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Ready-to-Use English Lessons by Sean Banville

Level 3 – 24th November, 2022

Work starts on beaming solar energy from space

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https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Contents

Please try Levels 0, 1 and 2 (they are easier).

THE ARTICLE

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

The world is in a climate crisis. We need to change how we get our power. This means we need to end the use of fossil fuels, like oil and gas. The European Space Agency (ESA) has started on work that could provide millions of homes with clean energy. It has approved a three-year project to test huge solar farms in 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 as a power station on Earth. She added that the aim is to have many of these giant satellites in orbit. They could cut our use of fossil fuels and reduce energy shortages.

The ESA project is called Solaris. The ESA states 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 "enormous" help. He said: "We need to convert into carbon-neutral economies and therefore change the way we produce energy. We especially need 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 yet, this would be absolutely fantastic. It would solve a lot of problems." The satellites will be around 1.7 km long. The International Space Station is 110 m in length.

Sources: https://www.**esa.int**/Enabling_Support/Space_Engineering_Technology/SOLARIS/SOLARIS2
https://www.**bbc.com**/news/science-environment-62982113
https://**scitechdaily.com**/esa-solaris-wireless-power-beamed-down-from-space/

WARM-UPS

1. SOLAR ENERGY: Students walk around the class and talk to other students about solar energy. Change partners often and share your findings.

2. CHAT: In pairs / groups, talk about these topics or words from the article. What will the article say about them? What can you say about these words and your life?

climate crisis / power / fossil fuels / oil / gas / solar farm / satellite / energy shortages
project / future / space / carbon neutral / production / fantastic / problems / length

Have a chat about the topics you liked. Change topics and partners frequently.

3. NO FOSSIL FUELS: Students A **strongly** believe we should stop using all fossil fuels next year; Students B **strongly** believe this is impossible. Change partners again and talk about your conversations.

4. 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
Solar energy		
Wave power		
Wind power		
Biofuel		
Hydroelectricity		
Nuclear power		

5. SATELLITE: Spend one minute writing down all of the different words you associate with the word "satellite". Share your words with your partner(s) and talk about them. Together, put the words into different categories.

6. WIRELESS: Rank these with your partner. Put the best wireless things at the top. Change partners often and share your rankings.

- Electricity
- Internet
- Speakers
- Ear buds
- Mouse
- Remote controls
- Garage door opener
- Radios

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

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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**
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

3. PHRASE MATCH: (Sometimes more than one choice is possible.)

1. The world is in a climate	a. wirelessly from space
2. It has approved a three-year	b. fuel
3. send energy	c. shortages
4. have many of these giant satellites	d. economies
5. reduce energy	e. in orbit
6. create a clean and secure energy	f. lot of problems
7. carbon-neutral	g. crisis
8. fossil	h. fantastic
9. this would be absolutely	i. future
10. solve a	j. project

GAP FILL

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

The world is in a climate (1) _____. We need to change how we get our power. This means we need to end the use of (2) _____ 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 (4) _____ a three-year project to test huge solar farms in space. ESA engineers hope to send energy (5) _____ from space into people's homes. Testing will take place over three years. An ESA spokesperson said one solar-farm (6) _____ could create the same amount of electricity as a power station on Earth. She added that the aim is to have many of these giant satellites in (7) _____. They could cut our use of fossil fuels and reduce energy (8) _____.

approved

fossil

shortages

crisis

orbit

provide

satellite

wirelessly

The ESA project is called Solaris. The ESA states on its website that it wants to create "a clean and (9) _____ energy future for European citizens". Josef Aschbacher, the director-general of the ESA, told the BBC that (10) _____ power from space could be of "enormous" help. He said: "We need to (11) _____ into carbon-neutral economies and (12) _____ change the way we produce energy. We especially need to (13) _____ 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 (14) _____, this would be absolutely fantastic. It would (15) _____ a lot of problems." The satellites will be around 1.7 km long. The International Space Station is 110 m in (16) _____.

solar

therefore

length

yet

convert

solve

secure

reduce

LISTENING – Guess the answers. Listen to check.

