources, focusing on nuclear, solar and the other renewable energy sources, and introduces the greatest issues related to energy use: energy request and environmental issues (i.e. climate change). Through effective examples and studies, this lesson invites to think about a key economic dilemma the World is facing: use energy in order to support the development and/or save energy to protect the environment. Increase energy efficiency, new infrastructures for renewable sources and search of innovative solutions are needed.