










Scope and Sequence

	Topic	Vocabulary	Listening		Reading	Grammar	Writing	Speaking
1 pages 8–19	 Green Energy	Energy	- Green policies - Wind power farms		Is Nuclear Power Really Green Energy?	Passive voice	A petition	- Discussing global issues - Presenting ways to save energy
2 pages 20–31	 Mobile Payments	Banking	- E-bill is better - Credit theft		The Benefits of Mobile Banking	Indirect questions	An investment portfolio	Discussing the pros and cons of investing in cryptocurrencies
3 pages 32–43	 Local Fun	Tourism	- Ecotourism - Welcome to Baku		It's More Fun in the Philippines!	Noun clauses (<i>whoever, whichever, whether, etc.</i>)	Travel brochure	- Local things to do - Customizing a tour
Review 1 pages 44–47								
4 pages 48–59	 Checking In and Out	Accommodation	- At the front desk - Checking out and giving feedback		The World's Most Extreme Hotels	Phrasal verbs	Customer satisfaction review	- Front desk role-play - Asking about hotel facilities
5 pages 60–71	 Relationships	Dating	- Making friends online - A blind date		We Are All Idiots	- Transitive and intransitive verbs - Verbs followed by gerunds and infinitives	Your character features	- Describing people's personalities - Making pen pals
6 pages 72–83	 Planning Vacations	Budgeting	- Saving for the future - Planning ahead		Top Things to See and Do in Ukraine!	Modal auxiliaries	A travel plan	- Dream vacation spot - Writing a budget plan
Review 2 pages 84–87								

Topic		Vocabulary	Listening	Reading	Grammar	Writing	Speaking
7 pages 88–99	 Preparing Presentations	Marketing	- A product launch - Talking about a company		The Xiaomi Success Story	Relative clauses	Marketing materials for a product - Talking about a product - Discovering companies
8 pages 100–111	 Negotiation	Purchasing	- Buying in bulk - Making a deal		The Potential of NFTs	Adverb clauses	A quotation - Your business - How your business works
9 pages 112–123	 Socializing Etiquette	Socializing	- Preparing for a dinner with a client - Class reunion		2022: The Year Social Media Turned 20	<i>If</i> clauses	A reunion survey - Meeting for the first time - Breaking the ice
Review 3 pages 124–127							
10 pages 128–139	 Describing Events	Event description	- Attending a party - A conference		Let's All Go to the Aquarium!	<i>As if vs. As though</i>	Confirming attendance - Organizing an event - A beach cleanup campaign
11 pages 140–151	 Solving Problems	Complaint	- Problems with tech - It's undercooked!		Traits of the World's Best Problem Solvers	Participle clauses	A daily schedule - Solving conflicts - Finding a problem solver
12 pages 152–163	 Exhibitions	M.I.C.E.	- An upcoming exhibition - Flight details		Jules Verne and H.G. Wells—How Two Sci-Fi Pioneers Predicted the Future	Inversion	Career plan - Organizing activities after exhibitions - Making decisions
Review 4 pages 164–167							

1

Green Energy

Unit Goals:

- Learn how to talk about green policies and environmental issues
- Learn about the nuclear power issue
- Learn how to use passives in the past, present, and future

Warm-up

A Work with a partner. Look at the pictures and discuss the questions.



Questions:

1. What do each of the pictures have in common?
2. What can each of the things portrayed in the pictures help us do?
3. What do pictures a, b, and d show?
4. Which of the pictures does not show a renewable source of energy?

B Match the pictures to the correct descriptions.

1. _____ Hydropower harnesses the energy of moving water to create a renewable source of electricity.
2. _____ Wind power uses huge wind turbines to capture the energy of the earth's prevailing winds.
3. _____ By installing solar panels, people can power their homes using the heat energy of the sun.
4. _____ One of the most basic things we can all do to conserve energy is to turn off the lights when leaving a room.

