Tulane and Freeman part of record-setting $160 million grant to transform Louisiana’s energy industry

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Tulane University and the A. B. Freeman School of Business will play central roles in a new statewide effort that has received the largest and most competitive grant ever awarded by the U.S. National Science Foundation – up to $160 million over the next 10 years.

The NSF Engines grant will fund a coalition of universities, industry partners, government entities, nonprofits, civic organizations, economic development agencies and other stakeholders to foster scientific innovation focused on the

energy transition of Louisiana's industrial corridor.

The goal of the effort will be to support the state's energy industry through job creation and innovative solutions for environmental challenges. The grant emphasized the commercialization of transition technologies and the ability of universities like Tulane to bring breakthroughs to market faster, along with the development of pathways for sustained growth of regional innovation ecosystems.

"Challenges and opportunities in complex areas such as energy and the environment require an all-hands-on-deck approach with contributions from a wide array of fields," said Tulane University President Michael Fitts. "Tulane is proud to offer its expertise to this vital effort which will help ensure both the economic vitality and environmental leadership of our home state."

Tulane will contribute its expertise in chemical engineering, materials science, sustainable energy, entrepreneurship and other fields to the project. Researchers and leaders from Tulane's A. B. Freeman School of Business, School of Science and Engineering, the Tulane Innovation Institute, and other Tulane centers and schools will be part of this interdisciplinary endeavor.

"This exciting project provides a compelling example of the value of Tulane's powerful commitment to breaking down academic silos and creating multi-school, multi-disciplinary communities and collaborations to address the most complicated and pressing challenges facing our communities," said Robin Forman, Senior Vice President for Academic Affairs and Provost at Tulane.

The NSF Engines grant, Louisiana Energy Transition Engine, is known as Future Use of Energy in Louisiana, or FUEL. It will be led by Louisiana State University and includes universities, private energy companies, community and technical colleges and state agencies. FUEL partners include the Louisiana Department of Natural Resources, the Louisiana Board of Regents, the Baton Rouge Area Chamber, Greater New Orleans Inc., ExxonMobil, Shell, and the energy technology company Baker Hughes.

The state, through Louisiana Economic Development, will also contribute an additional $67.5 million over the next decade in support of FUEL. This will include funds to help higher education partners build a world-class team to convert research into practical and useful solutions.

FUEL will work to solve emerging challenges in areas like carbon capture, transport and storage, hydrogen, the use of carbon dioxide to produce low-carbon fuels and essential carbon-based products, water use and management, sustainable manufacturing, and policy development.

Tulane's Entergy Chair in Clean Energy Engineering Daniel F. Shantz will be FUEL's co-principal investigator and interim director of use-inspired research and development. Other Tulane leaders in the project include Kimberly Gramm, David and Marion Mussafer Chief Innovation and Entrepreneurship Officer; Henry Ashbaugh , Professor of Chemical and Biomolecular Engineering; Pierre Conner, Executive Director of the Tulane Energy Institute; and Eric Smith, Associate Director of Tulane Energy Institute.

Tulane's FUEL goals include becoming a global research and development leader for solving energy and hydrocarbon transition-related challenges. Tulane's FUEL team members also will launch an energy transition start-up incubator that prioritizes the efforts of underserved communities to create early-stage technologies. The university will also educate diverse groups in energy transition disciplines and generate more sustainable investments and workforce development.

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