

North Central Texas Hydrogen User Forum

University of Texas at Arlington June 11, 2024

HYDROGEN USER FORUM AGENDA

8:00 A.M. REGISTRATION AND NETWORKING

9:00 A.M. OPENING WELCOME (PAGE 3)

Dr. Chris Boyer, The University of Texas at Arlington

Lori Pampell Clark, North Central Texas Council of Governments

(NCTCOG) and Dallas-Fort Worth Clean Cities

10:00 A.M. PANEL 1: TRANSPORTATION - VEHICLES/REFUELING (PAGE 3)

Christie Goodman-Duke, Moderator

Cory Shumaker, Hyzon

Bill Khan, PACCAR/Peterbilt

Bill Zobel, Pilot

Dmitry Serov, HyRoad

11:00 A.M. PANEL 2: TRANSPORTATION - END USERS (PAGE 5)

Craig Chick, Moderator

Nick Konen, Hillwood

Hugo Contreras, DFW Airport

Rijin Easow, DART Cole Rogers, Talke

12:00 P.M. LUNCH

1:00 P.M. PANEL 3: INDUSTRY SUPPLIERS & CONSUMERS (PAGE 7)

Meghna Tare, Moderator

Mothusi Pahl, Modern Hydrogen

Gerson Durán, RTE Pro Darin Knicely, RW Energy Chris Shugart, Ambient Fuels

2:00 P.M. PANEL 4: POWER & BLENDING (PAGE 8)

Mike Martinez, Moderator

Garry Waggoner, Vistra/Luminant

Peter Baldwin, Harnyss

Kevin Boudreaux, Monarch Energy

3:00 P.M. CLOSING REMARKS (PAGE 10)

Susan Shifflett, Texas Hudrogen Alliance

3:30 P.M. NETWORKING

OPENING WELCOME



Dr. Chris Boyer, The University of Texas at Arlington

Dr. Boyer has been a leader in the energy transition since 1989 and has developed, designed, and deployed many technologies' first-of-a-kind industrial projects, including green hydrogen production, military facility microgrids,

utility battery energy storage systems, grid connected photovoltaic systems, off-grid renewable energy systems, reactive-distillation processes, fuel cell and electrolyzer systems, and salt-dome gas storage. He currently serves as a faculty member to develop a new program, Resource and Energy Engineering, at the University of Texas at Arlington. He received a Ph.D. in Chemical Engineering from Texas A&M University and is author on over 20 patents.



Lori Pampell Clark, NCTCOG and DFW Clean Cities

Lori manages a team that works to advance the clean fuel and clean energy transition in the transportation sector, with emphasis on strategies that improve local air quality. Efforts range from zero emission vehicles

to renewable fuels to energy efficiency and renewable energy. She serves as Director of the Dallas-Fort Worth Clean Cities Coalition, which is hosted within NCTCOG and designated by the Department of Energy as part of the national Clean Cities program. She serves on the Envionmental Protection Agency Mobile Source Technical Review Subcommittee and on the Board of Advisors for the Transportation Energy Institute. Lori received a bachelor's degree in environmental studies and political science from Baylor University.

PANEL 1: TRANSPORTATION - VEHICLES/REFUELING



Christie Goodman-Duke, Moderator

Christie Goodman-Duke is an Economic Development Coordinator for Fort Worth. Her primary focus is on the recruitment, retention, and expansion of the energy industry and strategic real estate development within Fort Worth. Christie grew up in DFW and graduated from TCU

prior to moving to Austin, Texas. She spent the majority of her career working in

state government as a Chief of Staff and as a lobbyist. While working as a lobbyist, she represented interests, including, but not limited to: energy, tourism, juvenile justice, education, transportation, and software. In 2020, Christie returned to the metroplex to start a consulting firm specializing in municipal economic development.



Cory Shumaker, Hyzon

Cory brings his 15 years of experience with hydrogen fuel cells and zero emission heavy-duty vehicles to provide insight into the deployment of Class 8 hydrogen fuel cell trucks and, through partnerships, the development of hydrogen production and infrastructure projects for

fleets. Fun fact, Cory worked for Vision Industries Corporation through his role as Chief Electrical Engineer where he assisted in building the world's first hydrogen fuel cell Class 8 truck prototype in 2011 that was tested in the Port of Los Angeles/Long Beach.



