

CONFERENCE

CONNECTIONS THE METHANE EMISSIONS

2024

EVERYTHING, EVERYWHERE, ALL AT ONCE: Technologies, Policies, and Regulations Driving Adoption

CH

GTI ENERGY

Conference Program

October 15-16, 2024

Colorado State University Fort Collins, Colorado

BRIDGER P H O T O N I C S

THE BEST IN METHANE LEAK DETECTION.

Bridger Photonics is your trusted partner for achieving emissions reduction.









GTI Energy and the Energy Institute at Colorado State University are proud to host the 11th annual CH4 Connections Conference, October 15-16, 2024.

EVERYTHING, EVERYWHERE, ALL AT ONCE: TECHNOLOGIES, POLICIES, AND REGULATIONS DRIVING ADOPTION

Welcome to CH4 Connections

Regular attendees will know that CH4 Connections has always been a technology-first conference that strives to showcase the innovation and creativity of the methane emissions research landscape. This year is no different. We thank our Gold, Silver and Bronze sponsors who continue to build upon CH4 Connections' tradition as a platform for companies at the forefront of methane science, and technology advancements.

Everything...

What sets this year apart is the \$1.36 billion in financial and technical assistance from the Methane Emissions Reduction Program (MERP). Coupled with upcoming rule changes to the Environmental Protection Agency's (EPA) Greenhouse Gas Reporting Program (GHGRP), this funding is set to catalyze all efforts to monitor, measure, characterize, manage, and mitigate methane emissions. Our agenda this year seeks to highlight the unprecedented levels of policy and regulatory efforts driving innovation and emissions reductions - a hugely significant shift in the methane space.

Everywhere...

This year, we seek to harness the extraordinary levels of ambitions, focus, and investments across public and private sector initiatives. Our program features speakers across several cross-sector U.S. federal agencies including the Department of Energy (DOE), EPA and the Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA), to discuss how policy incentives and regulatory measures can accelerate technology adoption, improve market transparency, and drive much-needed reductions in methane emissions nationwide, and worldwide.

All at Once...

As we reflect upon the whirlwind of activity over the summer - aren't we glad that the MERP FOA proposal deadline is over? - CH4 Connections is the perfect time to imagine all the transformative possibilities unlocked by the MERP. From ensuring methane mitigation efforts prioritize community benefits to mapping out the technology and data implications of the EPA's Super-Emitter rule, there's never been a more exciting time to be involved in the methane emissions space and we are so glad you are here!





Erin Blanton Vice President **Zero Emissions Systems GTI Energy**

Ron Snedic Senior Vice President, **Corporate Development GTI Energy**

Install the CH4 Connections App



- View the most up-to-date agenda
- Receive alerts on current and upcoming sessions
- See sponsors' company bios and links
- Find speaker bios



Download the **Cvent Events app** to your iPhone or Android from your App Store



Dr. Bryan Willson Executive Director Energy Institute Colorado State University



Be social!

Share your CH4 Connections experience with photos and posts using #CH4Connections and tag us on LinkedIn and X!

Day 1 Tue 10/15

Agenda

Please check the conference app for the most up-to-date agenda

(all times in U.S. Mountain Time Zone)

7:30 AM - 4:00PM **Registration and information desk**

7:30 - 8:30 AM Hot Buffet Breakfast and Networking

8:30 - 8:40 AM

Opening Remarks

Erin Blanton, Vice President, Zero Emissions Systems, GTI Enerav Bryan Willson, Executive Director, Energy Institute, Colorado State University

8:40 - 9:05 AM

Keynote 1: Market Drivers of Methane Mitigation

Arjun Murti, Partner at Veriten and Director of **Conoco Phillips**

9:05 - 9:15 AM

Questions and Answers with Keynote Speaker, **Arjun Murti**

Fireside chat Moderator: Erin Blanton, Vice President, Zero Emissions Systems, GTI Energy

9:15 - 9:40 AM

DOE Presentation on Marginal and Orphan Well Program

Larrez Green, Program Manager for the Methane Emissions Reduction Program (MERP), U.S. Department of Energy

9:40 - 10:15 AM **BREAK, NETWORKING, EXHIBITS**

10:15 - 11:15 AM

PANEL SESSION 1:

Regulations to Increase Adoption of New Technologies: How government regulations are stimulating adoption of new technologies

Moderator: Amanda Harmon, Director, Zero Emissions Systems team, GTI Energy

Panelists:

Tristan Brown, Deputy Administrator, Pipeline and Hazardous Materials Safety Administration (PHMSA)

Ned Shappley, Physical Scientist, EPA's Measurement Technology Group, Office of Air Quality Planning & Standards, Environmental Protection Agency

Milos Krnjaja, Professional Engineer, Alberta Energy Regulator

11:15 - Noon **PANEL SESSION 2:**

Exploring Community Benefits – Increasing Focus from Methane Mitigation

Moderator: Joe von Fischer, Professor, Department of Biology, Colorado State University

Panelists:

Cynthia Medina, Environmental Justice Analyst, GTI Energy Alex Taylor, Research Associate, Colorado State University Jenny Ward, Natural Gas Data Emissions Program Manager, Duke Energy

Gold Sponsor Technical Presentation Pete Roos, President & CEO, Bridger Photonics

12:10 - 1:10 PM LUNCH, NETWORKING, EXHIBITS

) 1:10 - 1:20 PM **Gold Sponsor Technical Presentation** Steven Norlock, Field Engineer, Sensit

1:20 - 2:05 PM

PANEL SESSION 3:

Accuracy and Transparency -- A Key Requirement for **Monetizing Methane Mitigation**

Moderator: Zach Weller, Data Scientist, GTI Energy

Panelists:

Nile Garritson, Portfolio Manager, CalSTRS

Megan Hays, Managing Director & Head of Sustainable Investment & Engagement, Kimmeridge

Geneva Werner, Senior Associate, Research & Innovation team, Energy Impact Partners (EIP)

2:05 - 3:05 PM **PANEL SESSION 4:**

MMRV International Perspectives

Moderator: Dan Zimmerle, Director, Methane Emissions Program in the Energy Institute (METEC), Colorado State University Panelists:

Tom Curry, Director of Policy and Analysis, Office of Resource Sustainability, U.S. Department of Energy

Makoto Shimouchi, Project Director, Hydrogen Planning Division/ Methane Management Taskforce, Japan Organization for Metals and Energy Security

Selina Roman-White, Senior Engineer, Air Quality, Greenhouse Emissions, SLR International Corporation

Karen Nielson, Director of Air Quality Permitting & Compliance, Kinder Morgan

3:05 - 3:40 PM **BREAK, NETWORKING, EXHIBITS**

3:40 - 4:30 PM **PANEL SESSION 5:** Silver Sponsor Showcase Rapid-Fire Session Moderator: Ryan Brouwer, Facility Manager, METEC

4:30 - 5:15 PM

PANEL SESSION 6:

Measurement Technology Applications for Methane from Other Sectors

Moderator: Sara Place, Associate Professor of Feedlot Systems, AgNext, Colorado State University

Panelists:

Landfills: Dave Risk, Research Chair in Climate Science & Policy, St. Francis Xavier University, Nova Scotia, Canada

Underground methane mitigation: Kate Smits, Professor, Southern Methodist University, joint appointment at Colorado State University



