

## UNIT 10

### Lesson 2

# Energy Sources



## LESSON SUMMARY

### Vocabulary

CD 40

Word/Phrase	Meaning	Example
power plant (n) /pauər plænt/	a building where people produce electricity	In the past, people built a lot of <b>power plants</b> in developed countries.
wind turbine (n) /wɪnd tɜ:bain/	a turbine that is driven by the wind	We can see the <b>wind turbines</b> on the horizon when you look out to sea.
solar panel (n) /sɔ:lər 'pænəl/	a device that changes energy from sunlight into electricity	Is it necessary to equip each house with a <b>solar panel</b> ?
nuclear power (n) /nu:kliər 'pauər/	nuclear energy considered as a source of electricity	<b>Nuclear power</b> is a major power source in South Korea.
dangerous (adj) /deindʒərəs/	able to cause harm, death or unpleasant problems	Nuclear energy is both expensive and <b>dangerous</b> .
cheap to build /tʃi:p tu: bɪld/	low price to make something	Coal plants are <b>cheap to build</b> .
expensive to run /ɪk'spensɪv tu: 'rʌn/	costing a lot of money to operate	Solar power is not <b>expensive to run</b> .
clean to run /kli:n tu: rʌn/	not dirty to operate	Nuclear power is <b>clean to run</b> .
noisy (adj) /'nɔ:zi/	making a lot of noise	It can be <b>noisy</b> to live near wind turbines.

### Grammar

#### Conjunctions and & but

##### Usage

We use **and** or **but** to connect two or more words, phrases or clauses.

**and**

→ to add information or ideas

Renewable sources are solar power and wind power.

Non-renewable sources are oil, coal and natural gas.

**but**

→ to introduce a different idea or information

Nuclear power is clean, **but** it is dangerous.

Motorbikes are cheap and convenient, **but** they cause pollution.



## Pronunciation

### Sound changes CO2 41

◆ **and** /ənd/ often sounds like /n/.

Nuclear power is dangerous **and** expensive to build.

Solar power is clean **and** cheap to run.

◆ Some other examples of sound changes



alone /ə'ləʊn/ → /loʊn/  
apply /ə'plai/ → /plaɪ/  
around /ə'raʊnd/ → /raʊnd/

alive /ə'laɪv/ → /laɪv/  
about /ə'bəʊt/ → /baʊt/  
exactly /ɪg'zæktli/ → /'zæktli/

## PRACTICE



## Pronunciation

Circle the word that has a stress pattern pronounced differently from the others.

1 A cover	B affect	C pollute	D create
2 A better	B noisy	C renewable	D common
3 A option	B pollution	C reason	D power
4 A popular	B expensive	C difficult	D dangerous
5 A turbine	B problem	C nuclear	D environment

## Vocabulary

a. Match the words or phrases with their definitions.



① run  
② create  
③ affect  
④ wind turbine  
⑤ power plant

○ ○ ○ ○ ○

A to influence  
B to operate  
C to invent something  
D a building where people produce electricity  
E a tall structure using the wind to make electricity



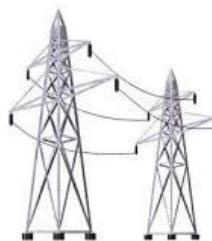
b. Circle the correct options.

- 6 Solar power / coal plants are cheap and clean to run, but they are expensive to build.
- 7 Wind turbines are also clean and cheap, but they make pollution / noise and need wind to run well.
- 8 People think that natural gas / oil is cleaner than coal. However, it still produces a lot of pollution.
- 9 Hydropower plants don't cause pollution, but they aren't expensive / cheap to build.
- 10 It can be better for countries to choose a kind / mix of energy sources.

## Grammar

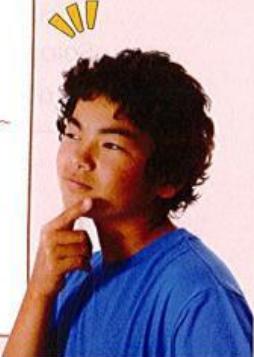
a. Fill in the blanks with **and** or **but**. Add a comma where necessary.

- 1 Natural gas is cheap to build \_\_\_\_\_ it's expensive to run.
- 2 Hydropower is renewable \_\_\_\_\_ it's not cheap to build.
- 3 Coal is cheap and easy to use \_\_\_\_\_ it's non-renewable.
- 4 Gasoline motorbikes cause pollution \_\_\_\_\_ they are noisy to run.
- 5 Electric ovens are expensive \_\_\_\_\_ they use more electricity than microwave ovens.



b. Look at the table, tick (✓) the correct answer, cross (✗) the wrong one and correct it.

