



UT Energy Bulletin | November 2024

Energy@UT News


**GULF COAST
HYDROGEN HUB
(HyVelocity)**

\$1.2B
federal investment

~7M
metric tons CO₂
avoided annually

Hv

TX

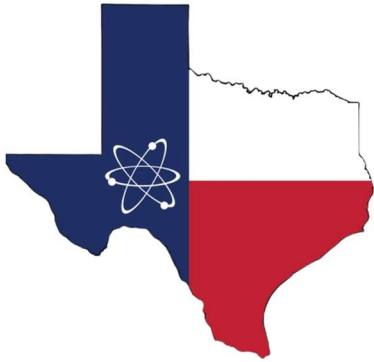
 **TEXAS**
The University of Texas at Austin

Note: Anticipated based on information provided to the Department of Energy as of Fall 2024.

UT Energy Expertise To Guide New Gulf Coast Hydrogen Hub, Bolster U.S. Energy Supply

The University of Texas at Austin will continue to be at the forefront of energy innovation in the U.S. as the lead academic partner in the HyVelocity Hub, which officially launched on November 20. The hub promises to drive job growth in the region and further Texas' leadership position in the global hydrogen marketplace.

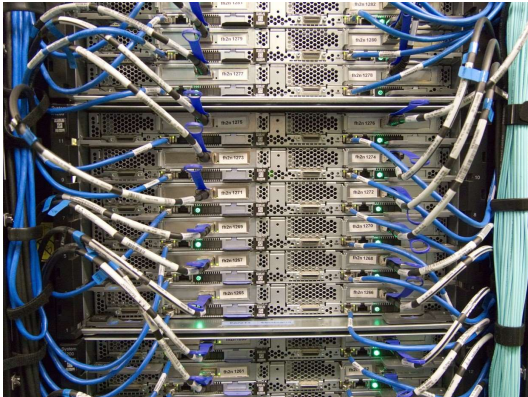
[Learn more](#)



Texas Advanced Nuclear Working Group Issues Recommendations

UT nuclear scientists played a leading role in a working group convened by the State of Texas to investigate how to deploy advanced nuclear technology to meet the state's energy security and grid reliability needs. Their report finds that Texas is well-positioned to lead the next phase of nuclear power generation and provides recommendations on how the state can accelerate development of the industry.

[Read more](#)



New Thermal Interface Material Could Cool Down Energy- Hungry Data Centers

Researchers at The University of Texas at Austin, led by [Guihua Yu](#), have developed a groundbreaking thermal interface material that could reduce cooling energy needs in data centers by 13%, paving the way for more efficient and eco-friendly technologies.

[Read more](#)



AI + Energy

Learn more about how AI can both challenge and advance sustainable energy efforts via a conversation among experts [Michael Pyrcz](#), [Varun Rai](#), and [Rob James](#) at UT's recent "Policy Leadership in the Age of AI" symposium.

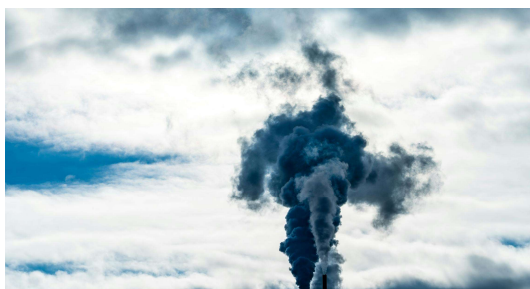
[Listen now](#)



New Program Helps Texas Schools Teach Carbon Capture

The [Gulf Coast Carbon Center](#) at UT Austin has developed a K-12 curriculum on carbon capture and storage (CCS), offering ready-made lesson plans and materials for teachers across Texas. The DOE-sponsored program aims to educate students about CCS and its role in addressing climate change, while also sparking interest in emerging career opportunities in the field.

[Learn more](#)



Hidden Human Health Costs of Carbon Capture, Utilization and Storage (CCUS) in Gulf Coast are Disproportionately Impacting Vulnerable Communities, Study Finds

New research from UT researcher [Andrew Waxman](#) reveals the hidden human health costs of carbon capture, utilization and storage (CCUS) for Gulf Coast communities and what stronger regulations could mean.