6:15 - 8:30 PM **Speaker/Sponsor Dinner** (Location for dinner in north ballroom called Never No Summer)

Noon - 12:10 PM

Day 2 Wed 10/16

7:30 – 8:30 AM Hot Buffet Breakfast and Networking		
8:30 -	8:40 AM	
Openi	ng Remarks	
Ron Sn GTI En	<i>edic,</i> Senior Vice President, Corporate Development, ergy	
Bryan I Univers	<i>Villson,</i> Executive Director, Energy Institute, Colorado State sity	
8:45 - PANEI	9:25 AM SESSION 7:	
How S	Satellites are Changing the Landscape for	
Intern	ational Emissions	
Moder System	a tor: <i>Abigail Corbett,</i> Senior Scientist, Zero Emissions Is Team, GTI Energy	
Panelis	its:	
Betsy I System	carris, Senior Systems Engineer, Civil Space Unit, BAE	
Dana C NASA	hadwick, Earth System Scientist, Jet Propulsion Laboratory	
Jon Go Enviror	<i>Idstein,</i> Senior Director, Regulatory and Legislative Affairs, imental Defense Fund	
\bigcirc	9:25 – 9:35 AM	
7	Gold Sponsor Technical Presentation	
	Jean-Francois Gauthier, Sr. VP, Strategy, GHGSat	
\bigcirc	9:35 – 10:35 AM	
7	PANEL SESSION 8:	
	Bronze Sponsor Showcase Rapid-Fire Session	
	Moderator: Chris Moore, Senior Manager, Programs, Zero Emissions Systems, GTI Energy	
	, , , , , , , , , , , , , , , , , , , ,	

Day 2 Wed 10/16 CONTINUED

Agenda

Please check the conference app for the most up-to-date agenda

(all times in U.S. Mountain Time Zone)

11:15 - Noon **PANEL SESSION 9:**

Technology Implications from EPA Super Emitter Rule: How midstream and production companies understand the regulations and how they can be implemented

Moderator: Bryan Willson, Executive Director, Energy Institute, Colorado State University

Panelists

Arsineh Hecobian, Atmospheric Chemist, Methane Detection & **Ouantification Advisor. Chevron**

Christy Woodward, Regulatory Affairs Advisor, Colorado Oil and Gas Association and Colorado Chamber of Commerce

Karen Marsh, President and Founder of Lumina Sky Consulting

Noon - 1:00 PM LUNCH, NETWORKING, EXHIBITS

1:00 - 1:10 PM

Gold Sponsor Technical Presentation

Drew Pomerantz, GEG Emissions Principal Domain, SLB

1:10 - 2:00 PM

PANEL SESSION 10:

Mitigation solutions in the field: Technology solutions from legacy to greenfield sites and updates from the practitioners

Moderator: Anna Hodshire, Research Scientist, Energy Institute, Colorado State University

Panelists

Roy Hartstein, Founder & President, Responsible Energy Solutions Milind Bhatte, Methane Measurement Manager for Lower 48, ConocoPhillips

Jack Lewnard, Program Director, Advanced Research Projects Agency-Energy (ARPA-E)

2:00 - 2:10 PM

Gold Sponsor Technical Presentation

Julien Klein, Senior Director, Product Management, Picarro

2:10 - 2:40 PM **BREAK, NETWORKING, EXHIBITS**

O 2:40 - 3:20 PM

Keynote 2: MERP Program

Sharyn Lie, Director of the Climate Change Division, Office of Atmospheric Protection, U.S. Environmental Protection Agency

Tim Reinhardt. Director for the Division of Methane Mitigation Technologies, Office of Resource Sustainability, Fossil Energy & Carbon Management, U.S. Department of Energy

3:20 - 3:40 PM

Questions and Answers with Keynote Speakers, Sharyn Lie and Tim Reinhardt

Fireside Chat Moderator: Hon Xing Wong, Senior Manager, Programs at GTI Energy in the Zero Emissions Systems Team, GTI Energy

3:40 - 3:45 PM

Wrap Up and Conference Adjourned

Ron Snedic, Senior Vice President, Corporate Development, GTI Energy

Bryan Willson, Executive Director, Energy Institute, Colorado State University

4:15 - 5:30 PM

Optional METEC Tour

- Shuttle vans will be available to transport you from the Lory Student Center (LSC) to METEC
- Shuttle pick-up will be located at the north-side entrance of the LSC from the North Engineering Parking Lot #310
- METEC is located at 3401 W. Vine Drive
- Parking is limited, therefore, we recommend carpooling or using the shuttle van ride
- No FR/PPE is required for tour participants
- It is an outdoor tour, so please dress accordingly, including sturdy, close-toed shoes and jacket



Scan for map

Meet Our Speakers



Milind Bhatte

Methane Measurement Manager for Lower 48, ConocoPhillips

Milind currently leads the methane measurement and reporting teams for ConocoPhillips's L48 business unit including the implementation of the OGMP program. Milind has a B.S., M.S., and Ph.D. degrees in Chemical

Engineering and has 34 years of progressive environmental experience, the last 27 years with ConocoPhillips with a primary focus on air quality issues. His experience includes leading environmental teams in refining, transportation, projects, and upstream sectors for ConocoPhillips.

Erin Blanton

Vice President, Zero Emissions Systems, GTI Energy

Erin Blanton is the Vice President, Zero Emissions Systems at GTI Energy. Erin Blanton leads GTI Energy's methane emissions mitigation solutions strategy and focuses on the role of natural gas

infrastructure in facilitating energy transitions towards a net-zero the U.S. Environmental Protection Agency. future. Erin joined GTI Energy from Columbia University's Center Brown earned a Juris Doctor degree from the University of California on Global Energy Policy, where she led the Natural Gas Research Berkeley School of Law, a Master of Philosophy degree from the Initiative and the Center's ESG research. She has extensive University of Cambridge where he was a Gates Cambridge Scholar, experience advising financial professionals on energy markets and a Bachelor of Science degree from the Lee Honors College at and investments. Erin holds a Master's degree from Columbia Western Michigan University where he was a Morris K. Udall Scholar University's School of International and Public Affairs and a B.A. in and a member of USA Today's All-Academic Team. Brown was born economics from Cornell University

Ryan Brouwer

METEC Facility Manager, Energy Institute, Colorado State University

Ryan Brouwer is the METEC Facility Manager at the Energy Institute at Colorado State University. His current role includes oversight and operation of the METEC facility. The focus is methane emissions from oil and natural gas,

and testing programs to evaluate the effectiveness of different systems to detect methane emissions.

Ryan holds a bachelor's degree in Energy Management from Bismarck State College, where he specialized in power generation. Prior to arriving at CSU, Ryan worked as a control room operator in various plants across the energy industry.

Δ





Tristan Brown

Deputy Administrator, Pipeline and Hazardous Materials Safety Administration (PHMSA)

Tristan Brown serves as the Deputy Administrator of the Pipeline and Hazardous Materials Safety Administration (PHMSA). Since 2021, Brown has led a team of nearly 600 full

time employees (as well as nearly 200 contractors), managing a \$500+ million annual budget-focused on overseeing the safety of 3.4 million miles of hazardous material pipelines and 1.2 million shipments of hazardous material goods transported daily across the United States. Brown also serves on the White House Council on Environmental Quality's Carbon Dioxide Capture, Utilization, and Sequestration (CCUS) Federal and Non-Federal Lands Permitting Task Forces.

