



A Green-Powered Canada

Students will research and present on renewable energy in Canada – on resources currently being used and those in development.



Learning outcomes

By the end of this activity, students:

- ✓ will have described at least one renewable type of power produced in Canada
- ✓ will be able to confidently communicate the advantages and disadvantages of a variety of energy resources

Complete **ONE** of the following options.

You will only be able to submit work and get credit for one option.



Option 1

A class debate

Students will research current energy production in Canada and hold a class debate on the role renewable energy will have in Canada's energy future.

Option 2

A research project on renewable energy

Students will research renewable energy in Canada and discuss its role in Canada's energy future.

Important

Please respect all school and governmental guidelines and restrictions surrounding COVID-19. Review the 2021 CDC COVID-19 policy [here](#). This challenge does NOT require students to participate in an in-person event.



FOSSIL FUELS



BIOMASS



NUCLEAR



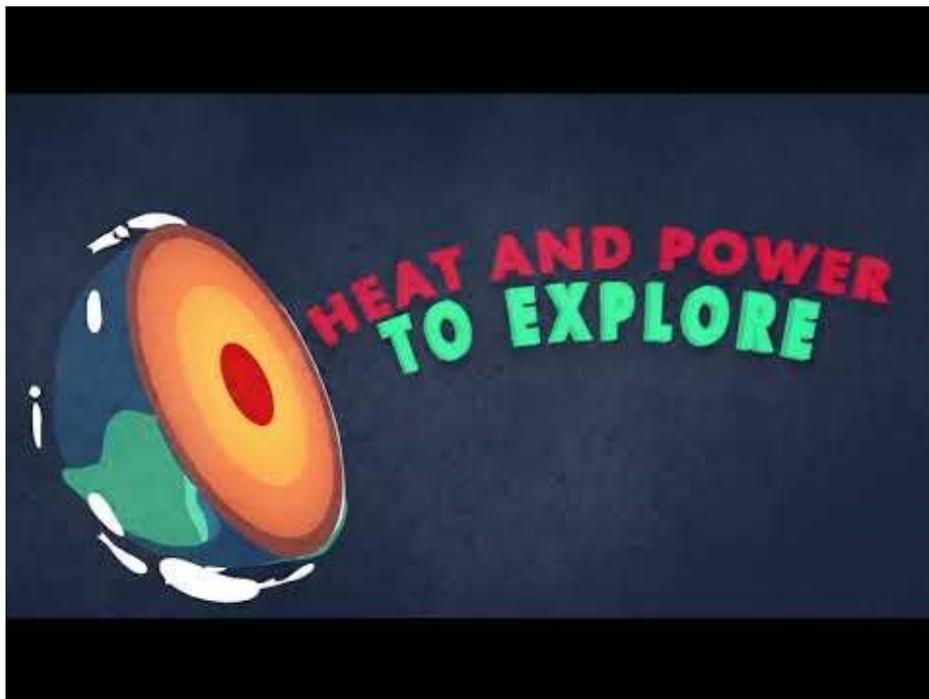
RENEWABLE

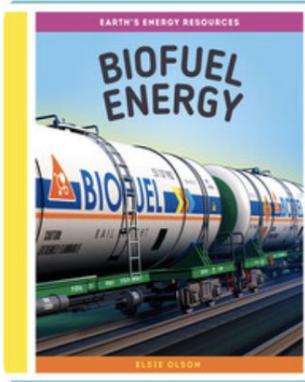


Listen carefully to learn about the different types of energy.

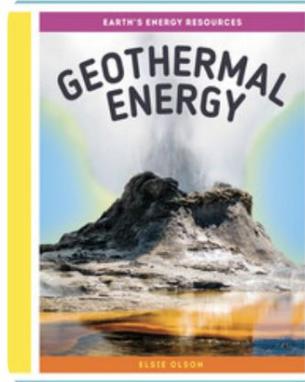


There is no sound. Enlarge to read the types.