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

1) The world is in a climate crisis. We need to change how we _____
   a. get your power
   b. get our powers
   c. get our power
   d. gets our power
2) It has approved a three-year project to test huge solar _____
   a. farm sin space
   b. fanzine space
   c. far mines space
   d. farms in space
3) ESA engineers hope to send energy wirelessly from space _____
   a. unto people's homes
   b. into people's homes
   c. into peoples home
   d. in two people's homes
4) She added that the aim is to have many of these giant _____
   a. satellites in a bit
   b. satellites inner bit
   c. satellites in orbit
   d. satellites in awe bit
5) They could cut our use of fossil fuels and _____
   a. deduce energy shortages
   b. reduce energy shortages
   c. induce energy shortages
   d. rid juice energy shortages
6) it wants to create a clean and secure energy future _____
   a. for European citizen
   b. for Europe citizens
   c. four European citizens
   d. for European citizens
7) ESA told the BBC that solar power from space could be _____
   a. of enormous help
   b. off enormous help
   c. oft enormous help
   d. of enormous helps
8) We especially need to reduce the _____
   a. fossil fuel apart
   b. fossil fuel pat
   c. fossil fuel pert
   d. fossil fuel part
9) I'm saying 'if we could,' because we are not there yet, this would _____
   a. be absolute fantastic
   b. be absolutely fan tasty
   c. be absolutely fantastic
   d. been absolute leafy artistic
10) The International Space Station is _____
   a. 110 m on length
   b. 110 m in length
   c. 110 m sin length
   d. 110 m in leant

LISTENING – Listen and fill in the gaps

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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

The ESA project is called Solaris. The ESA (7) _____ website that it wants to create "a clean and (8) _____ for European citizens". Josef Aschbacher, the director-general of the ESA, told the BBC that solar power from space could (9) _____ help. He said: "We need (10) _____ carbon-neutral economies and therefore change the way we produce energy. We especially (11) _____ 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 yet, this would (12) _____. It would solve a lot of problems." The satellites will be around 1.7 km long. The International Space Station is 110 m in length.

COMPREHENSION QUESTIONS

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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?

MULTIPLE CHOICE - QUIZ

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

1) What does the article say we need to change?
a) batteries
b) how we get power
c) how much electricity we use
d) electricity wires

2) How long will the space agency test the solar space farms?
a) a year
b) four years
c) two years
d) three years

3) What will one solar farm produce the same amount of energy as?
a) a power station
b) the Sun
c) 10,000 batteries
d) 10,000 electric cars

4) How many of the satellites does the agency want to have in space?
a) a dozen
b) a few
c) many
d) half a dozen

5) What kind of shortages could the ESA project reduce?
a) food shortages
b) energy shortages
c) battery shortages
d) wi-fi shortages

6) What's the name of the solar farm project?
a) Solaris
b) Polaris
c) Claris
d) Orbit

7) Who might the solar farms give a secure energy future to?
a) the world
b) CEOs
c) European citizens
d) rich people

8) What did an ESA spokesperson say we needed to convert into?
a) carbon-neutral economies
b) hydrogen
c) sustainable lifestyles
d) wireless lifestyles

9) What did an ESA spokesperson say the solar farms would solve?
a) a lot of problems
b) very little
c) everything
d) the meaning of life

10) How long is a solar farm satellite?
a) 110 m
b) 117 m
c) 11.7 km
d) 1.7 km

ROLE PLAY

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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.

AFTER READING / LISTENING

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

1. WORD SEARCH: Look in your dictionary / computer to find collocates, other meanings, information, synonyms … for the words 'solar' and 'energy'.

solar	**energy**

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

2. ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

3. GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning…?

4. VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

5. TEST EACH OTHER: Look at the words below. With your partner, try to recall how they were used in the text:

• crisis • work • huge • homes • station • shortages	• website • BBC • convert • part • yet • length

SOLAR ENERGY SURVEY

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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, interview other students. Write down their answers.

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

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

SOLAR ENERGY DISCUSSION

STUDENT A's QUESTIONS (Do not show these to student B)

1. What did you think when you read the headline?
2. What images are in your mind when you hear the word 'solar'?
3. What do you know about solar energy?
4. Why is the world in a climate crisis?
5. What do you think of fossil fuels?
6. What do you think of wireless solar energy from space?
7. Have you ever experienced an energy shortage?
8. Would you like wireless electricity to end all power cords?
9. What forms of clean energy do you use?
10. What's the best form of clean and green energy?