Previously, Brown served as counsel to U.S. Senator Gary Peters and as an advisor to U.S. Senator Amy Klobuchar on matters related to transportation, space policy, energy, the environment, and native American issues. Brown previously practiced law in the private sector, focusing on regulatory, transactional, and litigation

matters relating to the transportation and public utilities sectors. He also previously served as Deputy Associate Administrator at

in rural Michigan and raised just outside Detroit. As a child he lived in New Hampshire where his father was an automotive manager and previously served as a deputy sheriff. His mother was a social worker and service employees union representative.



Dana Chadwick

Engagement Lead for Human Emissions & Technology, US Greenhouse Gas Center, NASA Jet Propulsion Laboratory

Dana Chadwick is an Earth system scientist at NASA's Jet Propulsion Laboratory who utilizes imaging spectroscopy across a variety of research and applications disciplines.

She is currently a member of the Stakeholder Engagement Team for the US Greenhouse Gas Center, she is the Mission Applications Lead for the EMIT mission which has observed large methane emissions across the globe, and terrestrial vegetation algorithm lead for the Surface Biology and Geology Mission's VSWIR instrument.



Abigail Corbett

Senior Scientist. Zero Emissions Systems. **GTI Energy**

Abigail Corbett is a senior scientist at GTI Energy in the Zero Emissions Systems Team at GTI Energy that investigates methane emissions mitigation solutions and focuses on the role of natural gas infrastructure in facilitating energy

transitions towards a net-zero future. She also serves as the Deputy Director of the Center of Methane Research. Since earning her PhD in Atmospheric Science from the University of Houston, Dr. Corbett's area of scientific focus over the last 10+ years has been in remote sensing development and analysis of greenhouse gas emissions at local to global scales. Dr. Corbett has been involved in large greenhouse gas measurement campaigns. DOE funded projects, and instrument algorithm development and testing.



Tom Curry

Director of Policy and Analysis, Office of Resource Sustainability, U.S. Department of Energy (DOE)

Tom Curry is the Director of the Policy and Analysis Division within the Office of Fossil Energy and Carbon Management's Office of Resource Sustainability. Tom leads the development of technical, economic, and

policy analyses to support the office's research and development, engagement, and natural gas regulatory work. Tom has more than 20 years of experience applying strategic and technical expertise to energy and environmental issues. He has managed the development of methane emissions intensity protocols for companies that operate in the natural gas supply chain and has extensive experience working with companies, investors, and trade associations on greenhouse gas emission inventories. Before joining the Department of Energy, Tom was a partner and the North America Climate Advisory Policy Lead at ERM. Tom holds a Master of Science degree from the Technology and Policy Program at the Massachusetts Institute of Technology and a Bachelor of Science in Civil Engineering with a double major in Engineering and Public Policy from Carnegie Mellon University.



Betsy Farris

Senior Systems Engineer, Civil Space Unit, **BAE Systems**, Inc.

Betsy Farris is a senior systems engineer in the payload systems department within the Civil Space business unit for BAE Systems, Inc., Space & Mission Systems. In this role, she specializes in optical

instrument development with an emphasis on Earth remote sensing, spectroscopy, and in particular, methane and air quality measurements. She was a member of the payload performance and calibration team for MethaneSat, is the most recent lead instrument systems engineer for the Airborne Methane Lidar instrument and has supported research and development for NASA Earth Science grants. She most recently led the instrument performance team for the NOAA GeoXO Atmospheric Composition Instrument during their Phase-A study and is part of the Phase-B execution team.

Prior to working at BAE Systems, Farris supported a NASA field campaign working on an ozone lidar, built ground sensor prototypes for oil and gas facility monitoring, and supported other laser-base sensor development during her master's program. She also worked as an engineer in the applied physics department at Southwest Research Institute supporting government-sponsored research and development projects.

Farris received a B.S. and M.S. in mechanical engineering from Colorado State University. She is currently pursuing a PhD in climate and air quality remote sensing with a focus on data assimilation at the University of Colorado, Boulder.

Joe von Fischer

Professor, Department of Biology, **Colorado State University**

Joe von Fischer is a professor in the Department of Biology who studies how the function of ecosystems is structured by the interactions among humans, plants, the soil and soil microbes, with particular focus on how these factors

influence the emissions of greenhouse gases like methane. Joe's research seeks to characterize the physical and biological diversity of systems that give rise to micro-sites with exceptional influence on overall system function. Joe's lab maintains two primary research areas. One is the study of how biological diversity among the bacteria that consume methane within soils leads to spatial and temporal patterns in soil methane fluxes. The other is in collaboration with the Environmental Defense Fund to use Google Streetview Cars to measure the leakage rate of natural gas from urban distribution systems around the country.



Nile Garritson Portfolio Manager, CalSTRS

Nile Garritson, CFA is a Portfolio Manager at CalSTRS, which he joined in 2022. He is responsible for the Fund's energy transition research and engaging portfolio companies. Prior to CalSTRS,

he was on the buy side for eight years primarily covering the oil & reduction, and developing financial aid programs for Tribal gas sector, along with a variety of industries as secondary coverage. governments. Also, the competitive FOA-3256 at \$850M. He was with Edison International in corporate finance and risk With almost two decades of energy experience previously, at management for four years. Nile spent the first seven years of his Maefield Development, MDC Texas Energy, Chevron, Hunt, and SLB, career as a Financial Advisor with UBS in San Francisco, a period Larrez has executed large-scale full cycle development programs that covered the tail end of the dot com boom and the ensuing bust and PE fund investments in production, services, and midstream. and recovery. He holds a B.S. in Business Administration and an His expertise extends to traditional Oil & Gas Development, CCS/ MBA from the University of Southern California. CCUS implementation, and technology deployment.

Jon Goldstein



Prior to joining EDF, Jon served as Cabinet Secretary of the New Mexico Energy, Minerals and Natural Resources Department and Deputy Secretary of the state's Environment Department

where he both strengthened regulation of the oil and gas industry and promoted the deployment of renewable sources of energy. He served on the New Mexico Renewable Energy Transmission Authority, Finance Authority and Water Trust Board and was elected chair of the New Mexico Water Quality Control Commission and Mining Commission. He was also appointed by Governor Bill Richardson as New Mexico's state liaison with the U.S. Nuclear Regulatory Commission. Jon's journalism and communications experience includes posts as Governor Richardson's Deputy Communications Director and Communications Director of the New Mexico Environment Department as well as work as a reporter and editor with the Baltimore Sun online and Time Magazine in New York.

Education: Jon received a Masters in Public Policy and a certificate in Science, Technology and Environmental Policy from Princeton University's School of Public and International Affairs where he was also honored with the MPP Award for academic achievement and commitment to public service. He is also a Phi Beta Kappa graduate of Trinity College in Hartford, CT with honors in History.

Larrez Green

Program Manager, Methane Emissions Reduction Program (MERP), U.S. **Department of Energy**

As the Program Manager for the Methane Emissions Reduction Program (MERP) at the U.S. Department of Energy, Larrez Green oversees the largest program in FECM DOE history,

leading a team to reduce methane emissions across various sectors. Key accomplishments include implementing Section 136 of the Clean Air Act, administering \$350M for state methane A licensed Professional Engineer, Larrez Green holds a Bachelor of Science in Civil Engineering from Auburn University and is dedicated to advancing sustainable energy solutions and a clean environment for our future.