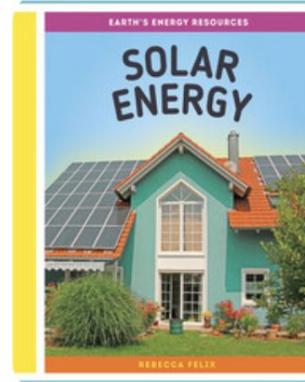




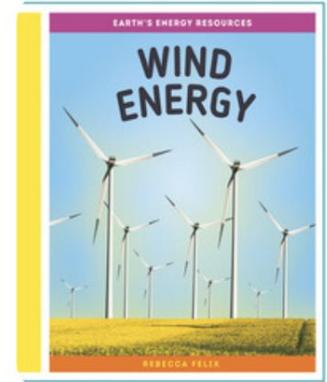
Earth's Energy Resources: Biofuel...



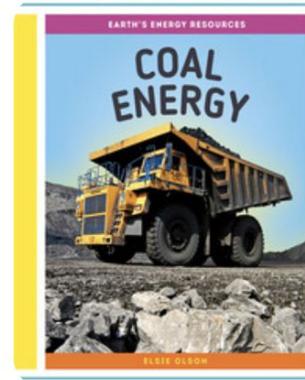
Earth's Energy Resources:...



Earth's Energy Resources: Solar...



Earth's Energy Resources: Wind...

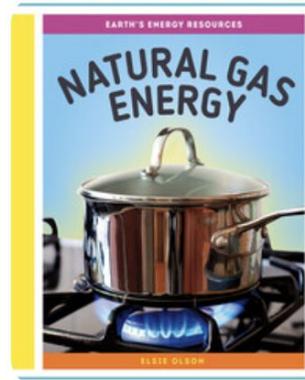


Earth's Energy Resources: Coal...

Age: 4-9
Level: 18 *
Pages: 22



Assign

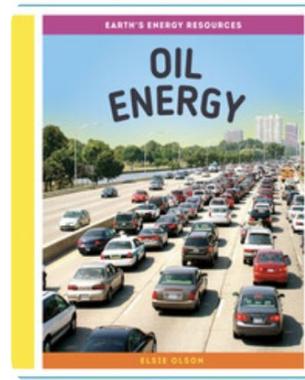


Earth's Energy Resources: Natural...

Age: 4-9
Level: 24 *
Pages: 22



Assign

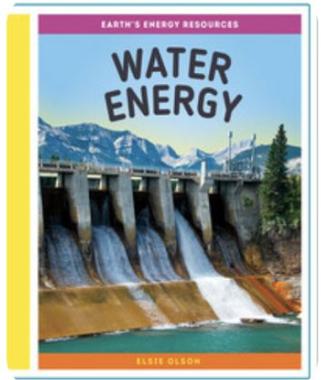


Earth's Energy Resources: Oil Energy

Age: 4-9
Level: 20 *
Pages: 22



Assign



Earth's Energy Resources: Water...

Age: 4-9
Level: 24 *
Pages: 22



Assign

Resources on EPIC



A Green-Powered Canada

Name Caleb

Date march 15,2021

Worksheet

Energy source

Biofuel energy

Type of resource (circle one)

Renewable

Non-renewable

Definition

Biofuel is any fuel that is derived from biomass—that is, plant or algae material or animal waste.

Benefits

1. We use it everyday.
2. it comes from many resources.

Drawbacks

1. It can cost a lot of money
1. May break down

How is this energy source being used in Canada?

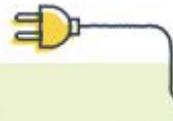
It is being used in cars and different types of ways.

What role could this energy source have in the future?

It can be used if we run out of fossil fuels.

Provide two reliable sources for people who would like to learn more about this energy source:

Green planet: Biofuel energy by Elsie olson.





A Green-Powered Canada

Name Avis man.

Date Monday march 15, 2021.

