

Guess which answers match the pictures.

1



This picture shows a

solar power plant ✓

The place is in

Abu Dhabi ✓

2



This picture shows a

hydroelectric power station ✓

The place is in

Canada ✓

Read the article. Put the ideas in the order they are mentioned.

Why our planet is getting warmer.

How greenhouse gases are created.

Countries that have a lot of sunshine and desert land.

A large solar power plant.

A country that gets most of its power from renewable energy.

How water creates power.



or Canada's electricity comes from hydroelectric power, making it one of the few countries which generates most of its power from renewable sources. One of the most important hydroelectric power stations is the one on the Niagara River, near to the world-famous Niagara Falls. Between 50% and 75% of the water from the river goes through four huge tunnels before the waterfalls. This water then passes through special turbines which provide energy to nearby areas of Canada and the United States. Once the water has passed through the turbines, it is then returned to the river after the waterfalls.

The Middle East has nearly half the world's solar energy potential and many countries other than Canada have significant amounts of water that can be used to generate electricity. The important question – will all these natural resources start to be used in place of burning the fossil fuels which are killing our planet? If our environment is to survive, then immediate action

Activate V
Go to Setting

1 Over  % of the water in the Niagara River goes through the hydroelectric power generator.

2 Over  tons of carbon dioxide is saved every year by the Shams 1 solar power plant.

3 The Shams 1 power plant is bigger than  football pitches.

4 Canada produces almost  % of its energy

There is no doubt that our planet is getting warmer and it is generally agreed that this is caused by the high levels of greenhouse gases, such as carbon dioxide (CO₂), in the atmosphere. These gases are created when we burn fossil fuels for energy. However, there are renewable sources of energy which can be used as a greener alternative to fossil fuels. This essay will look at two of the major alternative sources of energy: solar and hydroelectric. It will conclude that more of our power needs should come from these energy sources if we are to reduce the speed of global warming.

A lot of countries in the Gulf do not only have plenty of oil but also plenty of sun. This sunshine, together with a lot of unused desert land, means that they are the ideal locations to build

Activate W
Go to Settings

4 Canada produces almost  % of its energy

from renewable sources.

5 The Shams 1 power plant can provide enough electricity

for  homes.

6 Over  mirrors are used in the Shams 1

power plant.

Activate V
Go to Setting

warms greenhouse fuels oil steam mirrors turbines

Cause	Effect
People burn fossil fuels ✓ around the world.	The amount of greenhouse gas in the atmosphere increases.
There is a lot of greenhouse gas in the atmosphere.	The planet warms ✓ up.
Sun shines on mirrors ✓ at the solar plant.	The sun's heat is focused onto the pipes.
The sun heats up the special oil ✓ in the pipes.	The hot oil heats water to make steam ✓ .
The steam drives the turbines ✓ .	The mechanical energy from the turbines makes electrical energy.
Renewable sources produce energy instead of fossil fuels.	Less greenhouse ✓ gas goes into the atmosphere.

Choose the correct words to complete the sentences.

- 1 If the sea rises by even a small amount, many low-lying islands will be .
- 2 A  is a large mass of ice which moves very slowly.
- 3 About a quarter of the land on earth is used for .
- 4 One cause of deforestation is  farming.
- 5 Biodiversity is also  by deforestation.

5 Biodiversity is also  by deforestation.

6 The  of deforestation are damaging the natural habitat of many animals.

Match the causes to the effects.

Cause	Effect
greenhouse gases	global warming ✓
melting glaciers	rising sea levels ✓
droughts	aridity ✓
deforestation	loss of habitat ✓
fossil fuels	carbon dioxide ✓
logging	deforestation ✓

Choose true or false for each statement.

		True	False
Melting glaciers are caused by higher temperatures.	✓	☒	☐
Higher temperatures lead to increased greenhouse gases.	✓	☐	☒
Burning fossil fuels is the result of more greenhouse gases.	✓	☐	☒
Deforestation is caused by commercial agriculture and subsistence farming.	✓	☒	☐
Deforestation results in soil erosion.	✓	☒	☐
Using renewable energy sources is the result of improvement of the environment.	✓	☐	☒

Choose the correct words to complete the sentences.

- 1 The amount of greenhouse gas is increasing  the amount of fossil fuels we are burning.
- 2 We need to find alternative sources of energy  burning fossil fuels is damaging the environment.
- 3 Abu Dhabi is a good place to build a solar power plant  there is plenty of sun and unused space in the desert.
- 4 Canada is able to produce a lot of hydroelectricity  the Niagara Falls.

5 Many glaciers in the world are beginning to melt  global warming.

6 Many glaciers in the world are beginning to melt  the planet is getting warmer.

- | | | |
|---|--|---|
| 1 Our increasing need for energy | is causing damage to the environment. | ✓ |
| 2 The environment can be improved by using renewable energy sources | such as solar and hydroelectric power. | ✓ |
| 3 Animals are suffering because of the destruction of their habitat, which | is caused by global warming and deforestation. | ✓ |
| 4 Countries in Northern Europe are not very good places to build solar power plants because | they do not have much sunshine. | ✓ |
| 5 Hydroelectric power stations can be found in countries like Canada, | where there is a lot of water. | ✓ |
| 6 There are several ways in which we | can help improve our environment. | ✓ |

Put the sentences in order to make a paragraph about wind power.

As well as solar and hydroelectric power, wind power is now being used to generate electricity.

In America, China and many countries in Europe, wind farms are being built.



Each of these wind farms is made up of anything between three and several hundred wind turbines.

There are advantages and disadvantages to onshore wind farms.

Onshore wind farms are closer to where the energy is needed, but because of the way wind travels over land they are not very productive.

Along with the sun and water, the wind is now being used as a clean way to generate energy and in the future we will see more wind turbines in our landscape.

