# ExxonMobil and Mosaic Materials to Explore New Carbon Capture Technology

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ExxonMobil and Mosaic Materials said today that they have entered into an agreement to explore the advancement of breakthrough technology that can remove carbon dioxide from emissions sources.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20190826005107/en/

Mosaic Materials has progressed research on a unique process that uses porous solids, known as metal-organic frameworks, to separate carbon dioxide from air or flue gas. The agreement with ExxonMobil will enable further discussion between the two companies to evaluate opportunities for industrial uses of the technology at scale.

“New technologies in carbon capture will be critical enablers for us to meet growing energy demands, while reducing emissions,” said Vijay Swarup, vice president of research and development for ExxonMobil Research and Engineering Company.

“Our agreement with Mosaic expands our carbon capture technology research portfolio, which is evaluating multiple pathways -- including evaluation of carbonate fuel cells and direct air capture – to reduce costs and enable large-scale deployment. Adding Mosaic’s approach will allow us to build on their work to evaluate the potential for this technology to have a meaningful impact in reducing carbon dioxide emissions.”

“Through this agreement with ExxonMobil, we look to accelerate the pace of our development and demonstrate the business and environmental benefits that our technology can offer,” said Thomas McDonald, chief executive officer of Mosaic Materials. “Our proprietary technology allows us to separate carbon dioxide from nearly any gas mixture using moderate temperature and pressure changes, substantially increasing energy efficiency and decreasing costs.”

Mosaic Materials’ agreement with ExxonMobil is part of Mosaic’s commitment to accelerate the impact of its innovative, low-cost technology, and is Mosaic’s latest direct engagement with companies across a range of industries to demonstrate both the cost reductions and the environmental benefits of employing Mosaic’s solutions.

This engagement builds upon ExxonMobil’s extensive portfolio – in collaboration with startups, academia and governments – to develop next-generation energy technologies that improve energy efficiency and reduce greenhouse gas emissions. ExxonMobil supports Cyclotron Road, a fellowship for entrepreneurial scientists that is managed in partnership between Lawrence Berkeley National Laboratory and Activate, an independent nonprofit.

ExxonMobil also recently announced a 10-year, up to $100 million agreement to research and develop advanced lower-emissions technologies with the U.S. Department of Energy’s National Renewable Energy Laboratory and National Energy Technology Laboratory.

For more than 30 years, ExxonMobil engineers and scientists have researched, developed and applied technologies that could play a role in the widespread deployment of carbon capture and storage. With a working interest in approximately one-fifth of the world’s total carbon capture capacity, ExxonMobil has been able to capture about 7 million tonnes per year of carbon dioxide and has cumulatively captured more of it than any other company since 1970.

About ExxonMobil

ExxonMobil, the largest publicly traded international oil and gas company, uses technology and innovation to help meet the world’s growing energy needs. ExxonMobil holds an industry-leading inventory of resources, is one of the largest refiners and marketers of petroleum products, and its chemical company is one of the largest in the world. For more information, visit www.exxonmobil.com or follow us on Twitter at www.twitter.com/exxonmobil.

About Mosaic Materials

Mosaic Materials is a chemicals and engineering company focused on enabling greenhouse gas reductions through carbon capture and high-efficiency gas separations. The company is developing adsorbent-based separation technologies that can significantly reduce the energy and cost of large-scale gas separations, including post-combustion carbon capture and the direct removal of carbon dioxide from air.

Cautionary Statement: Statements of future events or conditions in this release are forward-looking statements. Actual future results, including project plans and timing and the impact and results of new technologies, including efficiency gains and emission reductions, could vary depending on the outcome of further research and testing; the development and competitiveness of alternative technologies; the ability to scale pilot projects on a cost-effective basis; political and regulatory developments; and other factors discussed in this release and under the heading “Factors Affecting Future Results” on the Investors page of ExxonMobil’s website at exxonmobil.com.

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