

TEMA / UH Energy Exchange

📅 Friday, September 25, 2026

🕒 12:00 PM – 6:30 PM

📍 T2 Room 203, CLASS Building, 4230 Martin Luther King Blvd.

Academic researchers, school energy managers, and energy professionals exchange ideas on energy management, smart-building technology, and how environmental and built conditions affect K-12 students.

FRIDAY PRESENTATION PROGRAM – 1:00 TO 5:00 PM

1:00 – 1:50

Engineering

Energy efficiency, smart-grid integration, and virtual power plants.

Engineering researchers discuss research on energy efficiency, smart-grid integration, and power management within the framework of virtual power plants.

Led by Jian (Jason) Shi, Associate Professor, Cullen College of Engineering.

2:00 – 3:20

Social Science
& Education

Ambient conditions, school infrastructure, and learning. 2:00 – 2:25

Social science researchers discuss how ambient environmental conditions interact with school infrastructure to affect child learning and other outcomes.

Led by Fan Wang & Willa Friedman, Associate Professors of Economics.

Energy and sustainability in extreme weather. 2:25 – 2:50

UH public affairs researchers will discuss research on the relationship between energy and sustainability in an extreme-weather environment.

Led by Maria Perez Arguelles, Research Assistant Professor, Hobby School.

School, education, & planetary health. 2:50 – 3:20

Environment, environmental education, planetary health in K-12 schools in urban and rural settings, America and international context.

Led by Jennifer Adams & Hunter Gehlbach, Professors, Johns Hopkins University.

3:30 – 5:00

Collaboration

Linking school infrastructure and student outcome data. 3:30 – 3:45

Introduction to UH-Education Research Center data.

Led by Jon Wivagg, Research Scientist, College of Education.

Research on school facility infrastructure and energy use. 3:45 – 4:30

Preliminary research using facility and energy-use data from Galena Park ISD.

Led by Rupsha Dey and Kristi Duong, Graduate Researchers, UH.

Energy management and potential for research collaborations. 4:30 – 5:00

Discussions of opportunities for collaborations.

Led by Manny Villalobos and Zach Fade, President and Vice President, TEMA.

MEALS AND LOCATIONS

Lunch and Networking – 12:00 to 1:00 PM

Networking and lunch, **Kasra Persian Grill**, T2 outside of room 203.

Dinner and Networking – 5:15 to 6:30 PM

Networking and dinner, **French Corner**, T2 room 303.



Jointly organized by the Energy Management Alliance and the University of Houston – Economics, Education, Engineering, and Public Affairs with funding provided by UH-DOR NCPA.

Environment, Energy, and Schools

📅 Saturday, September 26, 2026

🕒 8:30 AM – 1:00 PM

📍 Synergy Room, 2nd Floor, Student Center North, 4465 University Dr.

This event brings together an interdisciplinary team of researchers with expertise in environmental science, energy management, education, public policy, and social science to develop research ideas and proposals focused on Environment, Energy, and Schools. Building on relationships with school energy managers, we hope to establish unique datasets on school infrastructure, energy-facility upgrades, and energy use, and link these data to administrative data on student learning and other outcomes, as well as data on ambient environmental conditions. We aim to build research proposals that provide new insights into how ambient and school environments interact to affect students' short- and long-run outcomes and to develop smart, student-centered energy solutions that provide resilient thermal comfort.

WORKSHOP SESSIONS

9:00 – 9:50

Practitioner's
Perspective

School energy-management challenges and collaboration opportunities.

Led by Zach Fade, Galena Park ISD Energy Manager, and Ashley Williams, TEMA COO. Discuss challenges and tasks that school energy managers face? What social science, engineering, and education research/outreach could be useful? What opportunities do you see for collaboration and joint proposal/grant development?

10:00 – 10:50

Proposal
review

Review research proposal.

Presentation of potential components of NSF-style research proposal, building on prior proposal drafts and new preliminary research.

11:00 – 11:50

Ideas
sandbox

Proposal and idea discussions.

Each participant shares in sequence research ideas and proposal ideas. Group discussions and synthesis of ideas.

MEALS AND LOCATIONS

Breakfast – 8:30 to 9:00 Tacos A Go Go, in the Synergy Room, Student Center North.

Lunch – 12:00 to 1:00 Fresh Fork, in the Synergy Room, Student Center North.

Dinner Street to Kitchen restaurant for those interested and available.

Participants

 September 25–26, 2026

 University of Houston

Invited energy professional speakers

Michael Barnes

CMTA

Paul Brokhin

CEO, Imperial Sustainability

Adrian Carter

Automated Logic

Anna Chenier

Vice President, Pogue Construction

Nicole Lucero Coleman

Regional Impact Liaison, TEMA

Simren Dsouza

Project Engineer, Texas Air Systems

Zach Fade

Energy Manager, Galena Park ISD; Vice President, TEMA

Cris Munoz

Energy Conservation Specialist, Mansfield ISD

Manny Villalobos

Energy Manager, Cypress Fairbanks ISD; President, TEMA

Ashley Williams

COO, TEMA

Researchers

Jennifer Adams

Associate Professor, School of Education, Johns Hopkins University.

Maria Perez Arguelles

Research Assistant Professor, Hobby School, UH

Haley Curtis

Doctoral Researcher, Department of Economics, UH

Rupsha Dey

Doctoral Researcher, Department of Economics, UH

Kristi Duong

Graduate Researcher, Cullen College of Engineering, UH

Willa Friedman

Associate Professor, Department of Economics, UH

Hunter Gehlbach

Professor, School of Education, Johns Hopkins University

Emily Hannum

Professor of Sociology and Education, U. of Pennsylvania

Blake Heller

Assistant Professor, Hobby School of Public Affairs, UH

Pablo Pinto

Director, Center for Public Policy; Distinguished Professor, Hobby School of Public Affairs, UH

Xinwu Qian

Assistant Professor, Civil and Environmental Engineering, Rice University

Jian (Jason) Shi

Associate Professor, Cullen College of Engineering, UH

Chad Stevenson

Doctoral Researcher, Department of Economics, UH

Toni Templeton

Senior Research Scientist, College of Education, UH

Fan Wang

Associate Professor, Department of Economics, UH

Kailai Wang

Assistant Professor, Cullen College of Engineering, UH

Jon Wivagg

Research Scientist, College of Education, UH

Sunny Wong

Associate Dean for Graduate Studies and Professor, Hobby School of Public Affairs, UH