[Read more](#)

News From Around Campus

The University of Texas at Austin

UT Austin President [Jay Hartzell](#)'s remarks about how UT—the energy university—plays a leading role in American energy innovation were quoted in the [Ritz Herald](#)'s piece on the launch of the HyVelocity Hub.




HyVelocity in the News

Find more on the HyVelocity Hub launch in [Reuters](#), [Axios](#), [CleanTechnica](#), [E&E News](#), [Enerdata](#), [Energy Intelligence](#), [Energy News](#), [Fuel Cells Works](#), [H2 View](#), [Hart Energy](#), [Houston Business Journal](#), [Houston Chronicle](#), [Hydrogen Insight](#), [Innovation News Network](#), [NS Energy](#), [Offshore Energy](#), [RBN Energy](#), [RIGZONE](#), [SolarQuarter](#), & [Utility Dive](#)

Energy Institute

[Brian Korgel](#) was quoted in [The Austin Chronicle](#) discussing how the Solar for All program helps low-income families overcome the up-front cost of installing solar energy on their homes.

[Carey King](#) authored an article in [The Wall Street Journal](#)  on why policymakers should reconsider relying on energy efficiency as a key decarbonization strategy.

King was also quoted on [Marketplace](#) discussing the challenges of decarbonizing the natural gas supply chain.


[Dave Tuttle](#) spoke with [KUT News](#) about the growing importance of finding responsible solutions for repurposing and recycling EV batteries as their adoption increases.

Tuttle also spoke with [E&E News](#) about the challenges and feasibility of burying power lines to prevent hurricane-related grid damage, highlighting logistical and cost concerns, especially in urban areas.

[Jorge Piñon](#) spoke with [El Financiero](#) about Mexico's oil shipments to Cuba, noting that the island's thermoelectric plants are still operating at reduced capacity.

Piñon also spoke with the [Australian Broadcasting Corporation](#) about Mexico's key role in aiding Cuba amidst its ongoing energy crisis.

Cockrell School of Engineering

[Ben Cahill](#) was quoted in [The Washington Post](#)  discussing how President-elect Donald Trump's policies could significantly boost the fossil fuel industry by reducing regulatory pressure and increasing investor confidence.

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

[Kara Kockelman](#) spoke with [KVUE](#) about the challenges Austin faces in adopting electric buses and the risks of being an early adopter of the vehicles, which are not yet being mass-produced.

Cockrell School of Engineering | Hildebrand Department of Petroleum and Geosystems Engineering


[Hugh Daigle](#) argued in a piece on [RealClearEnergy.org](#) that the U.S. Treasury's proposed carbon intensity regulations for clean hydrogen production under the Inflation

Reduction Act risk stifling innovation and misrepresenting the emissions impact of hydrogen projects.

[Wen Song](#) was quoted on [Undark](#) discussing the transformative potential of AI in accelerating critical mineral discovery processes and assessments.


Cockrell School of Engineering | Webber Energy Group

[Joshua Rhodes](#) spoke with [Marketplace](#) on how the economics of renewables have shifted since the first Trump administration, noting that increased demand for electricity will likely drive growth in renewable energy, which remains the cheapest option for new electricity generation.

Rhodes was also quoted in [The Dallas Morning News](#)  about how strategies like demand response could better manage energy consumption during peak periods, leading to greater grid reliability and cost savings, compared to increasing supply.

KBH Energy Center | Cockrell School of Engineering

[Michael Webber](#) spoke with [Texas Monthly](#) about the potential for large-scale carbon removal technology like Occidental Petroleum's Stratos direct air capture facility to drive innovation and new opportunities within the energy sector.

Webber also spoke with [Bloomberg](#)  about how AI-driven power demand could ultimately support the climate transition by creating conditions that encourage clean energy investments.

LBJ School of Public Affairs

[Joshua Busby](#) and [Nathan Jensen](#) co-authored an article in [The Conversation](#) on the rapid expansion of U.S. clean energy manufacturing, particularly battery plants, fueled by government policies like the Inflation Reduction Act, and the risks posed by potential policy changes following the 2024 elections.

Upcoming Events



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](#)

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