Chevron Plans Further Growth Into Energy Transition – Renewable Fuels, Hydrogen and Carbon Capture

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(By Bruce Rudoy)



While long term goals of lowering greenhouse gas emissions and employing sustainable energy sources have gained momentum across all industries, Chevron Corp., through its New Energies division, has stated it has shorter term goals as well – it says its planned growth in renewable fuels, hydrogen and carbon capture is expected to enable about 30 million tones of annual CO_2 equivalent emission reductions by 2028. Technology adoption, policy and consumer behavior will drive energy choices, says a top sustainability executive, as companies focus on carbon management along the path to net zero. All three factor into

whether one form of energy or another is sought to supply demand created by income and population growth, according to Bruce Niemeyer, vice president of strategy and sustainability for Chevron Corp. "Keeping supply and demand balanced through the transition is important so the transition works for all and doesn't become a negative event for those most vulnerable," Niemever said earlier this month during UT Energy Week. He added, "We're going to need many forms of energy, which means we need to work on reducing the carbon intensity of all of them." Chevron is among the many companies working to lower its emissions amid a heightened focus on global warming and future energy supplies. Like the smartphone, technologies with features that meet consumers' needs or low-cost technologies will gain market share, he said, noting consumer preference is a strong factor. Take, for example, the automotive sector. EVs are expected to play a key role in the energy transition, giving their lower emissions, compared to vehicles with internal combustion engines. However, "last year, our best estimate is there were 6.6 million electric vehicles sold. At the same time, there were 35 million SUVs. It doesn't mean it will be that way forever, but consumer preferences are strongly important to how energy is demanded by the world and then the choices of whether it's provided from one form or another." Most consumers do not appear willing to give up their gasoline-fueled vehicles, however, falling electric vehicle (EV) prices with improved battery technology are contributing to an uptick in sales. Citing data from Wards Intelligence, the U.S. Energy Information Administration said in February that hybrid, plug-in hybrid, and EVs collectively accounted for 11% of light-duty vehicle sales in the United States in fourth-quarter 2021. Several countries and automakers have set ambitions to increase EV sales, including in the U.S. where there is a target of 50% EV sales share in 2030.

Like many of its peers, Chevron is advancing technologies to reduce the carbon intensity of its operations. Its targets include a 35% reduction in upstream CO_2 intensity by 2028, a more than 5% reduction in its portfolio carbon intensity by 2028 and net-zero Scope 1 and Scope 2 emissions by 2050. Chevron's 2030 new energies targets also include producing 150 ktpa in hydrogen, which Niemeyer said could be used to decarbonize the heavy-duty transportation sector; and 25 MMtpa in carbon capture and offsets. The company has formed several partnerships, including with Hydrogenious, a developer of liquid organic hydrogen carrier technology. Speaking during Chevron's analyst day in March, Chief Technology Officer Eimear Bonner said the technology could deliver affordable and efficient storage and transport of hydrogen. The company has said its planned growth in renewable fuels, hydrogen and carbon capture to these shorter term goals is expected to enable CO_2 equivalent emission reductions by 2028.

View the full article here: Chevron Exec Shares Insight on Energy Transition, Oil Major's Strategy | Hart Energy.

Tags: carbon capture, emission reductions, Hydrogen, renewable energy



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