Lesson -5

The fuel of the future

Summary

- India is the world's largest producer of wind energy.
- Wind energy generates cheap, non polluting, free and renewable energy.
- India is the 5th largest producer of wind energy.
- Tamil Nadu is the first state to use wind energy.
- Wind energy generates cheap, non polluting, free and renewable energy.

Important points from the text:

- 1. The lesson is about wind energy which is considered very important today. It is also referred to as a non-polluting source of energy.
- 2. There are many sources of renewable energy ie. the sun (solar), the wind, the tides, water, and even biogas.
- 3. We should be proud of being the world's 5th largest producer of wind energy.
- 4. Wind is the fastest-growing source of electricity generation in the world.
- 5. Wind energy generates cheap, non-polluting, free, and renewable energy. But the supply is intermittent as the wind does not always blow when electricity is needed.
- 6. Wind turbines are used to convert wind energy into mechanical power.
- 7. The first state to use wind energy was Tamil Nadu and later it was used in the parts of Gujarat, Andhra Pradesh, Kerala, and Maharashtra. Surveys show that the public prefers wind and other renewable energy forms over conventional sources of energy.
- 8. Some advantages of wind energy:
 - Clean energy- no pollutants
 - It is free of cost
 - It is a renewable energy
- 9. Some disadvantages of wind energy
 - It is noisy
 - It is not good to look at
 - It kills birds
 - Sometimes it leads to intermittent supply

Learn new words:

• Hydro: related with water

• Biogas: a gaseous fuel

• Renewable: continuous/inexhaustible

Evidence: proof/confirmation
Intermittent: irregular/broken
Lucrative: a great deal of profit

Resolve: solve/ sort out

Do you know?

Like wind energy solar energy refers to energy from the sun. The sun has produced energy for billions of years. It is the most important energy for life forms. Solar energy these days is used to light homes, produce hot water, heat homes, and produce electricity. It is one of the cleanest sources of energy and does not produce pollutants.

Extend your horizon.

Carry out research on the differences and efficacies of Wind and Solar energy, differentiate between the two, and then conclude that out of these two energies which one do you think is most suitable in India.

Evaluate yourself:

- 1. When and where was wind energy first used?
- 2. Name the first Indian state that used wind energy. How does research help in popularizing the use of wind energy?
- 3. Is wind energy popularly used? What are its advantages? Does it have any drawbacks?
- 4. Name the first Indian state that used wind energy. Can it be used elsewhere?

Maximize your marks:

- Read the chapter carefully and attempt all the questions.
- What is wind energy? State its advantages and disadvantages.