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SOLAR ENERGY DISCUSSION

STUDENT B's QUESTIONS (Do not show these to student A)

11. Did you like reading this article? Why/not?
12. What do you think of when you hear the word 'energy'?
13. What do you think about what you read?
14. What do you think of solar energy?
15. How does the world get out of its climate crisis?
16. What can we use instead of fossil fuels?
17. What do you think of a wireless world for power and communications?
18. Do you think wireless electricity might be dangerous
19. Where will the climate crisis be in 30 years from now?
20. What questions would you like to ask the scientists?

DISCUSSION (Write your own questions)

STUDENT A's QUESTIONS (Do not show these to student B)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

DISCUSSION (Write your own questions)

STUDENT B's QUESTIONS (Do not show these to student A)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

LANGUAGE - CLOZE

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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.

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) _____.

Put the correct words from the table below in the above article.

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
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
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

SPELLING

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Paragraph 1

1. The world is in a climate rcsiis
2. rovpide millions of homes with clean energy
3. send energy esslriwely
4. the same numato of electricity
5. many of these giant iasteletsl in orbit
6. energy sagstorhe

Paragraph 2

7. energy future for European tziinesc
8. be of enormuso help
9. We especially need to eeurcd the fossil fuel part
10. this would be absolutely tacnatsif
11. It would olsve a lot of problems
12. 110 m in ghnlte

PUT THE TEXT BACK TOGETHER

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Number these lines in the correct order.

( ) of electricity as a power station on Earth. She added that the aim is to have many of

( ) The ESA project is called Solaris. The ESA states on its website that it wants to create "a clean and secure energy

( ) these giant satellites in orbit. They could cut our use of fossil fuels and reduce energy shortages.

( ) from space could be of "enormous" help. He said: "We need to convert into carbon-neutral economies and therefore change

( ) on work that could provide millions of homes with clean energy. It has approved a three-year project to test huge

( ) end the use of fossil fuels, like oil and gas. The European Space Agency (ESA) has started

(***1***) The world is in a climate crisis. We need to change how we get our power. This means we need to

( ) "If you can do it from space, and I'm saying 'if we could,' because we are not there

( ) yet, this would be absolutely fantastic. It would solve a lot of problems." The satellites will

( ) solar farms in space. ESA engineers hope to send energy wirelessly from space into people's

( ) be around 1.7 km long. The International Space Station is 110 m in length.

( ) the way we produce energy. We especially need to reduce the fossil fuel part of our energy production." He added:

( ) future for European citizens". Josef Aschbacher, the director-general of the ESA, told the BBC that solar power

( ) homes. Testing will take place over three years. An ESA spokesperson said one solar-farm satellite could create the same amount

PUT THE WORDS IN THE RIGHT ORDER

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

1. world is The a climate crisis. in

2. like fuels End use the oil. of fossil

3. It homes of clean energy. millions with provides

4. space wirelessly from energy into people's homes. Send

5. satellites these in Have of many giant orbit.

6. energy clean a and Create secure future.

7. is enormous of Solar space help. power from

8. part. reduce We to fuel need fossil the

9. you can space. it do If from

10. would a problems. of It solve lot

CIRCLE THE CORRECT WORD (20 PAIRS)

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

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

The ESA project is *called / calling* Solaris. The ESA states on its website that it wants to create "a clean and secure *energy / energetic* future for European citizens". Josef Aschbacher, the director-general of the ESA, *said / told* the BBC that solar power from space could be *of / to* "enormous" help. He said: "We need to convert *onto / into* carbon-neutral economies and therefore change the way we produce energy. We especially need to *increase / reduce* the fossil fuel part of our energy *prediction / production*." He added: "If you can do it from space, and I'm saying 'if we could,' because we are not there *yet / already*, this would be absolutely fantastic. It would *solve / absolve* a lot of problems." The satellites will be around 1.7 km long. The International Space Station is 110 m in *longing / length*.