Vocabulary

A Below are some words related to green energy. Listen and repeat them.

carbon neutral	footprint	offset	emitter
commitment	enforceable	coalition	renewable
turbine	grid	disrupt	migratory

B Match the definitions on the right to the correct words.

- | | |
|-------------------------|--|
| 1. _____ renewable | a. an amount or consideration that balances the effect of another |
| 2. _____ migratory | b. something which puts something into or adds something to the atmosphere |
| 3. _____ disrupt | c. the quality of removing as much CO ₂ from the atmosphere as one puts into it |
| 4. _____ carbon neutral | d. an animal which moves from place to place, often in time with the changing seasons |
| 5. _____ offset | e. to halt or stop someone or something from performing an action |
| 6. _____ emitter | f. describing something which can be used over and over again |

C Complete the sentences with the correct words.

grid	turbine	footprint
coalition	disrupt	commitment

1. In a hydroelectric dam, rushing water spins a _____, which in turn generates electricity.
2. In World War II, a _____ of allies fought against the likes of Germany, Japan, and Italy.
3. With its _____ to green architecture, the city is looking to reduce its carbon emissions.
4. In order to _____ the flow of illegal drugs into the country, border inspections have been increased.
5. Doing something as simple as turning the lights off when you leave a room can be enough to reduce your carbon _____.
6. This small cabin isn't hooked up to the electricity _____; it is solar-powered.

Listening 1



03

A Listen to the conversation.

- Angel:** What do you think about the new green energy policies that were announced by the president yesterday?
- Brad:** I think they are a good step forward. The main goal is to go **carbon neutral**¹ by the year 2040.
- Angel:** Right. They plan to put more emphasis on constructing more green buildings that utilize solar, wind, and hydropower.
- Brad:** That should be a big help. They are also planning to phase out gas-powered cars in the next ten years. Within a decade, all vehicle transportation, including public transportation, will be electric.
- Angel:** In the meantime, I heard the carbon **footprint**² will be reduced by the government buying carbon **offsets**³. Do you understand that at all?
- Brad:** You can think of it like this. Let's say a ton of CO₂ is being put into the atmosphere by your country. They can then buy a carbon offset, which could be, for example, paying people to plant trees in another country.
- Angel:** Oh, so in theory those trees that get planted would then remove that CO₂ from the atmosphere.
- Brad:** That's the general idea. What we really need, though, is for the world's biggest **emitters**⁴ of greenhouse gases to actually turn their green energy **commitments**⁵ into law.
- Angel:** I agree. If it's just a policy or a proposal, it's not actually **enforceable**⁶. Are any countries carbon neutral already?
- Brad:** I read that the countries of Bhutan and Suriname are already carbon neutral. And Uruguay isn't far behind. They are set to become carbon neutral by 2035.
- Angel:** More and more countries are joining the Carbon Neutrality **Coalition**⁷, too. It's an international organization that asks member states to target 2050 as the year they will become carbon neutral.
- Brad:** I hope the entire world will sign up. If we're going to stop the worst effects of climate change, the time is now.

B Choose the correct answer for each question.

- When does the speakers' country plan to go carbon neutral by?
 - 2035
 - 2040
 - 2045
 - 2050
- What do the speakers say will happen within the next ten years?
 - All electric vehicles will be declared illegal.
 - People will be encouraged to buy more gas-powered vehicles.
 - All gas-powered vehicles will be taken off the street.
 - All electric vehicles will be converted to gas-powered.

- What is the most urgent thing that is required to combat climate change?
 - All nations of the world need to stop consuming energy entirely.
 - Countries around the world need to increase their overall energy consumption.
 - Individual consumers need to buy more solar panels and wind turbines.
 - The worst polluters need to turn their green energy policies into law.
- How many countries are currently carbon neutral, according to the speakers?
 - One
 - Two
 - Three
 - Four

04

C Listen and choose the best response for each question or statement.

