

RICE ALLIANCE ENERGY **TECH VENTURE FORUM**

The Premier Energy Tech VC Conference to Connect Energy Innovators, Investors, Corporations and the Energy Ecosystem



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Ion District, Powered by Rice University.

The Ion anchors the Ion District, the 16-acre innovation hub in Houston's Midtown, developed by Rice University.

Through collaborative spaces and programming, the lon foster collisions among startups, academics, and established companies.

The lon's innovation ecosystem brings together people, places, ideas and experiences to shape the future of Houston, driving transformative progress and enhancing the quality of life for all.

Propelling Houston's Energy Transition

Located in the energy capital of the world, we offer programs that support the growth of transformative energy startups and ventures—both those in Houston and around the world. From startup pitch days to investor/venture introductions to intensive accelerators, energy innovators have a community of support to accelerate the energy transition.

Programming at the lon is led by the Rice Alliance for Technology and Entrepreneurship, Rice University's nationally recognized initiative, which has over two decades of experience in executing flagship programming and developing a robust entrepreneurial ecosystem.

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2025 SCHEDULE - MORNING SESSIONS

7:30

JAMAIL PLAZA: Breakfast and Registration

PLENARY SESSION - RICE UNIVERSITY - MCNAIR HALL, SHELL AUDITORIUM

8:30 Welcoming Remarks

Brad Burke, , Associate Vice President, Industry and New Ventures, Rice Innovation

Executive Director, Rice Alliance for Technology and Entrepreneurship

8:40 Opening Keynote and Fireside Chat

Arjun Murti, Partner, Energy Macro and Policy, Veriten

9:10 Company Presentations: Industrial Efficiency, Decarbonization, & Robotics

Xplorobot Kewazo CO2 Lock

Flyscan Systems

Polystyvert dba UpSolv

C+UP Muon Vision
Hive Autonomy SpiroPak

10:00 JAMAIL PLAZA: Networking Break

PLENARY SESSIONS - RICE UNIVERSITY - MCNAIR HALL, SHELL AUDITORIUM

10:30 Company Presentations: Energy Efficiency & Carbon Management

Circul8 Energy & Environment Artemis Production Solutions

Direct C Badwater Alchemy

Aquafortus

Iron IQ

10:55 Company Presentations: Advanced Manufacturing & Materials

Ammobia Sperra Mithril Minerals
Mcatalysis RapiCure Solutions Precision Additive

Exum Instruments

11:30 Panel: Corporate Venture Capital – *Exploring the investment trends, challenges, and opportunities shaping the future of energy*

MODERATOR: Mitra Miller, Vice President, Houston Angel Network

Kemal Anbarci, GM Venture Capital & Managing Executive, Chevron Technology Ventures

Chad Bown, Americas Managing Director, bp Ventures

Rob Crane, Technology Scouting & Venturing Manager, ExxonMobil

Brian Panoff, Head of Ventures, Americas, Shell Ventures

Jim Sledzik, Managing Director, North America, Aramco Ventures



2025 SCHEDULE - AFTERNOON SESSIONS

12.00 JAMAIL PLAZA: Lunch and Networking

PLENARY SESSION - RICE UNIVERSITY - MCNAIR HALL, SHELL AUDITORIUM

1:00 Afternoon Welcome and Introductions

Brad Burke, Associate Vice President, Industry and New Ventures, Rice Innovation

Executive Director, Rice Alliance for Technology and Entrepreneurship

1:10 Rice Alliance Clean Energy Accelerator Class 5 Demo Day Pitches

Welcoming Remarks:

Kerri Smith, Executive Director, Rice Alliance Clean Energy Accelerator

Associate Managing Director, Rice Alliance

Thomas B. DeBesse, Region Executive, Southeast Texas Region, Wells Fargo & Company

Startup Introductions by Executives in Residence: John Jeffers, Dev Motiram,

Lynn Frostman & David Horsup

Class 5 Ventures:

Innowind Energy Solutions Fathom Storage AtoMe Moonshot Organics

Metal LightResollantAtmoSpark TechnologiesLukera EnergyGeoKiln Energy InnovationAqua-Cell EnergyPolyQorArculus Solutions

2:15 Company Presentations: Renewables

Teverra Aeromine Technologies

Aquora Biosystems Glint Solar

2:30 Company Presentations: Aerospace & Sustainable Aviation Fuels

Lydian SiriNor

2:40 Company Presentations: Hydrogen & Fuel Cells

Ekona Power DirectH2
Hydrogenious LOHC Maritime Utility Global

3:00 **JAMAIL PLAZA:** Networking Break

3:30 Company Presentations: Electricity & Grid

Moment Energy Horne Technologies LiNova Energy

AlumaPower Sweetch Energy Skyven Technologies

BREAKOUT SESSIONS - RICE UNIVERSITY - MCNAIR HALL, ANDERSON FAMILY COMMONS (AFC)

EMCEE: John Reale, Founder, Integr8d Capital

1:00 Panel: Growth Capital for Scaling Ventures – How later-stage capital is accelerating commercialization and scaling infrastructure

MODERATOR: Barbara Burger, Energy Director and Advisor

David Hayes, Managing Director, Investments, Decarbonization Partners, a BlackRock & Temasek JV

Bala Nagarajan, Managing Director, Energy Investment Team, S2G Investments

Cory Steffek, Partner, Ara Partners **Jesse Teichman,** Partner, MKB

1:40 Panel: Powering Progress: Deploying AI in the Energy Sector – A case study in how AI is being deployed to accelerate efficiencies in the energy industry

MODERATOR: **Alex Gras,** Senior Associate, Mercury

Buck Crum, Director of Operations, Winn Resources

John Kalfayan, Director of Data Drilling & Al Wildcatting, collide.

Nancy Zakhour, Venture Partner, Ascent Energy Ventures

2:20 Panel: VC Outlook: Where Energy VCs Are Betting Big Next – Leading energy VCs share where they see the greatest potential for innovation, disruption, and returns

MODERATOR: Scott Craig, Partner, Latham & Watkins

Sean Ebert, Senior Partner, Altira

Christina Karapataki, Partner, Breakthrough Energy Ventures

Victor Liu, CEO & Co-General Partner, HL Energy Ventures

Vic Pascucci III, Managing General Partner & Co-Founder, Energy Capital Ventures

2025 SCHEDULE - LATE AFTERNOON SESSIONS

PLENARY SESSION - RICE UNIVERSITY - MCNAIR HALL, SHELL AUDITORIUM

4:00 Institutional Venture Investors – Discussing strategic capital deployment, risk management, and scalable innovation driving the global energy transition

MODERATOR: Sandy Guitar, Executive Director, TEX-E "Texas Exchange for Energy & Climate Entrepreneurship"

George Coyle, Co-Founder and Managing Partner, Energy Innovation Capital

Adam Lasics, Partner, Piva Capital

Eric Rubenstein, Founding Managing Partner, New Climate Ventures

Paul Sheng, Managing Partner, Fathom Fund

4:30 Closing Fireside Chat

MODERATOR: Barbara Burger, Energy Director and Advisor

KEYNOTE: Susan Schofer, Partner, SOSV; Chief Science Officer, HAX

5:00 Announcement of the Ten "Most Promising" Companies and People's Choice Award

Presented by:

Brad Burke, Associate Vice President, Industry and New Ventures, Rice Innovation

Executive Director, Rice Alliance for Technology and Entrepreneurship

Danny David, JD, Managing Partner, Baker Botts

PLACE YOUR VOTE FOR PEOPLE'S CHOICE

Vote for your favorite participating venture by 4:35 PM!





