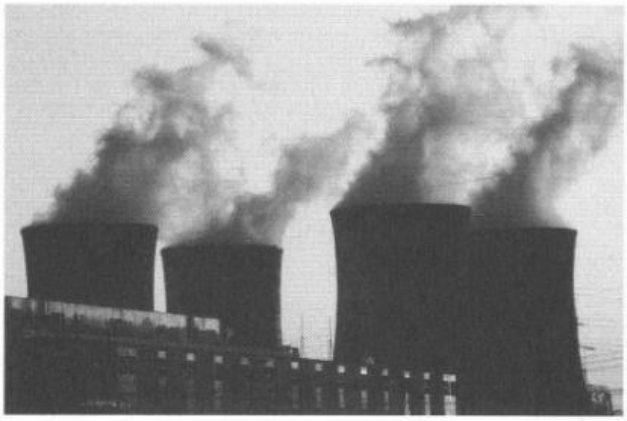
7 Alternative energy

Aims: Reporting verbs | Identifying opinions and attitudes | Completing flow charts
Answering short questions | Completing sentences/summaries

Part 1: Vocabulary





1 **The words below all relate to energy. Draw a table like the one below and put the words into the correct groups. Some words belong in more than one group.**

boil	freeze	liquid	oil
burn	fuel	melt	oxygen
chemical	gas	metal	solar
cool	heat	nuclear	substance
electricity			

Noun	Verb	Adjective

2 **Rewrite the sentences 1–8 by replacing the underlined phrases with words from Exercise 1. You can make other changes as well if necessary.**

Example: In springtime the ice in the Arctic Circle <u>returns to a liquid state</u>.
In springtime the ice in the Arctic Circle melts.

1 An effective way of producing power is to use energy <u>from the sun</u>.

2 At the North and South Poles, water becomes so cold that it <u>changes from a liquid to a solid state</u>.

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3 If you raise the temperature of water to 100 degrees Centigrade, it boils.

4 This power station uses energy produced by atomic fission to generate electricity.

5 Oil is physical matter found under the surface of the earth.

6 In order to make a fire, some kind of combustible material such as wood is needed.

7 If you lubricate an engine, it will function more effectively.

8 Refrigeration is the main method of lowering the temperature of food.

3 **Reported speech tells you what someone said, but does not use the person's actual words. These are modified and preceded by a reporting verb, which often also describes the function of their words.**

Example: 'I didn't copy my essay from another student.' → She denied copying her essay from another student.

Match the reporting verbs 1–10 with their meanings a–j.

1	warn ___	a	to say that something is true or correct because you know about it
2	recommend ___	b	to tell people about something publicly or officially
3	persuade ___	c	to suggest that something should be done
4	announce ___	d	to state that something is true and give the reasons why you think it is true
5	deny ___	e	to tell someone about something such as a possible danger or problem so that they are aware of it
6	confirm ___	f	to cause someone to do something by giving them good reasons for doing it
7	accuse ___	g	to say something about someone or something, usually briefly
8	argue ___	h	to say or tell someone that you believe they have done something wrong or dishonest
9	claim ___	i	to state that something is not true
10	mention ___	j	to say that someone else is saying something is true but you are not sure whether or not they are telling the truth

4 **The first sentence in each pair of sentences 1–5 is in direct speech, and the second is in reported speech. Complete the second sentence with the past simple tense of the correct reporting verb from Exercise 3.**

1 'We have found evidence that global warming is caused by human intervention in nature.'

Scientists _____ that they had found evidence that global warming was caused by human intervention in nature.

2 'The gas leak was not due to a broken pipe.'

The company representative _____ that the gas leak was due to a broken pipe.

3 'I think it would be a good idea to insulate your house to save energy.'

She _____ that they insulate their house to save energy.

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4 'People have to change the way they think about using energy before it is too late for the planet.'

The environmentalist _____ that people had to change the way they thought about using energy before it was too late for the planet.

5 'Changing to green forms of energy will save you money in the future.' 'You are right. I will change.'

She _____ him to change to green forms of energy.

