Renewable energy comes from sources such as solar, wind, hydro, and geothermal power. These sources replenish naturally and produce low greenhouse gas emissions.

Solar panels convert sunlight into electricity, while wind turbines harness air movement. Hydroelectric systems generate power from flowing water.

Renewable energy improves energy security and reduces reliance on fossil fuels. Challenges include intermittency and storage, which are addressed through batteries and smart grids.

As climate concerns rise, renewable energy adoption is accelerating worldwide.