

Welcome

Al Green Energy Conference March 24, 2023, 8 am PDT Live Stream Seattle Washington

08:00 am PDT Mayor – Kick off the Conference

Mike Brisbois | 708.668.5488 | mike.brisbois@ieee.org

IEEE AI Green Energy Conference Friday March 24, 2023, 8 am PDT *Live Stream Seattle Washington*

Speaker Line Up

08:00 am PDT Mayor – Kick off the Conference

08:10 am PDT Kirt Conrad, Hydrogen Fuel Bus Depot, CEO Stark Area Regional Transit Authority 08:35 am PDT Stevan Bratic, 'Lowest Energy option vs. Grid – low carbon emissions – EV Charging 09:00 am PDT Jumie Yuventi, Product Engineer, Twenty Percent Plus | Glenn Algie, Enterprise IoT, Energy 09:25 am PDT Dr. Sayonsom Chanda, Grid and Energy Data Analytics, National Renewable Energy Lab 09:50 am PDT Syed Ahmer Imam, Experience in Electrical Power System 10:15 am PDT Pamela Hamblin, 'Renewable Energy Generation, Transmission, Distribution', Consultant 10:40 am PDT Andrea Corwin Pinabell, Sustainability Executive, AC Impact Advisors, CEO 11:05 am PDT Lexie Assunto, VP of Business Development Smart Cities, Solar & Sustainable Energy 11:30 am PDT Dr. Sreeram (Ram) Dhurjaty, Distinguished Speaker, Consumer Technologies 11:55 am PDT IEEE Prize Pack Give Away – Special Guest 12:05 pm PDT Siva Jayaram, PE Grid Scale Energy Storage, Manager, Intersect Power 12:30 pm PDT Katherine Hammack, 'Measuring resilience in Microgrids', GBCI 12:55 pm PDT McKenna Dunbar, Building Electrification Lead, Sierra Club 1:20 pm PDT Mark Zannoni, 'Advancing Cities Transportation through Technology' 1:45 pm PDT Carl Slater, Senior Engineer, Space Commercial Airplanes, 'Plastic Processing Microgrids' 2:10 pm PDT Umit Cali Associate Professor of Energy Infomatics (AI & Blockchain) 2:35 pm PDT Ram Dutt, 'Empowering Digital Transformation Smart Software as a Service, Meylah, CEO 3:00 pm PDT Jim Dodenhoff, IEEE AI Microgrid Controller Standard, 2030.7, Principal, Silent Running 3:25 pm PDT Mike Hopkins, Hydrogen Fueling Stations, CEO Bakken Energy 3:50 pm PDT Chris Carr – North America Sales Manager for GenCell Fuel Cells 4:15 pm PDT Salim Rahemtulla, President and CEO, PowerTap Hydrogen Fueling Corp. 4:40 pm PDT John Somers, Clean Energy Standards, 3Degree, Service Development Manager 5:05 pm PDT Salute to our Speakers 5:10 pm PDT Special Guest

08:10 am PDT Kirt Conrad, Hydrogen Fuel Bus Depot, CEO Stark Area Regional Transit Authority



Senior executive in public transit with expertise in alternative energy and public policy. Has increased ridership over 30% and increased revenues by 20%. Has secured over \$50 million in competitive grants and managed construction programs from railroad rehabilitation to LEED certified building in the transportation industry. He led the purchase of 50 miles or railroad right-of-way and use of transportation infrastructure as a multi-modal corridor for both freight and commuter service. Currently, I am working with several private sector companies to commercialize fuel cell based public transportation and researching the best business models to support public hydrogen infrastructure.

https://www.linkedin.com/in/kirt-conrad-90a7a6a/

08:35 am PDT Stevan Bratic, 'Lowest Energy option vs. Grid – low carbon emissions – EV Charging Managing Dir.



LED lighting is the low hanging fruit with quick payback when it comes to energy efficiency. In addition, with energy costs increasing 3-4% year after year, we now can help shave off that increase and/or peak charges or even take you off the grid with solar, battery backup and CHP. And we can finance the whole system. We hope to have an opportunity to help you reduce your overall energy cost and be more environmentally friendly.

Brighton, MI - EV Charging POD LLC, a leading technology-based full-service solution provider that offers extensive experience in providing energy efficiency and sustainability in the EV and infrastructure marketplace.