Amanda Harmon **Director, Zero Emissions Systems,**

GTI Energy

Amanda is a Director within the Zero Emissions Systems team at GTI Energy where she supports methane emissions measurement to mitigation and renewable fuels decarbonization strategies for the energy sector. She

currently serves as the executive director of Veritas, a GTI Energy Methane Emissions Measurement and Verification Initiative, Renewable Fuels co-chair for Low Carbon Resource Initiative, Methane Emissions study group for the International Gas Union 2025 triennium, Environmental Matters Committee within the American Gas Association, and program manages the Environmental Impacts Working Group for Operations Technology Development (OTD). As a research microbiologist with over 14 years of experience, she has extensive field campaigns/research laboratory experience and co-authored/publically presented numerous research findings in biomethane and infrastructure integrity-microbiologically influenced corrosion conducted at GTI Energy.



Roy Hartstein

Founder and President, Responsible Energy Solutions LLC

As the Founder and President of Responsible Energy Solutions LLC, Roy Hartstein is driven to help oil and gas companies find value in environmental excellence and in demonstrating that natural gas can be an important part

of our energy future. He pioneered the execution of the first U.S. "certified gas" transaction, established methane management initiatives for production operations and chaired the first Group of Experts on Methane Emissions for the International Gas Union from 2015 to 2018. Recently Hartstein served as an industry methane

emissions expert for the US Trade Development Agency's trade missions on Advanced Technologies for Methane Abatement which included companies from Egypt, Algeria, Libya, Ecuador, Argentina and Mexico. He also participates as part of RES audit teams for both MiQ and Equitable Origin certification assessments at a growing group of leading oil and gas companies across the U.S.

Hartstein has spoken frequently on responsible resource development including presentations on certified gas, water management and methane emissions management. Recent presentations include the SPE Forum - The Future of Energy; SPE Capital Section - Certified Gas in the Marketplace; North American Energy Capital Conference - Certified Gas Workshop; CH4 Connections Conference; 4C HSE - Benefits of Responsibly Sourced Gas; Louisiana Mid-Continent Oil and Gas Association - Responsibly Sourced Gas and American Council for Capital Formation - The Role of Responsibly Sourced Gas.



Megan Hays

Managing Director, Head of Sustainable Investment & Engagement, Kimmeridge Megan Hays is a Managing Director and

Head of Sustainable Investment and Engagement at Kimmeridge. She joined Kimmeridge following a 15-year career leading investor relations, strategic

communications, M&A, capital markets, and ESG within publicly and privately held oil and gas exploration companies. Before joining Kimmeridge, Ms. Hays served as the Vice President of Investor Relations at Cimarex Energy, where she led the company's \$19 billion merger with Cabot Oil & Gas. Previously, she was Vice President of Investor Relations and Public Affairs at Concho Resources, where she led investor relations in addition to developing and driving the company's ESG strategy. During Ms. Hays' tenure at Concho, she supported the company's capital markets and A&D/M&A activities, including Concho's \$9.5 billion acquisition of RSP Permian in 2018 and Concho's ultimate sale to ConocoPhillips for \$10 billion in January 2021.

Ms. Hays holds a certificate for the Executive Education for Sustainability Leadership Program from the Harvard T.H. Chan School of Public Health. She received a B.A. in Political Science (International Relations) from Texas Christian University, where she currently serves on the advisory board of the Ralph Lowe Energy Institute at the Neeley School of Business.



Arsineh Hecobian

Methane Detection and Quantification Advisor. Chevron

Arsineh Hecobian is an atmospheric chemist who has conducted extensive research on emissions from wildfire smoke, agricultural and anthropogenic sources from aircraft and ground. She

has developed sensors and measured emissions of methane and VOCs from oil and gas operations across various basins in the US. Dr. Hecobian has served as the chair of the City of Fort Collins Air Quality Advisory Board and as a member of the Larimer County oil and gas task force. As a member of the original Methane Emission Technology Evaluation Center (METEC) team, she authored and contributed to publications on the measurement methods of methane from various sources. Currently, Dr. Hecobian is the Methane Detection and Quantification Advisor at Chevron, where she focuses on leveraging cutting-edge technologies to detect and quantify methane emissions, with the goal of keeping methane in the pipes.



Anna Hodshire

Research Scientist, Energy Institute, Colorado State University

Anna Hodshire is a Research Scientist at the Energy Institute at Colorado State University. She works at the Methane **Emissions Technologies Evaluation** Center in the Zimmerle group. Her

current roles include coordinating field campaigns for top down/ bottom down surveys and basin-wide surveys of oil and gas emissions of methane. She also helps coordinate graduate student onboarding, recruitment, and training efforts for the Zimmerle group.

Her research interests are broadly on pollution emission and dispersion, air quality, climate change, and the intersection of health among all these topics. Prior to joining the Zimmerle group, Hodshire worked at small companies focused on measuring properties of atmospheric aerosols for health and climate applications. Hodshire holds a Ph.D. and M.S. in Atmospheric Science from Colorado State University.



Milos Krnjaja

Professional Engineer, Alberta Energy Regulator

Milos Krnjaja, a Professional Engineer (P.Eng), boasts over 20 years of experience in the oil and gas sector. He has worked on assets across

Canada for various companies and is currently employed by the Alberta Energy Regulator, where he focuses on air emissions and methane regulations. Milos played a key role in shaping Alberta's 45% reduction in methane emissions from the 2014 baseline. His current areas of focus include fugitive emissions management, alternative approaches to fugitive emissions, compressor seals, and mitigating methane slip from engines. Milos holds a chemical engineering degree from the University of Calgary and has over 20 years to evaluating energy usage and identifying opportunities for air emission reductions in oil and gas operations. He has successfully executed numerous emission reduction projects from conception to implementation.

Jack Lewnard

Program Director, ARPA-E

Jack Lewnard joined DOE's ARPA-E agency as a Program Director in June 2019. His interests include energy infrastructure, and low-carbon fuels, and energy processes. He is responsible for several programs at ARPA-E. The

REPAIR program seeks to rehabilitate legacy gas pipes using robots to apply novel coatings inside pipes. REUSE investigates processes to convert unrecyclable plastics to fungible liquids. REMEDY addresses abatement of methane emission from fossil energy value chains. Methane Pyrolysis focuses concurrent hydrogen and solid carbon production. FLECCS addresses carbon capture for intermittent natural gas combined cycle power plants.

Prior to joining ARPA-E Jack was the VP of Business Development for Chesapeake Utilities' Strategic Development Group, and was VP and CTO at the Gas Technology Institute. His background includes a diverse range of energy technologies.

Jack received his Bachelor degree in Chemical Engineering from the University of Cincinnati, and his PhD from Berkeley, also in Chemical Engineering.