	Advantages	Disadvantages
“Electric cars”	use cleaner energy reduce pollution quiet to run	expensive to buy slower to run hard to find a charging station could not travel far take more time to charge
“Gasoline cars”	cheap to buy faster to run could travel far take less time to fill up gas easy to look for a gas station	cause pollution pay for gas noisy to run use non-renewable energy



6 Electronic cars use cleaner energy, but they reduce pollution.  
7 Electronic cars are quiet to run, and they couldn't travel far.  
8 Gasoline cars are cheap to buy, and it's easy to repair them.  
9 It takes less time to fill up gasoline cars, and you have to pay for gas.  
10 Gasoline cars cause pollution, but it's easy to find a gas station.


## Reading



a. Read the text about solar energy. Circle the best options.

Among all energy sources, solar energy seems to have the least 1) \_\_\_\_\_ effects on the environment. It does not pollute the water 2) \_\_\_\_\_ send out greenhouse gases into the air. 3) \_\_\_\_\_ from a nuclear power plant, a solar energy plant uses very little water. Producing solar energy seems to make no noise. That is a benefit because people living in cities tend to use a lot of solar energy. You can use less energy from the supplier when you can 4) \_\_\_\_\_ your own electricity. As a result, you don't have to pay a lot for your 5) \_\_\_\_\_ use. You can also make money by selling the electricity you don't use back to the supplier.

1 A negative	B positive	C good	D helpful
2 A and	B or	C for	D yet
3 A Like	B Unlike	C Different	D Alike
4 A waste	B take	C buy	D produce
5 A water	B electricity	C Internet	D natural gas

b. Read the text about wind farms. Complete each gap in the summary with ONE WORD from the text.

A wind farm (wind park) is a collection of wind turbines in the same location used to produce electricity. Wind farms come in different sizes. A wind farm can include a small number of turbines or several hundred wind turbines covering a huge area. Wind farms can be either on the land or in the sea.

Wind farms have a lower environmental effect than many other sources of electricity because they do not require fuel. For that reason, people often consider wind farms a good source of green energy. However, people often criticize wind farms because they affect the landscape. Normally, wind farms need more land to build than other power stations. Wind farms are often in wild and rural areas, and people living in those areas believe the construction of a wind farm causes habitat loss and affects tourism.

A wind farm has 6) \_\_\_\_\_ sizes. Engineers can build a wind farm offshore or on 7) \_\_\_\_\_. A wind farm does not have many 8) \_\_\_\_\_ impacts. Wild and 9) \_\_\_\_\_ areas are suitable for building wind parks. However, people are not excited about that because they think it causes habitat loss and affects the landscape and 10) \_\_\_\_\_.

## Speaking

Complete the conversation using the sentences in the box. There is one extra sentence.

**Tom** Can you do me a favor, Dad?

**Dad** Of course. What can I do for you?

**Tom** What's renewable energy, Dad?

**Dad** 1) \_\_\_\_\_

**Tom** Why do we call them renewable energy?

**Dad** 2) \_\_\_\_\_

**Tom** How about fossil fuels?

**Dad** 3) \_\_\_\_\_

**Tom** Are they renewable energy, Dad?

**Dad** 4) \_\_\_\_\_

**Tom** Why do we call them non-renewables?

**Dad** 5) \_\_\_\_\_

A Yes, they are expensive.

B Well, because we can use them up, Tom.

C Coal and oil are fossil fuels. They take thousands of years to form.

D Because they can naturally refill themselves.

E Well, wind and solar power are renewable energy.

F No, I am afraid not. They are non-renewable energy.

## Writing

a. Combine the sentences using *and* or *but*.

Add commas where necessary.

1 Wind energy is clean. It is renewable, too.

\_\_\_\_\_

2 Nuclear power is clean. It is dangerous.

\_\_\_\_\_

3 Energy from coal is cheap to build. It is expensive to run.

\_\_\_\_\_

4 Hydropower needs big rivers. It is expensive to build.

\_\_\_\_\_

5 Natural gas is cheap to build. It creates some pollution.

\_\_\_\_\_

b. Make complete sentences using the prompts.

Use *and* or *but* and add commas where necessary.

6 Buses / be / cheap / crowded.

\_\_\_\_\_

7 Our town / be / big and modern / it / be / noisy.

\_\_\_\_\_

8 Nuclear power plants / produce / clean energy/ they / be / expensive to build.

\_\_\_\_\_

9 Wind turbines / create / noise / need / windy weather / to work well.

\_\_\_\_\_

10 Hydroelectric plants / not cause / pollution / they / affect / environment.

\_\_\_\_\_

### Answer key



- Pronunciation \_\_\_\_/10 pts.
- Vocabulary \_\_\_\_/20 pts.
- Grammar \_\_\_\_/20 pts.

- Reading \_\_\_\_/20 pts.
- Speaking \_\_\_\_/10 pts.
- Writing \_\_\_\_/20 pts.

**Total** \_\_\_\_ / 100 pts.

