PerspECCtive

Theme: BE READY

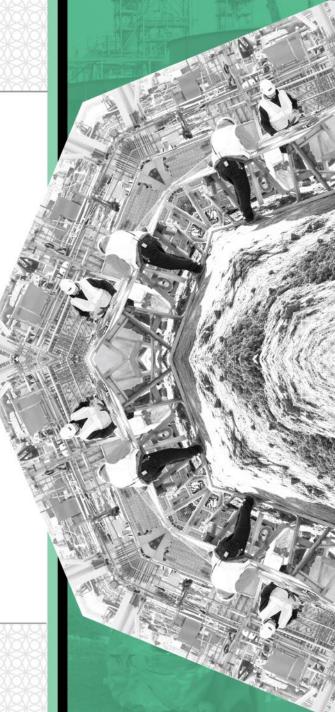
My ECC Experience

Summary of Key Takeaways from the 2023 ECC Conference

Year: Date: 2023 August 30-September 1 Location:

Marco Island, FL

ECC



ECC Overview

For over 50 years, the Engineering and Construction Contracting (ECC) Association has provided unique opportunities for industry pioneers and innovators to collaborate in a forum free from the daily demands and politics of business. Formed by owners, contractors, suppliers and academics in the engineering and construction business, the ECC aims to drive excellence and the long-term success of the industry through networking, innovation, and outreach.

The ECC Association provides:

- a business-neutral platform for its diverse participants to come together outside the constraints of everyday business, to explore new paths, collaborate, exchange ideas, and gain perspective.
- Honest, genuine peer-to-peer interaction that promotes better understanding to individual careers and company
- A source for real knowledge and skills that allow participants to be a leader and decision maker within their unique industry role.



Annual Program Overview:

- Annual 3-Day ECC Conference held in September
- ECC Extra Single Day event in February
- Sponsor Only Sessions and Future Leader program events held twice per year
- Numerous networking events throughout the year

2023 ECC Conference Theme



Ready to Lead

At ECC, we know and understand that in order for our industry to face the challenges of tomorrow we must prepare our future leaders today. Join us as we explore some of the tools our leaders need to overcome adversity and deliver this year and beyond the horizon. Realize that in order to be 'Ready to Lead' we must respond rather than react.

Ready to Launch

Being able to execute when the time comes is essential for success in the capital project space. After we have trained, studied, and prepared, we have to be 'ready to launch' and accomplish our mission. No one understands better what it means to "be ready to launch" than Adam Steltzner, Chief Engineer: Mars Sample Return, NASA Jet Prolusion Laboratory. Join us to capture creative problem solving approaches utilized in addressing the unknown and unpredictable environment of Mars.

Ready to Leverage

Our greatest strength as an industry is our ability to leverage our resources to solve the challenges of today while simultaneously ensuring a sustainable tomorrow. Join ECC and industry leading experts for creative and innovative thought content on leveraging our collective talent, problem solving skills and relationship networks to effectively manage the complexity of today's environment and tomorrow's future.

My Personal ECC Experience





- How the ECC experience will impact my role, career, company
- Who I met

• My key takeaways

Ideas our company can implement



Progression of the ECC Experience & Next Steps

Regular Participation	Support through Sponsorship	Impact through Leadership
Attend the ECC Annual Conference & ECC Extra	Commit to long term ECC Sponsorship	Bring ECC Conference learnings back into your organization.
Champion ECC within your organization, develop a long-term engagement approach	Participate in Sponsor Only Sessions and ECC Networking Events throughout the year	 Encourage your organization's leaders to participate in ECC Leadership
Interact with Industry peers and begin to develop your ECC Network	Leverage the ECC Future Leader program by nominating staff from your organization each year into the three-year program	 Encourage your organization's Future Leaders to lead a working committee or serve as a Board Liaison.
Develop a Long-Term Bring others within your network into the ECC Community Make ECC part of your long-term career development plan		

- Connection
- Bring others within your network into the ECC Community
 Make ECC part of your long-term career development plan
 Stay active in the Future Leader Alumni community

Visit the ECC Website for information ECC Sponsorship, the Future Leader Program and more

