



THE POWER OF NATURE



Scan to review worksheet

Expemo code:

1HNF-L1L4-E4A

1 Warm up

Look at the images of different energy sources. Do you know what they are called? Answer the following questions.

biomass

coal

geothermal

hydroelectric

solar power

wind power



1. _____



2. _____



3. _____



4. _____



5. _____



6. _____

- Do you know how they produce energy? Which image is the odd one out?
- What energy source does your family use to: heat your home? run your family car? keep your lights on?
- Where does this energy come from?



2 Focus on vocabulary

Part A: Match each word or phrase to its correct definition.

Group 1

- | | |
|---------------------------|---|
| 1. <u>generate</u> (v) | a. a part of a machine that produces power by turning as liquid, wind or gas moves through it |
| 2. <u>solar panel</u> (n) | b. fix something into the correct position so it can be used |
| 3. <u>turbine</u> (n) | c. a disadvantage or problem |
| 4. <u>install</u> (v) | d. produce something, often connected to energy |
| 5. <u>drawback</u> (n) | e. a piece of equipment that uses light from the sun to produce electricity |

Group 2

- | | |
|------------------------------|---|
| 1. <u>fossil fuel</u> (n) | a. a barrier built across a river to stop the water flowing, often built to store water |
| 2. <u>unlimited</u> (adj.) | b. energy such as coal or oil that is from old, dead plants and animals |
| 3. <u>dam</u> (n) | c. gas, especially carbon dioxide, that causes global temperatures to increase |
| 4. <u>steam</u> (n) | d. the hot gas that water changes into when it boils |
| 5. <u>greenhouse gas</u> (n) | e. without restriction or an end |





Part B: Write the correct word or phrase from Part A in each sentence. You may need to change the form of the word.

1. We need to get someone to _____ our new washing machine. I don't know how to do it!
2. If you go to a sauna, sometimes you can't see because of all the _____.
3. We need to reduce _____ in the atmosphere to stop global warming.
4. Wind power _____ over a quarter of the United Kingdom's electricity in 2021.
5. _____ create much more pollution than renewable forms of energy.
6. Tarbela _____ in Pakistan is the largest in the world. It is 143 metres high and is used to hold 14km³ of water.
7. My neighbours have _____ on their roof and they say it saves them money every month.
8. If you buy one drink, you get _____ refills so you can drink as much as you want.
9. One _____ to electric cars is that there are too few places to recharge the battery on long journeys.
10. Some people don't like wind _____ near where they live because they think they are big and ugly.

Part C: Discuss these questions with a classmate and use the word in bold in your answers.

1. Why should we use renewable sources of energy instead of **fossil fuels**?
2. Can you think of any **drawbacks** to having **solar panels** installed where you live?
3. What type of energy sources **generate** electricity in your country? Which is the most common?

3 Reading: general comprehension

Part 1: Look at the sets of words below. Which type of energy do you think they are connected to?

1. _____ : sunlight – heat – cloudy – daytime
2. _____ : earth – heat – steam – spa
3. _____ : pollution – underground – smoke – miners
4. _____ : river – dam – lake – reservoir
5. _____ : blow – hurricane – farm – breeze



Part 2: Read the article below and match the energy types above to the correct section (A-D). There is one energy type that you do not need to use.

The Power of Nature

The advantages and disadvantages of four renewable energies

Nature is amazing and its power is enormous. Not only does it provide us with fresh water, food and clean air but also energy sources that will never run out. We are using renewable energy sources more and more as we try to reduce our consumption of traditional fuels such as oil, coal and gas. Renewable energy sources are not only better for the environment but also cheaper and more efficient.

Here are four energy sources we are likely to be using in the next 50 years.

- A. _____ Sailors and farmers have used this for thousands of years but only in the last 20 years have improvements in technology meant we can use this source of power to generate electricity. Farms are now being built out in the sea where they are producing more energy than ever before. This energy doesn't produce any harmful gases, there is a lot of it and it's cheap. However, this may depend on where you are. If there is no wind, no electricity will be produced so this source is not always reliable. A further drawback is that turbines kill up to half a million birds each year so it's important to plan where farms are located to avoid these accidents.
- B. _____ There is nothing new about this type of energy. Egyptians built their homes in a way that stored heat over 2000 years ago. The difference today is that technology allows us to install panels to generate electricity, and these can be installed on roofs everywhere. Compared to fossil fuels, this type of energy is very clean, the price of the panels is coming down and they are becoming more efficient. As with wind, one drawback is that electricity is only generated during the day and on cloudy days even less. The other major drawback is the cost of the panels. If you don't have any government help, they can still be too expensive for individual families.
- C. _____ This type of energy is used more than any other type of renewable energy in the world today. It produces electricity by pushing water through turbines. Rivers and the sea can be used for this, but the most common way is by building dams. Unlike other types of renewable energy, water can be stored in dams so there is always energy when people need it. This energy is also more efficient as it's possible to control the amount of water that flows out of a dam. Despite being a clean source of energy, one disadvantage is the effect on local habitats. When a dam is built it can affect the flow of water to other areas. Dams are also expensive and time-consuming to build.
- D. _____ This type of energy uses our planet's natural heat to produce energy, a source that is unlimited. Electricity is created from steam that comes naturally out of the earth. 25% of Iceland's energy comes from this source. However, the main drawback of this energy source is that it still produces some greenhouse gases. To become a truly environmentally friendly source of energy these emissions need to be limited if it's to be the answer to stopping climate change.

