

Exxon Meets Microsoft in the Permian Basin

By Sarang Shah, J.D. Candidate 2021 | March 12, 2019

Out on the desert plains of west Texas, while [searching for the Permian Basin](#), you may find yourself lost in geological time and space. This vast collection of basins, reefs, and platforms stretches across a land area of 86,000 square miles, nearly the size of Ghana and slightly larger than Belarus. Containing the world's thickest deposit of rocks from the Permian geologic period, spanning [47 million years](#) some 299 million years ago, the Permian Basin stretches from the southeast corner of New Mexico down to the Rio Grande, placing it on the Texas side of an international border and possibly a wall.

So what makes this stretch of beautiful, austere, yet otherwise unremarkable land so highly valued? Under this land lies a veritable bonanza of shale oil, a fossil fuel source extracted from sedimentary oil shale through a series of complex chemical processes. The Permian Basin [is an epicenter](#) for the shale oil boom and is poised to dramatically place the U.S. back into pole position as a top producer of hydrocarbon fuel.

Oil company Exxon has recently signed an agreement with Microsoft to use their “cloud technology” services to efficiently extract the basin's oil shale resources, “[\[c\]overing 9.5 billion barrels](#) of oil and natural gas across 1.6 million acres.” Given that Microsoft has long lagged behind its competitor Amazon in furnishing cloud services, Microsoft's investors are keenly interested in this highly lucrative and long-term contract. The company intends to deploy sensors, statistical analysis, and remote data storage (i.e. “internet of things,” “machine learning,” and “cloud storage” respectively) to help Exxon rapidly and efficiently take advantage of the Permian Basin's resources, likely with recent gestures by Saudi Arabia's Aramco to expand its natural gas holdings [in the Red Sea](#) in mind.

Alas, we must ask as investors, consumers, and, most importantly, global citizens [whether another “oil boom”](#) is what we need as the pressures of climate change bear down on our local ecologies and economies. The rugged interior of west Texas, especially the Trans-Pecos, has long been an environmental haven and one of the most biodiverse parts of the United States. Rapid natural resources extraction in the region will not only contribute to the global fossil fuel addiction, thus contributing to climate change, but will likely harm a far too undervalued ecological region. As Exxon and other companies [face the prospect of securities litigation](#), they run the risk of further damaging their reputation and their bottom lines. Microsoft may wind up with a far better deal out of this arrangement than Exxon in the coming years.

