

ENERGY TECHNOLOGY HISTORY

A Chronological Summary of Human Power Innovation

Pre-1700s

Natural Kinetic Energy

Early use of wood combustion for heat. Development of vertical water wheels and windmills for grain milling and irrigation.

1712

The Steam Engine

Thomas Newcomen invents the first practical steam engine, later refined by James Watt, triggering the Industrial Revolution via coal.

1839

Photovoltaic Effect

Edmond Becquerel discovers the process of producing electricity from light, the foundational principle for solar panels.

1882

The Electrical Grid

Thomas Edison opens the Pearl Street Station in NYC, the first central power plant. Nikola Tesla later pioneers AC distribution.

1954

Nuclear Power

The USSR's Obninsk plant becomes the first grid-connected nuclear reactor, utilizing atomic fission for civilian electricity.

1970s - 90s

Renewable Scaling

Global oil crises spur investment in wind turbines and thin-film solar cells. First large-scale wind farms established.

2010 - Pres.

The Transition Era

Mass adoption of Lithium-ion storage, Smart Grids, and Hydrogen fuel research to achieve global Decarbonization.