Bill Kahn, PACCAR/Peterbilt

Bill Kahn is a Senior Principal Engineer at Peterbilt Motors and is the Manager of Advanced Concepts. An engineering graduate (BSME) of Texas A&M University, he has over 40 years of experience in the trucking and aerospace industry. His last 27 years have been dedicated to evaluating

emerging technologies and developing timelines for their viability within the Peterbilt product. Of late, his work is focusing on hydrogen as a transportation fuel. Mr. Kahn is a member of the University of North Texas Faculty Advisory Board and the Society of Automotive Engineers, among other groups.



Bill Zobel, Pilot

William (Bill) Zobel serves as Director of Alternative Fuels Strategy for Pilot. He is responsible for the development and execution of the company's alternative fuels strategy as it relates to clean hydrogen. As a growth-focused company, Pilot delivers innovative solutions across its

retail, energy, and logistics operations, keeping interstate travelers moving through its leading network of more than 800 travel centers across North America. Prior to joining Pilot, Bill was Vice President of Business Development at Iwatani, assisting in the development of a fully integrated hydrogen value chain from supply sourcing to retail station development.



Dmitry Serov, HyRoad

Dmitry is a seasoned investor and repeat founder in both traditional and green energy. He founded Hyroad in 2022 to accelerate asset development and mobilize growth capital towards a space where lack of infrastructure was limiting adoption. Prior to founding Hyroad, Dmitry spent

10 years as Investment Director at Vitol, the world's largest independent energy trader. While at Vitol, he led Vitol's downstream activities in South America and, more recently, its investment activities in green mobility. This included founding VEV, Vitol's electric mobility platform for fleets. Prior to Vitol, Dmitry was a private equity investment professional at First Reserve Corporation.

PANEL 2: TRANSPORTATION - END USERS



Craig Chick, Moderator

Craig Chick is the founder of Capitol Partners Consulting.
Craig is known as one of the most honest voices in Texas
politics and is well regarded by both Republicans and
Democrats. He is unique among lobbyists because of
his rare combination of knowledge of the internal and

parliamentary procedures of both the House and Senate. His relationships and reputation, combined with his procedural experience, are at the core of what differentiates him. For years, Craig has been ranked as a top 20 lobbyists in Texas in the Texas Lobby Power Rankings published by veteran capitol reporter, Mike Hailey's CapitolInside.com.



Nick Konen, Hillwood

Nick serves as the Director of Strategic Development for Hillwood, working closely with development and marketing teams to advance long-term planning and infrastructure needs for AllianceTexas. Nick's primary focus is to advance critical development initiatives

around mobility innovation, industrial infrastructure, energy, and data. Nick's experience ranges from Class I railroad mainline to intermodal and sizeable industrial site development. He has successfully executed numerous large and small projects in different municipalities throughout the U.S.



Hugo Contreras, DFW Airport

Hugo Contreras is the Assistant Manager for Contract Services at Dallas Fort Worth International Airport. He manages oversight for five bussing services and the airport's valet service, as well as managing the use of DFW's GPS bus tracking and passenger counting

system. Hugo is a member of the DFW Airport Hydrogen Task Force, evaluating the viability of using hydrogen fuel cell buses in a unique airport environment. He is leading efforts to bring a hydrogen fuel cell bus to DFW for a pilot project. Hugo has been with DFW Airport since 2013.



Rijin Easow, DART

Rijin Easow is an Engineering Specialist at Dallas Area Rapid Transit, holding a Master's in Mechanical Engineering, who serves the Dallas public via his exemplary work in the transit industry through DART. He played a pivotal role in generating the Zero Emissions

Transition Plan for DART, while commissioning the long-range EV bus as a Lead Engineer, and conducting performance analysis on DART EV buses. Currently, Mr. Easow has an integral role within the procurement and successful onboarding of low emission compressed natural gas buses, which will aid the 2026 FIFA World Cup in moving people from various countries who are visiting Dallas.



Cole Rogers, Talke

Cole Rogers, currently serving as the Head of Technical and Projects for TALKE USA, is a seasoned professional with a background in project management and logistics. With a bachelor's degree from Tarleton State University, Cole began his career in industrial construction where

he spent eight years honing his skills as a project manager. Transitioning to the fertilizer industry, Cole spent a decade managing transportation and operations, gaining expertise in logistics and hazardous goods handling. Now, for TALKE, a leading full-service third-party logistics company specializing in hazardous materials, Cole brings his knowledge and leadership to drive excellence in logistics services.