Sharyn Lie

Director, Climate Change Division,

Department of Energy's Innovative Methane Measurement, Office of Atmospheric Protection, U.S. Monitoring and Mitigation (iM4) program. With over three years **Environmental Protection Agency** of dedicated experience in environmental justice initiatives. community relationship building, and fostering community Sharyn Lie is the Director of the Climate engagement and participation within the public academic sector, Change Division within the Office of Cynthia is a committed advocate for equitable change. In 2021, Atmospheric Protection at the U.S. Cynthia was recognized with the COP26 Climate Challenge Cup -Environmental Protection Agency. Climate Change Adaptation (November 2021) for her outstanding Ms. Lie is responsible for national contributions to the Climate Justice Partnership project presented and international policies related to reducing greenhouse gas at the COP26 United Nations 2021 Climate Change Conference. (GHG) emissions and understanding global climate change. Ms. In 2023, Cynthia participated as a panelist at CH4 connections Lie oversees a wide variety of programs, including the Methane to share the importance of environmental justice in methane Emissions Reduction Program, the Greenhouse Gas Reporting emissions initiatives. She has earned her master's in public health Program, and the Inventory of U.S. Sources and Sinks reported from the University of Illinois Chicago. Driven by her passion for to the United Nations Framework Convention on Climate Change promoting health equity, food justice, and environmental justice (UNFCCC). Ms. Lie's portfolio includes domestic and internation in underserved communities, Cynthia is on a mission to create partnerships program to reduce emissions, such as the Global an inclusive and equitable environment for those who have Methane Initiative and Natural Gas STAR. Ms. Lie also manages traditionally been excluded.



Karen Marsh

programs that provide comprehensive economic and scientific analysis of GHG impacts and benefits. Ms. Lie has over 25 years

of experience in the environmental industry, working for both

the private and public sectors. Ms. Lie holds a Bachelor of Arts

in Geology and Economics from Rice University and a Master of

Public Policy from Georgetown University.

President and Founder. Lumina Sky Consulting

Karen Marsh is the President and Founder of Lumina Sky Consulting and focuses on approaches to reduce GHG, VOC, and HAP from various industry source categories. Karen spent

13 years with the US Environmental Protection Agency, where she led regulatory development for air emissions regulations, including standards for the oil and gas industry, leak detection and repair from the chemical manufacturing and petroleum refining industries, landfills, and wastewater treatment facilities. With over 20 years of experience in regulatory policy and compliance, Karen's professional career has focused on understanding how advancements in detection and measurement technologies can support regulatory compliance and provide pathways toward the prevention of emissions.

Karen is a licensed Professional Engineer in North Carolina and holds a BS in Chemical Engineering from NC State University and a MSc in Water and Waste Engineering from Lougborough University.



Cynthia Medina, MPH

Environmental Justice Analyst, **GTI Energy**

Cynthia Medina, an Environmental Justice Analyst at GTI Energy, currently leading Diversity, Equity, Inclusion and Accessibility (DEIA) Plans for three projects funded by the U.S.

Q



Chris Moore

Senior Manager, Programs, Zero **Emissions Systems, GTI Energy**

Dr. Chris Moore is currently a Senior Program Manager in the Zero Emissions Systems group at GTI Energy. In his current role he leads efforts to evaluate new technologies and study

methane emissions from natural gas transmission, storage and distribution, and serves as the Principal Investigator for the GTI Energy Center for Methane Research, the technical segment lead for the Transmission and Storage segment in GTI Energy's Veritas Differentiated Gas Initiative, and the Environmental Aspects and Safety Technical Subcommittee in GTI Energy's Low Carbon Resources Initiative. Chris's research has been published in a wide variety of scientific journals including Nature and the Proceedings of the National Academies of Science. Dr. Moore holds a BS in Chemistry from WVU Tech. an MS in Environmental Science from the University of Virginia, and a PhD in Environmental Science from the University of Maryland.



Arjun Murti Partner, Veriten

Arjun Murti is a partner at Veriten, a research, strategy and investing firm focused on the long-term challenges and opportunities in the energy sector. Mr. Murti has spent over 30 years on Wall Street as an equity research analyst,

advisor, and board member covering the global energy sector. Since November 2021, Mr. Murti has published Super-Spiked, a Substack newsletter and podcast about the messy energy transition era.

In addition to his role at Veriten, Mr. Murti is currently serving as a Director of ConocoPhillips, a Senior Advisor to the Energy Group at Warburg Pincus, and as an Advisory Board member for Columbia University's Center on Global Energy Policy, and ClearPath. Mr. Murti graduated from the University of Denver, with B.S.B.A. in Finance, in 1992.



Karen Nielsen

Director of Air Quality Permitting and Compliance, Kinder Morgan

Karen Nielsen is a Director of Air **Quality Permitting and Compliance** for Kinder Morgan, one of the largest energy infrastructure companies in North America. She leads air quality permitting and compliance activities in adherence with federal, state, and local regulatory requirements. In addition, she leads Greenhouse Gas reporting, monitoring, and methane reduction efforts supporting Natural Gas Pipeline and CO2 Operations. Prior to her current role, she has held other positions within Kinder Morgan including Director of Corporate Compliance. In that role she had responsibility for the company's EHS information technology systems and coordinating advocacy efforts for EHS and Pipeline Safety regulatory changes.



Sara Place Associate Professor, AgNext, Colorado State University

Sara Place is an associate professor and expert in livestock systems sustainability with over a decade of experience in academia, industry associations, and agriculture private

industry. She joined Colorado State University's AgNext, a research collaborative focused on sustainable animal, in August 2022. Sara's research focuses on enteric methane emissions measurement and mitigation from cattle. Prior to CSU AgNext, she was the chief sustainability officer for Elanco Animal Health, senior director for sustainable beef production research at the National Cattlemen's Beef Association and an assistant professor in sustainable beef cattle systems at Oklahoma State University. She received her PhD in Animal Biology from the University of California, Davis, and a BS in Animal Science from Cornell University. Sara is a native of upstate NY where she grew up on a dairy farm.



Tim Reinhardt

Director for the Division of Methane Mitigation Technologies, Office of **Resource Sustainability (ORS), U.S.** Department of Energy (DOE)

Tim Reinhardt is currently at the Department of Energy (DOE) serving as the Director for the Division of Methane

Mitigation Technologies in the Office of Resource Sustainability (ORS) within Fossil Energy and Carbon Management (FECM). There he oversees programs related to methane mitigation and guantification, natural gas conversion, hydrogen and natural gas decarbonization, the Methane Emissions Reduction Program collaboration with EPA, and undocumented orphaned wells. Tim previously worked within DOE in the Geothermal Technologies Office (GTO) as the Program Manager for the Systems Analysis and Low-Temperature (SALT) Programs; and also served as the International lead.

Tim received his bachelor's degree from Northwestern University. He served in the United States Navy for nine years as an officer and Naval Aviator, and holds Master's Degrees from the University of Oklahoma and the University of Texas at Austin.

Dave Risk



Research Chair. Climate Science and Policy, St. Francis Xavier University

Dave Risk (PhD) is a Research Chair in Climate Science and Policy at St.

executing projects of methane emission management, hydrogen, Francis Xavier University (StFX) in Nova ammonia, and e-fuels/e-methane at JOGMEC. He is leading the Scotia. Canada. He is a specialist in CLEAN (Coalition for LNG Emission Abatement toward Net-zero) gas emissions measurement and data initiative which is a public and private program together with LNG processing techniques, working in both natural and industrial buyers, producers, governments and global initiatives. He is the settings. Risk's 'FluxLab' team at St. Francis Xavier University principal author for "Recommended guideline for greenhouse gas consists of almost 30 students and professional researchers. They and carbon intensity accounting framework for LNG & Hydrogen been involved in ecological gas measurement projects from pole & Ammonia/E-fuel (*JOGMEC CI guideline)" first version in 2022 to pole, monitoring design for CO2 injection sites, have visited over and 2nd version in 2023, which is written on the importance of 15,000 onshore and offshore oil and gas facilities across North carbon intensity calculation methods with primary data and data America to assess inventories, and have measured methane at alignment with methane management. Canadian landfills from coast to coast and has built a full-scale landfill controlled-release facility. Risk is always interested in moving important expertise into the world and loves working with **Kate Smits** tech companies or spinning them out - like Arolytics and Eosense Professor, Lyle School of Engineering, to address market gaps.