Bratic's longest product offering started with LEDs for the Automotive Industry over 20yrs ago, for the exterior. The product offerings progressed and lead to working with Forensics Scientists at the University of Aukland and ultimately lead to the Airport runway

lighting that met FCC & FAA specification for Cooper Crouse-Hinds. The success of this led to developing new opportunities that were awarded through Cooper Lighting when transitioning from HID to LED for the Commercial & Industrial exterior lighting.

Over time, Bratic took his knowledge to the Agricultural & Horticultural industry and that is when it was time to step up their offerings in with electrical power. Working with local fab shops to develop ground mount, roof top and canopy mounting systems for Solar. Not every project had the ability to make a huge impact due to having the space needed for large amounts of power. So, this also led Bratic to developing relationships with OEM manufactures in the Cogen industry and now being able to also use the waste from this equipment to offer other benefits and saving for its customers, like free HVAC energy.

Over time and with all the infrastructure issues nationally with growth in so many market segments like manufacturing, data & crypto centers, and the electric needs for a fast-growing EV world; Bratic realized the need and saw the issues that were only going to get worst with not having enough power to support the demand.

So, in mid-2022, Bratic started EV Charging POD in support the growing demand and growth with and for Electric Vehicles. Realizing that our experience providing Prime Power to the level of taking the customers off the grid through using Natural Gas (RNG or Propane), Solar, Battery and/or Micro-Grid technology, we can make a huge impact in limiting any ongoing infrastructure issues. Bratic will still be supporting power mitigation and peak shaving for facilities than need help, but the focus will be EV Charging.

https://www.linkedin.com/in/stevan-bratic-888b0711/

09:00 am PDT Jumie Yuventi, Product Engineer, Twenty Percent Plus | Glenn Algie, Enterprise IoT, and Energy



Executive with 16+ years of experience leading product and engineering in technology, manufacturing, construction, with focus on enterprise, B2B, and complex systems. My teams and I have delivered \$10B+ in construction systems, generated \$1B+ yearly revenue, created new product standards, and received multiple patents & awards.

https://www.linkedin.com/in/jumie-yuventi/

09:25 am PDT Dr. Sayonsom Chanda, Grid and Energy Data Analytics, National Renewable Energy Laboratory



Simulation Engineer Simulation Engineer National Renewable Energy Laboratory Denver, Colorado, United States

https://www.linkedin.com/in/sayonsom/



The talk will highlight the importance of renewable energy and the challenges associated with its production and integration into the grid. It will explore various AI techniques such as machine learning, neural networks, and predictive analytics that can be used to optimize renewable energy production. The potential benefits of using AI in renewable energy production will be discussed, including increasing efficiency, reducing costs, and improving grid stability. The talk will also address concerns and criticisms of AI in renewable energy production and suggest solutions to address them.

Overall, the talk aims to encourage further research and development in the field and work towards a cleaner and more sustainable energy future.

"Syed Ahmer Imam is a distinguished senior Electrical Engineering student with a passion for exploring the field of electrical engineering. He completed two months of internships at K-Electric BQPS-1 as an Electrical Engineering Intern and ZIMCO International Corporation as a Power Systems and IoT Intern. He has exhibited exemplary leadership abilities and managed various tasks as a Class Representative since his junior year. In addition, he has made valuable contributions to fostering creative writing skills by volunteering as a student and education volunteer in PUAN's Master Class in Residence program for Creative Writing.

He is committed to furthering the field of electrical engineering, leveraging his expertise in technical writing and communication. He has also served as a senior member of the IEEE-NEDUET Student Branch Technical, and as a current member of IEEE-PES-NEDUET and IET-NEDUET in Research and Development, he continues to demonstrate his dedication to this field through his research and development efforts. Currently, he is conducting a feasibility study and comparative analysis on two different photovoltaic (PV) systems, Fixed Tilt and Single Axis Tracking, with Levelized Cost of Electricity (LCOE) as his Final Year Project (FYP) for Amreli Steels, an industrial organization."

https://www.linkedin.com/in/syedahmerimam/



Business-savvy and performance-driven professional with substantial experience developing and executing effective sales and marketing strategies to meet/exceed business needs and goals. Proven success in ensuring flawless execution of sales strategy to build growing, sustainable, and profitable business. Proficient in designing and implementing optimal go-to-market model based on dynamics and business strategy, including sales roles, coverage models, and team configurations to maximize productivity. Well-versed in monitoring customer, market, and competitor activity, providing feedback and strategic recommendations to business, company, and relevant functional leadership teams. Instrumental at fostering and maintaining business relationships with key internal and external stakeholders as well as collaborating with cross-functional teams on upstream and downstream marketing goals. Expert at coaching, mentoring, and raising team's ability to deliver and exceed expectations while creating opportunities for succession talent.

