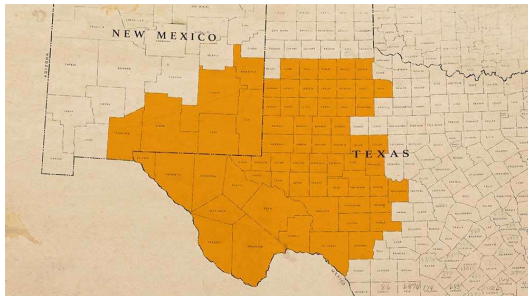




UT Energy Bulletin | October 2024

Energy@UT News



Permian Energy Development Lab Guiding Region Through Economic Innovation

The Permian Energy Development Lab (PEDL) is at the forefront of driving economic innovation in the region as it shifts toward a clean energy economy. By fostering collaboration among industry, government, and academic partners, the lab aims to create a sustainable energy ecosystem that not only enhances local economic resilience but also positions the Permian Basin as a model for safe, reliable, and equitable energy development.

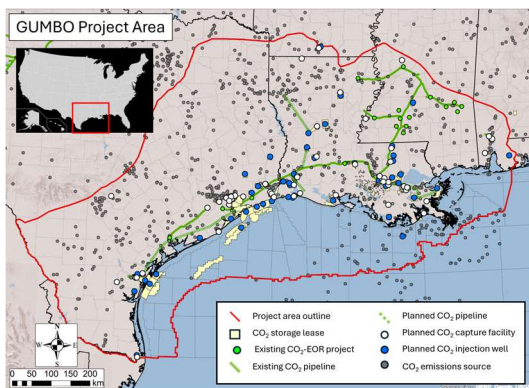
[Learn more](#)



China, Clean Technologies, and National Security

LBJ School of Public Affairs Professor [Joshua Busby](#) co-authored a piece for *War on the Rocks* examining the importance of minerals such as lithium, graphite, copper, nickel, and manganese to the national security of the U.S. With co-authors Morgan Bazilian and Emily Holland, Busby argues that, while efforts to diversify supply chains away from China are welcome and important, there is a potential for American policymakers to overreact against Chinese involvement in the U.S. economy.

[Read more](#)



Project GuMBO Aims To Kick Start Carbon Storage Industry

Researchers at UT's Gulf Coast Carbon Center are part of a multi-institution team working to advance carbon capture and storage infrastructure along the Gulf Coast as part of an initiative of the U.S. Department of Energy. Project GuMBO (Gulf of Mexico Basin Opportunities) aims to tackle subsurface carbon storage challenges while enhancing workforce development and community engagement in Texas, Louisiana, Mississippi, Alabama, and Arkansas.

[Read it here](#)



Scientists Explore Catalysts for Emissions-Free Hydrogen

Researchers at the Jackson School of Geosciences are investigating natural catalysts that can produce hydrogen gas from iron-rich rocks while eliminating carbon dioxide emissions. The project is part of a U.S. Department of Energy initiative to evaluate the feasibility of geologic hydrogen production across diverse iron-rich rock formations in North America.

[Learn more](#)



UT Part of Critical Nuclear Energy Milestone

The University of Texas at Austin is at the forefront of developing Texas' first new nuclear reactor in decades as a member of the Natura Resources Research Alliance, a consortium of four universities. UT's contributions to the design and safety analysis of the system draw on the university's experience operating a research reactor and utilizing advanced reactor modeling tools and high-performance computing.

[Read more](#)



Could Hydrogen, Ammonia Blends Become the Key to Clean Electricity?

Researchers at the Cockrell School of Engineering's Department of Aerospace Engineering and Engineering Mechanics plan to use both simulation tools and real-life experiments to enhance understanding of the combustion of hydrogen/ammonia blends for large-scale power generation. The project will also produce a podcast as part of an effort to increase public awareness of the research findings and their broader implications for power generation.

[Find out more](#)



Study Reveals Best Way to Encourage Environmental Gains in Oil and Gas

A study by researchers from UT's LBJ School of Public Affairs and Cockrell School of Engineering measured the impacts that strict regulatory standards, stakeholder pressure, and certified markets have on environmental improvements in the oil and gas industry. The study found that while certified markets were most effective, overly high barriers to entry or poorly targeted activism may hinder progress, highlighting the need for strategic, well-calibrated

approaches to achieve lasting environmental benefits.