Ned Shappley



Physical Scientist, Measurement Technology Group, Office of Air Quality Planning and Standards, U.S. **Environmental Protection Agency**

Ned Shappley is a Physical Scientist in EPA's Measurement Technology Group in the Office of Air Quality Planning and Standards, located in Research Triangle

Park, NC. Ned's primary role at the EPA is in method development of point-source measurements of criteria pollutants, air toxics, and GHG, concentrating on the evaluation and integration of next generation monitoring solutions. Ned works on several EPA's rule development teams, serving to integrate the appropriate measurements/methods into these standards for compliance purposes, including EPA's Oil and Gas Sector NSPS where he functions as one of the technical leads for the incorporation of alternative methane monitoring technologies into that rule. Ned has extensive experience in air quality policy and measurements, spending 15 years in the private world, providing air measurement and compliance support for the energy and chemical sectors before moving to the EPA in 2015.



Makoto Shimouchi

Project Director, Methane Management Taskforce, Project Director, Hydrogen Planning Division, Japan Organization for Metals and Energy Security (JOGMEC)

He previously worked as Project Engineer at Engineering company for Gas to Liquid project and LNG project (2009 - 2019). From 2019, he played a leading role developing and



Southern Methodist University

Kate Smits is a professor in Southern Methodist University (SMU's) Lyle School of Engineering, serving as chair of Civil and Environmental Engineering and Solomon Professor for Global

Development. Kate's research interests are focused on energy and the environment with applications to natural gas leakage, the cleanup of contaminated soils and waterways, and the storage of renewable energy. Much of her research looks toward the development of tools and models to better understand such systems. Smits also has a joint appointment at CSU, serving as one of the lead scientists for METEC's pipeline test beds. She has led 8 studies in collaboration with CSU on mitigating methane emissions from pipelines that have resulted in ~ 30 peer reviewed journal publications on the topic, and the implementation of her work into operator practice. Smits has also authored over 100 journal papers and 200 conference presentations on multiphase flow and transport, subsurface energy storage and contaminant remediation.



Ron Snedic

Senior Vice President, Corporate **Development, GTI Energy**

As Senior Vice President of Corporate Development, Ron Snedic leads the effort to expand GTI Energy's customer base and increase revenues from technology-based product and service

offerings designed to solve for some of the world's greatest

energy challenges. Ron leads GTI Energy's M&A activities and serves as President of GTI International which has three operating subsidiaries. He also oversees several business lines and shared service teams at the parent company including communications, business development, human resources and information technology. Ron is also the President of Operations Technology Development, NFP.

Ron earned a B.S. and an M.B.A. from NIU and has completed the Stanford Executive Program.



Alex Taylor

Research Associate, Department of Biology, Colorado State University

Alex Taylor is a Research Associate in the von Fischer lab in the Department of Biology at Colorado State University. Her current research projects include environmental justice (EJ) focused

analyses of natural gas leaks within local distribution systems. She is also interested in developing frameworks that support the expansion and use of EJ analyses to identify potential injustices associated with natural gas leaks across the supply chain.

Alex holds a B.S. in Mathematics and an M.S. in Biological Sciences from Colorado State University. Beyond the natural gas supply chain, she is broadly interested in how quantitative approaches can be employed to support environmental and social justice efforts.



Jenny Ward

Natural Gas Data Emissions Program Manager, Duke Energy

Jenny Ward serves as Duke Energy's Natural Gas Data Emissions Program Manager. She is responsible for coordinating the regulatory and voluntary emissions reporting for North Carolina, South Carolina, Tennessee, Ohio

and Kentucky.

Jenny joined Piedmont Natural Gas in 2006 and has held various process, controls, data and reporting focused roles. With Business Technology Services, she led a team of process owners and was one of Piedmont's first Data Stewards believing that the right data in the hands of field personnel can support better NGBU operations. As Charlotte Operations Manager, she led ~300 construction, inspection and contractor resources installing new distribution pipeline assets. During the Duke Energy/Piedmont Natural Gas merger, Jenny led the Distribution Construction transition to enterprise asset Management's Maximo work order system and implemented project and contract management

controls. As Manager of Operations Resources, she led contractor oversight and executed a 5-year Alliance Contract for North Carolina, South Carolina and Tennessee.

Jenny has a Master of Accounting and a Bachelor of Science degree in Business Administration from the University of North Carolina at Chapel Hill. She is a Certified Public Accountant in North Carolina.



Geneva Werner

Senior Associate, Research & **Innovation, Energy Impact Partners**

Geneva Werner is on the Research & Innovation team at Energy Impact Partners (EIP), a global investment platform that brings together forwardthinking industrials and climate

innovators to help decarbonize the global economy. EIP has over \$4B in assets under management and invests across five fund families: Flagship, Europe, Frontier, Elevate Future and Credit. Within EIP, she is focused on generating market intelligence that informs EIP's investments, supporting diligence, and identifying opportunities for collaboration between commercial partners and portfolio companies in the clean fuels and carbon management sectors. Prior to joining EIP, Geneva was a Sustainability Strategy consultant at Accenture where she supported Fortune 500s on their net-zero strategies and worked with Accenture Development Partnerships on last mile energy access, carbon markets, and regenerative food systems in emerging markets. She holds a B.S. in Chemical Engineering and minors in Energy Studies and Theater Arts from MIT.



Zachary Weller

Senior Manager, Digital Innovations, **GTI Energy**

Zach Weller is a Senior Manager at GTI Energy where he uses statistics and data science to address applied problems in the energy domain. He specializes in working with subject

matter experts and communicating technical concepts in a relatable way. He has authored or co-authored over 30 peerreviewed publications and produced several white papers and educational videos around the topic of uncertainty. He is currently leading or supporting several projects focusing on data integration and analysis to support operational improvement and understanding of methane emissions. Zach was closely involved in developing the Veritas protocols, including creating guidance for sample planning, data analysis methods, and uncertainty guantification to estimate methane emissions. He holds a PhD in statistics from Colorado State University.



Selina Roman-White

Senior Engineer - Air Quality, Greenhouse Gas Emissions, SLR **International Corporation**

Selina is a Senior Engineer with SLR International specializing in methane and greenhouse gas emissions. Selina has over 7 years of experience in measuring

and modeling GHG emissions from oil and gas supply chains. She has led several modeling efforts to conduct life cycle assessments (LCA) of natural gas and LNG supply chains, supporting both industry and Department of Energy. At Cheniere Energy, Selina led the climate team, focusing on customized supply chain LCA and field deployment of GHG measurement technologies to better characterize emissions and inform mitigation strategy. Selina helped to launch Cheniere's Cargo Emission (CE) Tag, which is a first of its kind program that delivers bespoke emissions data to customers receiving LNG cargoes. She led the QMRV R&D campaign across an entire supply chain, which deployed multiple measurement technologies at production, midstream and liquefaction facilities to assess key differences in inventory vs measured estimates as well as technology performance for different source types. Selina also served as co-chair on the LCA task group for a 2024 National Petroleum Council study, which was a multi-year research effort commissioned by the U.S. Secretary of Energy. Selina specializes in models and analysis to assess facility and supply chain-level emissions intensity and implementing these tools to inform robust climate and emission mitigation strategies. Selina holds her BS in Chemical Engineering from Penn State University and her MBA from the Harbert College of Business at Auburn University.