Thank you to our 2023 ECC Premier Sponsors



Thank you to our 2023 ECC Annual Sponsors



2024 ECC Calendar of Events

2024 ECC Annual Sponsorship – Sponsor Now



} + ECC PerspECCtive

Featured Speakers - Overview



Adam Steltzner Author, Aerospace Engineer Jet Propulsion Laboratory





Anirban Basu Chairman & CEO Sage Policy Group





Vicki Hollub President and Chief Executive Officer Oxy





Jon Acuff Best Selling Author

Tony Dungy Former Head Coach, Football Analyst NFL/NBC Sports



2023 ECC Featured Speaker Summary

Adam Steltzner: Perseverance



PERSEVERANCE LANDS ON MARS



Key Message:

Adam Diedrich Steltzner (born 1963) is an American NASA engineer who works for the Jet Propulsion Laboratory (JPL). He worked on several flight projects including Galileo, Cassini, Mars Pathfinder, and Mars Exploration Rovers (MER). He was the lead engineer of the Mars Science Laboratory's EDL phase (Entry, Descent and Landing), and helped design, build and test the sky crane landing system.

The media has portrayed Steltzner as a "rock and roll" engineer. NPR's Morning Edition said "he has pierced ears, wears snakeskin boots and sports an Elvis haircut," while the EE Times called him "a bit of a hipster" and a "new breed of engineer" who is media savvy.

"Great works and great folly may be indistinguishable at the outset "

Key takeaways:

- Hold onto the doubt; the curious mind stays agile, innovative and competitive
- Find something to like (or even love) in everybody on the team. It's possible to find things to hate or love about everybody you work with. If you do this, everyone has a better time at work.
- Callous disregard; the willingness to fail, and being ok with failure, enables us to take risk that enables success

Taking it Further: Speaker's Website Link to Full Presentation

Anirban Basu: Mixed Economic Signals





Key Message:

Anirban is Chairman & CEO of Sage, an economic and policy consulting firm in Baltimore, Maryland that he founded in 2004. Dr. Basu is among the most recognizable economists, in part because of his consulting work on behalf of numerous clients, including prominent developers, bankers, brokerage houses, energy suppliers, law firms and business associations.

Dr. Basu has written several high-profile economic development strategies on behalf of government agencies and non-profit organizations, including co-authoring economic development strategies for Baltimore City and Baltimore County, Maryland. Among other things, Anirban serves as the chief economist to Associated Builders and Contractors (national) and as chief economic advisor to the Construction Financial Management Association.

In recent years, he has also focused upon health economics, the economics of education, and economic development. He has lectured at Johns Hopkins University, most recently in global strategy.

Key takeaways:

- The global supply chain seems to be healing yet shifting simultaneously. China is becoming less reliable and some manufacturing is moving back to the US.
- Inflation Reduction Act may increase inflation into 2026 then help reduce it.
- There are contradictory signals regarding the US economy; many economists have dropped predictions of recession this year, yet things such as increasing credit card debt suggest it is looming. Spending is up, but that doesn't mean people are buying more, but rather that the things they are buying are more expensive.
- Al will likely increase productivity, leaving a portion of the workforce behind

Taking it Further: Speaker's Website

Link to Full Presentations and Video

Vicki Hollub: Strategically Pursuing Net Zero



Key Message:

Vicki Hollub is President and Chief Executive Officer of Oxy. She has been a member of Oxy's Board of Directors since 2015.

During her 35-year career with Oxy, Vicki has held a variety of management and technical positions with responsibilities on three continents, including roles in the United States, Russia, Venezuela and Ecuador. Most recently, she served as Oxy's President and Chief Operating Officer, overseeing the company's oil and gas, chemical and midstream operations.

Vicki serves on the boards of Lockheed Martin and the American Petroleum Institute. She is chair of the World Economic Forum's Oil and Gas Community and a member of the Oil and Gas Climate Initiative. A graduate of the University of Alabama, Vicki holds a Bachelor of Science in Mineral Engineering. She was inducted into the University of Alabama College of Engineering 2016 class of Distinguished Engineering Fellows.

