Agriculture: Energy Use and Conservation

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**Abstract**

Effective energy use and conservation are becoming increasingly important in the context of rising energy costs and concerns over greenhouse gas (GHG) emissions. This entry reviews the methods of energy audit and compares the energy use and conservation for different farming systems and practices, including machinery operation, tillage practice, and irrigation methods. Opportunities for adopting new technologies such as renewable energy and biotechnology to reduce farming energy inputs and impacts of GHG emissions are also discussed.

**Keywords**

- agriculture,
- energy,
- energy efficiency,
- renewable energy,
- energy conservation,
- farming systems,
- greenhouse gas emissions