PANEL 3: INDUSTRIAL SUPPLIERS AND CONSUMERS



Meghna Tare, Moderator

As the University of Texas at Arlington's Chief Sustainability Officer, Meghna supports the operations and strategic planning for the university-wide sustainability practices programs and policies in collaboration with university operations units, academic

and research units, student organizations, and external partners. She also leads strategic initiatives to foster economic growth, innovation, and entrepreneurship within the campus and North Texas community. She serves on the Board on Higher Education and Workforce (BHEW) within the division of Policy and Global Affairs at the National Academies, Roundtable on Science and Technology for Sustainability at the National Academies, and on the Board of Directors for International Council for Local Environmental Initiatives (ICLEI).



Mothusi Pahl, Modern Hydrogen

Mothusi Pahl has a deep background in the introduction of new technology across energy, infrastructure, and utilities. He leads Business Development and Government Affairs at Modern Hydrogen, a Seattle energy technology company backed by leading

investors, including NextEra Energy, National Grid, and Bill Gates.



Gerson Durán, RTE Pro

Gerson is the CEO of RTE Pro, a consultancy firm established in 2022. He brings over eighteen years of experience in the mining & metals sector and has been involved in the hydrogen energy field since 2019. His experience in hydrogen includes agnostic evaluations

of hydrogen technologies, techno-economic analyses, electrolyzer design (both balance of stack and balance of plant design), development of integration solutions and necessary adaptations at clients' sites, hydrogen safety evaluations, fabrication, procurement, and management of permit applications. His projects in hydrogen include pyrometallurgical and energy-intensive manufacturing companies in USA, Chile, Brazil, Colombia, Peru, Mexico, and Spain.



Darin Knicely, RW Energy

Darin Knicely is CEO of RW Energy. RW specializes in blue hydrogen logistics and helps companies make the most of their natural gas and methane supply. Their expertise in solving methane emissions, diversifying natural gas portfolios, and curing stranded gas assets

makes them an excellent partner for companies. They offer support in financing, equipment selection, engineering design, and sales logistics, bringing their clients into the clean hydrogen ecosystem and optimizing natural gas usage. Darin has worked in 29 states and 5 countries throughout his career. He continues to stay active in his passion areas of christian leadership, energy transition, education, and disadvantaged populations.



Chris Shugart, Ambient Fuels

Chris comes to Ambient Fuels with over 25 years of experience in renewable and industrial and energy projects, including wind, solar, battery storage, high voltage transmission, and cogeneration. Chris is responsible for leading the development, execution,

and operations of the Ambient Fuels' project pipeline. Prior to his current role, Chris was a member of the executive management teams at leading renewable energy firms Pattern Energy and Rev Renewables (LS Power). In these roles, Chris had diverse leadership roles spanning project development, construction, project operations, asset management, corporate operations, supply chain, and construction management of renewable energy and storage projects.

PANEL 4: POWER AND BLENDING



Mike Martinez, Moderator

Mike Martinez, a founding partner of H2 Ranch, has more than 20 years in the energy industry, spending the last 5 years focused on green hydrogen production. As a member of the Texas Hydrogen Alliance, he serves on its Board of Directors as Treasurer. Mike also was an active

participant in the IH 45 Corridor – ZEV Plan prepared by NCTCOG. Additionally, Mike enjoyed a very rewarding stint in politics as a lobbyist, a national campaign worker, and Chief of Staff for a Texas state representative. Mike holds a Bachelor of Arts degree in Government from the University of Texas at Austin.



Garry Waggoner, Vistra/Luminant

Garry Waggoner is the Vice President of Generation Services for Irving-based Vistra, a leading Fortune 500 integrated power generation and retail electricity company – and the largest competitive power generator in the U.S. Mr. Waggoner joined the company in 1982 and

has 42 years of experience across the power generation industry. In his current role, Mr. Waggoner leads a diverse organization of engineers and technical specialists, providing operational risk-based expertise to support the safe and reliable operation of the company's diverse power generation fleet, which includes nearly 50 natural gas, nuclear, coal, solar, and battery energy storage facilities located across the country from California to Maine.