Active Surfaces, Woburn, Massachusetts

We're building the future of solar—lightweight, flexible, and radically easier to install. Unlike earlier perovskite players, we're cheaper, more stable, more manufacturable, and backed by paid partnerships with Fortune 500s. With global solar capacity projected to hit 20TW by 2050, the company that enables solar anywhere will shape the next energy era. We're unlocking that-one surface at a time.

activesurfaces.xyz

Shiv Bhakta: shiv@activesurfaces.xyz



Advanced Reactor Technologies, Cypress, Texas

Advanced Reactor Technologies (ART) LLC is developing a new efficient process for producing ethylene at a 25% lower capital cost and 80% lower CO2 than the incumbent steam cracking process. The company was founded by two experienced professionals (CTO has 18 years in the chemical industry and CEO has 30 years in oil and gas industry). Proof of concept studies in the laboratory confirms that the ART's proprietary catalyst system prepared in a scalable way meets the early performance target. We plan to scale up to a pilot scale (1 Ton/day) in 2026.

netzeroethylene.com

Sagar Sarsani: Sagar.Sarsani@Netzeroethylene.com



Advanced Thermovoltaic Systems, Loveland, Colorado

An Earthshot Prize and U.S. Dept. of Energy ITV Winner, ATS is the world's first and only solid state solution for industrial waste heat—no moving parts. It is a sustainable (99% circular) and cost-effective solution that produces electricity directly from waste heat. The impact potential is gigatonnes, spanning industries and the world. We are radically redefining what's possible to fix the climate.

ats.energy

Doug Hudson: doug.hudson@ats.energy



Aeromine Technologies, Houston, Texas

Aeromine Technologies has developed a breakthrough scalable renewable energy solution that harnesses the power of wind in an efficient system. Aeromine units install on the edge of the building roof, they are motionless, vibration- and noise- less. System installations are typically 50 kW or larger. The solution is robust, long-lasting, and requires much less rooftop space than other options to generate distributed energy. Ideal for large, flat rooftop buildings – including warehouses, big box retailers, data centers, office, and apartment buildings - Aeromine leverages existing financial structures, installation resources and incentives established by the solar industry.

aerominetechnologies.com

Carsten Westergaard: cw@aerominepower.com



Al Driller, Midland, Texas

Al Driller delivers a seismic shift in operational efficiency, safety, and ROI. By leveraging real-time data and machine learning, it reduces downtime, cuts costs, and maximizes hydrocarbon recovery boosting margins where it matters most. Backed by field proven results, Al Driller empowers operators with predictive insights and automation at scale, turning complex decisions into strategic advantages.

aidriller.com

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Airbridge, Jandakot, Western Australia, Australia

Airbridge has developed a proprietary gas-liquid reactor that captures CO2 under ambient conditions using a liquid absorbent. Unlike conventional carbon capture processes which require high energy input and operate under extreme conditions, Airbridge's process is easily scalable, energy efficient and highly cost-effective.

The technology has proven to be effective across a range of feed concentrations (5-100 vol%) per Airbridge's granted international patent. The reactor design is suitable for integration across multiple industries where point-source CO2 emissions are present. The next step in Airbridge's journey is to demonstrate the scalability and commercial viability of the technology in an industrial environment.

airbridgeaustralia.com

Nick Lockwood: nick.lockwood@airbridgeaustralia.com

Airworks Compressors, Edmonton, Alberta, Canada

Airworks Compressors Corp is a leading Canadian innovator in compressed air systems, hybrid drive technologies, and zero-emission solutions. With a commitment to clean energy and industrial efficiency, Airworks designs and manufactures high-performance equipment tailored for demanding environments including oil and gas, mining, agriculture, and emerging tech sectors. Our cutting-edge systems integrate G-Force TechnologyTM to maximize power while minimizing environmental impact. Headquartered in Alberta, with offices in Texas and Phoenix, we support clients across North America with reliable, forward-thinking solutions that reduce emissions and increase productivity. At Airworks, we don't just power industries — we help shape a more sustainable future.

airworkscompressors.com

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AlumaPower, Sarnia, Ontario, Canada



AlumaPower's Galvanic Generators run on high energy scrap Aluminum as a fuel to provide long duration, dispatchable, firm, zero emissions power for critical infrastructure. Aluminum has 2.5X the energy density of gas/diesel, stores energy forever, is easily transported/stored, is the earth's most abundant metal, and has a massive existing production base. The DOE expects blackouts to increase by 100X over the next 5 years. These characteristics make Aluminum highly suitable to provide backup power for critical infrastructure such as data centers, water treatment, and military installations as well as to infill for the variable production of renewables in microgrids and as a distributed virtual power plant.

alumapower.com

Rob Alexander: roba@alumapower.com

Ammobia, San Francisco, California



Ammobia is a climate tech company transforming ammonia production with its breakthrough Haber Bosch 2.0 technology. Unlike traditional methods that are centralized, expensive, and emissions-intensive, Ammobia's system produces clean ammonia at significantly lower pressure and cost. This enables safer, decentralized production with up to 40% capex savings, making low-carbon ammonia accessible for agriculture, energy, and industry. By decarbonizing one of the world's most polluting chemicals, Ammobia plays a critical role in the transition to a net-zero economy.

ammobia.co

Karen Baert: karen@ammobia.co

Aqua-Cell Energy, Edmonton, Alberta, Canada



Rice Alliance Clean Energy Accelerator Class 5

Aqua-Cell Energy is building grid-scale saltwater flow batteries to store clean energy up to 48 hours to address growing electricity demand and renewable power projects. Salt water is the most affordable electrolyte, without safety / supply chain risk. The battery hardware is mass-produced in the water treatment industry, which we convert to a flow battery, and will commercialize with <20% of the time and capital. In the Caribbean, solar + saltwater batteries will pay off in < 3yrs. Aqua-Cell raised >\$2M in grants and revenue for pilots, (2 customers secured), and is raising a \$1.5M pre-seed round to deliver these.

aqua-cellenergy.com

Keith Cleland: keith.cleland@aqua-cellenergy.com



Aquafortus, Fort Worth, Texas

Based on IP originally developed in New Zealand, Aquafortus is a deep tech startup pioneering a non-thermal solvent-based ABX desalination technology. Now a US-based company, backed by sophisticated global venture capital, Aquafortus commissioned the world's first solvent-driven desalination plant in 2024. The ABX system can concentrate a wide range of high TDS brines from O&G, mining, and numerous industrial applications, utilizing Aquafortus' patented chemicals to absorb water from brine to concentrate it up to saturation and beyond. The system is scalable, operating at a fraction of the energy requirement of conventional hypersaline desalination systems, allowing a low emission, sustainable process.

aquafortus.net

Jim Newman: Jim@Aquafortus.net



Aquora Biosystems, Ann Arbor, Michigan

Aquora is building the next generation of organic waste biorefineries to unlock the full potential of renewable natural gas (RNG) and sustainable aviation fuel (SAF) production. Aquora's technology overcomes feedstock constraints and cost barriers that limit today's approaches, opening a new pathway to meet surging fuel demand. Aquora can source all of its feedstocks, such as manure, sewage sludge, and food waste, domestically, turning cost centers for waste producers into revenue streams. With plans to build alongside existing refining infrastructure, Aquora's waste fermentation-to-fuel technology can scale quickly to serve 25% of the U.S.'s jet fuel demand by 2050.

aquorabiosystems.com

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Arculus Solutions, Rockville, Maryland

Rice Alliance Clean Energy Accelerator Class 5



At Arculus, we want to reach net zero by 2050. To accomplish this, Arculus' SputterPig applies an Al/Al2O3 coating developed at MIT on the internal surface of oil and gas pipelines. This coating: (1) reduces internal friction, lowering OpEx, (2) extends pipeline lifetime, (3) Repurposes pipes for ${\rm CO_2}$ transportation, (4) enables hydrogen blending with natural gas.

arculus-solutions.com

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Artemis Production Solutions, Houston, Texas

Artemis Production Solutions, Inc. is a Houston-based innovative energy services company rethinking how natural gas pipelines are evacuated. Its patent-pending PROTEUS™ platform is a high-capacity, mobile e-Compression system engineered to deliver faster job execution, zero fugitive emissions, and safer field operations through integrated automation. PROTEUS is currently undergoing full-scale field validation—including commissioning, performance, and stringtesting—at a live job site. Unlike legacy systems requiring multiple small-capacity units, Artemis's approach minimizes equipment needs and environmental impact. With MSAs in place and commercial interest growing, Artemis is positioned to scale its fleet across the U.S. Lower 48 and serve a high-demand segment of the midstream market.

artemispsi.com

Mike Luna: mluna@artemispsi.com

AtmoSpark Technologies, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 5



AtmoSpark Technologies Inc. tackles one of the biggest energy drains in humidity-sensitive industries: the cost of cooling due to moisture in the air. Using our patented electro-separation technology, we don't remove moisture but separate water molecules from air before they become an energy burden. This enables up to 50% energy savings, especially in high-humidity environments, while reducing system footprint by nearly 80%. As a bonus, the system produces up to 100 gallons of potable water per day. Our technology is compact, retrofit-friendly, and sets a new benchmark for sustainable, high-efficiency climate control. We're currently piloting with select data center operators as our beachhead market.

