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THE CURRENT: How is the COVID-19 pandemic affecting global energy markets?

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(MUSIC)

PITA: You're listening to The Current, part of the Brookings Podcast Network. I'm your host, Adrianna Pita.

2020 has seen oil prices plunge, as the coronavirus pandemic has shut down travel both local and international, and shuttered factories as workers stay home to halt the spread of the virus. With us to discuss current state of the energy sector Samantha Gross, a fellow in the energy security and climate initiative here at Brookings. Samantha, thanks for talking to us today.

GROSS: Thanks for having me.

PITA: In this moment, you've called the challenge facing oil markets and producers a two-headed monster. Tell us what you mean by that and what's happening.

GROSS: Well, it seems like right now the global oil market is facing an unprecedented double whammy. On the one hand, it's taking a hit as you said in your intro from a reduction in economic activity, trade, and travel because of the coronavirus and our actions to keep the coronavirus from spreading further. Right now, three billion people, nearly half of the world's population, is in a near-lockdown today, in the U.S., Europe, India, and other places. And these are among the wealthiest three billion people with the highest energy demands. 60% of global oil use is in transportation and that sector is taking a particular hit; aviation has just nearly shut down globally. And oil demand as a result has just fallen off a cliff. It's difficult yet to get estimates as to how much it's gone down, but I listened to a call with Fatih Birol, head of the International Energy Agency just yesterday, and he said that we might be headed toward a decline of as much as 20% of global oil demand.

At the same time that demand is plummeting, the market is in a spectacular state of oversupply. The OPEC+ agreement, most importantly between the OPEC countries led by Saudi Arabia and Russia just imploded earlier this month. The Russians did not want to reduce production in response to the virus and so in response, OPEC is even eliminating the existing production cuts that are set to expire at the end of this month. Saudi Arabia has promised to max out its crude production, more than two million barrels per day from its current production. We're headed toward such a major state of oversupply that people who watch the market are now questioning whether the amount of global storage capacity will ultimately limit the amount of oil production that happens. The world will literally soon be producing more crude oil than it knows what to do with.

So, the combination of these two forces sent oil prices plummeting. In the U.S., benchmark crude is around \$22 per barrel as we record this, and that's compared to \$61 per barrel at the beginning of 2020. I think these prices are likely to go even lower; I don't think we've seen the bottom, because the

Saudis haven't completely ramped up production yet in the way that they promised. The world has just never seen an oil market like this.

PITA: What does this mean for U.S. producers in particular?

GROSS: The U.S. oil industry is going to hurt, no doubt. In part because of the flexibility of the US oil industry, which is in some ways an advantage, the type of oil that we produce the most here in the US from tight shale formations is a very different cost structure than the kind of oil that we've seen most places globally. Production from these individual wells declines quickly and so operators keep drilling over time in order to keep production up, whereas in most of the rest of the world, upfront costs to drill and develop a field are very high, but the variable costs to keep producing are lower. Here in the U.S., more of the costs are variable, including the drilling process, making our whole industry a lot more price-responsive than we see other places.

And they will definitely respond to price. Several prominent U.S. producers have announced spending cuts of around 25-50% over 2020. And I've seen estimates of job losses in the U.S. oil industry and adjacent industry at as high as 200,000. A few companies have hedged their future oil sales in hope they'll get higher oil prices than we're seeing today. This will help those companies' financial positions, but it won't encourage more employment and more production in today's market.

There are varying explanations for what happened with the OPEC+ agreement and Russia; one is they hope to destroy the U.S. shale oil industry. Although the U.S. industry will definitely hurt for a while, this idea that it will destroy this industry is kind of crazy. The resources will continue to be there, and companies know how to produce them. And because these resources are so price-responsive, as soon as prices bounce back, these resources are going to come back into production and the U.S. oil industry will come back. There will likely be bankruptcies and consolidations among some of the weaker players in the industry just like last time around when we had lower oil prices around 2014. But the industry's not going to be destroyed despite what anyone thinks.

PITA: The Senate just passed a broad-reaching \$2 trillion economic recovery package. And hopefully some of that will be helping some of the workers who are going to be affected by unemployment and the implosion of the industry here. What else was in it that will be affecting energy jobs and energy producers?

GROSS: It's interesting, both the oil and gas industry and also renewable energy industries were pushing for several provisions in that stimulus package that they didn't actually get. There's definitely help for those workers, and that's terrific. The energy industries were looking for some more specific things. On the oil and gas side, there was a push to include \$3 billion to buy oil for the U.S. strategic petroleum reserve to help out the U.S. oil industry a bit. And this would've been a total reversal of recent policy where the U.S. was actually selling off portions of the strategic oil reserve to raise money. But the reserve isn't full and buying this oil could've increased the U.S. oil stockpile on the cheap while also providing a little bit of relief for the U.S. producers. But that didn't make the final package.

Another energy industry want that did not make the final package was that renewable advocates pushed really hard to include extensions of tax credits for wind and solar installations. There are concerns that some upcoming deadlines in order to get these tax credits will be missed, both because operations are shut down because of the virus, and there are also disruptions to supply chains. On the solar side, one of these deadlines is coming up in mid-April, so this is more urgent. However, these didn't make the final package.

There was also concern the industry was looking for some more direct help in terms of direct payments, concerns that because this help could come in the form of tax credits, the U.S. appetite for tax credits this year, just because firms won't be making so much money, means the tax equity won't be as valuable as it was in the past. But again, this didn't make the final provision. There's likely to be more

stimulus later; these industries are going to continue to go to the government for help, and both sides will keep pushing, but neither of these provisions made the first cut.

PITA: With all this tumult in the oil industry, what can you share with us about the long-term ripple effects you think this might have to some of the other energy resources? Do you think this is more of a temporary blip – however serious a blip – and once demand gets back to normal, that the oil markets will start stabilizing in a way that we're used to seeing, or do you think this might be heralding a more permanent re-ordering of the way that we use energy, and where we get it from?

GROSS: It's a really good question. I've seen some optimism among the energy intelligentsia about how they hope this will mostly re-order our relationship to energy and help a bit with climate change. We've certainly seen pollution go down during this time period as the economy has gotten so much more quiet. I'm a little more concerned that this won't end up being a positive. The reason why is that in order to deal with climate change and to decarbonize the energy industry, you need investment. You need investment in everything from more efficient homes and building different kinds of vehicles, different infrastructure in our electricity sector. And those investments are just not going to be made in today's environment. All kinds of businesses are going back on investment because of the climate of economic uncertainty. So, I'm actually concerned that this will be definitely a downward shift in energy demand and greenhouse gas emissions, but that it will bounce right back when the economy comes back, and also that we will be losing time that we might have been making those investments in a greener economy.

It's also true that we're sort of stuck thinking in the short term right now. We have an immediate problem that's a threat to human health and welfare, whereas thinking about a greener energy system is more of a long-term thought process and we don't really have the luxury of thinking long term right now. I'm concerned that if this goes on for a long time and becomes more economically disruptive that it will take us even longer to get back to our ability to think long term about things that we need to do to deal with longer-term issues. So, I'm concerned this will set us back in our efforts to green the economy and to decarbonize it.

PITA: All right. Samantha, thanks for talking to us today about this.

GROSS: Thanks so much for having me. It's my pleasure.