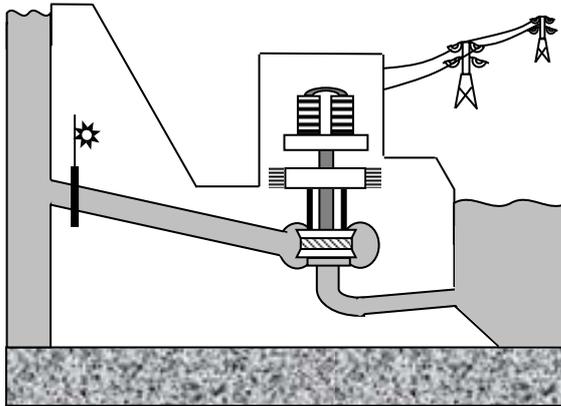# Energy Resources

Hydro

Hydro uses the energy from flowing rivers to generate much of the world's electricity. Although it is considered to be a clean energy resource, the building of huge dams often leads to environmental and relocation problems.

Labels

Dam
Reservoir
Intake
Control gate
Penstock
Turbine
Outflow
Generator
Transformer
Power house
Electricity grid

Hydro Fact File

1. Is the resource renewable (yes/no)? _____

2. % of world's electricity generated using hydro _____

3. Does the energy originate from the sun? _____

4. Is the energy expensive to utilise? _____

Research Ideas

- Explain how the sun powers the water cycle.

- Describe how hydroelectric plants generate electricity.

- What are the advantages of using hydroelectricity?

- What problems are caused when a hydroelectric dam is built?

- Describe the history of using moving water as a source of energy.

Advanced Research

- What is a pumped storage plant?

- Discuss the efficiency of hydroelectric power.

- What are the geological dangers of building in mountainous areas?

- Why is the use of hydroelectricity less ideal than it may at first appear?

- Describe how inventors may generate hydroelectricity in your soles.

Presentation Ideas

Design a wall display with diagrams, graphs, facts and big, bold headings. Make sure that your work is as neat as possible.

Give a talk to your class. Prepare some diagrams (maybe on overheads) to help illustrate your presentation.

Write a song or poem.

Make a puzzle or game about the energy resource.

Internet Search Terms
(we recommend "google.com")

- sun + "water cycle"
- hydro + generated + electricity
- "hydroelectric" + advantages
- "hydroelectric" + problems
- "water power" + history

Websites

Energy is a controversial issue – beware of misleading information

- http://www.howstuffworks.com/hydropower-plant.htm
- http://en.wikipedia.org/wiki/Hydroelectricity
- http://en.wikipedia.org/wiki/Renewable_energy
- http://www.wvic.com/hydro-facts.htm
- http://www.darvill.clara.net/altenerg/hydro.htm

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