Areas of Expertise

- Strategic Sales Planning
- Budgeting & Forecasting
- Staff Development & Leadership
- Process Improvement
- Stakeholder Management
- Account Management
- Revenue/Profit Optimization
- Relationship Building
- New Business Development

Key Accomplishments

- Prepared and published papers for ASME on both boiler reliability and high-energy piping.
- Published feature articles in power engineering magazines and inspection journals.
- Participated at Electric Power Conference, Power-Gen, and 23rd Annual IPEIA Conferences.
- Developed and maintained 9K+ resource contacts within utility and industrial sectors.

https://www.linkedin.com/in/pamelahamblin/



A collaborative and goal-oriented executive with consistent and proven success leading multiple teams and organizations resulting in scalable solutions and funding while building strong partnerships. As a known change-agent with a growth mindset, Andrea (she/her) integrates holistic and strategic approaches by aligning goals and influencing others, through an environmental, socially conscious, and financially sustainable lens. Globally experienced and a recognized servant leader with excellent people skills, she balances high level business acumen and risk mitigation with innovation and entrepreneurship, moving organizations and foundations to be more purpose driven, sustainable, resilient, and equitable.

My journey has been unique which has led to me being a well-rounded, collaborative, and strategic leader. One of my greatest strengths is the ability to engage and influence others and development excellent relationships through authentic leadership.

https://www.linkedin.com/in/andreapinabell/

11:05 am PDT Lexie Assunto, Vice President of Business Development Smart Cities, Solar & Sustainable Energy



Proud to serve as an executive team member of a fastgrowing, forward-thinking organization that provides innovative energy and smart city solutions to a diverse clientele.

We partner with property owners, government agencies (local, state, federal), real estate developers, utility companies, major retailers, and institutions (higher education, healthcare) to minimize their environmental footprints, enhance their IoT capabilities and drastically reduce or eliminate their energy bill.

Our solutions include:

Smart City Solutions - supporting critical infrastructure (5G, IoT, multiple security systems, Wi-Fi, environmental sensors etc)

Solar & LED Street/Parking Lot Poles - with savings of 40% - up to 100% with Solar (off the grid)

Retroflex Solar Wrap - installed on new and existing poles, 100% energy savings

Lighting as a Service - Fully funded Smart City lighting and solutions for municipalities

Substantial Cost savings: Lower energy costs by replacing antiquated, lighting with modern LED solutions. Up to 100% savings by converting to the Solar and LED solution with lights off the electric grid.

Smaller environmental footprints: By using solar energy, you alleviate pressure on our aging, overused electrical grid.

Reduce maintenance costs: With a 10-year warranty, LED lighting provides a maintenance-free experience for a full decade, saving thousands of dollars annually through reduced maintenance costs.

No conventional infrastructure needed (trenching, wiring, conduit, metering): Installations completed at fraction of the cost with significant time savings and no downtime.

Join the many forward-thinking, environmentally conscious organizations that have already opted for cutting-edge energy solutions to reduce their costs and help improve the environment.

https://www.linkedin.com/in/lexieassunto/

11:30 am PDT Dr. Sreeram (Ram) Dhurjaty, Distinguished Speaker, Consumer Technologies



Research, Development and Commercialization of Medical electronics systems such as Patient and Fetal Monitors, Medical Ultrasound, CT scanner, Digital and computed radiography. Expert in low noise Analog Electronics for medical devices as well as Biophotonics. Development of appropriate medical systems for developing countries that are affordable and meet the unique needs of those countries. Expert on high density power supplies and magnetics for medical and other applications

Goals are to develop systems both for Research and Development in systems and analog spaces, working with innovative companies.

