

2023 CMMS Midstream Student Essay Contest

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The Midstream Industry's Unique Role in the Sector Allows for a Swift Pivot Under the Humorous Threat of the Energy Transition

At nearly 20 million barrels a day, oil and gas, being the lifeblood of this nation, is pumped through pipelines day in and day out to feed the large populous dependent on the industry ("How Much of the crude oil produced in the United States is consumed in the United States", n.d. <u>U.S. Energy Information Administration</u>). But under the heat of the *energy transition*, the future of the midstream industry is rightfully questioned. While there are many pieces to the oil and gas puzzle, the midstream industry has been a historically profitable and low-risk business because of its isolated business structure. Rather than being dependent on the price and volatility associated with the commodities in transport, midstream companies operate through long-term contracts signed with energy companies, bypassing the associated risks of the commodity ("How the Midstream Generates Revenue" Harp 2021, <u>ETF Database</u>). So, as the transformative effects of the energy transition begin to chip into the six trillion-dollar energy market, the midstream industry exudes a strong resilience with their unique role in the landscape ("Worldwide oil and Gas Industry to 2031 – Identify Growth Segments for Investment", 2022 <u>Yahoo Finance</u>).

With that being said, the oil-and-gas sector is not only a behemoth of a business, but also a very well-developed one, with over 2.6 million miles of pipelines delivering trillions of cubic feet worth of natural gas every year in a faster and more efficient manner than any truck or train combination, it is safe to say that the vast infrastructure developed for this business will not disappear in a blink of an eye ("General Pipeline FAQs", n.d. Pipeline and Hazardous Materials Safety Administration). Besides, the sheer volume of consumers dependent on the product every single day is enormous, with 7.4 billion barrels of petroleum consumed by Americans each year (310.8 billion gallons), yet again proving the strong dependence on the highly sought after commodity ("How much oil is consumed in the United States", n.d. U.S. Energy Information Administration). So, while the alternative energy market may continue to grow, its impact on the 'old fashioned' energy may be less than concerning given the depth of the current oil-and-gas reliance.

Which makes for a situation that we have seen time and time again, the 'new tech' threatening to replace the old— highly adopted system. As seen in the 1980s, when e-mail first gained significant popularity, there were doubts about the future of the US postal service. As the postal service was responsible for delivering physical letters over the course of a few days, being able to send your message instantly to someone with a compatible device seemed like quite the career-ender for mailmen. But that did not end their 205-years in business. Instead, the USPS adapted to the changing times and launched a service called E-COM, or Electronic Computer Originated Mail, that allowed people to send mail via their computers and their messages would

be printed and delivered as a hard copy ("E-COM, Electronic Computer Originated Mail", 2008 <u>USPS</u>). In addition, the service expanded on the growing package delivery space and began to offer much more innovation in the digital services world.

Clearly surviving the swift transition to digital mail, the history of the USPS's relationship with computers is not too dissimilar to the energy transition on the midstream industry. First, both are responsible for the transport and processing of product for their customers and are isolated from the contents of the envelope or pipeline. Second, both businesses have the advantage of already having a well-integrated system and a large population dependent on their service. Third, as the postage is largely a single payment service, the midstream industry sees a larger advantage to booking long-term contracts with energy companies, solidifying their payment streams on a longer time horizon rather than a day-to-day basis.

Given these similitudes, it would not be irrational to see the midstream industry pull some innovative stunts like the USPS did. Even, if there were a significant decline in the production and consumption of oil and gas across the globe, the midstream industry is in a prime position to pivot their business to handle different products. Whether that be hydrogen or similar compound, the practice and demand for midstream companies is not going to vanish. On the other hand, as the world continues to develop and grow, and the demand for the wildly established oil and gas industry continues to thrive — midstream will still be there establishing long-term contracts with energy companies and processing your oil.