Brvan Willson

Executive Director, Energy Institute, Colorado State University

Bryan Willson is the Executive Director of CSU's Energy Institute, holds Presidential Chair for Energy Innovation and continues to teach mechanical engineering in the Walter Scott, Jr.

College of Engineering.

Brvan founded CSU's Engines & Energy Conversation Laboratory and its Powerhouse Energy Campus in 1993, which paved the way for the Energy Institute. Willson's experience reaches well beyond CSU including a Program Director at ARPA-E (Advanced Research Projects Agency – Energy) from 2012-2016 and continues to serve as a consultant / advisor to the agency. As an entrepreneur, Dr. Willson co-founded four companies and continues to support the launch of numerous others through the Energy Institute and a DOEfunded energy incubator.

Bryan has made important contributions through his research in hydrogen energy systems, internal combustion engines, oil and gas production technology, advanced electrical grids, biofuels and technology for the developing world.

Bryan earned his B.S. at Texas A&M University, and his M.S. and Ph.D. from University of Texas at Austin, all in mechanical



Hon Xing Wong

Senior Manager. Programs. Zero **Emissions Systems, GTI Energy**

Hon Xing Wong is a Senior Manager. Programs at GTI Energy on the Zero Emissions Systems team where he is Executive Director of the Net Zero Infrastructure Program and Program

Administrator for the Collaboratory to Advance Methane Science. He was previously at Columbia University's Center on Global Energy Policy where he researched climate and energy transition risks. and electrification of the transportation sector. He also consulted with New York City's Metropolitan Transportation Authority (MTA) on electric bus projects. Previously, he was a chartered chemical engineer at BP and held various engineering and site-operations roles in Angola, Egypt, and the North Sea, UK. He holds a Master of Public Administration from Columbia University's School of International and Public Affairs and a Master of Engineering in chemical and environmental engineering from Nottingham University, engineering.



Christy Woodward

Regulatory Affairs Advisor, Colorado Oil & Gas Assoc and Regulatory Affairs Advisor, Colorado Chamber of Commerce

Christy Woodward serves as a Regulatory Affairs Advisor for the Colorado Oil & Gas Association and

the Colorado Chamber of Commerce. She is also the President of Astute Regulatory Solutions and serves as the Director of the Colorado Air Quality Enterprise Board. Ms. Woodward has 25 years' experience in civil and environmental engineering design and project management, including Clean Water and Clean Air Act permitting and compliance and National Environmental Policy Act (NEPA), Wildlife and Cultural assessments for energy projects on Federal Lands. She is an Environmental Engineer and has provided technical support for the oil and gas industry, the homebuilding industry, mining industry, other private clients, U.S. Environmental Protection Agency (EPA) and the Department of Defense (DoD).

Most recently, Ms. Woodward has provided support to the oil and gas industry through her work with COGA and has engaged in many stakeholder meetings, rulemakings and guidance/policy development in air quality and at the Energy and Carbon Management Commission. Notable are the development of a GHG intensity verification rule and protocol, groundbreaking regulations on air monitoring, public health assessments and emission control regulations.



Daniel Zimmerle

Director, Methane Emissions Program / METEC

Director, Remote and Distributed Energy Center (RADEC), Energy Institute, Colorado State University Daniel Zimmerle is the Director of

the Methane Emissions Program in the Energy Institute at Colorado State University. Zimmerle was a principal investigator on seven major studies of methane

emissions in the natural gas supply chain, including studies of upstream, midstream, and distribution systems at a national and/ or regional scale, and leads the Methane Emissions Technology Evaluation Center, one of the largest test facilities for natural gas leak detection solutions. Zimmerle's group conducts research on natural gas emissions including studies of equipment and pipeline emissions, field studies, and fundamental investigations of commonly utilized methods. Recent work has branched into agricultural and waste emissions area.

Additionally, Zimmerle also works on energy access and development in rural communities in the developing world and the integration of distributed generation into power systems.

An 'accidental academic,' Zimmerle's pre-CSU experience is all industrial. He served as the Chief Operating Officer at Spirae, Inc. and 20 years at Hewlett Packard and Agilent Technologies including experience as both a division general manager and R&D manager, leading organizations in multiple businesses and organizations that included personnel in the US, Ireland, Singapore and other countries.

He holds a BSME and MSME from North Dakota State University.



FOR MORE INFORMATION, CONTACT:



Kevin Trim **GTI Energy** Senior Manager, Education & Events ktrim@gti.energy



Myriam Mercado **GTI Energy** Senior Marketing Specialist mmercado@gti.energy



Maury Dobbie Lead, CH4 Connections Conference Colorado State University Maury.Dobbie@colostate.edu

WWW.GTI.ENERGY/CH4

FIND GAS LEAKS FAST





SENSIT









TRAK-IT[®] PMDa



FROM FINDING GAS LEAKS TO **ENVIRONMENTAL MONITORING** SENSIT Technologies has you covered

STOP BY booth

- ✓ Methane Emission Monitoring
- ✓ VOC Monitoring
- ✓ Portable Gas Leak Detection
- ✓ Mobile Methane Detection
- ✓ GPS, Mapping & Analytics
- ✓ Wireless Communication
- ✓ Durable & Intuitive









Natural gas utilities saved <u>1.7 million metric tons</u> of greenhouse gas emissions through energy efficiency programs in 2020.



CANARY

View our 2024 ADED Results

All your emissions measurement & reporting. One platform.





KT Photonics Improve Your Vision

HOT T2SL MWIR OGI infrared detector for gas leak detection, extended life and SWaP (weight 260g)





The **BAUER FG[™]** Series Fugitive Gas Solution captures fugitive methane gas emanating from dry gas seals as well as from system blow-downs during maintenance and repair cycles. After capturing and compressing the fugitive gas, the **BAUER FG[™]** Series compressor system re-injects the compressed gas back into the pipeline either upstream or downstream of the centrifugal pipeline compressor.

biogas@bauercomp.com

in f 🖻 🞯 🌀 🛛 Connect

Connect with us.

SCAN TO LEARN MORE

> COLORADO STATE UNIVERSITY'S LORY STUDENT CENTER FORT COLLINS, COLORADO VISIT US FOR LIVE DEMO AT CH4 BOOTH #10

CONNECTIONS OCTOBER 15-16, 2024

www.ktphotonics.com

GTI ENERGY



Actionable & reportable insights

Powered by elite analytics





Note: Cantronic Systems is brand and selling branded cameras.

www.cantronics.com



Emissions Performance Testing, Detection, Quantification & Analytics

Encino stands at the forefront of emissions monitoring within the Energy sector, offering a comprehensive suite of environmental services. These services encompass NSPS OOOOb Net Heat Value and ECD Performance Testing regulatory compliance solutions, along with our innovative Composite Thief Hatch, which significantly lowers maintenance expenses and reduces fugitive emissions.

The Encino Advantage

complex environmental projects.