Worksheet

Energy source	Wind energy.
Type of resource (circle one)	<input checked="" type="radio"/> Renewable <input type="radio"/> Non-renewable
Definition	It is from the wind and makes kinetic energy.
Benefits	Drawbacks
Wind is a natural resource. Does not make pollution.	It can kill birds. It takes up space.
How is this energy source being used in Canada?	
It is in a part of canada energy production. People first built windmills.	
What role could this energy source have in the future?	
Canada should make more of these.	
Provide two reliable sources for people who would like to learn more about this energy source:	
Wind Energy Rebecca Felix.	





A Green-Powered Canada

Name Haylie

Date March 15, 2021

Worksheet

Energy source	<i>Coal Energy</i>	
Type of resource (circle one)	Renewable	<u>Non-renewable</u>
Definition	<i>It makes electricity of everyday life.</i>	
Benefits	<i>Coal is something that we use everyday and I am using it now!</i>	Drawbacks
		<i>Sadly, coal is bad for the environment.</i>
How is this energy source being used in Canada?	<i>We play games and work on them and we in the house, never stop using it.</i>	
What role could this energy source have in the future?	<i>We can run out of this energy and it takes a lot time to mine coal.</i>	
Provide two reliable sources for people who would like to learn more about this energy source:	<i>Elsie Olson Earth's Energy Resources: Coal Energy</i>	





A Green-Powered Canada

Name Daisy

Date Monday March 15
2021

Worksheet

Energy source	Gasoline	
Type of resource (circle one)	Renewable	Non-renewable
Definition	Gasoline is used to power cars and other things like trucks and spaceships.	
Benefits	Drawbacks	
Now we can go to the grocery store and get food! With our car! Unless you know your close enough to walk to the store.	It causes pollution and then you don't get your exercise! It will run out eventually so it's non-renewable.	
How is this energy source being used in Canada?		
It's used for most vehicles and other stuff..		
What role could this energy source have in the future?		
It can be used to power cool robots or it can create a machine that mines diamond automatically!		
Provide two reliable sources for people who would like to learn more about this energy source:		
I read a book on epic on gasoline it was by the author Kevin Cunningham. I also read a book on bricatana school. It was an article on gasoline. "Technology and Invention." <i>Britannica School</i> , Encyclopædia Britannica, 18 Feb. 2021. school.eb.com/levels/elementary/article/Technology-and-Invention/353296#253812 . Accessed 15 Mar. 2021.		



A Green-Powered Canada

Name Eugenia

Date rn

Worksheet

Energy source	Natural gas	
Type of resource (circle one)	Renewable	Non-renewable
Definition	It is a fossil fuel. It is made from dead plant and animals in swamps.	
Benefits	Drawbacks	
It is good because gas makes heat which helps us live. Pipes bring gas to our homes. It pollutes less than oil or coal.	It is bad because it cause a lot of damaging to the environment. It takes millions of years to make natural gas. People harm the environment when they drill wells.	
How is this energy source being used in Canada?	It is use for heat and cooking.	
What role could this energy source have in the future?	Natural gas in expensive. Canada will continue to use it for many decades.	
Provide two reliable sources for people who would like to learn more about this energy source:	Earth's Energy Resources: Natural Gas Energy By: Elsie Olson How Did That Get To My House? Natural Gas By: Nancy Robinson Masters	
"Natural Gas." <i>Britannica School</i> , Encyclopædia Britannica, 5 Jan. 2021. school.eb.com/levels/elementary/article/Natural-Gas/399474 . Accessed 16 Feb. 2021.		



A Green-Powered Canada

Name Iris

Date Monday
march 15

Worksheet

Energy source	Wind power
Type of resource (circle one)	<input checked="" type="radio"/> Renewable <input type="radio"/> Non-renewable
Definition	Environmental friendly energy.
Benefits	Drawbacks
Is good for the environment. Doesn't waste a lot of money	People don't like the wind farms they think it takes away the beauty of the land.
How is this energy source being used in Canada?	
Used to sail boats cut wood and mill grain. Today we use it to have electricity.	
What role could this energy source have in the future?	
It could be used to make rooms cold.	
Provide two reliable sources for people who would like to learn more about this energy source:	
Green planet wind power by rebecca pettiford. EPIC books for kids.	