Key takeaways:

- Industry needs to dramatically reduce methane emissions in order to improve public perception
- The world can't afford the 15,000 1MTPA CO2 scrubbers required to meet net zero
- Utilizing captured CO2 for Enhanced Oil Recovery (EOR) will help meet targets
- Presentation further summarizes Oxy's strategic intent for direct air carbon capture deployment

Taking it Further: Speaker's Website Link to Full Presentation

2023 ECC Featured Speaker Summary

Jon Acuff: Soundtracks



Key Message:

PerspECCtive

Jon Acuff is the New York Times bestselling author of eight books, including his most recent, Soundtracks, The Surprising Solution To Overthinking.

Published in more than twenty languages, his work is both critically acclaimed and adored by readers. When he's not writing, Acuff can be found on a stage, as one of INC's Top 100 Leadership Speakers. He's spoken to hundreds of thousands of people at conferences, colleges and companies around the world including FedEx, Nissan, Microsoft, Lockheed Martin, Chick-fil-A, Nokia and Comedy Central. Known for his insights wrapped in humor, Acuff shared the stage with an American Icon when he opened up for Dolly Parton at the Ryman Auditorium.

For over 20 years he's also helped some of the biggest brands tell their story, including The Home Depot, Bose, and Staples. His fresh perspective on life has given him the opportunity to write for Reader's Digest, Fast Company, The Harvard Business Review and Time Magazine.

Key takeaways:

Jon's keynote highlighted his recent book *Soundtracks* which tackles the impacts that overthinking has on individual and team performance. He provided the infographic below as key a summary of the key takeaways.



Taking it Further: <u>Speaker's Website</u> Link to Full Presentation

Tony Dungy: Nice Guys Finish First







Key Message:

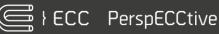
Tony Dungy is not your typical football coach. The former head coach of the 2007 Super Bowl Champion Indianapolis Colts refrains from the harsh language and aggressive manner so often associated with his sport. And yet he's proven that nice guys do indeed finish first. His philosophy of treating people with decency and respect inspires in his players the loyalty, dedication and determination to overcome any obstacle and prevail. Dungy imparts this too-often-forgotten aspect of leadership: that kindness isn't weakness; rather, it generates the type of devotion that results in success. Dungy is a leader who shows us all how faith, strength and solidarity can sustain and inspire any team. Currently, Dungy is a football analyst for NBC Sports and is the author of four books, including Uncommon: Finding Your Path to Significance and his most recent, Mentor Leader.

Key takeaways:

- 7 E's of Leadership: Engage, Educate, Equip, Encourage, Empower, Energize, Elevate
- "If someone doesn't want you to fly, you might have to teach yourself"
- "There's no law that says you have to do what other people are doing"

 Taking it Further:
 Speaker's Bio Website

 Link to Full Presentations and Video



Breakout Forums – Overview

Better Together: Using Data to Get Field Connectivity Right Leading in The Energy Trilemma: A balancing act to achieve net zero The EPC Road to Perdition: From relationship doghouse to sole source penthouse

Developing the Project Teams of Tomorrow

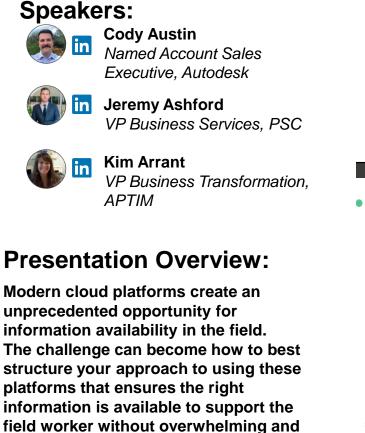
The Search for Talent: How do you engage the workforce of the future?

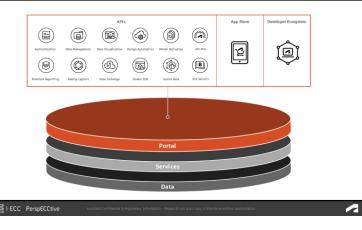
Quality is Killing us: The Impact of the Loss of Competence

Battling the Enemy of Predictable Projects



Better Together: Using Data to Get Field Connectivity Right





- Step 3 Construction Execution
 - Example Metrics

Before The Cloud 1200 Folders 30,000 Documents 12,000 were duplicated With The Cloud Single Common Cloud Similar numbers of documents No duplication

- Has nearly eliminated version issues
 - · Example estimating from the wrong version of a document

Results:

Push: Keep the Crews in the field, at the workface, informed and successfully completing tasks

Stats - Industry published statistic – implementation of mobile data collection can increase productivity (time on tools) as much as 35%. Can we realize that?

