



No. 13

Aug. 4, 2010

Dear Juan,

As the mercury continues to rise this summer, interest in waste heat recovery technologies is taking off. A new organization called [Heat is Power](#) was launched this summer with a provocative website. This coalition of WHR innovators and entrepreneurs is spearheading a national effort to highlight the vast opportunity to produce zero-emission electricity by reusing wasted thermal energy from industrial plants. Already, the group's newly unveiled [website](#) has been featured on former Houston mayor and current Texas gubernatorial candidate Bill White's Facebook page, and a number of federal legislators are taking heed of thermal energy's vast untapped potential (see article below). In addition, as we reported in the last edition, waste heat recovery, including the capture of waste heat from on-site power generation, was included as an eligible technology in recent Renewable Portfolio Standards in Louisiana and Oklahoma.

## Thermal Energy Gaining Bipartisan Steam Among National Policymakers

Clean energy that reuses waste heat is attracting bipartisan support among policymakers, resulting in the recent introduction of promising federal legislation.

Last month, U.S. Sens. Al Franken (D.-MN) and Kit Bond (R.-MO.) and U.S. Rep. Betty McCollum (D.-MN) introduced [HR 5805, the Thermal Renewable Energy and Efficiency Act of 2010](#), which would offer incentives to promote combined heat and power (CHP) and district energy, a bill strongly endorsed by the [International District Energy Association](#) and [U.S. Clean Heat and Power Association](#) (USCHPA).

"Expanding our use of renewable thermal energy, exemplified by the model district energy system we have in [St. Paul](#), is one way to provide low, stable heating and cooling prices to consumers, dramatically increase our country's energy efficiency and speed up our transition away from coal and fossil fuels that cause global climate change," said Sen. Franken.

Also recently introduced was the [Heat is Power Act](#), a bipartisan proposal to increase the investment tax credit (ITC) for CHP and waste heat recovery projects from 10% to 30%. Bill sponsors include U.S. Representatives Shelley Berkley (D.-NV), Jay Inslee (D.-WA), Ron Paul (R.-TX), and Paul Tonko (D.-NY). An increase in

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### Important Dates

**Aug. 5**

U.S. DOE ITP "[Achieving Employee Engagement in Energy Efficiency](#)" webinar

Sustainable Facility [Virtual Global Green Expo](#)

**Aug. 10**

**Deadline:** El Paso Electric Co. RFP [Final proposals](#)

**Aug. 11**

**GC RAC webinar:** [CHP: Benefits and Basics](#)

**Aug. 15-18**

GovEnergy 2010 [Conference](#) (Dallas, TX)

**Aug. 16-17**

Gulf of Mexico Deepwater [Symposium](#) (Baton Rouge, LA)

**Aug. 17-19**

Energy Technology and Policy [Industrial Course](#) (Austin, TX)

**Aug. 24-26**

Clean Air Through Energy Efficiency [Conference](#) (Austin, TX) - **GC RAC presenting**

**Aug. 26**

Rural Alliance for Renewable Energy [Biomass Workshop](#)

the ITC has been the subject of [lobbying efforts by the USCHPA](#).

"We shouldn't allow clean energy produced by waste to go wasted," said Rep. Inslee. "By implementing this policy, we will be able to incentivize the deployment of technologies that can capture thermal energy from waste and convert it to electricity."

Close to one-third of the total quantity of energy consumed in the U.S. is used for heating and cooling buildings and industrial processes, representing an opportunity to reuse waste heat and reduce greenhouse gas emissions, either through combined heat and power, renewable thermal energy sources, or other energy-efficient technologies.

## UT-Austin CHP Earns AEE Award

The University of Texas at Austin received the 2010 Corporate Energy Management award for Region IV from the [Association of Energy Engineers](#) (AEE). The award recognizes the school's accomplishments in developing, organizing, managing, and implementing its energy management program.

UT's 65 MW CHP system supplies all of the campus's power, heating, and cooling needs to over 150 buildings and 16 million square feet. Thanks to ongoing modifications to increase the plant's efficiency, the [UT-Austin Utilities and Energy Management team](#) has returned emissions and fuel requirements to 1977 levels despite roughly doubling the amount of building space. The school's energy management received international recognition last fall with a [Global District Energy Climate Award](#), presented by the International Energy Agency.



Juan Ontiveros

"The University of Texas at Austin is honored and proud to accept this very prestigious recognition, showing that combined heat and power and district energy are proven to improve efficiency and reduce CO2 emissions," said Juan Ontiveros, Executive Director of Utilities and Energy Management at UT-Austin. "With a good plan and support from administration, UT Austin has taken off-the-shelf technology such as digital controls, real time modeling and creatively applied plant improvements to address long term campus energy needs in a manner in which the fuel savings realized from efficiency improvements exceeds the long term debt. If we can do it, anyone can."

Ontiveros recently co-presented GC RAC's ["CHP in Colleges and Universities" webinar](#), available for download. Colleges and universities considering CHP can find project support through the DOE's regional [Clean Energy Application Centers](#) and the [International District Energy Association](#) and its members.

Ontiveros will accept the AEE award on behalf of UT-Austin at the association's annual conference in Washington, D.C., in December.