Member of Board of the Southeast YMCA in Rochester, Private Pilot, Civil Air Patrol, Boards of management of various medical companies.

Specialties: Expert in low noise Analog electronics, Power supplies, and systems architecture

Understanding the clients unmet needs and lost opportunity costs in order to tailor appropriate solutions

Track record in identifying and commercializing innovative products

Creation and deployment of winning teams

Broad knowledge of the industry that helps me to identify future trends

Record of delivering products on time and within budget

https://www.linkedin.com/in/dhurjaty/

11:55 am PDT IEEE Prize Pack Give Away – Special Guest

12:05 pm PDT Siva Jayaram, PE Grid Scale Energy Storage, Manager, Intersect Power



https://www.linkedin.com/in/sivajayaram/

Use Cases and Value Streams for Energy Storage Battery energy storage systems (BESS) have emerged as a promising technology to support the integration of renewable energy sources into the grid. As the world shifts towards a decarbonized future, the importance of BESS in the energy sector is becoming increasingly apparent. In this presentation, we will explore the use cases of BESS on the grid, including its ability to provide ancillary services, enhance grid resilience, and support renewable energy integration.

Siva Jayaram is the Manager of Energy Storage Systems at Intersect Power. Prior to joining Intersect Power, Siva worked for RRC Power and Energy, Doosan GridTech, and Black & Veatch. Siva in his roles has worked on Power System Studies, Power System Protection, designing, installing, and commissioning Energy Storage Systems. Siva has a Master of Electrical Engineering from Missouri University of Science and Technology and pursued his bachelor's in electrical and Electronics Engineering from Anna University, India.

12:30 pm PDT Katherine Hammack, 'Measuring resilience in Microgrids', GBCI



Climate-related extreme weather events are on the rise, and they're taking their toll on the world's power infrastructure. Improving electricity efficiency, day-to-day reliability, and overall resiliency in severe events like flooding and hurricanes is a key concern. Microgrids are becoming an increasingly common solution. These self-contained electrical networks connect renewable energy resources (DERs) and loads and can operate connected to the main power grid or in an islanded mode. The amount of data that is processed, in real time, to make decisions as to the most effective operating mode while addressing the intermittency of renewables is Today's advanced microgrids need real-time amazing. optimization, enabling frequency regulation or load modulation with responses faster than one second. Advanced controls or AI helps to better and faster manage energy supply and demand variations across a microgrid. With AI, a microgrid can successfully manage a complex energy structure, including new variables such as renewable power generation or rapidly changing energy prices. The USGBC has developed the PEER certification tool to measure and analyze power system performance, validating progress and offering guidelines for future improvements to reduce energy losses, lower

emissions, and operating costs, and provide resilient power systems.

Honorable Katherine Hammack

Katherine Hammack is an energy and environmental consultant who works with organizations such as Green Business Certification Inc (GBCI), an organization that provides third-party credentialing and verification for several rating systems relating to the built environment. She focusses on enhancing resilience, sustainability, and modernization of power infrastructure through the PEER rating system, climate change adaptation and climate change mitigation strategies. With over 35 years of experience in energy, sustainability, and infrastructure operations she has worked in the strategic and technical aspects of smart cities, resilience, and energy/water security. From 2010 to 2017 she was the Assistant Secretary of the Army for Installations, Energy and Environment under President Barak Obama. Under her leadership, the Army instituted a net zero program for energy, water, and waste. As an ASHRAE Fellow, she currently chairs ASHRAE Standard 189.1 - Standard for the Design of High-Performance, Green Buildings, which is the basis for the International Green Construction Code. She also leads the ASHRAE Decarbonization Task Force Working Group on Grid-Building Intersection. Katherine is a graduate of Oregon State University where she received a Bachelor of Science Degree in Mechanical Engineering. Her MBA was awarded from the University of Hartford. She is a founding member of the USGBC and serves on the boards of Slipstream and MK Advisors.

https://www.linkedin.com/in/katherine-hammack-50212214/



Electrification Enthusiast. Environmental Justice Practitioner. Climate Mental Health Advocate. Cat Parent.

Specialties: Renewable Energy Systems, Building Electrification, Environmental Justice, Community Solar PV Adoption, Environmental Education Programming, Energy Burden Mitigation, Non-profit Management, Clean Energy Economics, Youth Professional Development Coaching, and Social Entrepreneurship and Impact.