Increased our time on tools from industry 40% to 80% (3rd party assessment)

Key takeaways:

- Cloud platforms provide a catalyst to change the information supplied to and received back from the field worker
- Begin with an area of meaningful impact like using a cloud repository to make sure the information in the field is current and lacking duplication
- It is possible to see significant gains in time on tools with accurate and available information in the field
- Available information provides a platform for re-imagining field supervisory roles, making them more available to their teams!
- All of the above points provide an opportunity for increased safety

Taking it Further: Link to Full Presentation

isolating them in an information storm

Leading in the Energy Trilemma: A balancing act to achieve net zero

Speakers:



in Alice Bullington

Principle Technical Expert, Risk Management, **Shell**



in Garrett Fultz

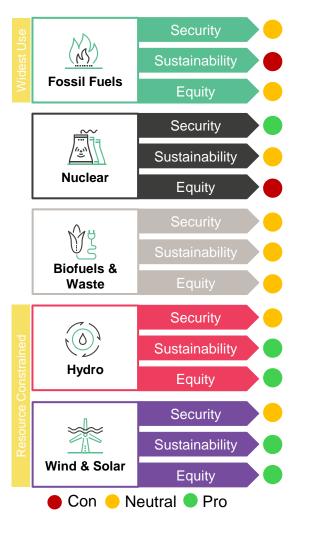
Global Construction, Projects, and Assets Lead, **FTI Consulting**



in Danny Splettstosser Vice President of EPC Strategy, AES Clean Energy

Presentation Overview:

- What is the Energy Trilemma? The interplay between the energy objectives of affordability, sustainability and reliability.
- There is not one solution to the Energy Trilemma: There remains a significant need for an energy mix to deliver on the global energy demand and manage the tradeoffs within the energy trilemma
- Key Battlegrounds for Success
 - Geopolitical, Legislative & Regulatory
 - Supply Chain, Skilled Labor & Innovation
 - Project Delivery Strategies & Techniques





Key takeaways:

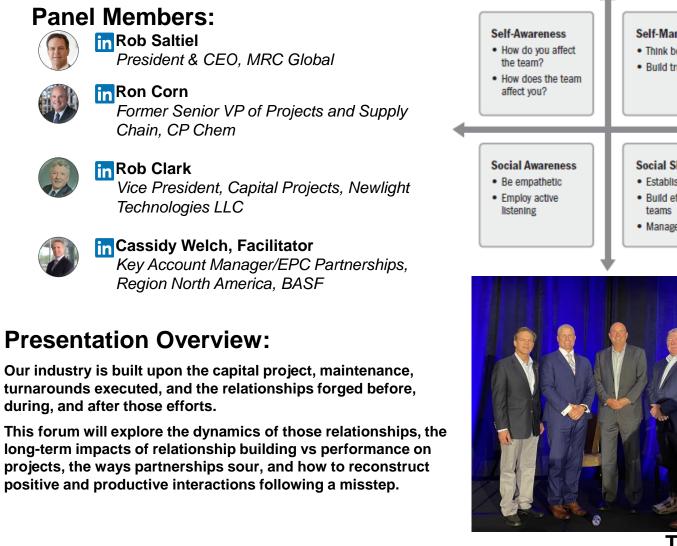
- The solution to the Energy Trilemma is an energy mix

 there isn't a silver bullet
- Experience and experimentation are critical to successfully developing energy assets especially as technology continues to evolve and new ones emerge
- Stay in the know new and/or updated legislative, policy, supply chain, and other factors are happening at a rapid pace
- Leadership starts by starting we have to be willing to innovate ... and be wrong
- Be open minded to new ways and tools to plan and execute partnering, generative ai, etc.

Taking it Further: Link to Full Presentation

2023 ECC Breakout Forum Summary

The EPC Road to Perdition: From Relationship Doghouse to Sole Source Penthouse







Key takeaways:

1. Project Alignment:

• Alignment is critical from the outset, right from RFP release to contract signing. Are the project goals understood by stakeholders?

