

ExxonMobil Working with Pratt & Whitney Rocketdyne to Develop Advanced Gasification Technology

IRVING, Texas--(BUSINESS WIRE)--

ExxonMobil announced today that it has entered into an agreement with Pratt & Whitney Rocketdyne to develop next-generation technology to convert coal, coke or biomass to synthesis gas (i.e., CO and hydrogen), which could facilitate the use of carbon capture and storage to reduce greenhouse gas emissions from power generation.

Under the agreement, ExxonMobil Research and Engineering Company and Pratt & Whitney Rocketdyne will work together to develop and test new gasification technology to improve efficiency and reduce the cost of converting raw materials into gas. The work focuses on the development of a gasification-reactor system, which has the potential to offer significant advantages compared to conventional approaches. Key features of PWR's rocket-engine expertise -- uniform feed distribution, high temperature combustion and rapid heat removal -- are utilized, resulting in a smaller and more cost effective system.

"Gasification technology has the potential to help with many of our most pressing energy challenges and we are pleased to be involved in this important project," said Rich Pisarczyk, president of ExxonMobil Research and Engineering Company. "Turning coal and similar energy sources into synthesis gas would allow these sources to be converted into a range of products, including chemicals, transportation fuels and power plant feedstock. Gasification also helps enable the adoption of carbon capture and storage and therefore reduces emissions from the use of coal and other heavy feedstocks."

Work has begun on pilot plants to test the technology at the Gas Technologies Institute in Des Plaines, Illinois, and the Energy and Environmental Research Center in Grand Forks, North Dakota. ExxonMobil is also cooperating with Pratt & Whitney Rocketdyne to assist in identifying potential interested parties for demonstration.

The collaboration takes advantage of ExxonMobil's technology leadership in the energy sector and Pratt & Whitney Rocketdyne's experience in rocket-engine development, with the goal of making real progress in gasification technology.

About ExxonMobil Research and Engineering

ExxonMobil Research and Engineering is the Downstream research and engineering affiliate of Exxon Mobil Corporation (NYSE:XOM), a leading global oil, natural gas, and petrochemicals company whose subsidiaries have operations in nearly 200 countries and territories. Additional information regarding ExxonMobil and technologies it licenses can be found at: <u>http://www.exxonmobil.com/refiningtechnologies</u>.

CAUTIONARY STATEMENT: Estimates, expectations, and business plans in this release are forward-looking statements. Actual future results, including the outcome and impact of research programs, could differ materially due to changes in market conditions affecting the oil and gas industry or long-term oil and gas price levels; technological advances; the competitiveness of alternative hydrocarbon or other energy sources; and other factors discussed under the heading "Factors Affecting Future Results" in the Investor Information section of our website (www.exxonmobil.com) and in Item 1A of our most recent Form 10-K.

Source: Exxon Mobil Corporation