atmosparktech.com

Aniket Khade: a.khade@atmosparktech.com

AtoMe, Ipswich, Massachusetts

Rice Alliance Clean Energy Accelerator Class 5



In industries such as energy, aerospace/aviation, defense, and many more, the ability to operate under higher temperatures and pressures, or to utilize advanced manufacturing methods such as 3D printing, will offer major improvements in efficiency and capabilities. Nearly universally, today's materials are the limiting factor. AtoMe introduces a proprietary method of reinforcing existing metal alloys with nanoceramics, allowing rapid improvement in hardness, strength, high temperature performance, and more, producing printable super-metals that can be tailored to the specific environment. Material properties define the limits of technological innovation. AtoMe is producing the enhanced metals that will move the world forward.

atome.us

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Austere Environmental, Golden, Colorado

The oil and gas industry discards nearly \$4 billion worth of diesel and synthetic base oils each year, trapped in drill cuttings. Austere's technology recovers 99.99% of the base oil directly on-site at the rig and returns it to the operator. This innovation reduces pad traffic from diesel trucks by approximately 40%, reduces base oil expenses to operators, eliminates the need to purchase drill cutting fillers, and significantly lowers the environmental liability for upstream operators.

eaustere.com

Curtis Purrington: curtis.p@eaustere.com



Badwater Alchemy, Seattle, Washington

Badwater Alchemy is revolutionizing desalination with advanced nanomaterials that purify ultra-saline produced water from oil and gas fracking—at a fraction of the cost of traditional methods. Backed by 13 years of R&D and a robust patent portfolio, our process uses zero-valent iron to efficiently remove sodium, chloride, and other contaminants. The modular, low-energy system fits in standard shipping containers, enabling rapid, cost-effective deployment in the field. Badwater Alchemy offers a scalable, economical alternative to conventional desalination, unlocking new value from one of the industry's most challenging waste streams.

badwateralchemy.com

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Brint Tech, Fort Collins, Colorado

Brint Tech is a sensor and analytics company leveraging a breakthrough technology to meet the demand for fast, sensitive, and accurate hydrogen gas detection and measurement in challenging environments. We combine field-ready sensors with real-time analytics and modeling to provide next gen sensing systems for existing and new hydrogen producers. Our compact laser sensor and sampling system detects H2 leaks rapidly (<00:05) and accurately (LDL <10ppm, False Positive Rate <0.1%). H-SHIELD delivers direct H2 measurement in complex air mixtures with no sample pretreatment. Innovations include the laser methods and the configurable precision / time ratio. Leak analytics can be used to prioritize operational responses, quantify ongoing conditions, and confirm nominal performance.

brint.tech

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C+UP, Chicago, Illinois

C+UP converts captured CO2 and renewable electricity into clean, high-purity propane—a carbon-negative fuel that's drop-in ready for today's infrastructure. Our patented electrochemical process operates without hydrogen, heat, or pressure, making it simpler and more scalable than existing synthetic fuel or bio-propane pathways. We're targeting ethanol producers as our beachhead market, enabling them to monetize biogenic CO2 emissions through on-site fuel use or local sales. With support from DOE ARPA-E, NSF, and Illinois Tech, C+UP is building the first modular platform for turning industrial CO2 into low-cost, high-value fuels and feedstocks.

cplusup.co

Hamed Heidari: h.heidari@cplusup.co



Carbon Blade, San Diego, California

Carbon Blade is a clean-tech startup headquartered in San Diego, California, with a mission to enable value-added carbon use by delivering modular, self-contained CO2 utilization systems that capture CO2 directly from ambient air. Designed for plug-and-play deployment, these units require significantly less energy, can be powered by onboard renewables, and need minimal infrastructure—making them ideal for co-location with CO2 utilization places anywhere—such as providing low cost, on-site direct-air captured CO2 for enhanced oil recovery for small-and-medium sized oil fields for which CO2-EOR is cost-prohibitive with current approaches. Carbon Blade also offers its unique carbon capture solutions combined with its patented biological mineralization technology, which rapidly converts CO2 into stable carbonates.

carbon-blade.com

Kalle Marsal: kalle@carbon-blade.com





CarbonX is transforming cement decarbonization with a patented CO2 capture system that integrates directly into existing plants, using waste heat to convert emissions into valuable limestone. Our solution reduces emissions, saves companies up to 82% on raw material costs, and unlocks the full \$85/ton 45Q tax credit. With two proven revenue models and 90–100% capture efficiency, we deliver strong margins and fast ROI. Backed by world-class advisors, real industry traction, and award-winning momentum, CarbonX is actively seeking funding sources in order to bring its innovative solution to market- introducing a profitable and sustainable future for the industry.

Samantha Maldonado: samanthadmaldonado@gmail.com



Cavern Energy Storage, Houston, Texas

We help the electrical grid with high levels of renewables succeed by providing long duration energy storage to address the variability that can create high prices on the grid. Unlike, short duration batteries, underground pumped storage hydroelectric provides 20-hours of 80% round-trip-efficient storage that increases reliability.

cavernenergy.com

William Taggart: william@cavernenergy.com



Celadyne Technologies, Chicago, Illinois

Celadyne unlocks hydrogen for industrial logistics and production by making durable and efficient fuel cells and electrolyzers. Our flagship proton exchange membranes that have been shipped to automotive OEMs and the DoD quintuples the durability of fuel cells, and our electrolyzers improves the productivity of electrolyzers by 10x to make electrolytic hydrogen competitive with traditional natural gas derived hydrogen. Current investors include Shell Ventures, Dynamo, Maniv and EPS Shipping, and current customers are General Motors, US Army, US Air Force, National Grid and other Tier 1 OEMs. The company has a \$ 12 M Series A open for the right investors.

celadyne.com

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CERT Systems, Toronto, Ontario, Canada

CERT Systems produces essential chemicals without fossil fuels. Using a process called CO2 electrolysis, CERT converts CO2 emissions into high value chemicals such as ethylene. This enables the production of chemicals and plastics with identical properties to virgin fossil materials while avoiding over 0.5 gigatonnes of annual emissions. CERT was a finalist in the Carbon XPRIZE and is backed by Breakthrough Energy.

co2cert.com

Alex Ip: alex@co2cert.com



Circul8 Energy & Environment, Houston, Texas

The management of 4 million barrels of spent OBM per year is an ongoing balance against drilling performance, waste management costs and lost revenue across all aspects of the drilling industry. Circul8, backed by principals who have spent their careers in the oil and gas space designing and operating cost effective recovery and end of life solutions for spent fluids have patented and commercialized the Delta series of 100/200 and 300 bpd recovery systems to address it. Zero chemical, hot short portable, single operator units that enhance existing solids control with >60% base oil recovery requiring 80% less energy than the competition and producing 95% less CO2. Recovered diesel, LTMO and synthetic has been independently tested showing zero degradation and conformance with all KPIs for 12 ppg fluid blends. Recover More. Waste Less. Drill Better.

circul8nrg.com

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CO2 Lock, Vancouver, British Columbia, Canada

CO2 has developed a set of IP, patent pending technologies, and internal capabilities that allow us to take CO2, mix it water, and inject it underground into a certain mineral. When the CO2 and water interact with the underground geology, a chemical reaction occurs whereby the CO2 hardens, effectively being stored underground forever. We have identified 300 sites around the world with the right geology and our first location in Western Canada has the potential to store 1 million tonnes of CO2 per year, for 25 years.

co2lockcorp.com

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CubeNexus.ai is a geospatial intelligence platform that helps energy companies turn fragmented sensor data into actionable insights. By embedding time and 3D location into every data point, our 4D framework enables real-time monitoring, Al-driven analysis, and 3D visualization of emissions, infrastructure, and field operations. CubeNexus unifies data from drones, IoT sensors, and legacy systems into a common language that operators can query using natural language or visualize across space and time. This allows energy teams to detect anomalies faster, reduce environmental risks, and optimize operations with greater clarity, speed, and precision—even in remote or GPS-denied environments.

cubenexus.xyz

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Deep Anchor Solutions, Houston, Texas