2. Value Addition and Relationship Building:

- Cultivate strong leadership and stakeholder ties.
- Strong relationships drive key performance indicators (KPIs) and project success.

3. Business Development and Client Engagement:

- · Articulate your value proposition clearly, emphasizing informationbased insights.
- Ensure senior leaders align with the value proposition presented by Business Development.
- 3. Safety, Productivity, and Communication:
- · Foster open, honest communication.
- Sponsor or Steering Teams are an absolute necessity on large complex projects.
- 4. Risk Management and Value Demonstration:
- Understand risk allocation's impact.
- Showcase execution, savings, and safety.
- 5. Procurement, Cost, and Change Orders:
- Avoid excessive cost focus and low-bid pitfalls.
- Submitting a low bid with an intent to change order from the onset guarantees your company is on a fast track to an off-ramp directly into the doghouse with no way out.
- 6. Recovery and Growth:
- Rebalance relationships and promote growth opportunities.
- Provide a growth path for the contractors in a penalty box to leverage their learnings while benched.

Taking it Further: Link to Full Presentations and Videos

Developing the Project Teams of Tomorrow

Panelists:



in Jason Kraynek President, Production & Fuels – Energy Solutions, FLUOR



in Erik Schmidt VP Senior Project Geismar - Project Director, BASF



in Torrey Garrison VP of EHS/Leadership Development, Performance Contractors



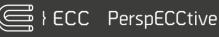
in Stacie Wrobbel (Facilitator) Vice President, Pathfinder LLC

Summary:

Our industry is currently cultivating and developing the next generation of project leaders while facing the retirement of the very knowledgeable and experienced Baby Boomer workforce at the same time. To close this skills gap, it is critical for Owners and Contractors to create an environment where skills and knowledge transfer are facilitated and encouraged. When project leaders have to drive diverse, multi-cultural and multi-generational teams towards project success, it is essential to: establish and prioritize process development literacy through comprehensive training and development programs in order to secure a smooth project delivery transformation, have a strong talent pipeline in place, provide a clear outline of career path opportunities, and also implement new ways to collaborate and communicate.

Key takeaways:

- Enhancing mentoring and coaching programs is one-way companies today are addressing the knowledge gap in the workforce (e.g., leadership coaches/advisors assigned to project teams).
- The Project Management skillset is fungible, and many companies are effectively moving resources from traditional projects to new energy projects.
- Increased soft skills training is a key enabler to equip leaders of tomorrow to successfully lead diverse, multi-cultural, multi-generational teams.
- To attract and retain project resources, companies must understand what prospective leaders of tomorrow are looking for in a career. Setting and understanding expectations in the interview process is a key step.
- Companies of the future need to embrace new technology and ways of working. 80% of ECC companies polled are working in a hybrid environment with about 70% in offices or at site and 30% remote.
- Some companies have Talent Development Teams that address technical skills, soft skills and leadership development as well as having both technical and managerial paths that lead to executive level positions.



The Search for Talent: How do you engage the workforce of the future?



Speakers:





in Jay Draeger

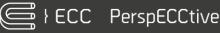


Presentation Overview:

- Our Moderator will present Workforce Trends Today based on PwC's Hopes and Fears survey results
- Share trends for hiring, engaging, and retaining talent in our industry
- Facilitated panel discussion on:
 - Investing in future talent
 - How culture wins over strategy
 - I&D success stories
 - Owning your career and helping leaders advocate
 - Developing employees for sustainable projects
 - Addressing retention at all levels
 - Audience polling and live Q&A

Key takeaways:

- Inclusive company cultures that foster innovation and encourage ideas are likelier to attract top talent.
- · Prioritize attracting top talent based on their skills rather than solely relying on their job history.
- Higher cost-of-living drive employees to seek new jobs, requiring employers to review compensation and talent strategies for retaining new talent.
- To engage and retain talent, companies must actively embrace AI, as the possibilities of Generative AI to transform the workplace generate excitement among employees, with most perceiving it positively.
- · Employers should collaborate with universities and technical schools, fostering relationships and designing programs that align with industry demands, thereby establishing a talent pipeline.
- · Companies should communicate their dedication to environmental sustainability and responsible practices,
- · Embracing workplace flexibility is vital for attracting and retaining talent.



