

General Information



SPE Workshop: Future Energy Roadmap—Navigating through the Energy Transition

22-23 August 2022 | The San Luis Hotel, Spa and Conference Center | Galveston, Texas, USA

Accessibility

Our events and functions are accessible to all attendees with wheelchairs. If you require special arrangements, please contact our staff at the registration desk.

Alcohol Policy

SPE recognizes the legitimate serving of alcoholic beverages in the process of conducting business and social activities. We also recognize that the use and consumption of alcohol carries with it the requirement for all attendees to consume those beverages responsibly.

Commercialism

In remaining consistent with workshop objectives and SPE guidelines, commercialism in presentations will not be permitted. Company logos should be used only to indicate the affiliation of the presenter(s).

Continuing Education Units

Attendees will receive 2.4 CEUs. One CEU equals 8 contact hours of participation. CEUs will be awarded through SPE Professional Development for participation and completion of an SPE workshop. A permanent record of a participant's involvement and awarding of CEUs will be maintained by SPE.

Documentation

Following the workshop, a URL containing released copies of the workshop presentations will be available to all attendees.

Electronic Devices

As a courtesy to the speakers and your fellow registrants, please turn off all electronic devices during presentations.

Name Badges

Please wear your badge at all times. It is a courtesy to your fellow registrants, speakers, and sponsors.

Photography and Recording Policy

SPE reserves the exclusive rights to all video/audio recording or reproductions of the workshop. Unauthorized video/audio recording is expressly prohibited in the session room(s) or poster area, whether by video, still or digital camera, mobile phone, or any other means or form of reproduction.

Any person attending may be photographed or videotaped, and by your attendance, you give permission to use your image in possible future marketing publications including print, online, and video.

Workshop Format

Workshops maximize the exchange of ideas among attendees and presenters through brief technical presentations followed by extended Q&A periods. Focused topics attract an informed audience eager to discuss issues critical to advancing both technology and best practices.

Many of the presentations are in the form of case studies, highlighting engineering achievements and lessons learned. In order to stimulate frank discussion, no proceedings are published and members of the press are not invited to attend.



Please take a moment and let us know your thoughts on this event!



http://go.spe.org/22AAGA1-AttendeeSurvey

Program Committee

Heath Nevels GHD

Co-Chairs

Jan Sherman Carbonvert

Program Committee

Jeff Brown
Stanford University

Birol DindorukUniversity of Houston

Justin Evans Worley

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David Maher Linde

Jonah Margulis Aker Offshore Wind

Siggi Meissner Nabors

Brandon SchwartzPenn State University

Lee Stockwell Shell

Cindy TaffSage Geosystems

Philipp Witte Microsoft ver the past couple of years, the message that the energy sector must reach net zero has gone mainstream. The oil and gas industry has reached a unique inflection point between continued fossil fuel development to provide affordable, reliable energy and investment, technology, and the government sprinting towards a clean-energy economy at the same time. Achieving net zero is not the end of the reliance on fossil fuels, it simply means the industry must offset all emissions through technologies that capture carbon emissions before they are released into the air, or by introducing additional future energy technologies.

This workshop will provide the attendee an introduction and fundamental understanding of key future energy technologies and how these technologies influence the energy transition today and in the future. The goal of the workshop will be to provide engineers and managers with a future energy roadmap that will allow them to navigate through the energy transition.

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Who We Are SPE is the largest individual member organization serving managers, engineers, scientists and other professionals worldwide in the upstream segment of the oil and gas industry.





Technical Agenda As of 8 August 2022

All technical sessions will be located in the Grand Ballroom.



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Monday, 22 August

0700-0800

Registration Check-In Grand Ballroom Fover

Breakfast Blake's Bistro

0800-0830

Chairperson's Welcome and Keynote Speaker

Chairs: Heath Nevels, GHD Jan Sherman, Carbonvert

Keynote Presentation Houston's Leadership in the Energy Transition

Bob Harvey, Greater Houston Partnership

0830-0930

Session 1: The Role Hydrocarbons Play in the Future Energy Mix

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Chairs: Birol Dindoruk, University of Houston Jenny Philip, Shell