- I'll start working on those proposals.
 - I think it's a good start.
 - It will be announced shortly.
 - The policy is being considered.
- The gas-powered car market is sure to get bigger.
 - Soon there will be no more gas-powered vehicles at all.
 - In two decades, there will only be gas-powered vehicles on the road.
 - It's strange that they want to make more and more gas-powered vehicles.
- Yes, it has no power whatsoever.
 - Yes, nobody has to follow it.
 - Yes, it has been written into law.
 - Yes, it's more of an idea than a law.
- Soon Uruguay will be carbon neutral as well.
 - I wonder why they refuse to go carbon neutral.
 - Thankfully Uruguay is already carbon neutral.
 - What is taking Uruguay so long?

Useful Expressions

- I think they are a *good step forward*.
- They plan to *put more emphasis on* constructing more green buildings.
- Let's say* a ton of CO₂ is being put into the atmosphere by your country.
- They *are set to become* carbon neutral by 2035.

05

D Listen and choose the statement that best describes each picture.



Listening 2

A Listen to the short talk and put the sentences in the correct order from a to f.

1. _____ Once made, they emit no greenhouse gases whatsoever.
2. _____ Once installed, they don't need fuel.
3. _____ So, as you can see, wind energy can be somewhat hit-and-miss.
4. _____ With all that being said, there are some drawbacks.
5. _____ As head of a renewable energy firm, I hear a lot about the pros and cons of wind farms.
6. _____ They are dependent on the wind.

B Listen again. Check the pictures that are mentioned in the talk.



C Circle *True* or *False* for each of the statements below.

- | | |
|--|--------------|
| 1. Wind turbines are inexpensive to build. | True / False |
| 2. Once installed, wind turbines require fuel. | True / False |
| 3. Farm owners are paid for the right to put turbines on their land. | True / False |
| 4. Wind turbines can pose some hazards to wildlife. | True / False |
| 5. Wind turbines are noisy. | True / False |

Reading

A Read the article about nuclear power.

Is Nuclear Power Really Green Energy?

Nuclear energy is often a very **controversial**¹ subject. While many maintain that it is a safe, **reliable**² energy source, accidents can and do happen. In 1986, the Chernobyl Nuclear Power Plant in Ukraine suffered a **catastrophic**³ power increase. The result was an explosion of the plant's core, and fires which caused **radioactive**⁴ material to become **airborne**⁵. The radioactive cloud spread as far away as Norway, and a large area of land surrounding the plant itself was deemed **uninhabitable**⁶ for decades after.

This incident might seem isolated, and in a sense it is, but it is also proof that nuclear power is not entirely safe. Still, during a time when nations are concerned about their carbon footprint, and about reducing the level of greenhouse gasses that they emit into the earth's atmosphere, nuclear power still makes for a **tempting**⁷ **alternative**⁸ to burning fossil fuels.

Generating nuclear power relies on using up radioactive fuel, known as fuel rods, usually made of uranium. Using that fuel does not produce greenhouse gases, but it cannot be reused. Instead of greenhouse gases, nuclear waste is produced by nuclear power **generators**⁹, and this must be safely **contained**¹⁰.

Though no greenhouse gases are produced by nuclear power plants themselves, there is another **angle**¹¹ to consider. The fuel that is used in nuclear power plants has to be **mined**¹². This requires the operation of equipment that burns fossil fuels. The nuclear fuel must then be transported, and again this usually requires the burning of fossil fuels.

On the other hand, nuclear power is still the second-largest source of low-carbon energy on the planet, coming in second only to hydropower. In fact, in some countries, nuclear power is **vital**¹³ to meeting goals of carbon neutrality. The UK, for instance, likely wouldn't stand a chance of becoming carbon neutral if it weren't for its 11 operational nuclear power plants.

The reason why places such as the UK are still **reliant**¹⁴ on nuclear power, and not on renewable energy sources such as hydro, solar, and wind energy, is because there isn't yet enough renewable energy **infrastructure**¹⁵ that has been set up. This is combined with the fact that renewable energy sources are not always reliable. If the wind doesn't blow, for example, wind turbines don't **spin**¹⁶, and no power is generated. Nuclear power plants, on the other hand, rarely if ever go offline.



