STUDY GUIDE

Why Are Utilities So Expensive?

KEY TERMS: subsidize, transmission, renewable energy incentives, fossil fuel inefficient

Detail Focus: *Complete this section <u>during</u> the video.*	**Main Summary Focus:** *Complete this section <u>after</u> the video.*
1. Since 2010, the price of coal has dropped by how much?	1. Why are utilities so expensive?
2. Since 1970, emissions of harmful pollutants have decreased 77% in the U.S. almost entirely due to what?	2. What could be done to bring utility prices back down?
3. What would likely happen if we took away the $70 billion in subsidies for the wind and solar industries?	

Discussion & Review Questions

1. Towards the beginning of the video, Mr. McConnell notes that, "Since 2010, the price of natural gas has fallen 43% and coal prices have dropped 11%. And yet the price of electricity for residential users in the U.S. has risen 13% over that time. Why? Because almost all the money Americans should have saved… went to subsidize renewable energy. Wind and solar, it turns out, are more expensive than advertised." What do you think has contributed to the decrease in the price of natural gas? Explain. Why do you think that the government has moved its focus away from fossil fuels in spite of fossil fuels getting cheaper and so much easier to access and to afford? Explain.

2. As part of explaining the generation cost of a typical electricity bill, Mr. McConnell further clarifies that, "Fossil-fueled electricity is inexpensive, and the fuel can be stored or sourced on site- the electricity is there when you need it. In contrast, wind and solar generate electricity based on the mood of Mother Nature. This is known as the Intermittency Problem. Here's what it means in practical terms: for every wind and solar farm you build, you need a fossil fuel facility nearby to supply electricity on demand." Considering that a region needs to build a fossil fuel plant anyways as part of their electric grid, why not just build a single fossil fuel plant that can handle the same load as a fossil fuel plant and a renewable plant together, instead of building both? Explain.

3. After explaining that wind and solar energy need vast expensive infrastructure to support, Mr. McConnell share with us that, "Texas, for example, has already spent over seven billion in new transmission lines to bring distant wind power to cities in the east and south. And billions more will be required. Texans are already seeing those costs in their energy bills. But Texas is not unique. It's happening everywhere." If the point of renewable energy is to lower energy costs, then why do you think that places like Texas are going ahead with using and supporting renewable energy even though the cost is demonstrably higher? What might some other negative and unintended consequences of constructing the vast, expensive infrastructure needed for renewable energy be? Explain.

4. Mr. McConnell goes on to share with us that, "… what you won't see on your electricity bill are the Federal and, in many places, state taxes that you pay to subsidize wind and solar generation. Federal subsidies alone for the wind and solar industries totaled more than $70 billion from 2010 to 2019. Most state governments kick in their own incentives… [however] We are not incentivizing new technology, but are artificially supporting an industry. Take away the subsidies and very likely that industry does not exist. Add it all up: the generation costs, the transmission costs, the taxes and fees- you're paying a lot more than you should." Why do you think that people don't clearly see on their bill the amount they are paying to subsidize the renewable energy industry? Explain. Where do you think that $70 billion would have gone to if it hadn't gone towards subsidizing the renewable energy industry? Explain. Do you think that the $70 billion could have been better spent? Why or why not?

5. Towards the end of the video, Mr. McConnell points out that, "A third of American households report having difficulty paying their electricity bills and seven million families face the choice between putting food on the table or keeping their home warm during the cold winter months. So Maybe we should be thinking more about them and less about expensive, inefficient wind and solar energy." Why do you think that the government has chosen to prop up the renewable energy industry at the expense of millions of Americans

who cannot afford the extra taxes and fees? Explain. Do you agree with Mr. McConnell that we should redirect our focus and action towards helping low-income Americans be able to have access to affordable energy rather than continue to support and advocate for the renewable energy industry? Why or why not?

Extend the Learning:

Case Study Energy Insecurity

INSTRUCTIONS: Read the article "In Pandemic-Triggered Economic Crisis, Millions of Americans Struggle To Pay Utility Bills," then answer the questions that follow.

1. What is the result of the federal government providing only limited assistance? What does the National Consumer Law Center estimate? What did the Indiana University survey find? Prior to the pandemic, what percentage of households faced a degree of 'energy insecurity?' Roughly half of which households face energy insecurity? What did the Duke Energy report find? What does the Illinois Commerce Commission settlement do?

