



RENEWABLE ENERGY

RENEWABLE ENERGY

- A renewable energy source or renewable resource is something that can be used more than once.
 - Replaced naturally and quickly
- **Examples:** Oxygen, water, the Sun, and wood



RENEWABLE ENERGY

Wind:

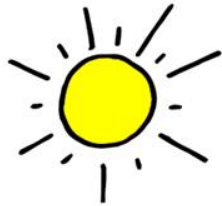
- Flows through wind turbines and electrical generators and is converted to electricity
- Historically, wind energy was used to power windmills.
 - Windmills were used to crush grain and pump water.



RENEWABLE ENERGY

Solar:

- Energy from the Sun, collected by solar panels
- Solar panels convert the Sun's energy into electricity.



Where have you seen solar panels before?

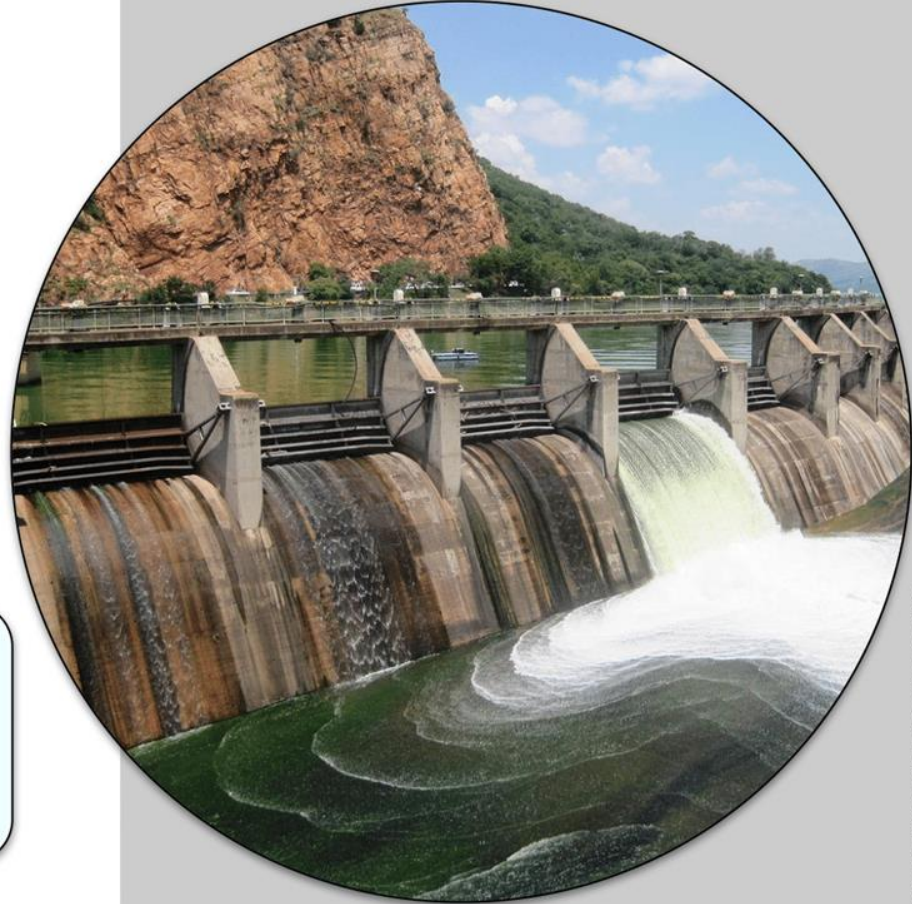


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Hydro (Hydropower):

- Converting the flow of water into electricity
- Electricity can be generated from natural waterfalls or built dams.

How is hydro a form of renewable energy?



RENEWABLE ENERGY

DID YOU KNOW?

Sir Adam Beck
Hydroelectric Generating
Stations (Niagara Falls)
are the largest
hydroelectric generating
stations in Ontario.

Adam Beck I was the largest
hydroelectric station in the
world when it was first built!





NON-RENEWABLE ENERGY

NON-RENEWABLE ENERGY

- A **non-renewable resource** is something that can only be used once.
- **Examples:** Oil, gas, diesel, plastics

What are some concerns associated with non-renewable resources?



NON-RENEWABLE ENERGY

- Although fossil fuels are produced naturally, they can take up to millions of years to form.
- It is important to conserve some fossil fuels in the Earth for future generations.



NON-RENEWABLE ENERGY



- **Fossil fuels** contribute to pollution and climate change.
- Fossil fuels release emissions into the atmosphere that are harmful to human health.
- Renewable energy is better for the environment, but often costs more to use.

NON-RENEWABLE ENERGY

- Scientists have worked to make alternatives to fossil fuels to reduce dependence on them.

DID YOU KNOW?

Fuel substitutes can be made from renewable sources like corn, soybeans and canola.