[Read it here](#)



Jackson School Joins KBH Energy Center

The Kay Bailey Hutchison Energy Center has formed a new partnership with the Jackson School of Geosciences, enhancing its commitment to an inclusive energy strategy and interdisciplinary development of future energy leaders in Texas and beyond. The center also appointed Jack Balagia, former vice president and general counsel of Exxon Mobil Corp, as its new executive director. Additionally, the leadership team now includes Fred Beach as Academic Director and Lorena Moscardelli, who will co-chair the Geosciences Executive Council.

[Learn more](#)



Carbon Capture Solvent Technology To Be Tested At World's Largest Test Facility

A new carbon capture solvent developed through a partnership by The University of Texas at Austin and Honeywell is set for engineering-scale testing at the Technology Centre Mongstad in Norway.

These tests build on previous successful pilot-scale trials conducted at the National Carbon Capture Center in 2023 and UT Austin's Separations Research Program in 2022. The tests aim to evaluate the technology's performance and readiness for future commercial deployment.

[Learn more](#)



New Extreme Weather Adaptation Lab at The LBJ School to Enhance Resilience in Texas Communities

The Extreme Weather Adaptation Lab at the LBJ School of Public Affairs aims to provide local leaders across Texas tools and information to build community resilience to the increasing challenges posed by climate change and extreme weather events. This initiative focuses on developing innovative strategies and policies to enhance the adaptability of energy infrastructure, fostering collaboration among researchers, local governments, and organizations to create effective solutions for navigating a rapidly changing climate.

[Learn more](#)

News From Around Campus

Energy Institute

[Jorge Piñón](#) was quoted in [The Wall Street Journal](#) discussing the lack of funds hindering the Cuban government's ability to purchase essential fuels and worsening the ongoing energy crisis.

Piñón also spoke with [The New York Times](#) about how a lack of operational and capital maintenance of the outdated electrical grid led to widespread power outages in Cuba.

[EL PAÍS](#) also featured Piñón's analysis that Cuba's electricity sector will not meaningfully improve unless the government decentralizes the economy and allows open investment.

Cockrell School of Engineering | Fariborz Maseeh Department of Civil, Architectural and Environmental Engineering

[C. Tyler Dick](#) was quoted in [Fast Company](#), discussing hydrogen's potential as a fuel source for railroads.

[Kara Kockelman](#) spoke with [Newsweek](#) about the potential for driverless vehicles to help evacuate people without access to cars during hurricanes.

LBJ School of Public Affairs

[Andrew Waxman](#) was a guest on the [Resources Radio](#) podcast, where he discussed the significance of carbon capture, utilization, and storage (CCUS) technology for meeting emissions-reduction targets and its potential impact on local air quality, particularly in communities along the U.S. Gulf Coast.

[Michael Webber](#) was quoted in [IT Brief-Asia](#) discussing the challenges and opportunities for the utility sector in expanding the grid to meet future energy demands while maintaining affordability, reliability, and reducing environmental impact.

School of Law

[David Spence](#) was quoted in [Great Lakes Echo](#), emphasizing the urgent need to combat disinformation in the energy transition, as discussed in his book *Climate of Contempt: How to Rescue the US Energy Transition from Voter Partisanship*.

Spence was also a guest on the [Kleinman Center for Energy Policy](#) podcast to discuss his recent book, *Climate of Contempt: How to Rescue the US Energy Transition from Voter Partisanship*.

Upcoming Events



Environmental & Energy Economics & Policy Seminar: *Major/Minor Thresholds in Environmental Regulation*

Tihitina Andarge, Assistant Professor of Resource Economics, UMass Amherst
November 1, 2024

[More Information](#)



Collaborative Communities for Energy Justice

November 13, 2024, 12:00 PM – 1:00 PM
Hosted on Zoom

[RSVP](#)



Environmental & Energy Economics & Policy Seminar: *Power Flows: Transmission Lines, Allocative Efficiency, and Corporate Profits*

Lucija Muehlenbachs, Associate Professor of
Economics, University of Calgary
November 15, 2024

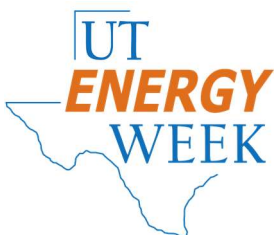
[More Information](#)



Environmental & Energy Economics & Policy Seminar

Richard L. Sweeney, Associate Professor, Boston
College
December 6, 2024

[More Information](#)



UT Energy Week 2025

March 31 – April 4, 2025

[More Information](#)

**Thanks to our corporate partners and event sponsors for their
generous support of UT's Energy Institute.**



[Become a Sponsor](#)