5 **Complete the newspaper article with the words a–j.**

a	argued	**d**	fossil	**g**	recommended
b	claim	**e**	nuclear	**h**	run out
c	contamination	**f**	radioactive waste	**i**	solar power

The Future of Energy

The future of energy is changing. Scientists (1) _____ that (2) _____ fuels need to be replaced by alternative forms of energy. These older fuels, such as oil and gas, are in short supply and may (3) _____ in the near future. So what are the alternative forms of energy that could be used? (4) _____ is quite a popular choice for many. Harnessing the sun for its energy has been (5) _____ by the government's Department for Energy as a cost-effective and long-term solution for both businesses and individuals. However, although cost-effective in the long run, the setup costs can be high. Others have (6) _____ that (7) _____ energy would be a better solution. This, however, is very contentious. The issue of (8) _____ is always raised by its detractors because of the fear of (9) _____ if something goes wrong.

Part 2: Practice exercises

Exam tip: In the IELTS Listening exam, you need to be able to identify the opinions and attitudes of the speakers in conversations and understand if they agree or disagree with each other. Speakers can express their opinions and attitudes in various ways. For example, they may use an adjective that is positive or negative (e.g. *interesting*, *boring*), a verb (e.g. *agree*, *don't believe*) or a phrase (e.g. *That's what I think too*, *I'm not sure that's right*).

1 **Read the phrases 1–10 and decide if the speaker is agreeing, disagreeing or expressing uncertainty. Write A (agreement), D (disagreement) or U (uncertainty).**

1 I couldn't agree more. _____

2 Absolutely! _____

3 That's a difficult one. _____

4 I'm afraid I don't share your opinion. _____

5 This is where we differ. _____

6 There's no doubt about it. _____

7 I wouldn't like to say. _____

8 I'm not convinced ... _____

9 I'm with you on that. _____

10 It's hard to say. _____

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2 Read the dialogues and answer the questions 1–3. Then underline the words that helped you answer them.

Dialogue 1

A: I think we should visit the nuclear power station as part of our research for this module.

B: I couldn't agree more. And hopefully, we'll be able to interview some of the staff for a more in-depth view of how it works.

Dialogue 2

A: Geothermal energy is the best option for governments to invest in for the future.

B: Mm, I'm with you on that, but like all things it depends on the amount of investment.

Dialogue 3

A: What I particularly like about using hydrogen as energy is that it is environmentally friendly.

B: Well, I haven't seen any reports to support that so I wouldn't like to say.

1 Does the second speaker in dialogue 1 agree that they should visit the nuclear power station?

2 Do both speakers in dialogue 2 think that the government should invest in geothermal energy?

3 Do both speakers in dialogue 3 agree that hydrogen is environmentally friendly?

Exam information: Flow chart completion (2)

A flow chart is designed to help people understand a process. It usually contains the key points or main ideas, rather than supporting points.

Exam tip: When listening, it is important to identify which are the key points and which are the supporting points. Main points give general information, whereas supporting points give explanations and examples, or expand on something.

3 **Read the list of safety instructions 1–6 for working in a laboratory and decide which are main ideas and which are supporting points. Write M (main idea) or S (supporting point).**

1 Any food or drink containers found by staff should be disposed of. _____

2 Wear safety glasses and gloves at all times. _____

3 Do not eat or drink in the laboratory. _____

4 If you see an open door or window, please report it to security staff before working in the laboratory. _____

5 All doors and windows must be locked when leaving the laboratory. _____

6 If someone is not wearing safety glasses or gloves, ask them to put them on before continuing their work. _____

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01 CD2

4 You are going to hear a tutor and a student discussing the process of doing a research project on alternative energy. Listen and complete the flow chart below. Write NO MORE THAN THREE WORDS AND/OR A NUMBER for each answer.

Alternative energy research project: process

Focus the question on one particular area.

↓

Make a reading list which is **1** _____ and **2** _____.

↓

Start reading as soon as possible. → Remember to **3** _____ while reading.

↓

Organise notes into some **4** _____.

↓

Analyse notes and reading for **5** _____ to question.

Exam information: Short-answer questions (2)

In some short-answer questions, you may have to identify two or three pieces of information. The question words include phrases such as 'List 2 reasons', 'Name 3 places ', 'Which 3 factors'. The answers are often close together in the recording and can be similar grammatically or thematically.

