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The Social Cost of Renewables vs. Fossil Fuels

With Paul, Director of ESG & Sustainability and Brent, Co-Head of Real Assets

PAUL: I think that people in its simplistic form think about good and evil, right? Renewables are good, that's where we want to be. We all want renewables, as we talk about wind and solar as being low emission, it's going to help save the planet. The evil being coal, oil and gas, the fossil fuel burning elements of it. So, in that context, it's just not as simple, there's the social element of it, the trade-off for it.

BRENT: Absolutely, and going back to high power prices in California, in California power prices are about 19 cents per kilowatt-hour, that's about 80% higher than the balance of the United States.

PAUL: I knew it, I knew it.

BRENT: So, you know this, right?

PAUL: I felt that, but now you put some numbers behind it.

BRENT: Now I've put a number to it, which makes it worse probably.

PAUL: Yeah, it makes it worse. It doesn't help.

BRENT: So, you're paying 80% more for your power than most other Americans. Now, there are some markets in the Northeast that are as high as California, but generally speaking, it's a very expensive power market. And that may be okay for you, you may not internalize that as much as somebody who may be in a different socio-economic situation where their power bill makes up a much higher percentage of their monthly income, so there's a social cost to those high power prices in the sense that energy poverty, which is not having access or being able to afford energy, which is fundamental to our way of life is a very real concern for a lot of Californians.

The other issue, Paul, is that when you look at where that environmental policy typically gets set in California, it oftentimes comes from, at least at the front end, zip codes that are significantly wealthier than the average Californian, so there's an element of the well-to-do setting policies without internalizing the social costs on the less well-to-do, and California is a market where that's a real concern. There are lots of complexities to it. I'm totally over-simplifying here, but here's a very simple example. You work in private equity. Okay? So, you live in a nice house on a nice street in California. I work in infrastructure, so I rent a small apartment on that same street. Okay?

PAUL: Alright, fair enough, fair enough.

BRENT: So, we're going to overly simplify here, but let's assume that you and I get our electricity from the same utility. The utility has had to secure generation, they've had to put in a transmission and distribution, they've had to put in hook-ups to your home, to my apartment. That's established a rate base that allows them to charge us a certain amount for the electricity that we're going to buy from them. So right now, we're paying the same per kilowatt-hour, you might use a little more, I might use a little less.

PAUL: I have a little bit of a bigger house.

BRENT: Yeah, you have a little bit of a bigger house, so you might be paying a little bit more, but because you work in private equity and you can afford it, you decide that you're going to upgrade your house, you're going to put in more efficient appliances, you're going to put in solar, you're going to take advantage of net metering so that you're selling back to the utility. You do all of these improvements, you reduce your electricity costs, and maybe in some case, you might even take yourself out of the system where you don't even need the electricity generated by the utility anymore.

PAUL: Which is good, right?

BRENT: Which is good.

PAUL: That's good for the environment. I'm being an environmentally responsible citizen with solar and other improvements on the house.

BRENT: Exactly. In our simple world though, that leaves me, the poor infrastructure guy, as the only rate payer now in that system, so those costs that the utility gets to pass through to the rate payers are disproportionately concentrated on me, so there's a social cost to this, and those environmental benefits that you're pursuing have potentially negative externalities on me as a renter who can't afford to do the same things.

PAUL: Exacerbating the inequities between the poor and others.

BRENT: That's exactly right. And there was some really interesting research, actually from Portland State and a professor from Vanderbilt that found that in developed economies that had higher degrees of renewable utilization, there was actually a wider inequality gap, which is interesting, right? Because that tells you that there's more than just an environmental cost to these policies. There is a social cost to these policies. In contrast, in developing nations, there was less inequality in nations that had higher degrees of renewable penetration. So, this gets back to my point around sometimes the better off in society are setting policies that may not fully reflect the social cost on those that are not as well off.