Talk about the connection between each pair of words in italics, and why the correct word is correct. Look up the definition of new words.

INSERT THE VOWELS (a, e, i, o, u)

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Th_ w_rld _s _n _ cl_m_t_ cr_s_s. W_ n__d t_ ch_ng_ h_w w_ g_t __r p_w_r. Th_s m__ns w_ n__d t_ _nd th_ _s_ _f f_ss_l f__ls, l_k_ __l _nd g_s. Th_ __r_p__n Sp_c_ _g_ncy (_S_) h_s st_rt_d _n w_rk th_t c__ld pr_v_d_ m_ll__ns _f h_m_s w_th cl__n _n_rgy. _t h_s _ppr_v_d _ thr__-y__r pr_j_ct t_ t_st h_g_ s_l_r f_rms _n sp_c_. _S_ _ng_n__rs h_p_ t_ s_nd _n_rgy w_r_l_ssly fr_m sp_c_ _nt_ p__pl_'s h_m_s. T_st_ng w_ll t_k_ pl_c_ _v_r thr__ y__rs. _n _S_ sp_k_sp_rs_n s__d _n_ s_l_r-f_rm s_t_ll_t_ c__ld cr__t_ th_ s_m_ _m__nt _f _l_ctr_c_ty _s _ p_w_r st_t__n _n __rth. Sh_ _dd_d th_t th_ __m _s t_ h_v_ m_ny _f th_s_ g__nt s_t_ll_t_s _n _rb_t. Th_y c__ld c_t __r _s_ _f f_ss_l f__ls _nd r_d_c_ _n_rgy sh_rt_g_s.

Th_ _S_ pr_j_ct _s c_ll_d S_l_r_s. Th_ _S_ st_t_s _n _ts w_bs_t_ th_t _t w_nts t_ cr__t_ "_ cl__n _nd s_c_r_ _n_rgy f_t_r_ f_r __r_p__n c_t_z_ns". J_s_f _schb_ch_r, th_ d_r_ct_r-g_n_r_l _f th_ _S_, t_ld th_ BBC th_t s_l_r p_w_r fr_m sp_c_ c__ld b_ _f "_n_rm__s" h_lp. H_ s__d: "W_ n__d t_ c_nv_rt _nt_ c_rb_n-n__tr_l _c_n_m__s _nd th_r_f_r_ ch_ng_ th_ w_y w_ pr_d_c_ _n_rgy. W_ _sp_c__lly n__d t_ r_d_c_ th_ f_ss_l f__l p_rt _f __r _n_rgy pr_d_ct__n." H_ _dd_d: "_f y__ c_n d_ _t fr_m sp_c_, _nd _'m s_y_ng '_f w_ c__ld,' b_c__s_ w_ _r_ n_t th_r_ y_t, th_s w__ld b_ _bs_l_t_ly f_nt_st_c. _t w__ld s_lv_ _ l_t _f pr_bl_ms." Th_ s_t_ll_t_s w_ll b_ _r__nd 1.7 km l_ng. Th_ _nt_rn_t__n_l Sp_c_ St_t__n _s 110 m _n l_ngth.

PUNCTUATE THE TEXT AND ADD CAPITALS

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

the world is in a climate crisis we need to change how we get our power this means we need to end the use of fossil fuels like oil and gas the european space agency esa has started on work that could provide millions of homes with clean energy it has approved a threeyear project to test huge solar farms in space esa engineers hope to send energy wirelessly from space into peoples homes testing will take place over three years an esa spokesperson said one solarfarm satellite could create the same amount of electricity as a power station on earth she added that the aim is to have many of these giant satellites in orbit they could cut our use of fossil fuels and reduce energy shortages

the esa project is called solaris the esa states on its website that it wants to create a clean and secure energy future for european citizens josef aschbacher the directorgeneral of the esa told the bbc that solar power from space could be of enormous help he said we need to convert into carbonneutral economies and therefore change the way we produce energy we especially need to reduce the fossil fuel part of our energy production he added if you can do it from space and im saying if we could because we are not there yet this would be absolutely fantastic it would solve a lot of problems the satellites will be around 17 km long the international space station is 110 m in length