It is worth noting as well that even many forms of so-called “clean” energy, such as solar power, for example, are not without any form of waste entirely. Utilizing solar panels to harness the power of the sun, for instance, might not generate much in terms of greenhouse gases, with lifetime emissions estimated at 40 grams of CO₂ per kilowatt hour. However, solar panels **degrade**¹⁷ over time. They cannot be reused, and when they are done working, they have to be **disposed of**¹⁸.

In some countries that have adopted solar widely, such as Japan, disposing of vast quantities of solar panels which no longer work is already becoming a problem. By 2040, it is estimated that Japan will have to find a way to dispose of around 800,000 tons of used-up solar panels per year. What this proves is that, in reality, there is no energy source that is completely green. Whenever we seek to generate electricity, even from renewable sources, there is a price to pay in terms of greenhouse gas emissions and other wastes that can harm the natural environment.



The best that can be said of nuclear power is that it is a potentially green source of

energy. But its status as such depends on how responsibly nuclear fuel is mined and **processed**¹⁹, how safely nuclear plants are operated so as to avoid disasters like Chernobyl, and how safely and transparently nuclear waste is disposed of so that it cannot cause harm to human populations in the future.

B Choose the correct answer for each question.

- Based on the article, which of the following can be said of nuclear power?
 - It is an entirely safe source of clean energy.
 - It is much cleaner in terms of waste than solar power.
 - It is not entirely clean, and not totally safe.
 - It produces no waste at all, unlike solar energy.
- Why is the UK still reliant on nuclear power?
 - Because renewable energy sources often run out.
 - Because many of the UK's nuclear power plants are not running efficiently.
 - Because of political pressure to keep the jobs associated with nuclear power.
 - Because renewable energy sources aren't always reliable.

- What problem is Japan facing when it comes to solar energy?
 - Disposing of used solar panels that no longer work.
 - Manufacturing enough solar panels for the whole country.
 - Making solar panels affordable for everyone.
 - Building solar panels that never have to be disposed of.
- What conclusion does the article seem to reach about nuclear power?
 - It is our best bet for a carbon-neutral future.
 - It is only potentially a source of clean energy.
 - It is the only way to successfully fight against climate change.
 - It is something that should be quickly phased out.
- What must happen in order for nuclear power to be deemed safe?
 - Nuclear waste should be kept above ground at all costs.
 - Plants must be shut down and waste must be buried deep.
 - Nuclear power has already been deemed entirely safe.
 - Plants must be well-operated and waste disposed of carefully.

C Choose the correct word to complete each sentence.

- If plastic is disposed of, it takes a long time to _____ and break down, even decades.
 - display
 - degrade
 - detain
 - deploy
- In terms of public transportation _____, the city has a subway and a light rail system.
 - infrastructure
 - structure
 - indicator
 - applicator
- As a small and isolated island, the country is largely _____ on imported food and fuel.
 - pliant
 - defiant
 - compliant
 - reliant
- During the 19th century, there were many sites in California where gold was _____.
 - mined
 - funded
 - declined
 - lined
- If the power goes out, we have a backup _____ that will give us power for the lights and other appliances.
 - replicator
 - adjudicator
 - moderator
 - generator



Grammar Check

Passive Voice

When we use the passive voice in the present, past, and future, the main focus is on what or who receives the action. In other words, the main focus is on the object. Whether we are talking about the present, past, or future, the key to writing sentences or speaking them aloud using the passive voice is the verb “to be.”

Present simple passive

Subject + *be* + past participle

Examples:

- Wind turbines *are constructed* by various green energy firms in factories around the world.
- Hydropower projects *are planned* for fast-moving rivers throughout Southeast Asia.

Past simple passive

Subject + *was/were* + past participle

Examples:

- Solar panels *were installed* on the roof by qualified green energy professionals.
- Nuclear plants *were activated* around the country in the 1960s.

