

GREAT DECISIONS

1918 • FOREIGN POLICY ASSOCIATION

HIGH SCHOOL

APRIL 2023

TEACHERS:
CHECK OUT
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THE OIL AND GAS INDUSTRY

**A LONG
HISTORY**

**ENVIRONMENTAL
DESTRUCTION**

**POLITICS AND
PETROLEUM**

**CORRUPTING
THE CLIMATE**



BY ISOBEL WHITCOMB



POWERING OUR WORLD

Workers operate machinery to drill for oil. In 2020, the oil and gas industry employed more than 12 million people in the United States.

Another Monday morning: you flick on the lights, then hop in a steaming-hot shower. Afterwards, you switch on a burner to scramble some eggs and pack your lunch in a plastic bag while the car warms up in the driveway. It's easy to take your school day routine for granted, but it wouldn't be possible without oil and gas.

We burn oil to light our homes, natural gas to heat our water and cook our food, and gasoline to power our cars. We even use oil and gas to produce the plastic items that fill our homes.

Oil and gas, also called **fossil fuels**, form over millions of years as ancient plants and animals decay into a substance called **petroleum**, which is found hundreds

to thousands of feet beneath the earth. Some petroleum leaks to the surface. Most of the time, heavy machinery is required to drill down and pump the oil. At large factories called **refineries**, the petroleum is turned into many different types of gas and oil, each with its own uses.

Our reliance on oil and gas has put the planet at risk; burning fossil fuels fills the atmosphere

with **greenhouse gases** that cause climate change. It will require the transformation of the massive fossil fuel industry—worth trillions of dollars—to maintain a habitable planet. However, this powerful industry pours enormous sums of money into political campaigns in the United States and abroad and uses public relations campaigns to sway the way the public views climate change.

DRILL, BABY, DRILL

Our relationship with oil and gas goes back millennia. In ancient China, people used it to heat their homes. Ancient Romans [made pavement](#) out of it. These people collected whatever oil seeped up from beneath the ground.

Then, in 1859, a man named Edwin Drake figured out that if you drilled a well straight into an underground petroleum reservoir, you could force the oil to the surface. His first well, drilled in Titusville, Pennsylvania, changed everything. Suddenly oil was available at levels previously unimaginable. Demand for the substance was enormous.

In the 1870s, a business called the Standard Oil Company began acquiring both oil wells and refineries, buying up as much of the competition as possible. By 1890, Standard Oil controlled 90% of oil production in the United States. The massive company had become a **monopoly**, meaning it had total control of the industry.

Standard Oil's reign didn't last. Monopolies are illegal under American **antitrust law**. In 1911, the Supreme Court divided Standard Oil into 34 smaller companies, including three that

would become rulers of the market today: Exxon, Mobil, and Chevron. Although Standard Oil ceased to exist, it transformed the oil industry by creating order, improving the refining process, standardizing oil quality, and lowering prices for consumers. It turned the oil and gas industry into the behemoth it is today.

A GLOBAL GIANT

By the early 20th century, oil consumption in the United States was quickly outpacing production, and people wanted to find more sources of cheap oil. One way to do that was helping poorer countries develop their own oil infrastructure. The United States and other wealthy countries began lending a hand to Mexico, Venezuela, Persia (now Iran), and Saudi Arabia, all of which had rich oil reserves. In return, for an agreed upon span of time, these

wealthy nations could take all the oil they pleased.

But these foreign entanglements eventually backfired on the United States. “Wealth generated by oil then left those countries, which created a lot of resentment,” says Sean Patrick Adams, a historian of energy and capitalism at the University of Florida. These poorer nations began to nationalize their oil, meaning they took total control of their oil reserves, leaving the United States out in the cold. Later, many of these countries formed an organization called the Organization of the Petroleum Exporting Countries (OPEC), which influences oil prices in the United States. “We were more and more dependent on other nations for supplies, and frankly, for prices,” Adams says. That's still true today. The United States consumes more oil than any other country, and 43% of it is imported.

THE DEBATE

SHOULD THE PURCHASE OF ELECTRIC VEHICLES (EVs) BE SUBSIDIZED?

