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BRIEF

Even in a carbon-constrained world, fossil fuels remain dominant: WoodMac

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Dive Brief:

- Even with rapid deployment of electric vehicles and the accelerated development of renewable energy resources, fossil fuels will still play a dominant role in the global economy for decades to come, according to new analysis released last week by the energy research company Wood Mackenzie.
- The report estimates fossil fuels will retain a 77% share of global energy demand in 2035 under carbon-constrained conditions, only slightly lower than the 79% estimate in the firm's base case scenario.
- The analysis concludes that even with policies designed to accelerate development of clean energy resources, it will not be possible to keep global warming under 2 degrees Celsius.

Dive Insight:

There has been a lot of bad climate news lately, and WoodMac's new analysis isn't any better.

The United States' economy could face hundreds of billions of dollars in economic damage a federal report warned last month. And a United Nations report in October described a bleak future within 30 years that included coral reefs dying, food shortages and more extreme weather.

Now, WoodMac concludes, it's too late to stop it.

"Even with an accelerated pace of change, a '2-degree world' remains out of reach in our accelerated scenario," David Brown, senior analyst at Wood Mackenzie, said in a statement. "Much more needs to happen around lowering non-power sector emissions to achieve such an outcome."

"Political momentum will be crucial and at present climate leadership is lacking," he added.

President Donald Trump told reporters earlier this month "I don't believe it" referring to the recent federal analysis warning of economic tumult. The federal report was released Black Friday, which some speculated was an attempt to bury the findings.

Wood Mackenzie's analysis, said Brown, is "a chance for us to step back and ask broader, strategic questions about the pace of change in the energy industry and what might be achievable if current market trends develop faster."

That could include the more rapid development of electric vehicles.

By 2040, depending on policies, Wood Mackenzie believes EV sales in the United States, European Union and China will account for 100% of new vehicle sales. That would displace 11 million barrels per day of oil and drive the pace of electrification, also helping autonomous vehicles become more widespread.

Wood Mackenzie believes the growth of EV adoption means that by 2040 power demand from the transportation sector is expected to be over 1,900 TWh, which the firm says is more than 1.5 times larger than India's 2017 power market.

In Wood Mackenzie's future of more rapid clean energy adoption, renewables are the "clear winners," growing at an annual average rate of 11% between 2015 and 2035. Wind and solar capacity could grow from 7% of total power supply today to

nearly 40% by 2040. And, there could be 780 GW of large-scale energy storage installed globally by 2040.

Despite all that, don't expect oil, natural gas and coal to throw in the towel.

"Fossil fuel use will not disappear any time soon," Brown said.

Globally, natural gas will see continued demand growth through 2040, according to the report. But Wood Mackenzie also says that in "slower-growing power markets like the EU and USA with high penetration of renewables, gas demand growth will be more limited."

As it is now, coal "will bear the brunt of an accelerated energy transition," the firm said. Wood Mackenzie said it expects coal demand to decline by half by 2040, "even with no international CO2 pricing regime as the power sector switches to gas and renewables."

Recent history and new analysis bears this out. According to a new report from financial think tank Carbon Tracker, two in five coal plants globally are running at a loss, and within a decade new wind and solar will be cheaper than almost all existing coal plants.

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