McKenna Dunbar is an innovator, clean energy professional, and environmentalist, but most importantly Dunbar is an advocate for environmental justice. At Sierra Club Virginia Chapter, Dunbar acts as the Building Electrification Lead - managing a team focused on reducing dependence on fossil fuels and moving the electric sector to clean energy by advocating for building electrification.

Dunbar is also the Founder of Ecological Justice Initiative, a NPO that engages interns and fellows in energy and environmental related research, and the CEO of MOCOKONO, a newly founded firm focused on disrupting outdated forms of CSR ventures in ESG markets.

Prior to joining Sierra Club, Dunbar was an Environmental Marketing Researcher, Renewable Energy Education Fellow, a Virtual Reality and Data Visualization Consultant, and a Public Relations and Marketing Associate for a retail tech startup. Dunbar has presented clean energy finance research for IAEE, performed herbarium archival research on moss, lichen, and mold species for national databases, in addition to being a professional development coach for dozens of college students.

Dunbar is a 2022 Truman Scholarship Finalist, 2022 ACEEE's Linda Latham Scholar, 2022 BECC Fellow, 2022 Greenbuild Host Committee Scholar, 2022 Linkedin Top Voice in Social Impact, 2022 EPA Environmental Justice Video Challenge Winner, 2021 Udall Scholar, 2021 Recipient of the Women of Color Environmentalist Award from Greening Youth Foundation, 2021 Recipient of The North Face's Move Mountains Filmmaker Grant, 2020 Recipient of the David D. Burhans' Civic Fellowship, 2020 recipient of the Benjamin A. Gilman International Scholarship, and a 2021 Recipient of the Davis Projects for Peace Award.

In their free time, Dunbar enjoys e-biking, hosting tea parties, listening to clean energy podcasts, and preparing vegan cuisine.

https://www.linkedin.com/in/electrification/

1:20 pm PDT Mark Zannoni, 'Advancing Cities Transportation through Technology'



vehicles.

https://www.linkedin.com/in/markzannoni/

Visionary and multi-disciplinary strategic leader with 20+ years' experience in Africa, Asia, the Middle East, Europe, and across the United States. Vertical focus on smart cities, aviation, transportation, public transit, economic development, and international development and key and emerging innovations and technologies in these verticals.

Technology innovation coverage includes Big Data & Analytics, AI, Cloud, 5G / Mobile, Facial Recognition, Data, Social, IoT, V2X and related regulations and policies that enable and accelerate digital transformation allowing for new efficiencies and capabilities for cities, countries, and transport.

Expertise across transport modes to include Mobility as a Service (MaaS), airports, aviation, urban air mobility, heavy rail, light rail, commuter rail, passenger rail, freight, maritime, transit, buses, BRT, PRT, APM, ride hailing, smart parking, intelligent street infrastructure, V2X, electric vehicles, and connected and autonomous 1:45 pm PDT Carl Slater, Senior Engineer, Space and Commercial Airplanes, 'Plastic Processing using Microgrids'



Senior Engineer Experience System Engineering Space and Commercial Airplanes, Risk and Opportunity Management, Airbreathing Propulsion and Commercial Manufacturing

https://www.linkedin.com/in/carl-slater-1805b725/

2:10 pm PDT Umit Cali Associate Professor of Energy Infomatics (AI & Blockchain)



Expertise Areas: Advanced Data Analytics (ML and DL), IoT (multi-domain prototyping), Blockchain Technology (Smart Contracts & P2P application development), Cyber-Physical-System design (power, transportation and connected cities applications), IoT / sensorics to Cloud gatewaying, Energy Economics, Energy Politics, Evaluation (Focus: Renewables), Renewable Energy Technologies, Wind Energy (Project Management, Technical Due Diligence, Project Development, Wind Yield Assessment, Wind Power Forecasting Systems, Direct Marketing), Power Trading, Energy Electrical Communication Engineering, Smart Energy/ Smart Grids, eMobility (V2X communication and BMS), Energy Storage, Automation Science, Networking, Project Management, MCP, Cisco Devices, PL/SQL, Shell / Java, Embedded Systems, Car Electronics,

https://www.linkedin.com/in/%C3%BCmit-cali-8769953/

2:35 pm PDT Ram Dutt, 'Empowering Digital Transformation with Smart Software as a Service, Meylah, CEO

