

CHAPTER OVERVIEW

6: Work, Energy, and Energy Resources

There is no simple, yet accurate, scientific definition for energy. Energy is characterized by its many forms and the fact that it is conserved. We can loosely define energy as the ability to do work, admitting that in some circumstances not all **energy** is available to do work. Because of the association of energy with work, we begin the chapter with a discussion of work. Work is intimately related to energy and how energy moves from one system to another or changes form.

[6.1: Prelude to Work, Energy, and Energy Resources](#)

[6.2: Work- The Scientific Definition](#)

[6.3: Kinetic Energy and the Work-Energy Theorem](#)

[6.4: Gravitational Potential Energy](#)

[6.5: Conservative Forces and Potential Energy](#)

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[6.10: World Energy Use](#)

[6.E: Work, Energy, and Energy Resources \(Exercise\)](#)

Thumbnail: One form of energy is mechanical work, the energy required to move an object of mass m a distance d when opposed by a force F , such as gravity. Image use with permission (CC-SA-BY-NC -3.0; anonymous).

Contributors and Attributions

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