YES

- ✓ Cheaper EVs would encourage more people to switch from gas-powered cars.
- ✓ Polls show that most U.S. adults support EV subsidies.
- ✓ Increased sales of new EVs will result in more used EVs on the market.

NO

- ✗ The government should not help pay for someone to buy a new car.
- ✗ EVs are already selling well and don't need help to become more popular.
- ✗ EV owners will already save money by not paying for gas.



That oil primarily comes from Canada, Mexico, Saudi Arabia, and Colombia.

REACHING HIDDEN OIL

Modern science enables us to find and retrieve oil hidden thousands of feet beneath the earth. When geologists and engineers think they have found oil, they use huge drills to bore holes deep into the ground and begin extracting it. Each well produces oil only for a few decades. That's because oil is a **nonrenewable resource**. It takes millions of years to form, so once a reservoir is empty, it's empty for good. In the United States, we've depleted much of the oil extractable using conventional drilling methods. As a result, engineers have had to

get creative. One newer method, called hydraulic fracturing, or fracking, took off in the early 2000s. This method involves pumping highly pressurized liquids into an oil-rich underground material called shale. The liquid creates tiny cracks in the shale, releasing trapped oil and gas. Today, because of an increase in fracking, the United States produces more oil and gas than any other country.

THE TROUBLE WITH OIL

Our use of fossil fuels has major consequences for the environment. Setting up an **oil rig** often involves clearing large tracts of land and building networks of access roads. Rigs are often located in remote wilderness where wildlife that's

sensitive to disturbance lives. For example, planned drilling in Alaska's Arctic National Wildlife Refuge could disrupt caribou and bird migration and threaten polar bears.

Drilling and fracking also cause air and water pollution. In 2010, an explosion on an oil rig off the coast of Louisiana spilled 134 million gallons of oil into the Gulf of Mexico. The spill killed tens of thousands of birds, marine mammals, sea turtles, and fish. Humans also suffer effects. Smoke from existing drilling operations in the Arctic is causing asthma, seizures, and other health issues among Native Alaskans. In some areas of rural Pennsylvania, which has seen a boom in fracking in recent decades, tap water is so polluted with toxic gas that it can be lit on fire.

A pelican is coated with oil as a result of the 2010 Deepwater Horizon oil spill off the coast of Louisiana. Experts believe that the spill harmed or killed more than 80,000 birds and countless other animals.



Win McNamee/Getty Images

Perhaps the biggest problem with fossil fuels is climate change. Since the beginning of the oil boom, concentrations of carbon dioxide, a gas that is produced by the burning of fossil fuels and traps heat in our atmosphere, have risen by around 50%. Global temperatures have also risen—by 1.8°F. This change may seem small, but it has big impacts: melting glaciers, rising sea levels, heat waves, wildfires, and massive storms.

THE POWER OF BIG OIL

In the days of Standard Oil, “countless political statesmen and governors were invested heavily in oil,” says Darren Dochuk, a historian of oil and gas at the University of Notre Dame in Indiana. “They’re naturally going to protect their interests through the political realm.” That’s still true today.

In the United States, 5.6% of all employed people work for the fossil fuel industry. “Oil means a lot to particular regions of the country, and politicians in those regions are going to be highly protective of them, whether we like it or not,” Dochuk says.

The oil and gas **lobby** also works hard to protect fossil-fuel interests. A lobby is a group of people working to influence politicians in their favor. One major lobby, the American Petroleum Institute (API), is composed of industry leaders. API’s chief executive, Mike Sommers, has pledged to resist President Joe Biden’s climate policies, such as proposals to fund new charging points for electric vehicles. One important



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Learning to drive is an important milestone for many teens, but unless you drive an EV, you are contributing to climate change.

way the fossil fuel lobby influences policy is through financial contributions to political campaigns. One study in the scientific journal PNAS found that the more a given

Congressperson voted against environmental regulation, the more campaign contributions they received from oil and gas companies supporting their reelection.

THE DEBATE

SHOULD THE UNITED STATES BAN GAS-BURNING VEHICLES?