Exam tip: The question will help you focus on the type of answer you need to give in terms of grammar and topic so make sure you underline the key words in the question.

5 **Read the questions 1–3 and underline the key words. Then decide what kind of answer is needed in terms of grammar and topic, and suggest possible answers. Write NO MORE THAN THREE WORDS AND/OR A NUMBER for each answer.**

1 List 3 energy-saving methods.

_____ _____ _____

2 Name 2 substances which contribute to climate change?

_____ _____

02 CD2

Now listen and answer the question below.

3 List the 3 forms of energy Mary will write about in her essay. Write NO MORE THAN THREE WORDS AND/OR A NUMBER for each answer.

_____ _____ _____

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Exam tip: In this type of short-answer question you will have to write one-, two- or three-word answers. If more than one word is required, think carefully about the grammar of your answer because it will need to be correct. You should think about the common grammatical combinations of words which will be tested, such as adjective + noun (e.g. *solar energy*), noun + noun (e.g. *power station*) verb + adverb (e.g. *decrease dramatically*) or verb + object (e.g. *improve the system*).

6 03 CD2 **You are going to hear three students discussing their environmental science presentation. Listen and answer the question.**

What 2 pieces of information do the students agree to remove from the presentation? Write NO MORE THAN THREE WORDS AND/OR A NUMBER for each answer.

1 _____ 2 _____

Exam information: Summary completion (2)

As you saw in Unit 4, in the IELTS Listening exam, you may have to complete a summary. Sometimes you have to choose the answers from a list of options in a box. There will be more options than you need.

Exam tip: In summary-completion tasks where you are given answer options, it is a good idea to identify which words are grammatically possible answers. That way, when you listen, you are choosing between a smaller number of options.

7 **Which words a–l could complete the spaces 1–5 in the summary? There is more than one possible answer for each space.**

a	alternative	**d**	dangers	**g**	nuclear	**j**	research
b	benefits	**e**	different	**h**	price	**k**	seminar
c	cost effective	**f**	evidence	**i**	problems	**l**	tutorial

The students are preparing for their (1) _____ discussion by discussing the various theories presented by academics in the field of (2) _____ energy. Overall, they agree with the academics that the most sustainable long term (3) _____ energy source is nuclear but they are concerned about the (4) _____ based on past disasters around the world. The students are unable to agree on the cost-to-benefit ratio of sources such as wind and solar because the academic (5) _____ appears to be inconclusive.

8 04 CD2 **Now listen and complete the summary in Exercise 7 above with the correct words a–l. Write ONE option a–l next to 1–5 below.**

a	dangers	**d**	cost effective	**g**	different	**j**	benefits
b	price	**e**	problems	**h**	nuclear	**k**	tutorial
c	alternative	**f**	evidence	**i**	research	**l**	seminar

1 _____ 2 _____ 3 _____ 4 _____ 5 _____

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Part 3: Exam practice

SECTION 3
QUESTIONS 1–4

05
CD2

Answer the questions below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

According to Phil, what are the 2 problems with some renewable energy sources?

1 _____

2 _____

List 2 things that Professor Jenkins wants to see in the students' report.

3 _____

4 _____

QUESTIONS 5–7

05
CD2

Complete the flow chart below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

Solar energy production costs forecast

Calculate the number of hours of **5** _____ in the UK.

↓

Estimate the number of hours of sunlight.

↓

Determine the cost of supplying homes in the entire **6** _____.

↓

Work out the power station construction costs.

↓

Research what customers would be **7** _____ pay.

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QUESTIONS 8–10

06
CD2

Complete the summary below using words from the box.

Write **ONE** option **A–H** next to 8–10.

Project content summary

The alternative energy project will cover 3 main areas; a comparison, a price **8** _____ and an analysis. The students will use information given to them by their tutor and government **9** _____. Using a system of comparison between the data sets they will **10** _____ any discrepancies for further analysis.

A data	**D** demonstrate	**G** reduction
B highlight	**E** prediction	
C statistics	**F** evaluate	

LIVEWORKSHEETS