- Energy Transition: Where We Stand on Foreseeable Future Energy Mix—Where We Draw the Boundaries and How Long? **Birol Dindoruk,** University of Houston
- Shifting Trends and Dynamics in the Energy Transition Jenny Philip, Shell
- Energy Transition: Advancing into a Low Carbon Future **Dengen Zhou**, Chevron

0930-1000 **Coffee Break**

Grand Ballroom Fover

1000-1140

Session 2: Carbon Capture, and Storage (CCS) Technology

Chairs: Jackie Gerst, Carbonvert Benjamin Lascaud, ConocoPhillips

- · Bayou Bend: Offshore Storage Hub in the US Continental Shelf Grant Pribilski, Talos Energy
- Storage Site Selection for a Mature Carbon Capture Storage Industry

Susan Hovorka, University of Texas, Gulf Coast Carbon Center

Panelist: John Dabbar, ConocoPhillips

1140-1300 Blake's Bistro Lunch

1300-1440

Session 3: Offshore Wind Technology

Chairs: Justin Evans, Worley Jonah Margulis, Aker Offshore Wind

- Marine Logistics in Floating Offshore Wind Bo Jardine, Bluetec Industries
- Fixed and Floating Offshore Substations Chunfa Wu, Worley
- Challenges and Opportunities for Moorings in Floating Offshore Wind

Tom Fulton. Acteon

1440-1510 **Grand Ballroom Foyer Coffee Break**

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1510-1700

Session 4: Geothermal in Sedimentary Rock

Chairs: Siggi Meissner, Nabors Cindy Taff, Sage Geosystems

• Temperature Data and the Thermal Picture in Sedimentary

Ken Wisian, UT Bureau of Economic Geolog

- Shining a Light on Geothermal in a Sedimentary Basin: Learnings from the Field Project in Saskatchewan Kirsten Marcia, Deep Earth Energy Production (DEEP)
- New Enhanced Geothermal Systems Approach: Results of Field Test in South Texas

Lev Ring, Sage Geosystems

1700-1800 **Networking Reception** San Luis Pool Deck

Tuesday, 23 August

0700-0800 Blake's Bistro Breakfast

0800-0830

Welcome Back and Keynote Speaker

Chairs: Heath Nevels, GHD Jan Sherman, Carbonvert

Keynote Presentation

Shaping Our Energy Transition Future Together

Michael Edwards, Edwards Energy Innovation Consulting, LLC

0830-1010

Session 5: Clean Hydrogen

Chairs: Frank Frey, GHD David Maher, Linde

- Hydrogen Storage in Solution Mined Salt Caverns Richard Fenza, Air Liquide
- Role of Blue Hydrogen in Midstream Industry Yun Bai, TC Energy
- In-situ Biohydrogen from Unrecovered Oil (Gold Hydrogen) Oil and Gas Industry Leading the Hydrogen Economy

Zach Broussard, Cemvita Factory

1010-1030 **Grand Ballroom Foyer Coffee Break**

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1030-1210

Session 6: Techno Economics

Chairs: Jeff Brown, Stanford University Eric Smith, Tulane

Techno-economic Analysis of Blue Hydrogen and Value Chain

Ning Lin, UT Austin Economic Bureau of Geology

• Techno-economic Models for Assessing CO₂ Pipeline Transport and Geologic Storage

Travis Warner, National Energy Technology Laboratory

• Skills Transfer from Petroleum Engineering to Decarbonization: Micro- and Macro-Techno-economic Analysis

Jeff Brown. Stanford University

1210-1310 Lunch

Blake's Bistro

1310-1450

Session 7: Emerging Technologies

Chairs: Daniel Kim, Williams Companies Yagna Oruganti, Microsoft

• Leveraging Digital and Edge Technologies for Integrated Methane Measurements

Gokhan Erol, Schlumberger

- Responsible Electric Grid Decarbonization Thomas McAndrew, Enchanted Rock
- The Emergence, Landscape and Future of Direct Air Capture Ben Stone, Avnos

...... **Grand Ballroom Foyer**

1520-1700

Coffee Break

Session 8: Future Energy Roadmap—Summarizing and Mapping How to Navigate through the Energy Transition

Chairs: Birol Dindoruk, University of Houston Jan Sherman, Carbonvert

Panelists:

Tom Blasingame, Texas A&M Jan Sherman, Carbonvert Birol Dindoruk, University of Houston Jenny Philip. Shell