Deep Anchor Solutions (DAS) is transforming how floating infrastructure is anchored offshore. Our patented Deeply Embedded Ring Anchor (DERA) system enables low-cost, modular, and environmentally friendly mooring without the need for specialized vessels or large port upgrades. Designed for soil-agnostic performance and rapid deployment, DERA supports shared-anchor configurations, reducing complexity and cost for floating wind, solar, and aquaculture. DAS is led by Dr. Junho Lee and backed by over \$2M in non-dilutive funding from DOE, MassCEC, and NSF-supported programs. We are currently advancing toward full-scale offshore pilots and ABS certification with global partners.

deepanchorsolutions.com

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Direct C, Edmonton, Alberta, Canada

Direct-C offers a rapid and accurate leak detection method with its breakthrough nanocomposite coating specifically designed to only react to liquid hydrocarbons. Capable of immediately alarming any hydrocarbon amounts from seeps to leaks, our deployment methods are designed for pipelines, production wells, storage tanks, pumping stations and refineries, offering different monitoring options to satisfy diverse operators' needs By focusing the installations at high risk, high consequence locations, Direct-C augments existing leak detection systems to further lower the risk and costs presented by smaller, unnoticed releases.

direct-c.ca

Adrian Banica: Abanica@direct-c.ca



DirectH2, Dallas, Texas

Direct H2 targets providing lowest cost green hydrogen below \$1/kg and without the need for subsidies! In addition to this disruptive low cost, Direct H2 further opens up new market applications from residential to enterprise to industrial applications with its modular and scalable product format. This low cost and modularity are enabled by Direct H2's differentiated technology that integrates high efficiency solar photovoltaics and electrolyzer functionality into panels which flat panel manufacturing has already demonstrated to provide low cost and high scalability. The founding team is composed of entrepreneurial leaders that pioneered perovskite solar technology at Hunt Energy and CubicPV and Rice University.

directh2.com

Vivek Dhas: vdhas@directh2.com



Ekona Power, Burnaby, BC, Canada

Ekona™ is a Burnaby-based company that is developing a novel methane pyrolysis solution for clean hydrogen production. Ekona's solution converts natural gas into hydrogen and solid carbon, thereby reducing CO2 emissions when compared with conventional processes, like steam methane reforming. Ekona's xCaliber™ reactor uses combustion to dissociate feedstock methane, which minimizes electricity consumption. Moreover, Ekona's reactor platform is non-catalytic and produces carbon black, which can be valorized to support attractive economics. Ekona's unique methane pyrolysis solution is low-cost, scalable for industry, and leverages existing natural gas infrastructure to deliver a practical solution, wherever and whenever it is needed.

ekonapower.com

Chris Reid: chris.reid@ekonapower.com



Ellexco, Manassas, Virginia

Ellexco is pioneering the next generation of sustainable, high-efficiency lithium extraction through an electro-driven direct lithium extraction (DLE) technology. As global demand for lithium surges—driven by EVs, grid storage, and digital electrification—Ellexco offers a transformative solution to one of the industry's most urgent bottlenecks: scalable, clean, and cost-effective lithium supply. Ellexco expands the domestic lithium mining industry to unconventional lithium sources. Battery grade lithium products can be generated from various lithium concentration brine sources.

ellex.co

Lingchen Kong: lingchen.kong@ellexco.com



Emerald Battery Labs, Seattle, Washington

Emerald Battery Labs is revolutionizing sodium-ion batteries. Utilizing a U.S. only and critical mineral free supply chain, we create advanced materials for sodium-ion batteries with significantly higher reversible capacities. This enables a step-change improvement in the energy density of sodium-ion batteries while reducing the cost of sodium-ion batteries to less than \$30/kWh - half the cost of the least expensive lithium-ion batteries from China. Backed by strong customer demand from OEMs and battery makers, Emerald Battery Labs is commercializing two technology platforms which serve defense, data center, utility, and mobility applications.

linkedin.com/company/emerald-battery-labs

Aric Stocks: astocks@emeraldbatterylabs.com



Equipt.ai, The Woodlands, Texas

Equipt.ai is a NextGen Operations Resource Maximization (NORM) platform purpose-built to master assets and field service execution. Designed by energy industry veterans for field-first organizations, NORM is a low-code, scalable, and persona-driven platform—featuring embedded AI and E-Genie, your intelligent Agent AI—to unlock real-time decision-making and drive operational excellence. Disparate systems, manual processes, and tribal knowledge are common across equipment-and field service-intensive industries. These inefficiencies lead to higher operating costs, increased downtime, inconsistent service delivery, and potential safety risks. Equipt.ai provides a unified platform with real-time, actionable data—replacing spreadsheets and fragmented tools—to improve asset utilization, workforce productivity, and operational decision-making.

equipt.ai

Indrajit Datta: indrajit.datta@equipt.ai



Exum Instruments, Denver, Colorado

Exum's Team has decades of involvement with every common analytical technique available in modern labs and from this experience, we recognized the \$80bn analytical instrument industry was ripe for disruption. Traditionally, accurately measuring the chemistry of a solid material required multiple methods, complicated operational and calibration procedures, and trained chemistry experts. Addressing these challenges, Exum developed Massbox, a mass spectrometer that combines high performance and ease-of-use into a compact desktop package. Instead of a full laboratory's worth of equipment, Massbox empowers advanced industries by reducing quality control cycle time, accelerating new material development, and increasing failure analysis capabilities.

exuminstruments.com

Mike Minyard: mike@exuminstruments.com



FAST Metals, Stamford, Connecticut

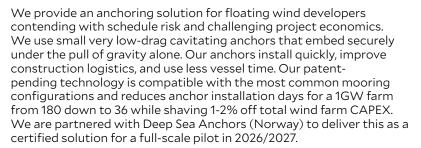
FAST Metals has developed a chemical process to extract valuable metals from complex toxic mine tailings, such as "red mud," generating revenue and leaving no waste behind. The company's breakthrough recovery process is capable of producing iron, aluminum, scandium, titanium and other rare earth elements using industrial waste and waste CO2 as inputs.

activate.org/fast-metals-inc

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Rice Alliance Clean Energy Accelerator Class 5



fathomstorage.com

Owen Riley: owen.riley@fathomstorage.com

FieldMesh, Edmond, Oklahoma

FieldMesh revolutionizes oil and gas well lifecycle management with the industry's first Al-native platform offering universal deployment flexibility. Our solution eliminates expensive consulting dependencies that cost operators millions in upgrade and migration fees through continuous deployment, automated schema management, and direct data ownership without external warehouses. The platform deploys anywhere - SaaS, customer cloud, on-premises, or desktop - with configurable schemas that automatically update APIs and AI integrations. Features include natural language querying, human-inthe-loop AI agents, and native web architecture. Founded by experts combining deep O&G operational experience with cutting-edge cloud and AI development capabilities.

fieldmesh.io

Jon Slominski: jon@fieldmesh.io

FlowCellutions, Pittsburgh, Pennsylvania

FlowCellutions is the first mover in chemistry-agnostic diagnostics for grid-scale batteries, combining 24/7 monitoring software, proprietary sensors with 20x greater lifespan than existing technologies, and predictive maintenance powered by data three times more accurate than current tools collect—delivering 25 to 40 percent OPEX savings and significantly improving battery uptime and reliability. Our cross disciplinary team is working with 5 paid pilot partners to validate our commercial technology, and raising a pre-seed round in Q1 2026 to accelerate our commercial product development.

flowcellutions.com

Becca Segel: becca.segel@flowcellutions.com









Fluidsdata, Edmonton, Alberta, Canada

We turn decades of fluid characterization data into a smart, predictive tool. Instead of re-sampling and re-analyzing fluids, companies can now get accurate fluids properties predictions using domain-driven Fluids Intelligence, cutting lab analysis costs by up to 80% and fluid sampling cost by 50%. We also help companies manage their fluid characterization data bringing in unparalleled efficiencies and novel use cases of data with Fluids Intelligence agentic AI.

fluidsdata.com

Afzal Memon: amemon@fluidsdata.com



Flyscan Systems, Quebec, Quebec, Canada

An Industrial SaaS, Flyscan is the first and only company in the world to augment the bi-weekly pipeline right-of-way inspection with detection of liquid leaks, 3rd party encroachment, exposed pipes and geohazards. Using real-time AI and hyperspectral analysis, Flyscan delivers a solid ROI and already serves 7 of the Top 12 liquid pipeline operators, including Kinder Morgan, Marathon Petroleum and Enbridge. As we plan to finish the year with over \$4 million of Annual Recurring Revenues with 75% already under Purchase Orders, we raise a Series A round to support our growth and expansion in new verticals including gathering lines inspection and other types of critical infrastructure.