2. Do you think that the Illinois Commerce Commission settlement is a good model for other states to follow? Why or why not? Do you think the pandemic will contribute towards raising awareness of energy insecurity in lower-income households and towards government agencies and industry actually helping those households? Why or why not? What do you think can be done to help redirect activity and money away from renewable energy and towards the energy insecure? Explain.

3. Why do you think some people see cleaner energy and fossil fuels as mutually exclusive? Explain. Do you support renewable energy? Why or why not?

https://www.ewg.org/energy/23235/pandemic-triggered-economic-crisis-millions-americans-struggle-pay-utility-bills

In Pandemic-Triggered Economic Crisis, Millions of Americans Struggle To Pay Utility Bills

The economic meltdown triggered by the coronavirus pandemic means that legions of Americans are struggling to pay their utility bills. As with other impacts of the pandemic, the federal government has provided only limited assistance, leaving the states to deal with an unprecedented crisis, particularly for lower-income households.

The National Consumer Law Center estimates that 53 million Americans will fall 90 days behind on their electricity bills, with total past due bills, or arrearages, of nearly $19 billion. Last month, the O'Neil School of Public and Environmental Affairs at Indiana University surveyed households earning up to twice the federal poverty level, and found that more than one in five respondents had been forced to pay energy bills rather than buy other necessities like food and medicine. Nearly one in eight hadn't paid their utility bill the previous month.

Even before the pandemic, the Energy Information Administration reported that 30 percent of households faced some sort of "energy insecurity," whether they have to forgo food or medicine to pay bills, or live in uncomfortable temperatures, or have received disconnection notices.

Roughly half of Black, Hispanic or Latino, and Native American households face energy insecurity.

In its first COVID-19 stimulus package, in March, Congress appropriated nearly $1 billion in funding bill assistance for low-income households. But the National Energy Assistance Directors Association reports that the states asked for four times that amount to meet actual need. Congress has yet to act on further support.

Nearly every state has imposed mandatory or voluntary moratoriums on utilities' disconnecting customers from service. When North Carolina Gov. Roy Cooper ordered a moratorium, he also mandated monthly reports on arrearages from the state's utilities. At the end of May, the arrearages report from Duke Energy, the nation's largest investor-owned electric utility, showed the severity of the problem in Duke's home state – more than one in seven households with past due bills, totaling nearly $117 million.

In May, Duke and its fellow utility companies petitioned Indiana regulators to let them charge customers to cover the utilities' losses from electricity they didn't use during the pandemic, although residential demand has increased since the coronavirus outbreak. This week, regulators denied the petition, which Kerwin Olson, executive director of the Citizens Action Coalition of Indiana, called an "absurd and self-serving request."

Last month, Illinois provided a model for other states to deal with the arrearage crisis and the ongoing energy security challenges faced by lower-income households, which are disproportionately in communities of color.

The Illinois Commerce Commission, which regulates utilities, approved a sweeping settlement that keeps people connected to utility service, addresses unpaid bills and sets up a process to address affordability. Kwame Raoul, the state's attorney general, said the plan will "assess whether particular communities, including communities of color, are being disproportionately impacted by a utility's disconnection and credit and collections processes."

Among the provisions of the settlement:

- Utilities must put up nearly $50 million to assist low-income households with paying down arrearages.
- Customers who have been disconnected must be reconnected, with reconnection and late fees waived.
- Payment arrangements, typically no more than 12 months, can be extended for up to two years.
- Over the next year, utilities will have to report on numbers of disconnections by ZIP code.
- Utilities are mandated to engage in a process to improve low-income energy programs.

Energy insecurity will not end once the pandemic is over. Neither should efforts to ensure that all Americans are able to afford the energy that lights, heats and cools their homes and protects their health – and can sometimes save their lives.

QUIZ

Why Are Utilities So Expensive?

1. **Since 2010, the price of natural gas has fallen _____.**

   a. 13%
   b. 23%
   c. 33%
   d. 43%

2. **Emissions of harmful pollutants in the U.S. have decreased by how much since 1970?**

   a. 57%
   b. 67%
   c. 77%
   d. 87%

3. **The cost of generating and reliably maintaining electricity comprises about 50% of your power bill.**

   a. True
   b. False

4. **Federal subsidies alone for the wind and solar industries totaled more than _____ from 2010 to 2019**

   a. 7 million
   b. 70 million
   c. 7 billion
   d. 70 billion

5. **How many families in the U.S. face the choice between putting food on the table or keeping their home warm during the cold winter months?**

   a. 12 million
   b. 7 million
   c. 4 million
   d. 1 million

QUIZ: ANSWER KEY

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