Quality is Killing Us: The Impact of the Loss of Competence

Speakers:



in George Zener Quality Director, bp



in Randy Pound Executive Director, Tormod



in Terry Tuggle Project Quality Director, KBR



in Keith Magowan, Facilitator Project General Manager, bp



Key takeaways:

- Quality issues can impact any phase of the lifecycle
- Global supply chain expansion increases complexity of project specific knowledge sharing so increased effort needed to engage and verify the supply chain.
- Standard products improve quality due to repeatable processes and embedding learnings from issues.
- What gets measured, gets done. Use data to focus on issues and drive improvements.
- Mindset shift needed for many organizations.

Summary:

Quality issues are eroding value from engineering through execution and operations making projects less profitable and predictable. The great resignation and the impacts of COVID accelerated many people's decision to retire earlier than planned, resulting in a drop in industry knowledge. Other geo-political issues, for example the conflict in Ukraine, have impacted established supply chains, forcing new supply chains to be rapidly developed. Owners and suppliers have had to change their approach to develop and predictably execute in this new dynamic environment specifically focusing on knowledge management, people development and project quality assurance.

Battling the Enemy of Predictable Projects

Speaker:



in Gary Fischer Executive Director, Project Production Institute

Summary

Globally projects have a well earned reputation for being late and over budget. It's normalized pain that afflicts all segments including digital infrastructure, life sciences, energy and general building. Poor project predictability destabilizes company business performance by tying up unproductive capital, consuming capital intended for other investments and delaying new revenue. But there is hope. Using the principles of operations science projects can perform reliably. Come and hear what progressive leaders are doing to break the mold and enjoy the benefits of predictable projects.



Key takeaways:

- Variability degrades performance
- The unproven technologies of many energy transition projects intrinsically have variability, posing challenges
- Human nature causes us to protect our work from variability by amassing the things we need ahead of time e.g. work in process. This in turn drives long schedules.
- Instead of amassing work in process there are effective methods to manage variability -"Uncontrolled" variability can be effectively managed with agile planning through project production control -"Controlled" variability results from decisions we make with unforeseen or unintended consequences -Projects can map, model, optimize and control the production system to effectively manage variability and deliver predictable results

ECC 2023 Sponsors Only Strategic Issues Session

144 Attendees from 112 Sponsoring Companies









The Energy Transition & Transformation: Who Will Drive Change, and How?

Panel #1: Defining the Energy Transition Challenge

1. Redefining Success 2. Reinventing Accepted Practice 3. Rethinking Risk 4. Redesigning Engagement Models

Rich DiClaudio Man. Dir. & CEO. **Bedford Mamt. Partners** Pres./CEO, Energy Innovation Center Inst.

Richard Westney Founder/director of **R/MW Consulting, Inc.** 2023 ECC Achievement Award Recipient



Panel #2: Developing the Solutions

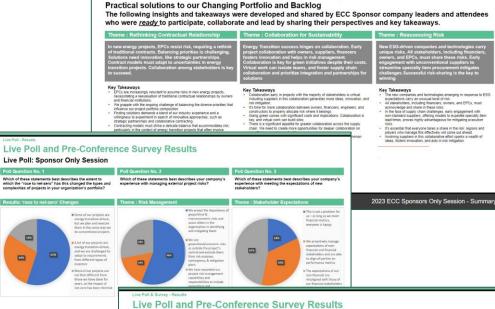
1. Redefining Success 2. Reinventing Accepted Practice

3. Rethinking Risk 4. Redesigning Engagement Models

Mark **Bader-Hellstrom** Group President MasTec Clean Energ Infrastructure







Sponsor Attendee Perspectives - Key Takeaways

Survey Results: Pre-Conference Survey



Key Takeaways - Polling and Survey Results, Perspectives, Challenges and Solutions shared with attendees

25%

CC PerspECCtive



2023 Sponsors Only Strategic Issues Session

Future Leader Wednesday Session

188 Future Leaders from 112 Sponsoring Companies





2023 ECC Future Leader Wednesday Session Summary

Leading Through the Energy Expansion



MOLLY DETERMAN

Key Message:

Molly Determan, President of the Energy Workforce & Technology Council, will help us BE READY to lead through the energy expansion. In her role with EWTC, Determan is a partner to promote the energy services and technology sector of the oil and gas industry. She advocates on behalf of the energy workforce and speaks frequently on workforce, culture, leadership and supply chain issues.