flyscan.com

Eric Bergeron: ebergeron@flyscan.com

GeoKiln Energy Innovation, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 5



GeoKiln Energy Innovation is creating the next onshore energy revolution by unlocking low-cost, emissions-free hydrogen from the subsurface. Our breakthrough technology, Manufactured Subsurface Hydrogen (MSSH), stimulates geologic formations using proven oil and gas thermal systems, making it modular, infrastructure-light, and easy to scale, much like the shale revolution. With MSSH, customers can produce clean hydrogen for under \$1.50/kg by 2030, without the high costs or delays of traditional methods. We are currently in field testing and fundraising, seeking partners ready to accelerate hydrogen production and transform untapped land into a key driver of the energy transition.

geokiln.com

Alexei Tcherniak: alexei@geokiln.com



Glint Solar, Oslo, Norway

Glint Solar offers a leading platform for utility and community solar and storage developers to 10x faster build a pipeline of quality projects. By leveraging geospatial data and proprietary algorithms, Glint Solar empowers its users to collaborate around site identification, evaluation and project development in a radically new way by killing bad projects much earlier and hence optimizing their workflow. Glint Solar's software is used by leading energy companies in more than 35 countries around the world and the company is backed by leading US and European investors.

glintsolar.com

Even Kvelland: even@glintsolar.com



GrapheneTX, Dallas, Texas

GrapheneTX supplies a comprehensive range of low-cost carbon fiber precursors, new functionalized graphene, and CNTs. Leveraging our ecofriendly production methods, we ensure large-scale manufacturing of these materials. They find their versatility in applications across various domains, including coatings (such as epoxy or urethane), carbon fiber composites, supercapacitors, Li-ion batteries, and engineering plastics (like Nylon-66). Our offerings encompass CF precursor fiber and powder, masterbatch, paste, and dispersion of functionalized graphene and CNT.

graphenetx.com

Sangmin Lee: sangmin.lee@graphenetx.com



GS VORTEX SYSTEMS, HOUSTON, Texas

Pipe friction losses waste enormous energy and degrade flow assurance, raising operating costs and emissions. Larger pumps and lines were previously the only way to increase flow, further raising operating expense. Vortex technology slashes flow resistance, reducing costs and emissions while increasing productivity at a stroke. Units have no moving parts, require no energy or maintenance and retrofit easily to existing pipes. The beachhead market is pivot irrigation, where higher flow assurance increases yield while simultaneously reducing operating costs by 30%. Trials are underway in midstream oilfield water transfer where Vortex offers immediate cost reduction and operating flexibility. Oil and products transport opportunities will pilot next, along with refining and bulk loading/discharge. Vortex is the new flow standard.

gsvortex.com

Avi Ghosh: avi.ghosh@gsvortex.com



Hive Autonomy, Kristiansand, Agder, Norway

Hive is igniting the next industrial productivity revolution by retrofitting logistics and heavy machinery into physical AI agents capable of fully autonomous operation. Built on our experience developing RedRock—with a legacy of delivering 300+ advanced offshore machines—and backed by an OEM agreement with Toyota Material Handling and a collaboration with Volvo, Hive combines deep industrial expertise with real-world scalability. Our retrofit autonomy, remote multi-machine control, and active deployments on dynamic job sites give us a decisive edge where traditional automation falls short. We bring physical AI to where it's needed most—on the ground, in motion, and already at work.

hiveautonomy.no

Fredrik Bringager: fredrik.bringager@hiveautonomy.no



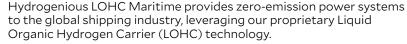
Horne Technologies, Longmont, Colorado

Horne Technologies is a privately held fusion energy company developing a practical, near-term solution to clean energy through engineering innovation rather than theoretical exploration. Our novel hybrid confinement system integrates Inertial Electrostatic and Magnetic Confinement, enabled by rapid design iteration and advanced High Temperature Superconducting (HTS) wire. We have demonstrated the world's first continuous-operation, superconducting high-beta device, and with our high-power fusion-capable platform now online, we are accelerating the path to commercialization. Horne Technologies is positioned to deliver scalable, cost-effective fusion energy to address the global energy challenge.

hornetechnologies.com

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Innowind Energy Solutions, Toronto, Ontario, Canada

Rice Alliance Clean Energy Accelerator Class 5



Our mission is to enhance the reliability and performance of wind turbine installations. For wind turbine asset owners operating 3+ MW turbines or blades over 80 meters, particularly those facing annual energy production losses due to rapidly shifting wind conditions. We offer an adaptable vortex generator (AVG). Our AVG delivers a proven 15% increase in annual energy production and extends pitch bearing life by up to 2 years, driving both performance gains and operational longevity.

innowind.ca

Rafat Jami: rafat.jami@innowind.ca

Installer, Oslo, Norway



Installer.com builds essential platform infrastructure for renewable asset deployment, akin to Shopify for e-commerce. We connect high-volume businesses with vetted installer networks, optimizing job matching, dispatching, automation, compliance, and tracking via geolocation, certifications, and performance metrics - like Uber's ride optimization. This eliminates building networks from scratch, slashing costs; clients save millions scaling without dedicated teams. You train installers for proficiency in EV chargers, solar, and heat pumps. For a customer deploying 10,000+ heat pumps yearly, we cut timelines from months to days, accelerating emissions reductions, job creation, and economies - driving the energy transition at scale.

installer.com

Gunnar Sem: gunnar@installer.com

Iron IQ, Grand Junction, Colorado



Iron-IQ is revolutionizing industrial automation with a modern, cloudnative SCADA platform that empowers operators to harness the full potential of their data. Unlike legacy Windows-based systems, Iron-IQ's Patch-IQSM is built from the ground up for scalability, security, and seamless integration with data warehousing and AI tools. Our platform enables real-time decision-making, autonomous control, and full visibility across operations for oil and gas operators. With over \$2.8M in ARR, a lean burn rate, and a battle-tested product, Iron-IQ is the proven choice for forward-looking companies seeking to modernize critical infrastructure and unlock operational intelligence.

iron-iq.com

Mike Ligrani: mligrani@iron-iq.com



Kanin Energy, Houston, Texas

Kanin Energy is a clean energy developer based in Houston and Calgary that focuses on decarbonizing heavy industry through waste heat recovery. In doing so, Kanin contributes carbon-free baseload electricity generation, thereby offsetting power produced from fossil fuels. Kanin is technology agnostic and successfully de-risks projects by providing expertise in carbon markets, project finance, and energy policy, as well as providing an innovative energy-as-a-service third-party financing model and turnkey approach that enables industrial facility partners to decarbonize their operations.

kaninenergy.com

Janice Tran: janice@kaninenergy.com



Kewazo, Houston, Texas

Kewazo is building the Physical AI platform for heavy industry. Heavy industry spends \$2T+ annually on maintenance and construction. Kewazo automates this space with robotics and AI, starting with vertical material movement by replacing cranes and manual handling. Every deployed robot captures structured data around material flow, laying the foundation for intelligence, automation, and coordination across sites. Deployed at sites of Chevron, Dow, ExxonMobil, Koch Industries, BASF and others.

kewazo.com

Heitor Gartner: heitor.gartner@kewazo.com



LiNova Energy, Monrovia, California

LiNova Energy's revolutionary battery platform has clear cost, safety, and supply chain advantages. Our metal-free polymer cathode and non-flammable electrolyte eliminate nickel, manganese, and cobalt--cutting cathode cost by up to 94% and CO2 emissions from cathode production by up to 88%, with no thermal runaway. These materials can be sourced and produced domestically, enabling localized manufacturing in any major market. We are commercializing our high-cycle, graphite-anode cell (Poly-G) for stationary storage and mobility and our high-energy, lithium-metal cell (Poly-Li) for automotive. In parallel, Saft is commercializing Poly-Li under a joint development agreement, targeting defense, aerospace and rail applications.

linovaenergy.com

Mike Nagus: mnagus@linovaenergy.com



Lukera Energy, Carrboro, North Carolina

Rice Alliance Clean Energy Accelerator Class 5

Lukera Energy converts stranded methane and industrial seawater into carbon-negative methanol for ships using a patented nanobubble electrocatalytic reactor that is seven times more energy efficient than conventional synthesis. Our modular 1-ton-per-day units cut levelized costs below 400 dollars per ton, eliminate the need for green hydrogen, and slash well-to-wake emissions by 120 percent compared with heavy fuel oil. Backed by LOIs for pilot deployments, we aim to commercialize 100-ton-per-day plants by 2030, attacking a 50 billion dollar marine fuel market.