(C) +1 (281) 201 3544 🔘 support@encinoenviron.com 🔘 encinoenviron.com

With more than 150 years of combined engineering,

project management, and environmental compliance

experience, Encino has the capability to assess, design,

and implement an array of strategies for simple to



MethaneTrack[™]

- Detects Methane, all Hydrocarbons, and Hydrogen using Close Proximity Continuous Monitoring[™]
- Real-time, consolidated dashboard of emissions with alerts & notifications
- Confident compliance with legislation for emissions tracking
- Reduce the cost of LDAR & drive operational efficiency & safety by eliminating manual monitoring

Visit us at Booth #19 or at www.nevadanano.com



HELPING YOU ZERO IN ON NET ZERO

Fixed

Can

EmSAT^{IM} S

Accelerate methane reduction with advanced monitoring and end-to-end emissions management solutions.

Explore the technology firsthand at our exhibit.

Learn more

THE FUTURE IS WHAT WE MAKE IT



CONTINUOUS METHANE EMISSIONS MONITORING WITH PINPOINT ACCURACY.

INTRINSICALLY SAFE SENSORS EQUIPMENT-SPECIFIC ACCURACY TURNKEY SETUP & 24/7 REMOTE MONITORING CUSTOMIZABLE & SCALABLE SOLUTIONS FULL SCADA INTEGRATION





ShepherdGas.com

Proven and reliable methane abatement technology

End-to-end solutions with scalable hardware and software

Learn how to eliminate methane emissions at Booth #7



Qnergy

Qnergy



Se FEATURES

Zero external power requirement - driven by station gas differential pressures (dP); 100 psi dP standard Closed vent system (OOOOb compliant) 0-1480 psig Intrinsically safe design (Class I, Div. 1) High-speed drawdowns- scalable in increments of 10 acfm Tolerates liquid ingestion Simple mechanical installation Redundant and adjustable pressure Control protection systems.

ABB

QUBE

Emissions Reduction Through Continuous Monitoring

Detect, measure, and reduce greenhouse gas emissions.

Contact Us | Schedule a Demo



Shaping the Future: Advanced Leak Detection & **Emissions Reduction, Transformational Workshop**



Date:	Date:	March 5 th - March 6 th , 2025	
Venue:	Venue:	Dallas/Plano, Texas Hilton Plano Granite Park Hotel	
Why Attend:	Shaping the Future of Advanced Leak Detection and Emissions Reduction Technologies! 🕉		
	Curious about the latest in portable, mobile, and UAV- assisted leak detection tools? Want to gain hands-on experience and insights from industry leaders? Join us for an exclusive workshop led by ABB, where innovation meets expertise!		

Vhat to Expect

- Cutting-Edge Tech: Discover the newest advancements in leak detection and emissions reduction
- Hands-On Learning: Dive deep with practical sessions, real-world
- applications, and hands-on training. Expert Insights: Hear from ABB's pioneers and industry experts who are shaping the future of the industry.

This workshop is more than an event—it's an immersive experience designed to prepare you for the evolving challenges and opportunities in the field

View the event's full agenda HERE



HOW IT WORKS

High-pressure gas from station's discharge header expands through ZEVAC D3 unit, flowing to lower pressure suction header. This differential pressure provides the power for the unit to operate

 $\mathbf{7}$ All vent lines in the station are routed to ZEVAC D3 unit intake



When pressure is detected on the vent lines, ZEVAC D3 activates $\frac{2}{3}$ capturing the vent gas and compressing it into the station suction header



All ZD3 units can be equipped with auxiliary air-drive capability when gas dP is unavailable.

www.getzevac.com







Gas Flow Meter 2.0 has always been the best EPA compliant high volume sampler on the market, and now, it's official! We're UL certified in the US and Canada for Class I, Division 2 Intrinsic Safety. (No hot work permits needed.)



Visualize. Protect. Safeguard what Matters





Visit us at www.cisensing.com



Energy Field Fugitive Emissions Capture Technologies

Defendable tank practices

- 1. Closed vent system
- 2. External gauging/no venting
- 3. External thiefing/sampling
- 4. All port isolation
- 5. Provides documented proof of abilities

Defendable Technologies "No E Tank Gauge" "No E Hatch Valve" Pat # 12.0540337 Pat Pend. 18/162,418-1/23 Storage tank isolation system No employee exposure Prevent employee exposure-safety No venting during gauging Allow for immediate repairs without Plumb bob gauge any tank venting Simple operation & connect Allow testing to design psi Clear view window Adjustable wiper Thief Hatch Isolation Documented Proof Contact us- j.schunk@effectproducts.com www.effectproducts.com Mason, Michigan

INOVAER TECHNOLOGIES

CUBIC

Continuous Methane Emissions Monitoring System



Tunable Diode Laser Absorption Spectroscopy (TDLAS)

Features :

- Quantitative continuous emission monitoring
- Superior accuracy and sensitivity
- Outstanding performance
- Flexible customized wireless communication
- Smart power consumption management • 3D ultrasonic anemometer - Coming Soon
- o 10+ years lifetime



Methane/ **LP Gas Sensors**

for Residential **Gas Detectors**



FIGARO

World leader in gas sensing innovation



Figaro USA, Inc. https://figarosensor.com/

5400 Newport Drive, Suite 19, Rolling Meadows, IL 60008

Phone : (847) 832-1701, figarousa@figarosensor.com

TGS2612 TGS8410 - Cost effective -Battery operable - 5-year life -5-year life

Thanks to Bronze Sponsor



www.flir.com

K Highwood Emissions Management

From months to minutes. Methane accounting made easy.

Reconciliation at the click of a button.

Our global experts in measurement-informed methane intelligence also provide

Consulting Services

OGMP 2.0 Gold Standard, MiQ and Veritas support, technology strategy, and vendor support.

Education Services

Let's talk

info@highwoodemissions.com highwoodemissions.com









Open-air fixed-path Mid-IR TDLAS

PPB detection for Methane and Ethane

Off-road installation option







WWW.HEATHUS.COM info@heathus.com

SEE. SIZE. SOLVE. KUVO Methane Mitigation Simplified

Continuous Visual Methane Monitoring for Emissions Action



PRIORITIZE



WWW.QLMTEC.COM

QLM

Making the Invisible, Visible

www.satlantis.com 📊

A TOY





VENTUS OGI™ VISUALIZE (CH4)

640x512 Resolution Component for Integrators Gas Enhancement Mode

€ (541)716-0015
 ● SIERRAOLYMPIA.COM



Emissions Measurement - Emissions Reduction - Pipe Replacement - Advanced Leak Survey

Timely, Trusted, and Actionable Data

The global leader in the measurement, quantification, and reduction of methane emissions





Let's up your methane game.

New methane regulations from the EPA are driving dramatic change in emission management practices in the field. While operators are under pressure to adapt to tighter rules and new requirements, they have flexibility to use advanced tools to monitor smarter.

We help operators do just that. And up the game on methane:

- ightarrow Move to smarter, cost-optimized continuous measurement where it truly matters.
- \rightarrow Gain deeper understanding into emissions patterns at facilities to prioritize abatement actions.
- \rightarrow Phase out routine flaring by identifying the best technology to monetize associated gas at each facility.

We're SLB End-to-end Emissions Solutions, providing complete methane measurement technology and consultancy support.



Find out more at slb.com/SEES