YES

- ✓ More than a quarter of greenhouse gas emissions in the U.S. come from transportation.
- ✓ Electric cars can run entirely on carbon-free energy, such as wind and solar.
- ✓ Electric cars are becoming more affordable—a new electric car and a new gas-powered car could sell for the same price by the end of 2023.

NO

- ✗ The United States imports most of the minerals it needs to produce electric car batteries, often from countries with questionable environmental and human rights records.
- ✗ Demand for these minerals could soon outpace supply.
- ✗ Many people consider total bans to be government overreach.



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Representative Alexandria Ocasio-Cortez speaks during a congressional hearing on greenwashing and climate change in September 2022.

THEY KNEW ALL ALONG

The fossil fuel industry has also used their reach to sway public perception of climate change. That's because the only way to stop climate change—transitioning to different forms of energy—is a threat to the whole industry. A report in the scientific journal *Science* published earlier this year found that the oil giant Exxon accurately predicted decades ago when we'd start feeling the effects of climate change. Despite this knowledge, the company paid for advertisements in major publications suggesting that scientists disagree on whether climate change is happening. (In reality, 97% of scientists agree that humans are causing global warming.)

Meanwhile, in the early 2000s, the oil and gas company BP launched a campaign in which it urged consumers to calculate their own **carbon footprint**. Chances are, you've heard this term, which refers to each individual's personal carbon emissions—but the concept hadn't reached the public until BP's

campaign. The carbon footprint campaign portrayed BP as a climate-friendly organization while taking focus off of the company's own role in causing emissions. Activists call this strategy **greenwashing**—communications that make a company seem environmentally friendly without action to back it up.

THE FUTURE OF OIL AND GAS

The United States has committed to reducing carbon dioxide emissions to **net zero** by 2050. To meet this goal, we're going to have to switch to carbon-free sources of energy, such as wind, solar, nuclear, and hydroelectric power. So what happens to the oil and gas industry once we're no longer burning oil and gas?

It's possible that oil and gas companies will start selling different kinds of energy. Already, BP is building wind and solar farms, investing in charging stations for electric vehicles, and researching strategies to remove carbon dioxide from the atmosphere. The company has pledged to achieve net zero by 2050. ExxonMobil has also expressed support for climate policy. Still, both companies remain members of the American Petroleum Institute.



Rana Faure/Getty Images

In 2023, controversy erupted over a proposed ban on gas-burning stoves in the United States. Each year, the country's gas-burning stoves produce roughly the same amount of emissions as 500,000 cars.

Dochuk thinks that when there is a greater financial incentive to move away from fossil fuels than there is to stick with them, these oil giants will make the switch to alternative sources of energy. “We have every reason to doubt that these companies are fully invested and sincere in these alternatives,” Dochuk says. Still, “oil companies are good at celebrating the entrepreneurialism that has displayed itself in the business. And entrepreneurialism means exploring alternatives.”

WHAT YOU CAN DO

The oil and gas industry may have a lot of money and power, but your voice can still make a difference. By engaging politically, teens can hold fossil fuel companies accountable for potentially harmful actions, stall or prevent new projects, and pressure politicians to vote in favor of the planet and people’s health.

- **Get informed.** Research the oil and gas industry’s activity in your area. Are there fracking wells or oil rigs? Refineries or plants that produce plastic? What about pipelines and storage facilities? Find out how these projects impact local communities and how citizens are responding.
- **Get active.** In 2021, President Joe Biden signed historic climate legislation into law. This legislation, called the Inflation Reduction Act (IRA), puts us on track to meet climate goals with incentives to convert to renewable energy. That wouldn’t have happened without years of activism—including from teens. The Sunrise

THE DEBATE

HAVE FOSSIL FUELS BEEN A NET POSITIVE FOR HUMANITY?

YES

- ✓ Fossil fuels powered the industrial revolution, which led to economic growth and the emergence of a middle class.
- ✓ Oil and gas allowed many people to keep their homes heated and well-lit for the first time.
- ✓ Many of the items we rely on are made of plastic, which is produced from petroleum.