lukera.energy

Brian Worfolk: brian@lukera.energy



Lydian, Charlestown, Massachusetts

Lydian is developing novel technology that uses captured CO2, water, and renewable electricity to produce a sustainable, drop-in alternative to today's fossil-based jet fuel that reduces lifecycle emissions by up to 95%. Uniquely built for cost, scale and the modern grid, Lydian's modular technology delivers superior energy efficiency and operates intermittently, solving for the greatest challenge e-fuels face - their significant electricity demand. Within just three years of the company's founding, Lydian has moved from concept to a fully integrated pilot demonstration, capable of producing up to 10,000 gallons per year, with commercial production expected to begin in 2027.

lydianlabs.com

Joe Rodden: joe@lydianlabs.com



MacroCycle Technologies, Cambridge, MA, Massachusetts

MacroCycle can take plastic and textile waste of any quality, and upcycle them into a drop-in petrochemical grade solution without carbon emissions and no green premium. We do this through our SolvoGenesis platform that uses our proprietary solvent and catalyst system to remove impurities from the incoming feedstock, remove contaminants from within the plastics, and then conduct chemistry to increase the chemical properties of the polymer to create a product that can be used as is for true circularity. And thanks to the process and capital efficient approach, we eliminate the need of a green premium as we achieve cost parity at scale.

macrocycle.tech

Stwart Pena: stwart@macrocycle.tech



MCatalysis, Dallas, Texas

Value Proposition: Low-cost, clean synthetic fuels and chemicals from waste carbon resources and microwave technology. Technology and Approach: Producing clean fuels and chemicals is energy-intensive and sensitive to electricity price. By focusing on energy efficiency, electricity cost is desensitized, and thus critical to reaching petrochemical cost parity at modern fuel standards. At MCatalysis, we have designed a catalog of particles that are concurrently catalysts and strong microwave absorbers for a broad range of feedstocks and value-add products. Microwave energy penetrates deeply for even heating and >98% energy absorption.

mcatalysis.com

Michael Irwin: irwin@mcatalysis.com

Metal Light, Newark, New Jersey

Rice Alliance Clean Energy Accelerator Class 5



Metal Light is reimagining clean energy with its Metal-Air Generator and Metal-Fuel technology, offering a scalable and cost-effective alternative to traditional diesel generators. By addressing key challenges such as emissions, fuel costs, safety, and operational inefficiencies, we empower industries to transition toward cleaner and more sustainable energy solutions. We are initially targeting the highest users of diesel generators in the utilities and construction markets with the intention to move towards freight rail and maritime shipping where we can power ships and trains across the globe.

metallight.io

Ryan Goethals: ryan@metallight.io

Mithril Minerals, Austin, Texas



Mithril Minerals' robotics enable the lowest cost production of critical minerals, specifically ocean polymetallic nodules containing trillions of dollars of cobalt, copper, nickel, and critical minerals. Our novel robotic technology is developed in-house by a strong team of engineers, entrepreneurs, and scientists, including an MBA, PhD, & engineer who have built and scaled VC-backed businesses, founded an independent mineral extraction company, and built and deployed impressive deep sea tech, including picking up nodules. The technology is starting to get market traction thanks to the low capital cost and low environmental impact.

Anna Scott: anna@mithrilminerals.com



Modular MOPU, Houston, Texas

Modular MOPU is an energy technology company delivering modular offshore production solutions that unlock high-return opportunities in stranded deepwater oil reserves by eliminating infrastructure bottlenecks and slashing time to first oil. We repurpose existing Mobile Offshore Drilling Units (MODUs) and Floating Production Units (FPUs) into modular production platforms that integrate proven 3-phase systems with our proprietary 4th Phase Processing System. This enables rapid early production without pipelines, reducing capex and emissions. Associated gas is captured, used as fuel, or converted into value-added products—hydrocarbon liquids, hydrogen, or solid carbon—creating new revenue streams. The result: fast-track commercial production, minimized environmental footprint, and compelling financial performance in deepwater projects previously deemed uneconomic.

modularmopu.com

Craig Castille: cTc@modularmopu.com



Moment Energy, Coquitlam, British Columbia, Canada

Moment Energy is North America's leading EV battery repurposing company creating clean, affordable, and reliable battery energy storage systems (BESS) by repurposing retired electric vehicle batteries. Moment Energy works with major automotive companies, including Mercedes Benz Energy, to support circular economy goals and ensure their batteries are safely used in second-life applications before they are recycled. The team supports utilities, microgrids and commercial customers to improve grid reliability, power EV charging stations and reduce demand charges, all with a sustainable and performant BESS solution made from repurposed EV batteries.

momentenergy.com

Edward Chiang: edward@momentenergy.com

Moonshot Organics, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 5



Moonshot Organics is a clean energy company that converts food and agricultural waste into hydrogen and bioethanol using a proprietary fermentation-based process. Unlike anaerobic digesters or RNG systems, our method is faster, cheaper, and emits no methane—producing clean fuel in just 3–5 days. We serve both sides of the value chain: waste producers benefit from cost-effective diversion, including market tipping fees, while offtakers like SAF projects and hydrogen distributors gain access to low-carbon fuels. Our model supports farmers, reduces emissions, and enables a scalable circular economy to meet the growing demand for sustainable energy.

moonshotorganics.com

Chris Wood: chris@moonshotcompost.com



Muon Vision, Cambridge, Massachusetts

Muon Vision boosts efficiency, sustainability, and safety for processing low-grade mineral ores, managing mine waste and other industrial processes by leveraging a transformational, deeply penetrating subsurface visualization technology. Our patented technology uniquely identifies, digitally maps, and continuously monitors non-productive zones and areas at risk of collapse in leaching heaps, while boosting the recovery of green economy metals. Our next market is the inspection and continuous characterization of large tailing dams, a widely recognized massive liability for the industry and direct threat to the global supply chain of critical metals. We are building a capital light, recurring revenue business with excellent cash flow potential.

muonvision.com

Tancredi Botto: tbotto@muonvision.com



NANOBORNE, Austin, Texas

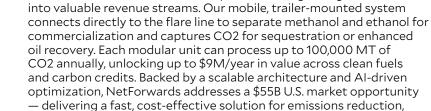
We are a petroleum and geosystems engineering company specializing in applied nanotechnology. Our flagship product is a nanoparticle-surfactant technology that forms an Emulsion System with Nanoparticles (ESN®) used for improved the subsurface fluid flow management. This innovative nano-emulsion ESN® has applications in geothermal well drilling, carbon storage, as well as the upstream oil and gas sectors. One of the key challenges we address is the excess water production along with its environmental impact, and incompleteness of resources recovery. Our company is committed to advancing sustainable development in the global industry by integrating nanotechnology.

NetForwards is a cleantech startup transforming flare gas waste

nanoborne.com

Vitaly Sergeev: vs@nanoborne.com

NetForwards, Fulshear, Texas



netforwards.com

Nicholas Kader Taho: Nicholastaho@netforwards.com

regulatory compliance, and energy transition goals.