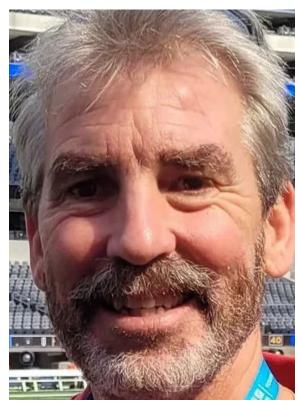


A dynamic business executive, entrepreneur, and community leader with a passion to solving complex business problems in technology and entrepreneurship. Strongly believe in partnerships to create a scalable win-win business model.

Passionate about local economic development, digital equity, and SMB's. Love to play Golf and use Golf to make an impact in the community.

Expertise: eCommerce, Strategic Planning, Product Management, Digital Marketing, Partner Development, Business Development.

https://www.linkedin.com/in/ramdutt/



Providing clean energy and sustainability advisory, consulting, and development services to for-profit and non-profit firms to create competitive advantage. Specialty areas include microgrid development, commercial, industrial, and institutional energy efficiency, clean energy finance, water-energy nexus projects, business model and business plan development, enterprise-wide sustainability initiatives, and facility resiliency and related emergency design and planning. Recent Projects:

• Presented paper at the Association of Energy Engineers-West Conference titled "Public Safety Power Shut-offs (PSPS's): Risk Mitigation for Who and What" (June 2022)

• Served on the California Energy Efficiency Coordinating Committee (CAEECC) Composition, Diversity, Equity, and Inclusion (CDEI) Working group developing funding and administrative strategies for increasing CAEECC engagement with community based organizations, climate action agencies, and

other disadvantaged stakeholders.

• Advising community-based advocacy organizations and cities in the qualification of Community Solar projects that provide electricity to Disadvantaged Communities.

• Prepared detailed analysis of climate change impacts and policies for CA, TX, and FL for client to assess relative challenges and opportunities of locating in these markets

• Served on the California Energy Efficiency Coordinating Committee (CAEECC) Equity Metrics Working Group developing overarching metrics for Energy Efficiency programs serving disadvantaged communities

• Developed a Business Plan to install LED Stadium Lighting to all California high school football, soccer, and baseball fields using a combination of 3rd Party debt finance and utility incentives with average energy cost reduction of 30-50%.

• Presented research paper titled "A New World: Wildfires and their impact on Resiliency Risk" at the November 2021 Behavioral, Energy, and Climate Change Conference (BECC).

https://www.linkedin.com/in/jimdodenhoff/

3:25 pm PDT Mike Hopkins, Hydrogen Fueling Stations, CEO Bakken Energy



Entrepreneurial CEO. Trusted Board member. Innovator. Thought leader & results deliverer[©] in clean hydrogen, renewables & energy storage

https://www.linkedin.com/in/michaeljustinhopkins/

3:50 pm PDT Chris Carr – North America Sales Manager for GenCell Fuel Cells

4:15 pm PDT Salim Rahemtulla, President and CEO, PowerTap Hydrogen Fueling Corp.

4:40 pm PDT John Somers, Clean Energy Standards, 3Degree, Service Development Manager



Mr. Brisbois is an Electrical Engineer with design experience, project management and leadership skills. He has worked in the building, space and technology sectors. He has hosted and presented at many technical sessions and conferences. He is a technical competent leader and able to get things done. Mr. Brisbois has his Professional Engineering license in the State of Washington, Oregon, Texas, Illinois, California, and Missouri. His focus is on leading sustainable energy projects. He is a board member on several technical organizations.

Mike Brisbois

https://www.linkedin.com/in/mike-brisbois-pe-2b79207/

5:05 pm PDT Salute to our Speakers

5:10 pm PDT Special Guest

Thank You

We will see you in Las Vegas on April 21, 2023, 8 am IEEE Las Vegas Tech Conference Expo



The presentation will be posted on our webpage. We thank all our speakers and sponsors.



We thank our supporters today! Thomas Coughlin - Coughlin Associates IEEE Consultant Network Melbourne