



# The University of Texas at Austin Energy Institute

## UT Energy Bulletin

January 2018

### NEWS



#### UT Energy Week opens Jan. 29

Experts from industry, academia, government regulatory agencies, and non-profit organizations will explore the latest trends, technologies, and challenges in the world of energy during [UT Energy Week 2018](#), Jan. 29 – Feb 2, on the UT Austin campus. The conference, now in its fourth year, features presentations and discussions on a variety of vital energy topics, including utility-scale energy storage, the electric grid of the future, transformative changes in the transportation sector, and energy geopolitics. The event is free for university students, faculty and staff, but registration is required. View the conference [program](#) and [register](#).



#### UT Energy Symposium kicks off spring semester

The UT Energy Symposium (UTES) will kick off its spring semester of guest lectures on Thursday, Jan. 25 with a presentation on *Thermodynamics, Ecology, and Economics* from [John R. Schramski](#), an engineering professor at the University of Georgia. The lecture series, sponsored by the UT's [Energy Institute](#), provides a forum for experts representing a variety of perspectives to discuss energy technology, policy, regulatory and market issues in an informal setting. Students who register for the symposium receive one credit hour for the 15-week seminar course, which is open to both undergraduate and graduate students, and the public at-large. The symposium is held in the Avaya Auditorium ([POB](#) 2.302) from 5:15 p.m. – 6:15 p.m. each Thursday. [Learn more](#) about the UTES and see a full schedule of speakers.



## Bureau of Economic Geology awarded \$4 million for continued CO<sub>2</sub> storage research

The U.S. Department of Energy has awarded \$4 million to UT Austin's [Bureau of Economic Geology](#) to continue research on how carbon dioxide emitted from industrial facilities along Texas' Gulf Coast can be safely stored in geological formations under the Gulf of Mexico. Go [here](#) to learn more about this research, led by the Bureau's [Gulf Coast Carbon Center](#).



## Permian Basin continues to thrive

West Texas' Permian Basin – well known as a productive region for oil and gas development for many decades – has not only weathered the recent decline in oil prices but thrives at a time when many shale plays have slowed production and unemployment has waned. For more about this legendary region and projections of how it might perform over the next 10 – 15 years, read an [article](#) in *Energy One*, the annual magazine produced by UT's renowned [Petroleum and Geosystems Engineering Department](#).

## COMMENTARY



### How *not* to talk about energy policy

As the Trump Administration continues to pursue pro-coal policies at home, energy leaders from around the world gathered in Germany recently to discuss how to combat climate change. The two disparate conversations illustrate how polarized the debate over energy policy has become, writes Prof. [David Spence](#) in a new op-ed. Spence uses two other recent news items as potential springboards for a more productive public discourse; one that accounts for the inevitable tradeoffs that accompany complex energy policy questions. [Read more](#).



### The beer-renewable energy-water nexus

In a lighthearted article for *Earth* magazine, Energy Institute Deputy Director [Michael Webber](#) explores the possibilities of a new realm of research: the beer-renewable energy-water nexus. "While the demand for renewable energy has never been higher," Dr. Webber writes, "beer consumption has been falling. Meanwhile, energy sources are becoming more distributed, as are beer producers, and we are facing threats to our water supply (and thus, beer). Clearly this is a field ripe for study." [Read more.](#)

## RESEARCH



### Fueling the Dragon, Feeding the Tiger

The rapid growth in energy consumption among the world's two most populous countries, China and India, provide a fruitful springboard for a discussion of world energy trends, observes [Fred Beach](#), an assistant director for policy studies at UT [Energy Institute](#) during a recent guest lecture. Dr. Beach, who for the past several years has led a group of UT business school students on a tour of China's energy facilities and infrastructure, spoke to U.S. Navy officers participating in the [Naval Postgraduate School's Energy Program](#). For more, watch a [video](#) of his lecture.



### Nuclear and wind power have lowest leveled CO<sub>2</sub> emissions over operating lifetime

Using data from the Energy Institute's 2016 [Full Cost of Electricity Study](#) (FCe-) Research Fellow [Joshua Rhodes](#) estimates nuclear and wind power have the lowest leveled CO<sub>2</sub> emissions over their operating lifetime. The FCe- study examined the carbon intensity of 12 different fuel and technology combinations for newly constructed power plants by dividing a facility's emissions over its lifetime by its total expected electricity output. [Read more](#) about Rhodes' recent analysis.



### UT ENERGY SYMPOSIUM

*Drivers of technological improvement in clean energy*

Jessika Trancik

Professor in Energy Studies, Institute for Data, Systems and Society at MIT

[Watch the video](#) | [View other UTES talks](#)

# EVENTS



## UT Energy Week

**Jan. 29 – Feb. 2, 2018 | UT Austin campus**

Explore emerging trends, technological breakthroughs, and vital energy challenges facing society during the fourth annual UT Energy Week, Jan. 29 – Feb 2, 2018 in the [Etter-Harbin Alumni Center](#) on the UT Austin campus. UT Energy Week is hosted by the university's [Energy Institute](#), [KBH Center for Energy, Law & Business](#), and two student-run organizations – the [Longhorn Energy Club](#) and the [Texas Journal of Oil, Gas, and Law](#). The event is free for university students, faculty and staff, but [registration](#) is required. For more, view the [conference program](#).



## CEC annual workshop

**Feb. 10 -11, 2018 | UT Austin campus**

Renowned Prof. [John Goodenough](#) will participate in a discussion on the next generation of batteries during the 2018 [Center for Electrochemistry](#)'s Annual Workshop, Feb. 10 -11, 2018. The workshop provides a platform for experts in the world of electrochemistry to discuss their research and convey insights on two other themes: Electrochemistry for the Climate and Environment, and InSitu Characterization of Intermediates in Electrocatalysis. The workshop will be held in the [Robert A. Welch building](#) (Room 2.122) on the UT Austin campus. [Read more and register](#).



## RESEARCH SPOTLIGHT

Wendy Wagner

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