Oxylus Energy, Branford, Connecticut

We convert CO2 directly into carbon-neutral fuels & chemical feedstocks. Our proprietary, highly efficient, and scalable electrolyzer technology converts CO2 across our membrane and catalyst to create green chemicals. The e-methanol produced by our patent-pending technology can be used in replacement of traditional fossil fuels supporting an extraordinarily wide array of use cases.

oxylusenergy.com

Ray Mattioli: ray.mattioli@oxylusenergy.com



PetroBricks, Arvada, Colorado

PetroBricks makes software that helps oil and gas companies create data pipelines in days not months, in a way that anyone can manage (operators don't have to write code and maintain it for the next 7 years). PetroBricks makes software that helps oil and gas companies create data pipelines in days not months, in a way that anyone can manage (operators don't have to write code and maintain it for the next 7 years). Today, PetroBricks powers data pipelines at multiple large E&Ps, solving problems that range from compression data (gas lift), to point sensor and flyover emissions data.

petrobricks.com

Rudy Lacovara: rudy@petrobricks.com



PHNXX, Melbourne, Victoria, Australia

PHNXX designs and deploys modular microgrid systems that replace diesel generators with clean, reliable power for off-grid and edge-of-grid applications. Our systems combine solar, batteries, and advanced energy management software to deliver cost-effective, high-performance energy that's easy to install, relocate, and scale. Proven across agriculture, construction, and remote sites in Australia, PHNXX's technology is built for the toughest conditions and delivers data-driven insights to optimise energy use. We help industries reduce emissions, cut fuel costs, and gain energy independence—without compromising reliability.

phnxx.io

Wei-Chi Lee: weichi.lee@phnxx.io



Rice Alliance Clean Energy Accelerator Class 5

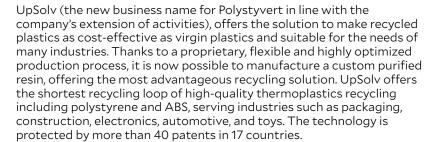


PolyQor is a circular materials startup that converts hard-to-recycle, post-consumer plastic waste into high-performance additives for concrete products. Our patented EcoGrete reduces the carbon footprint of blocks, pavers, and tiles by up to 30%, while also making them up to 20% lighter. Each unit of product offsets 2-3lbs of plastic waste that would otherwise end up in landfills or incinerators. We serve concrete product manufacturers, FMCGs with Net Zero goals, and waste managers, offering an end-to-end solution that drives both sustainability and profitability through EPR compliance and greener construction materials.

polyqor.com

Ali Naqi: ali@polyqor.com

Polystyvert dba UpSolv, Anjou, Quebec, Canada



polystyvert.com

Nathalie Morin: nmorin@polystyvert.com

Precision Additive, Indianapolis, Indiana



UpSolv

We are advancing large-format additive manufacturing with reactive and structural metals like magnesium—critical for aerospace, defense, and Energy. As U.S. foundry and machining capacity declines, our proprietary, patent-pending process delivers certifiable parts up to 5x5 feet with breakthrough consistency, geometric accuracy, and material integrity—overcoming long-standing barriers to AM adoption. Our multidisciplinary team, drawn from Aerospace, NASA, and leading OEMs, has built a scalable platform already trials for urgent U.S. defense programs. With corrosion-resistant applications in oil & gas and a clear path to certification leadership, we're positioned to redefine industrial part production in high-value sectors.

precisionadditive.com

Austin Hodge: austin.hodge@precisionadditive.com



RapiCure Solutions, Loveland, CO, Colorado

Aging infrastructure failures shut down operations for days, cost hundreds of thousands in emergency repairs, and leave communities without essential services. With traditional repair methods requiring extensive downtime, specialized crews, and weeks of curing time, utilities are trapped in a cycle of costly reactive maintenance while a >\$1 trillion funding gap makes comprehensive replacement impossible. RapiCure Solutions eliminates repair downtime with revolutionary quick-curing technology that completes infrastructure repairs in minutes, not weeks—restoring service 200X faster than conventional methods and delivering 3X superior durability. Our easy-to-apply solutions require minimal training, enabling utility teams to execute emergency repairs without waiting for contractors or lengthy curing periods. With 340 million Americans depending on over 8,000,000 miles of pipeline infrastructure, resilience is critical. RapiCure Solutions transforms complex, costly repairs into streamlined operations that protect communities and budgets alike.

rapicuresolutions.com

Heather Rubin: heather@rapicuresolutions.com



RASMAG Energy, Fort Worth, Texas

RASMAG Energy is a Fort Worth, TX long-duration energy storage startup backed by the MITRE Corporation (a U.S. federally funded R&D center), the University of Texas at Austin, the Hamm Institute of American Energy, and Rose Rock Bridge. Our founding team includes former executives from Chevron, Macquarie Bank, The Marine Corps and Barclays Capital. Our patented technology (US?12,270,368?B2) unlocks affordable, multi-day firm power by leveraging established in-market oil and gas hardware and techniques into grid-scale underground pumped hydro storage. Up to 10X longer duration than lithium batteries, at half the capex and twice the useful life. RASMAG can be retrofitted into depleted oil & gas wells, extending the utility of existing infrastructure beyond extraction phase, if present.

rasmag.energy

David Agoston: contact@davidagoston.com



RedShift Energy, Warminster, Pennsylvania

RedShift is a startup that is developing a patented plasma chemistry platform technology that converts waste and problematic gases like hydrogen sulfide in the oil and gas value chain into usable products like hydrogen and syngas. At small scale upstream, the technology reduces the cost of producing from high sulfur reserves, while at refineries, it can recover hydrogen at scale and, where the cost of electricity is less than 6 cents a kilowatt, under a dollar per kilogram. RedShift has been supported by the National Science Foundation and the Department of Energy.

rsenrg.com

Trey Anthony: trey@rsenrg.com



RENASYS, Førde, Vestland, Norway

Renasys is a Norwegian advanced water and wastewater filtration technology company advancing the frontiers of water treatment and its reuse—while working to decarbonize the sector through carbon harvesting, unlocking untapped renewable energy opportunities. Our mission is to "Take the Waste out of Wastewater" through modular, high-efficiency filtration systems that are simple to install, easy to maintain, and engineered for long-term performance and cost-effectiveness.

renasys.com

Christopher Sveen: christopher@renasys.com



RenewCO2, Somerset, New Jersey

RenewCO2 develops electrocatalytic technology (eCUT) that transforms CO2 into high-value fuels and chemicals using only water and electricity. Their proprietary catalyst enables the energy-efficient production of synthetic fuels and chemicals. eCUT is designed for flexible, distributed deployment, allowing industrial partners to localize production, stabilize supply chains, and reduce exposure to volatile markets. The system's modularity and compatibility with existing infrastructure make it ideal for on-site chemical and fuel manufacturing, offering a reliable and scalable alternative to traditional petrochemical routes.

renewco2.com

Anders Laursen: anders.laursen@renewco2.com



Resollant, Tomball, Texas

Rice Alliance Clean Energy Accelerator Class 5

For large-scale oil & gas refineries seeking affordable, high-volume hydrogen, Resollant delivers ultra-pure hydrogen at 20% lower cost than today's production (<\$1/kg)—without emissions or permitting delays. Our process captures carbon as high-value graphite, creating a new revenue stream while avoiding the need to modify your air permit. We've raised \$200K in non-dilutive funding for our proof of concept at the University of Tennessee, filed a patent, completed 30+ voice-of-customer interviews, and are exploring pilots with four major oil & gas companies and EPCs. The Resollant reactor is a novel combination of proven parts, long used in harsher operating profiles and at larger scale—sourced off the shelf from established suppliers, but operated under easier, smaller-scale conditions. This gives us clear insight into CAPEX, OPEX, and reliability. Our team of industry experts has deep core knowledge in commercializing complex technologies, generating trillions in revenue.

resollant.com

Emily Avagliano: emily@resollant.com



Resonantia Diagnostics, Durham, North Carolina

Resonantia Diagnostics is developing the Hermes Platform, a field-portable system that rapidly identifies microbial communities driving microbiologically influenced corrosion (MIC) and determines their susceptibility to common biocides. By combining rapid molecular detection with real-time phenotypic testing, Hermes delivers actionable data in under an hour—enabling operators to optimize chemical treatments, reduce costs, and prevent critical infrastructure failures without sending the sample off for a weeks wait. Our technology transforms MIC management from reactive to proactive, helping energy companies minimize downtime and extend asset life.

