

TASK 1. GREEN FUEL: What do you know about these green fuels? How efficient are they? Complete this table with your partner(s). Change partners often and share what you wrote.

	What I Know	Efficient	UKRAINE
Solar energy Wave power Wind power Biofuel Hydroelectricity Nuclear power			

TASK 2. WIRELESS: Rank these with your partner. Put the best wireless things at the top.

<ul style="list-style-type: none"> • Electricity • Internet • Speakers • Ear buds 	<ul style="list-style-type: none"> • Mouse • Remote controls • Garage door opener • Radios
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TASK 3. VOCABULARY MATCHING

Paragraph 1

1. climate	a. A time of big difficulty or danger.
2. crisis	b. Make available for use; supply.
3. fossil fuels	c. A situation where we cannot get enough of the things we need.
4. provide	d. Things we use for power, like oil, gas and coal.
5. huge	e. A human-made machine or thing put in space to collect information or for communication.
6. satellite	f. The weather in an area in general or over a long period of time.
7. shortage	g. Very, very big.

Paragraph 2

8. secure	h. A person who holds (or can hold) a passport of a country.
9. citizen	i. Very, very big.
10. enormous	j. Find an answer to a question or problem.
11. convert	k. Make smaller or less in amount, degree, or size.
12. reduce	l. Change one thing into another thing.
13. fantastic	m. Certain to stay safe.
14. solve	n. Really, really great.

BEFORE READING / LISTENING

1. TRUE / FALSE: Read the headline. Guess if a-h below are true (T) or false (F).

1. The article says we need to charge how we get power. T / F
2. The European Space Agency has finished testing solar farms in space. T / F
3. Electricity from the solar farms will be available in three months. T / F
4. The space agency says it wants many space farms in orbit. T / F
5. The electricity will only be available for people in Europe. T / F

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6. The agency said we need to become carbon-neutral economies. T / F
7. The agency said solar farms in space would solve many problems. T / F
8. A solar farm is over 10 times bigger than the International Space Station. T / F

2. SYNONYM MATCH: (The words in bold are from the news article.)

1. crisis	a. change
2. provide	b. happen
3. approved	c. safe
4. take place	d. supply
5. aim	e. great
6. secure	f. goal
7. enormous	g. catastrophe
8. convert	h. work out
9. fantastic	i. agreed to
10. solve	j. very big

GAP FILL

The world is (1) ____ a climate crisis. We need to change how we get our power. This means we need to end the (2) ____ of fossil fuels, like oil and gas. The European Space Agency (ESA) has started on work that could (3) ____ millions of homes with clean energy. It has approved a three-year project to test huge solar farms (4) ____ space. ESA engineers hope to send energy wirelessly from space into people’s homes. Testing will take place over three years. An ESA spokesperson said one solar-farm satellite could create the same amount of electricity (5) ____ a power station on Earth. She added that the aim is to have many of these giant satellites in (6) ____ . They could cut our use of fossil fuels and reduce energy shortages.

1	(a) in	(b) of	(c) by	(d) at
2	(a) used	(b) useful	(c) use	(d) useless
3	(a) sell	(b) order	(c) provide	(d) cut
4	(a) at	(b) by	(c) of	(d) in
5	(a) as	(b) has	(c) was	(d) is
6	(a) habit	(b) orbit	(c) debit	(d) credit

The ESA project is called Solaris. The ESA (7) ____ on its website that it wants to create “a clean and secure energy future for European citizens”. Josef Aschbacher, the director-general of the ESA, told the BBC that solar power from space could be of “(8) ____” help. He said: “We need to convert into carbon-neutral economies and therefore change the way we produce energy. We especially (9) ____ to reduce the fossil fuel part of our energy production.” He added: “If you can do it from space, and I’m saying ‘if we could,’ because we are not there (10) ____, this would be absolutely fantastic. It would (11) ____ a lot of problems.” The satellites will be around 1.7 km long. The International Space Station is 110 m in (12) ____ .

7	(a) slants	(b) stats	(c) starts	(d) states
8	(a) giant	(b) enormous	(c) hugely	(d) biggish
9	(a) needy	(b) necessary	(c) need	(d) needing

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10	(a) before	(b) already	(c) still	(d) yet
11	(a) salvo	(b) solution	(c) soluble	(d) solve
12	(a) longing	(b) length	(c) long	(d) lengthy

COMPREHENSION QUESTIONS

1. What does the article say we need to change?
2. How long will the space agency test the solar space farms?
3. What will one solar farm produce the same amount of energy as?
4. How many of the satellites does the agency want to have in space?
5. What kind of shortages could the ESA project reduce?
6. What's the name of the solar farm project?
7. Who might the solar farms give a secure energy future to?
8. What did an ESA spokesperson say we needed to convert into?
9. What did an ESA spokesperson say the solar farms would solve?
10. How long is a solar farm satellite?

ROLE PLAY

Role A – Electricity

You think electricity is the best wireless thing. Tell the others three reasons why. Tell them why wireless isn't so necessary with their things. Also, tell the others which thing least requiring of wireless technology of these (and why): the Internet, ear buds or a computer mouse.

Role B – Internet

You think the Internet is the best wireless thing. Tell the others three reasons why. Tell them why wireless isn't so necessary with their things. Also, tell the others which thing least requiring of wireless technology of these (and why): electricity, ear buds or a computer mouse.

Role C – Ear Buds

You think ear buds are the best wireless things. Tell the others three reasons why. Tell them why wireless isn't so necessary with their things. Also, tell the others which thing least requiring of wireless technology of these (and why): the Internet, electricity or a computer mouse.

Role D – Computer Mouse

You think a computer mouse is the best wireless thing. Tell the others three reasons why. Tell them why wireless isn't so necessary with their things. Also, tell the others which thing least requiring of wireless technology of these (and why): the Internet, ear buds or electricity.

SOLAR ENERGY SURVEY

Write five GOOD questions about solar energy in the table. Do this in pairs. Each student must write the questions on his / her own paper. When you have finished,

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interview other students. Write down their answers. Make mini-presentations to other groups on your findings.

	STUDENT 1	STUDENT 2	STUDENT 3
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

SOLAR ENERGY DISCUSSION

1. What do you know about solar energy?
2. Why is the world in a climate crisis?
3. How does the world get out of its climate crisis?
4. What do you think of fossil fuels?
5. What can we use instead of fossil fuels?
6. What do you think of wireless solar energy from space?
7. What do you think of a wireless world for power and communications?
8. Do you think wireless electricity might be dangerous?
9. Have you ever experienced an energy shortage?
10. What forms of clean energy do you use?
11. What's the best form of clean and green energy?
12. What questions would you like to ask the scientists?