PUT A SLASH (/) WHERE THE SPACES ARE

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Theworldisinaclimatecrisis.Weneedtochangehowwegetourpower.Thismeansweneedtoendtheuseoffossilfuels,likeoilandgas.TheEuropeanSpaceAgency(ESA)hasstartedonworkthatcouldprovidemillionsofhomeswithcleanenergy.Ithasapprovedathree-yearprojecttotesthugesolarfarmsinspace.ESAengineershopetosendenergywirelesslyfromspaceintopeople'shomes.Testingwilltakeplaceoverthreeyears.AnESAspokespersonsaidonesolar-farmsatellitecouldcreatethesameamountofelectricityasapowerstationonEarth.Sheaddedthattheaimistohavemanyofthesegiantsatellitesinorbit.Theycouldcutouruseoffossilfuelsandreduceenergyshortages.TheESAprojectiscalledSolaris.TheESAstatesonitswebsitethatitwantstocreate"acleanandsecureenergyfutureforEuropeancitizens".JosefAschbacher,thedirector-generaloftheESA,toldtheBBCthatsolarpowerfromspacecouldbeof"enormous"help.Hesaid:"Weneedtoconvertintocarbon-neutraleconomiesandthereforechangethewayweproduceenergy.Weespeciallyneedtoreducethefossilfuelpartofourenergyproduction."Headded:"Ifyoucandoitfromspace,andI'msaying'ifwecould,'becausewearenotthereyet,thiswouldbeabsolutelyfantastic.Itwouldsolvealotofproblems."Thesatelliteswillbearound1.7kmlong.TheInternationalSpaceStationis110minlength.

FREE WRITING

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

Write about **solar energy** for 10 minutes. Comment on your partner's paper.

ACADEMIC WRITING

From https://breakingnewsenglish.com/2211/221124-solar-energy-from-space.html

All energy will be clean and green in the future. Discuss.

HOMEWORK

1. VOCABULARY EXTENSION: Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

2. INTERNET: Search the Internet and find out more about this news story. Share what you discover with your partner(s) in the next lesson.

3. SOLAR ENERGY: Make a poster about solar energy. Show your work to your classmates in the next lesson. Did you all have similar things?

4. END FOSSIL FUELS: Write a magazine article about ending the use of fossil fuels next year. Include imaginary interviews with people who are for and against this.

Read what you wrote to your classmates in the next lesson. Write down any new words and expressions you hear from your partner(s).

5. WHAT HAPPENED NEXT? Write a newspaper article about the next stage in this news story. Read what you wrote to your classmates in the next lesson. Give each other feedback on your articles.

6. LETTER: Write a letter to an expert on solar energy. Ask him/her three questions about solar energy. Give him/her three of your ideas. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

VOCABULARY (p.4)

1.	f	2.	a	3.	d	4.	b	5.	g	6.	e	7.	c
8.	m	9.	h	10.	i	11.	l	12.	k	13.	n	14.	j

TRUE / FALSE (p.5)

1	F	2	F	3	F	4	T	5	T	6	T	7	T	8	T

SYNONYM MATCH (p.5)

1. g	2. d	3. i	4. b	5. f
6. c	7. j	8. a	9. e	10. h

COMPREHENSION QUESTIONS (p.9)

1. How we get power
2. Three years
3. A power station
4. Many
5. Energy shortages
6. Solaris
7. European citizens
8. Carbon-neutral economies
9. A lot of problems
10. 1.7 km

WORDS IN THE RIGHT ORDER (p.19)

1. The world is in a climate crisis.
2. End the use of fossil fuels like oil.
3. It provides millions of homes with clean energy.
4. Send energy wirelessly from space into people's homes.
5. Have many of these giant satellites in orbit.
6. Create a clean and secure energy future.
7. Solar power from space is of enormous help.
8. We need to reduce the fossil fuel part.
9. If you can do it from space.
10. It would solve a lot of problems.

MULTIPLE CHOICE - QUIZ (p.10)

1.	b	2.	d	3.	a	4.	c	5.	b	6.	a	7.	c	8.	a	9.	a	10.	d

ALL OTHER EXERCISES

Please check for yourself by looking at the Article on page 2.
(It's good for your English ;-)