(College Station, TX)

**Sept. 15**  
Industrial EE Programs for Utilities [Workshop](#) (Oklahoma City, OK) - **GC RAC presenting**

**Sept. 15-17**  
Texas Association on Regionalism [Conference](#) (San Antonio, TX)

**Sept. 29-30**  
Waste Heat to Power [Workshop](#) (Chicago, IL)

**Sept. 30- Oct. 1**  
[Border Energy Forum XVII](#) (Chihuahua, Chihuahua)

**Oct. 6-8**  
USCHPA Annual [Conference](#) (Washington, DC)

**Nov. 2-3**  
U.S. EPA CHP Partners [Meeting](#) (Austin, TX)

## Did you know?

CHP is a great fit for campuses, whether in a central plant model or in a decentralized scheme. See our recent webinar presentation "[CHP in Colleges and Universities](#)" for more information

## Must read

The Massachusetts Institute of Technology Energy Initiative recently issued the interdisciplinary study "[The Future of Natural Gas](#)." Study authors predict an increase in national usage of natural gas, the most prevalent fuel source for CHP, due largely to its large domestic supply and relatively smaller carbon footprint.

## Spotlight on Campuses

### Michael Webber UT-Austin

Michael Webber, PhD, is considered a rising star among energy experts in Texas for good reason. An assistant professor in mechanical engineering at the University of Texas at Austin, Webber hardly stays confined to the classroom. In addition to teaching undergraduate and

## CATEE Conference to Include CHP Panel

The upcoming annual Clean Air Through Energy Efficiency (CATEE) conference will include a panel focusing on the numerous benefits of combined heat and power (CHP). GC RAC director Dan Bullock will join [Texas CHP Initiative](#) board members Rich Herweck and Ray Deyoe on the panel. Cliff Braddock of [Robust Energy](#), for which Herweck serves as CEO, rounds out the CHP speaker set of the "Institutional and Commercial" breakout session on the first day of the conference.

CATEE will be held Aug. 24-26 in Austin, Texas. For more information on the conference, visit the [CATEE website](#).

## Texas Biomass Subject of Workshop

Biomass's potential for energy production serves as the focus for the Rural Alliance for Renewable Energy's (RARE) upcoming workshop. While natural gas is the most prevalent fuel source for CHP systems, biomass is another option.

The workshop will be held Aug. 26 in College Station, Texas. For more information on the workshop, visit the [RARE website](#).

### POLICY MATTERS

## Sunset Commission Renders Decisions on PUCT, ERCOT

The [Texas Sunset Advisory Commission](#) has rendered decisions based on staff's recommendations to improve operations of the Public Utility Commission of Texas (PUCT), the Electric Reliability Council of Texas (ERCOT), and the Office of Public Utility Council. Download the Sunset report [here](#).

While ruling on some issues, the commissioners postponed the long-standing issue of consolidating certain PUC electricity functions with gas and water regulation at the Railroad Commission of Texas (RRC) or the Texas Commission on Environmental Quality (TCEQ). The Commission agreed with the staff's recommendations to evaluate consolidating certain functions at the conclusion of the RRC's and TCEQ's Sunset reviews later this year. Texas is the only state to regulate electric and gas utilities under separate agencies, complicating the permitting process for CHP adopters in the state.

The Sunset advisory process evaluates Texas state agencies on their performance and incorporates public input into the Commission's decision to renew an agency and/or recommend operational changes. GC RAC had previously [filed comments to the Sunset Commission](#) and to two PUCT rulemaking dockets (Nos. [37623](#) and [35792](#)) recommending that the PUCT help overcome regulatory and market barriers to CHP.

graduate students about timely energy technology and policy issues. Webber regularly delivers speeches and presentations to a range of technical and general audiences.

Among Webber's many publications is the 2009 report "[Energy-Water Nexus in Texas](#)" produced in conjunction with the Environmental Defense Fund. Quantifying the statewide water-saving benefits of combined heat and power, which uses no water, may serve as the basis for further research.

Webber's popular three-day industrial course "[Energy Technology and Policy](#)" (held Aug. 17-19 this year) has become a must-attend for local policymakers and professionals due to his engaging, affable teaching style and incisive observations on energy issues. Webber also directs the [Webber Energy Group](#), a core of interdisciplinary student researchers who help bridge the divide between scientists and policymakers.

Webber also serves as the associate director of the UT-Austin Jackson School of Geosciences' [Center for International Energy and Environmental Policy](#).



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### Newsletter Archive

Missed an issue? [Visit our website](#) to catch up on Gulf Coast clean energy developments!

### About the Center

## Upcoming GC RAC Webinar

### "CHP: Basics & Benefits"

GC RAC presents a free webinar on the basics and benefits of combined heat and power. Topics covered include: current technologies, best user's profile and common design strategies, applications in different market segments, environmental benefits, and case studies.

**When:** Wed., Aug. 11, 2:00-3:00 p.m. CDT

**Cost:** Free!

[Register Now](#)

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An archive of past webinars on various topics related to CHP is available on our [website](#).



The U.S. Department of Energy Gulf Coast Clean Energy Application Center (GC RAC) facilitates greater deployment of clean energy technologies like combined heat and power (CHP), district energy, and waste heat recovery in Texas, Louisiana, and Oklahoma.

The GC RAC provides education and outreach programs to technology adopters, policy makers, and regulators. We also provide project-specific support services to help adopters evaluate the benefits of clean energy technologies. In addition, we work with the clean energy industry and other stakeholders on policies supporting clean energy.

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