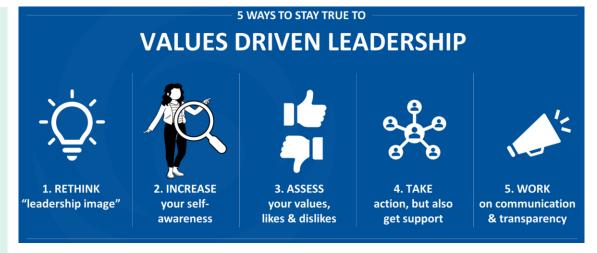
As the industry confronts the energy expansion, we must work together to reduce emissions while meeting increased global demand. This will require multiple iterations based on unique aspects of individual countries and regions. Aligning values across the industry with the public interest has become a critical component of industry's license to operate.

Taking it Further:

- Website:
- https://energyworkforce.org/
- Email: info@energyworkforce.org
- LinkedIn: mollymdeterman

Key Takeaways:

- Personal Values: Achievement, Challenge, Positivity, Curiosity, and Service
- How people perceive you matters
- Tough conversations become much easier when we are aligned on Values
- Energy transition is not a transition away from oil and gas, it is an expansion of the entire energy ecosystem, including oil and gas
- We are powering the future



Taking it Further: Link to Full Presentation

2023 ECC Future Leader Wednesday Session Summary

Ready, Set, Build: Launching the Future with Construction Robotics



ERIC M. WETZEL, PH.D.

"MAC"

Key Message:

Eric Wetzel, PH.D. is an Associate Professor at Auburn's McWhorter School of Building Science, specializing in construction robotics, BIM, and project controls. With continued research and advancements in A.I., computer vision, battery technologies, and navigation, the construction industry is poised to benefit significantly from robotics to offset dangerous tasks, repetitive/mundane tasks, and areas of labor shortage and productivity stagnation.



Taking it Further:

- Website: https://cadc.auburn.edu/people/eric-wetzel/
- Email: emw0009@auburn.edu
- LinkedIn: ericwetzel

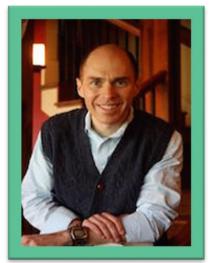
Taking it Further: Link to Full Presentation

2023 ECC Future Leader Wednesday Session Summary

Key Takeaways:

- Reduce dangerous, repetitive, and mundane construction activities in the field by leveraging Robots.
- Labor shortages will likely continue to be a problem in construction; ٠ tech will play a role in mitigation.
- Current markets robotics are expensive and often require tech-savvy • users, but competition, use-case development, and improvements to user-interfaces will help lower the bar of entry.
- Researchers at institutions of higher education are working ٠ alongside industry to help with this transition.

Leveraging Your Influence for High Performance Teams



MIKE VAN HOOZER

Key Message:

Mike Van Hoozer is an expert in the psychology of human performance and serves as a leadership expert and peak performance coach to business leaders, entrepreneurs, and elite amateur and professional athletes helping them reach their potential in sports, business, and life. Transformational leaders create a shared mission, vision, and set of values while empowering others through trust, alignment, commitment, and accountability.



Taking it Further:

- Website: <u>www.mikevanhoozer.com</u>
- Email: mvanhoozer@gmail.com
- LinkedIn: mikevanhoozer
- Twitter: <u>@mvanhoozer</u>
- Youtube: <u>Mike Van Hoozer</u>

Taking it Further: Link to Full Presentation

Key Takeaways:

PerspECCtive

- Create your Leadership Legacy and conduct Leadership Quarterly Reviews
- Learn when to lead and when to lead through others delegate purposefully
- Notice and recognize contribution and achievement
- Become a relentless architect of the possibilities of people

2023 ECC Future Leader Wednesday Session Summary

