

Towards Green Energy

Chapter 15: Towards Green Energy · Topic 1

Key Concept

Solar energy harnesses sunlight using photovoltaic cells or solar thermal systems, providing a clean, abundant, renewable energy source.

Wind energy uses turbines to convert wind's kinetic energy into electricity, growing rapidly as a clean energy source worldwide.

Hydropower generates electricity from flowing or falling water, providing a reliable, established renewable energy source in many regions.

Transitioning to green energy is essential for reducing greenhouse gas emissions, combating climate change, and ensuring sustainable energy for the future.

Quick Revision Notes

- Solar energy: photovoltaic cells, solar thermal.
- Clean, abundant, renewable source.
- Wind energy: turbines convert kinetic energy.
- Growing rapidly worldwide.
- Hydropower: from flowing/falling water.
- Reliable, established renewable source.
- Green energy reduces greenhouse emissions.
- Essential for combating climate change.

Practice Questions

- 1 Research how solar panels work.
- 2 Research how wind turbines generate electricity.
- 3 Discuss hydropower's role in renewable energy.
- 4 Discuss why transitioning to green energy matters.
- 5 Research a green energy project in your region.
- 6 Explain green energy sources in your own words.