Sources - earth.org; BBC.co.uk



Part 3: Read the article again and complete the table with a partner.

energy	advantages	disadvantages
wind	1	2
solar	3	4
hydroelectric	5	6
geothermal	7	8

Part 4: Look at the advantages and disadvantages below. Which energy type is being described?

1. Clean and reliable but can cost a lot of money and take a long time to introduce. _____
2. Cheap and clean but can harm wildlife and you can't always depend on it. _____
3. Although this energy has great potential it still produces some harmful gases into the atmosphere.

4. Everyone can start using this clean energy, but the equipment can still be expensive for many.





Part 5: Think of another energy type and write down some of its advantages and disadvantages in the table.

energy	advantages	disadvantages

4

Talking point

In small groups, answer the following questions.

1. Which energy types are used in your country most?
2. Do you think governments and people need to think more about the energy they use?
3. What type of renewable energy is best for your country?



5

Focus on language: not only ... but also

Read the following sentences from the article again and think how we use the words in bold.



Renewable energy sources are **not only** better for the environment **but also** cheaper and more efficient.



Nature is amazing, and its power is enormous. **Not only** does it provide us with fresh water, food and clean air **but also** energy sources that will never run out.



We use *not only X but also Y* to add emphasis when talking or writing about two connected things. Look at the following sentences and read them aloud. Which sentence would you use in an essay?

- 1. "Renewable energy sources are better for the environment and cheaper and more efficient."
- 2. "Renewable energy sources are not only better for the environment but also cheaper and more efficient."

We can use *not only* at the beginning of a sentence. When we do this, we invert the subject and the verb and use *do, does* or *did*:



Nature is amazing, and its power is enormous. **Not only** does it provide us with fresh water, food and clean air **but also** energy sources that will never run out.

Read the following sentences and rewrite them using *not only ... but also*.

- 1. She plays basketball. She plays football.

- 2. He can dance very well. He sings brilliantly.

- 3. They need food. They need medicine.

- 4. You haven't done your homework. You have been late to school three times this week.





6 Vocabulary game: Backs to the Board

You are going to play a revision game called *Back to the Board*. Follow the rules. You can use as much of the vocabulary as you want.

1. Get into two teams. Choose a team name.
2. Each team takes it in turns to choose one team member.
3. This student sits with their back to the board at the front of the class.
4. Your teacher writes a word on the board.
5. The student's team explains the word and the student has to guess what it is in 30 seconds.
6. If the student guesses correctly in 30 seconds their team gets two points.
7. If the student doesn't guess correctly the other team gets one point.
8. It's now the other team's turn.

Adjectives	Nouns	Verbs/Phrasal Verbs
unlimited	blizzard	melt
renewable	lightning	regulate
nasty	avalanche	surround
loyal	thunderstorm	fuel
nocturnal	forecast	lower
harmless	legend	come back
venomous	shadow	float
naked	parrot	get rid of
probable	delight	fall out
accurate	joint	recover
sustainable	ecosystem	monitor
frequent	consumption	set up
long-term	emissions	put up
visible	bang	go wrong



Adjectives	Nouns	Nouns
baggy	rodent	trap
reliable	amphibian	estimate
sensitive	trunk	protection
stormy	organ	disturbance
icy	beak	insight
foggy	scales	oil spill
curious	depth	tonne
Verbs/Phrasal Verbs	the seabed	ancestor
zoom in	predator	oxygen
generate	venom	solar energy
install	renewable energy	solar panel
dump	reservoir	greenhouse gas
detect	habitat	steam
observe	trace	dam
emerge	mineral	fossil fuel
forecast	flash	drawback
to rain cats and dogs	equator	turbine
to talk a lot of hot air		