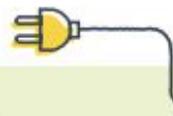
A Green-Powered Canada

Name Wenbin

Date March 10, 2021

Worksheet

Energy source	Water Energy	
Type of resource (circle one)	<u>Renewable</u>	Non-renewable
Definition	Comes from the power of water	
Benefits	Drawbacks	
Matches other renewable energy	Weather could cause water sources to dry up.	
How is this energy source being used in Canada?		
A hydroelectric dam captures energy from the movement of a river		
What role could this energy source have in the future?		
Will not pollute the air. Each country can produce their own water energy.		
Provide two reliable sources for people who would like to learn more about this energy source:		
Youtube video on renewable energy for kids. National Geographic Epic books for kids: Water Energy by Elsie Olson		





A Green-Powered Canada

Name Shruti

Date March 15 2021

Worksheet

Energy source	<i>Biofuel Energy</i>	
Type of resource (circle one)	<u>Renewable</u>	Non-renewable
Definition	<i>Comes from plants</i>	
Benefits	Drawbacks	
<input type="text"/>	<input type="text"/>	
How is this energy source being used in Canada?		
<input type="text"/>		
What role could this energy source have in the future?		
<input type="text"/>		
Provide two reliable sources for people who would like to learn more about this energy source:		
<input type="text"/>		





A Green-Powered Canada

Name jerry

Date 2021/3/14

Worksheet

Energy source	Wind energy	
Type of resource (circle one)	<u>Renewable</u>	Non-renewable
Definition	It is from the wind and sources.	
Benefits	Wind is a natural resource.	Drawbacks
		It can kill birds.
How is this energy source being used in Canada?		
It is in a part of canada energy production plan and it generates energy		
What role could this energy source have in the future?		
It can power up countries!		
Provide two reliable sources for people who would like to learn more about this energy source:		
Earth's energy resources:wind energy Rebecca felix		





A Green-Powered Canada

Name Jerry

Date March 15

Worksheet

Energy source	Coal energy	
Type of resource (circle one)	Renewable	Non-renewable
Definition	We use it every day	
Benefits	Get energy	Drawbacks
		Hard to mine
How is this energy source being used in Canada?		
It helps power plants .it often used to make electricity		
What role could this energy source have in the future?		
A lot of people will use steam power things		
Provide two reliable sources for people who would like to learn more about this energy source:		
Earth's energy resources coal energy elsie olson		





A Green-Powered Canada

Name Max

Date March 15, 2021

Worksheet

Energy source	Coal energy	
Type of resource (circle one)	<input checked="" type="radio"/> Renewable	<input type="radio"/> Non-renewable
Definition	It's a rock it comes from many sources.	
Benefits	It gives us electricity.	Drawbacks
		It causes pollution!
How is this energy source being used in Canada?		
They burn it for heat. Blacksmiths burn it to melt metal. Trains use coal. Power plants burn coal for heat.		
What role could this energy source have in the future?		
We will eventually run out of coal.		
Provide two reliable sources for people who would like to learn more about this energy source:		
Elsie olson		





A Green-Powered Canada

Name Eugene

Date Mar 15 2021

Worksheet

Energy source	Oil energy
Type of resource (circle one)	Renewable <u>Non-renewable</u>
Definition	It comes from dead plants and swamps.
Benefits	Drawbacks
Heats and turned there remains into oil. Oil is a very valuable resource for the US.	Factories refine oil, they turn it into gas.
How is this energy source being used in Canada?	
People use the oil by burning the oil to make electricity.	
What role could this energy source have in the future?	
It can kill the environment by the oil burning to make electricity.	
Provide two reliable sources for people who would like to learn more about this energy source:	
Earth's Energy Resources: Oil Energy By: Elsie Olson	

They want to learn how oil works