NO

- ✗ Climate change caused by burning fossil fuels hits the poor hardest and worsens economic inequality.
- ✗ One study linked climate change to 5 million excess deaths each year.
- ✗ Eight million tons of plastic enter the oceans each year, ensnaring, poisoning, or choking marine life.



New Africa/Shutterstock

Movement, which is entirely youth-led, was instrumental in developing many of the concepts that made it into the IRA. Find your [local Sunrise hub](#).

- **Get in touch.** Lobbying isn’t just for industry leaders. One simple form of lobbying involves an email, phone call, or letter to a policy maker. [Contact your](#)

Protestors gather during the Fridays for Future NYC Global Climate Strike in New York City in 2022.



Lindsey Nicholson/UCG/Universal Images Group/Getty Images

local, county, state, and federal representatives.

- **Go green.** It's possible to reduce your own reliance on fossil fuels. Three of the most impactful changes you can make are eating less meat, living car-free, and flying less.

The average person in the United States produces 14.24 tons of carbon dioxide per year. Eating a plant based diet can reduce those emissions by almost 1 ton. Avoiding just one long-haul flight saves you nearly 2 tons. Living car-free packs the biggest

punch: lowering carbon dioxide emissions by 2.5 tons each year.

- **Vote,** when you are old enough! With few exceptions, you can't vote until you're 18, but in many states you can register at 16 or 17, and you'll be all set when 18 rolls around.

TRAILBLAZERS

Xiuhtezcatl Martinez



Ronen Tivony/SOPA Images/Shutterstock

Xiuhtezcatl Martinez

When he was just 16 years old, Xiuhtezcatl Martinez sued the Colorado Oil and Gas Conservation Commission (COGCC). Martinez, who is the former youth director of the environmental nonprofit Earth Guardians, demanded that the COGCC hold off on issuing permits for oil and gas drilling until they could present scientific evidence that it's safe for the climate and human health. The case made it all the way to the Colorado Supreme Court. The court ruled in favor of the COGCC, but the case shed light on the effects of oil and gas development in Colorado. Today,

Martinez continues his work as an activist and a hip-hop artist.

Kelsey Juliana

Kelsey Juliana, who grew up in Eugene, Oregon, was six years old when her parents first took her to a rally, to protect the habitat of spotted owls from deforestation. In 2015, at age 19, Juliana joined a court case against the U.S. government. In *Juliana v. United States*, she and 20 other young people alleged that the government had violated their right to a safe climate. While the case was dismissed in



Kelsey Juliana

Kevin Lamarque/Reuters/Alamy



Autumn Peltier

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2020, it encouraged other, young people across the country to join similar lawsuits against state governments.

Autumn Peltier

At 17 years old, Autumn Peltier is the chief water commissioner for Anishinabek Nation, which represents seven tribal groups in Canada. Since age 12, Peltier has worked to hold the Canadian government accountable for water pollution caused by oil and gas development. In Canada, more than 100 First Nations lack access to safe drinking water. At a United Nations summit, Peltier told delegates: "We can't eat money or drink oil."



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IN THE SHADOWS

1. What is this cartoon trying to say? Why do or don't you agree?
2. Why might the oil and gas industry want to keep alternative energy sources from becoming more popular?
3. How much power should lobbyists have to influence the actions of politicians?

NOW IT'S YOUR TURN TO MAKE GREAT DECISIONS

1. What kinds of limits, if any, should the U.S. government enact on using fossil fuels?
2. What kinds of problems, if any, might be caused by switching from fossil fuels to alternative energy sources?
3. **YOUR STORY:** What are you doing, if anything, to cut down on your own use of oil and gas?

KEY WORDS & TERMS

antitrust law	monopoly
carbon footprint	net zero
fossil fuels	nonrenewable resource
greenhouse gases	oil rig
greenwashing	petroleum
lobby	refineries



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NEXT ISSUE: Gender Inequality in America

GREAT DECISIONS THE OIL AND GAS INDUSTRY

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Special thanks to: Matt Barbari, MacDara King, Noel V. Lateef, Tonya Leigh, Elliott Rebhun