Peter Baldwin, Harnyss

Mr. Peter Baldwin, Vice President of Business
Development at Harnyss, leads efforts in renewable
energy microgrids using solar and solid-state
energy storage. With over 35 years of experience in
environmental science and sustainability, he has extensive

expertise in sustainability, air, water, safety, and data management. Previously, he served in key roles at CH2M Hill and AECOM. At Harnyss, Peter focuses on low-carbon energy production and storage technologies, including self-contained microgrid solutions with solid-state supercapacitors and on-site hydrogen production. His goal is to reduce dependence on diesel power generation and promote global energy resilience.



Kevin Boudreaux, Monarch Energy

With over 20 years of progressive accomplishments in the energy industry, Kevin has a deep understanding of multimarket operational processes from new market entry to complex settlements. He currently leads the power procurement division for Monarch Energy that includes

structuring large scale and complex power procurement, hedging, and optimization strategies. Prior to joining Monarch Energy, Kevin managed the Sustainability division for Priority Power Management that included helping large power clients reduce their carbon footprint, as well as reporting on successes. These initiatives included onsite solar development and battery storage, as well as integration of new generation sources with existing power supply and flexible load optimization.

CLOSING REMARKS



Susan Shifflett, Texas Hydrogen Alliance

Susan M. Shifflett has worked in the Clean Fuel markets for more than 25 years. Currently, she serves as the Executive Director of the Texas Hydrogen Alliance. The Texas Hydrogen Alliance crafts strategic relationships with policy decision makers and regulators. Utilizing its

members' expertise, networks, and assets, the Texas Hydrogen Alliance is leading Texas' energy expansion. Previously, she served as President of the Texas Clean Fuels Alliance, President of the Texas Natural Gas Vehicle Alliance, and Marketing Coordinator of the Alternative Fuels Research and Education Division of the Railroad Commission of Texas.

HOSTING ORGANIZATIONS



North Central Texas Council of Governments (NCTCOG)

NCTCOG is a voluntary association of, by and for local governments, established to assist in regional planning across North Central Texas. NCTCOG serves as a regional planning agency for 16 counties in North Central Texas, and the metropolitan planning organization (MPO) for 12 counties within this region.



Dallas-Fort Worth Clean Cities

NCTCOG also serves as the host agency for the DOE-designated Dallas-Fort Worth Clean Cities Coalition, which works with local stakeholders to reduce transportation energy use and improve air quality. NCTCOG / DFWCC has received \$70 million from the Federal Highway Administration to install 5 hydrogen refueling stations across the Texas Triangle.



Texas Hydrogen Alliance

The Texas Hydrogen Alliance recognizes the significant economic and environmental opportunities for hydrogen in Texas. The goal of the alliance is to educate and advocate for effective policies, legislation, and rulemaking that will enable and incentivize the effective pursuit of these opportunities. The alliance is comprised of industry and technical experts that can facilitate dialog and convene key stakeholders to enable the growth of a hydrogen economy and markets. For more information email <code>info@texashydrogenalliance.org</code> or visit <code>www.texashydrogenalliance.org</code>.



The University of Texas at Arlington

The University of Texas at Arlington (UTA) is ranked as the #1 Public University in North Texas. Located in the heart of the Dallas-Fort Worth Metroplex, our campus spans 420 acres and serves an enrollment of over 41,000 students. In addition to a long history of energy innovation in the traditional engineering majors, UTA added a first-of-its-kind bachelor of science program, Resource and Energy Engineering (REE), to train students to evaluate, design, develop, and operate energy generation, storage, conversion, and distribution systems. Apply as a student or get involved as a company to help us create the Energy Transition Work Force.



Chemtec New Energies

At Chemtec New Energies, we're not just another energy company. We're a team of dedicated professionals committed to reshaping the future of energy. We are focused on driving access to clean energy refueling and storage solutions. As a division of Chemtec Energy Services, we come with a rich history of over 25 years of turnkey solutions for the oil and gas market. We've inherited a legacy rooted in engineered precision measurement and additive solutions throughout the oil and gas value stream. Our quarter century of designing modular solutions has fostered strong relationships with industry experts in valving, measurement instruments, compression and more.











