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‘A Drop in the Bucket’

If you’ve seen an advertisement touting an oil company’s commitment to renewable resources, you might think that the industry has made great strides toward reducing carbon emissions. Not so, says UC Santa Barbara professor of political science Paasha Mahdavi.

In new research published in The Review of International Political Economy, Mahdavi and his co-authors (Jessica Green of the University of Toronto, Jennifer Hadden of the University of Maryland, and Thomas Hale of the University of Oxford) explore the stark contrast between how the 10 largest international oil firms talk about their commitment to decarbonizing and what actions they are actually taking to shift away from fossil fuels.

“This project looks at what has been called ‘greenwashing’ in the oil and gas sector,” Mahdavi said. “We tried to combine information on what oil and gas firms tell their investors and what they are actually doing in terms of clean energy. What we found is that – perhaps unsurprisingly – there is very little connection between what firms say and what they do.”

Instead, major oil firms engage in what Mahdavi and his coauthors call “hedging,” or making relatively small investments in green energy while also maintaining large stakes in traditional oil markets. “Hedging is the idea of managing risk,” Mahdavi explained. “It means a firm is investing in upstream oil production while also investing in a small wind farm and in energy efficiency. They’re doing both things because they are trying to minimize risk if there is stringent policy or shareholder

pressure in the future. They stop short of fully committing to any one investment or sector – other than oil, that is."

The oil companies may give lip service to their green energy investments, but that is far from the full picture. "Even the most ambitious companies are spending less than 0.1 percent of their total revenues on renewables and low-carbon solutions," said Mahdavi. "They might be saying that they're going to invest in solar and wind, but, while they do invest in those types of companies, it's a drop in the bucket in terms of their total expenditures."

In order to track the difficult-to-quantify data of corporate messaging, the team looked at over 1700 investor calls from 2004 to 2019. "We evaluated about 16 million words that are part of these conversations," Mahdavi said. "We tracked what firms were saying regarding six different components of climate politics and climate policy — things like carbon pricing, carbon capture, national laws and international agreements"

The research team chose investor calls in order to hold the firms accountable. "We picked this method because this is not just cheap talk," Mahdavi explained. "Firms are held liable for what they say to their investors, both legally and financially. There is enough of a costliness there that we felt it's a bit harder for firms to spin or outright lie."

The researchers then compared the firms' statements to data from their operations, Mahdavi explained, including how much carbon they emit, how much energy they use, their future oil commitments and their renewable and non-oil investment deals.

They found a large disparity. Mahdavi and his co-authors were surprised to discover that not a single firm was strictly committed to decarbonization, but there was a lot of variation in their level of commitment. "People used to think that all of these firms were similar, or divided along continental lines," Mahdavi said. "It's not just that American firms like Exxon or Conoco operate one way and European firms like Shell or BP operate another way."

Rather, the team found that geographical location mattered because of a combination of regulatory and political factors. "National policy and domestic corporate culture – particularly domestic investor culture – have an impact on how

global companies operate," Mahdavi said. "It's not necessarily the case that global policies like the Paris Agreement by themselves dictate policy and decarbonization. We found that there is variation that tracks with how individual companies are regulated and how they differ in corporate culture."

The disparities across the industry are ultimately a good sign, Mahdavi explained, because it means that change can come from more manageable local efforts, as opposed to just from multi-national climate accords. "It's a somewhat hopeful message that you can impact and influence change with domestic policy and investor culture in your home country. You don't have to rely solely on international climate policy."

Looking to the future, Mahdavi says that he hopes this research impacts how activists and local governments approach climate regulation for the oil industry. "I hope this information about the nuances that do exist in the oil sector and the competing pressures the companies are facing influences the design of stronger policy, activist demands and shareholder demands to ultimately find the right pressure points that could lead to lasting change," he said.

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