Future simple passive

Subject + *will* + *be* + past participle

Examples:

- The electric car factory *will be completed* in 2024.
- The nuclear waste *will be disposed* of in a remote underground location.

A Rewrite the sentences into passive sentences.

1. The workers are constructing a new wind farm.

2. The president commissioned a nuclear power plant.

3. Next week, I will install the solar panels.

4. That store sells energy-efficient light bulbs.

B Complete the conversation with the correct words in their passive form.

A: I heard some wind turbines are going to ① _____ (*install*) on your farm.

B: That's right. They ② _____ (*erect*) within the next month.

A: Are you concerned that birds ③ _____ (*affect*) by the turbines?

B: That is a concern, but I'm consulting with some biologists about what I can do to lessen the impact on the surrounding environment.

A: What about the cost? Some turbines ④ _____ (*make*) for my neighbor's land a while back. He said it was quite costly.

B: Actually, there is no cost on my end. I get paid for having them on my land, in fact!

C Put the sentences in the correct position to complete the passage.

The largest hydroelectric dam in the world is China's Three Gorges Dam. ① _____. The reason it took so long becomes clear when one examines the sheer size of the dam. Along the top, the length of the dam is an astonishing 2,335 meters. ② _____. The amount of steel used could have built 63 Eiffel Towers. The cost of building the huge project was as immense as the dam itself, coming in at an estimated US\$22.5 billion. ③ _____. Another third was spent on relocating residents who lived along parts of the Yangtze River in Hubei that would be flooded by the dam. ④ _____. This is because the new dam, once complete, created a reservoir that was 660 kilometers long, on average. ⑤ _____. Though the cost and dimensions were sky high, it was reported, however, that the dam was so efficient in generating renewable energy that the costs were recovered by December of 2013.

- Meanwhile, the top of the dam sits at 181 meters above the ground.
- Millions of people had to be moved.
- Construction on the project began in 1994, and was completed in 2012.
- It was also over a kilometer wide along much of its expanse.
- Only about a third of that cost was spent on the actual construction, though.



Guided Writing

A Read the petition from an organization.



Stop the Faroe Islands Whale Slaughter

Every year, in the Faroe Islands, people engage in a practice known as “The Grind.” They herd pilot whales, which are actually a species of dolphin, into a secluded cove. Once in the cove, the pilot whales are helpless, and there they are mercilessly slaughtered.

In September of 2021 alone, over 1,400 pilot whales were killed in the Faroe Islands. Though the Faroese people maintain that The Grind is a cultural practice, we at Sea Shepherd say that it is cruel, unsustainable, and goes against European animal welfare standards. It is unregulated, there are no quotas to maintain a healthy population of pilot whales, and no oversight of the hunt.

Pilot whales are a key part of the marine ecosystem. And so, we say today, that The Grind must be brought to an immediate halt.

Stop The Grind now!

B Now, make up your own petition.

Stop the _____

Every year, in the _____, people _____.

They _____. Once _____, the _____, and _____.

In _____ alone, over _____ were _____ in the _____. Though the _____ maintain that _____, we at _____ say that it _____, and _____. It is _____, there are _____, and no _____.

_____ are a key part of _____. And so, we say today, _____.

Stop _____ now!

Speaking

A Work with a partner. Use the following phrases to help you discuss global issues.

- I feel that . . .
- In my opinion . . .
- I maintain . . .
- According to my research . . .
- What I found is that . . .
- In the course of my studies on the subject . . .
- I also discovered . . .



B Discuss ways that can help save energy and write down how you and your partner do this.

You	Your Partner

C Listen to a sample dialogue. Then discuss how you can help save energy.

- A:** *In my opinion*, one of the easiest ways to save energy is to find simple things we can all do every day.
- B:** *What I found is that* by turning off the lights whenever I leave a room, I can lower my energy consumption significantly.
- A:** *In the course of my studies on the subject*, I also discovered that energy-efficient light bulbs can make a huge difference.
- B:** *I maintain* that it's up to all of us to reduce our carbon footprint, and there are many ways we can all do this.