ExxonMobil Renews Collaboration with Princeton Energy Center to Advance Low-Emission Research and Energy Solutions

02.07.2020 | Business Wire

- Research projects to-date have included CO_2 capture, power generation and new innovative materials
- Research agreement for breakthrough energy technologies began in 2015, renewed in 2020 through 2025

ExxonMobil and Princeton University’s Andlinger Center for Energy and the Environment have renewed their collaboration to research lower-emission technologies and energy solutions.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20200702005074/en/

The new, five-year agreement builds on ExxonMobil’s participation in Princeton’s E-filliates Partnership, which began in 2015. E-filliates is a corporate membership program administered by the Andlinger Center and aims to help accelerate research, development and deployment of energy and environmental technologies through academia and industry partnerships.

“We collaborate with leading universities and institutions around the world to find meaningful and scalable solutions to develop lower-emission technologies” said Vijay Swarup, vice president of research and development for ExxonMobil Research and Engineering Company. “Our work with Princeton University’s Andlinger Center builds on decades-long interactions with the university, supporting the essential research in science, engineering and humanities needed to address national and global issues.”

“Working with companies is a critical piece of translating fundamental knowledge and discoveries into real-world impact. We challenge ExxonMobil scientists to explore the fundamental scientific questions that underpin technology development in new ways, and they challenge our scientists to think about the practical considerations of scaling technologies,” said Yueh-Lin (Lynn) Loo, Andlinger Center director and the Theodora D. ’74 and William H. Walton ’78 Professor in Engineering. “It’s a win-win and ultimately helps us carry out a core tenet of our mission, which is to reduce emissions globally while improving access to energy around the world.”

ExxonMobil is the world-leader in carbon capture, sequestering more carbon in the last 20 years than any other company. Princeton University is advancing this technology with new research to better understand how stored CO_2 flows within rocks and interacts with minerals, improving the understanding of underground storage capacity. Future CO_2 storage projects can be more optimally planned and operated to achieve net emissions reductions.

Princeton University scientists are also working with ExxonMobil on the development of carbonate fuel cells. This is in addition to the company’s ongoing collaboration with FuelCell Energy to enhance technology for capturing CO_2 from industrial facilities and electric power generation.

Over the past five years, through the company’s participation in E-ffiliates, ExxonMobil scientists have collaborated with Princeton faculty and researchers to support early-stage research projects that are focused on identifying lower-emission technologies that can accelerate the energy transition. Results have been published in peer-reviewed journals including Nature Geoscience, Science, Applied Energy, Journal of the American Chemical Society, and Energy and Environmental Science.

Princeton University researchers also are working to better understand the barriers, technology needs and opportunities of the global energy transition. This research is taking a comprehensive look at potential pathways to achieve net-zero emissions in the United States by 2050, and the investments in technology, infrastructure, and skill development to achieve that goal. The fundamental approach and modeling tools developed in this pilot study will be available for global use. The effort is co-led by the Andlinger Center, along with other campus partners, and funded in part by ExxonMobil and other partners.

Princeton’s Andlinger Center for Energy and the Environment is one of five university energy centers ExxonMobil has partnered with to undertake fundamental research to provide low-carbon energy solutions while meeting global energy demand.

Since 2000, ExxonMobil has invested approximately $10 billion in projects to research, develop and deploy lower-emission energy solutions. The company also continues to expand collaborative efforts with more than 80 universities, five energy centers and multiple private sector partners around the world to explore next-generation energy technologies.

About ExxonMobil
ExxonMobil, one of the largest publicly traded international energy companies, 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. To learn more, visit exxonmobil.com and the Energy Factor.

Follow us on Twitter and LinkedIn.

About Princeton University’s Andlinger Center for Energy and the Environment
The mission of the Andlinger Center for Energy and the Environment is to develop solutions to ensure our energy and environmental future. To this end, the center supports a vibrant and expanding program of research, teaching, and stakeholder collaboration in the areas of sustainable energy technology, energy transitions, and environmental sensing and remediation. A chief goal of the center is to translate fundamental knowledge into practical solutions. Since it began operations in 2010, the center has grown rapidly, launching unique educational programs, and catalyzing high-risk/high-payoff research with industry partners. Housed in Princeton University’s School of Engineering and Applied Science, the Andlinger Center actively convenes companies, government, peer institutions, and non-profit organizations to foster collaborative initiatives that help to overcome shared challenges to develop and deploy more sustainable systems. You can follow the work of the center on its website, Twitter account, and Facebook page.

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.

View source version on businesswire.com: https://www.businesswire.com/news/home/20200702005074/en/

Contact

ExxonMobil Media Relations:
(972) 940-6007

Andlinger Center for Energy and the Environment
(609) 258-3617