Matt Jones: matt.jones@resonantiadx.com



Respire Energy, Somerville, Massachusetts

Respire Energy is developing a battery that is non-flammable, low-cost, free of critical minerals, and with the energy density of lithium-ion batteries. These aqueous metal-air batteries will be utilized for 8-100 hour durations of large-scale stationary energy storage and backup applications. The team brings over 4 decades of industry and research experience to commercialize this technology.

respireenergy.com

David Hsu: david.hsu@respireenergy.com



Safety Radar, Tulsa, Oklahoma

Safety Radar, founded in 2022; headquartered in Tulsa, OK, is a privately held, Al-driven enterprise SaaS platform transforming operational risk and safety management. It captures real time field reports, analyzes submissions across hundreds of risk factors using Al, and surfaces insights without disrupting legacy systems. The platform boosts safety engagement by up to 400% in six months, speeds deployment to days, and has reduced key metrics like DART, TRIR, and LTIR. Backed by seed investment and grant funding, the company now supports Fortune 500 customers as well as privately held companies, in energy, manufacturing, aerospace, construction, and logistics. It is preparing for an upcoming fundraising round.

safetyradar.com

Garrison Haning: Garrison@safetyradar.com



SeaStock, Fremantle, WA, Australia

SeaStock produces algae in a land based bioreactor process. The Algae is processed to separate the natural compounds (1) Natural Bromoform ingredient used to reduce livestock methane emissions by 90% (2) Natural red / pink pigments for natural colours in food, beverage, confectionery, dairy, cosmetics and pharmaceutical applications. We use or repurpose salt water and our waste/residue biomass can be converted into renewable energy. We are an Australia-based company with 2 patents, commercial pilot plant and now looking to scale up production. Series A capital raise is open. We have signed a number of MTA's with global brands and ingredient suppliers.

seastock.com.au

Tom Puddy: tom@seastock.com.au





Secant Fuel turns captured CO2 into green synthetic gas—at the same cost as fossil-based syngas. Our breakthrough reactor technology uses a thermo-catalytic process to produce drop-in synthetic fuels with up to 95% lower carbon intensity and zero green premium. This unlocks a massive pathway for monetizing carbon capture and scaling e-fuel production across hard-to-abate sectors like shipping, aviation, and petrochemicals.

secantfuel.com

Jochem Kamstra: Jochem.kamstra@secantfuel.com

SiriNor AS, Stavanger, Norway



SiriNor is pioneering a new class of electric jet propulsion that delivers:
• Modular designs: 1 to 90+ kN thrust, • Uses standard aerospace alloys (no superalloys)

• Operating temperature <400°C, • Fan size: 30–300 cm, • Built using CNC + additive manufacturing, • Retrofit-ready, • Ultra-low thermal signature with superior thrust-to weight ratio, • Noise-reduced operation, optimized for civilian and defense UAV stealth requirement. Markets We Serve: • UAVs – Endurance, stealth, • GEVs – Low-altitude, high-efficiency, marine, • eVTOLs – Range, comfort, Hybrid, • Regional Jets – Emission-compliant transport.

sirinor.com

Abhijeet Inamdar: abhijeet@sirinor.com



Skyven Technologies, Farmers Branch, Texas

Skyven Technologies helps energy-intensive industries cut costs and reduce emissions by recovering waste heat to produce emissions-free steam using their Arcturus steam-generating heat pump. Skyven's proven Energy-as-a-Service model allows industrial manufacturers to generate emissions-free industrial steam at the lowest cost, with no capex required.

skyven.co

Jim Saccone: jim.saccone@skyven.co



SolGrapH, Los Angeles, California

SolGrapH is a spin-out that was formed to commercialize a novel solar-thermal material synthesis technology discovered at UCLA in the labs of two of its Co-Founders: Profs. Tim Fisher and Mitchell Spearrin. Our technology uses direct, concentrated sunlight to create the ultra-high local temperatures required to decompose hydrocarbons derived from waste gas, landfill gas, or natural gas into graphite and hydrogen. We have advanced the technology from the lab to the field under non-dilutive DoE support and demonstrated on-sun production of high-quality, high-purity graphite at scale. We are now seeking investments and partnerships for pilot operations and graphite finishing process scale-up.

solgraph.com

Tim Fisher: tim.fisher@solgraph.com



Sperra, Boulder, Colorado

Sperra is reimagining offshore construction through structurally efficient, low-carbon concrete products built for marine environments. We design and manufacture these products using ultra-lean, automated concrete printing technology that enables local, scalable production at ports worldwide. Sperra has raised over \$26 million in non-dilutive grant funding to advance its product portfolio and build out its inhouse manufacturing capabilities with 12 staff. Our flagship product is a 3D-printed concrete anchor built for inland and nearshore floating solar. It's low-carbon, cost-effective, and installs without heavy marine equipment - cutting costs by up to 50%. We have signed MoUs for over 305MW of FPV projects in the UK and are advancing pilot installations in 2025 in the US and Portugal to validate performance, obtain product certification, and support market entry. Sperra is seeking equity investment to spin out its gravity anchor product line as part of a new Sperra subsidiary, Sperra Seaworks Limited.

sperra.com

Mason Bell: Mason.bell@sperra.com



SpiroPak, Manning, Western Australia, Australia

Despite growth in renewables, CO2 from fossil fuels, cement, steel, and chemicals will persist. Capturing it at the source is essential—but current methods are costly due to low flue gas CO2 concentrations and energy-intensive solvent regeneration, driving high CAPEX and OPEX. Carbon credits rarely offset these costs. SpiroPak is a novel 3D structured packing that boosts CO2 uptake inside absorber columns. Its unique geometry enables smaller columns, lower energy use, and reduced auxiliary equipment. This cuts plant footprint and total cost. By improving core efficiency, SpiroPak can reduce capture costs by up to 25%.

spiropak.com.au

Jasper Bouwmeester: jasper@spiropak.com.au



Stratos Perception, Houston, Texas

Stratos Perception develops artificial intelligence solutions that revolutionize autonomy for complex machines and processes. We breakthrough sensing and control barriers that may be historically well accepted, but that can be penetrated and overcome through AI. Stratos was founded in 2018 and our focus is on advancing the intrinsic reasoning, sensing, and control capabilities in robotics and in industrial machines and processes to achieve dramatic increases in autonomy, situational awareness, safety, and reliability.

stratosperception.co

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Sweetch Energy, St-Grégoire, Brittany, France

Sweetch Energy harnesses osmotic power—energy generated from the natural mixing of fresh and salt water—using cutting-edge nano-osmotic diffusion (INOD) membranes developed in partnership with CNRS. This breakthrough enables the production of 24/7 flexible, renewable, and dispatchable electricity without carbon emissions. The modular system, powered by ion exchange membranes, delivers competitive electricity at \$90–120/MWh, suited for baseload and peak demand. With applications in estuaries and industrial settings, Sweetch's technology can potentially meet up to 15% of global electricity needs. After launching a pilot plant in France, the company is scaling globally with a target of 1 GW+ post-2030.

sweetch.energy

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TerraFlow Energy, Bellville, Texas

TerraFlow Energy is building the next category leader in long-duration energy storage. Our LDUPS™ solution delivers 10+ hours of uninterrupted power while solving critical grid issues like harmonics, volatility, and inflexible load. Designed for high-demand applications, our flow battery systems are housed in steel buildings for scalability, serviceability, and security—unlike shipping container-based alternatives. With U.S.-based manufacturing and a design that avoids thermal runaway, TerraFlow is positioned as a safer, smarter alternative to lithium-ion. Backed by a growing pipeline and a clear market need, TerraFlow offers investors a differentiated opportunity in a sector undergoing massive transition.

terraflowenergy.com

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Teverra, Atlanta, Georgia

Teverra's oil & gas-trained staff applies learnings from that industry to accelerate clean energy adoption. Our innovative solutions, particularly around the characterization, confirmation, and development of subsurface clean energy resources such as next-generation geothermal energy and carbon sequestration, aim to reduce the cost and risk associated with developing these technologies. Teverra developed GeoDeck to fill a critical need around reservoir monitoring, and in so doing provide increased value and reduced risk for subsurface operators. Teverra GeoDeck is believed to be the only tool available to provide real-time monitoring of subsurface reservoirs.

teverra.com

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Think Energy Holdings, Wilmington, Delaware

Think Energy offers a modular crude processing solution that enables oil & gas producers and industrial operators to generate their own low-sulfur diesel or bunker fuels directly on-site. Our proprietary chemical process removes sulfur and H2S, cuts CO2 emissions by up to 50%, and delivers high energy output without the need for large refineries or complex infrastructure. Plants are deployable in 60–90 days with a rapid four-month payback. Backed by validation from Texas A&M and ISO 14067 certification, Think Energy helps companies lower fuel costs, reduce environmental impact, and gain independence from unreliable external suppliers.

gothinkenergy.com

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O UTILITY

Turnover Labs, Brooklyn, New York

Turnover Labs builds ultra-durable reactor systems to help chemical producers reduce their emissions and stabilize manufacturing costs. Our one-of-a-kind technology converts dilute, impurity rich CO2 that would be otherwise emitted into high value gases that can be difficult to source. Our system installs onsite, at the facility, and can generate these gases on demand, eliminating costs associated with the transport and storage of flammable and toxic materials. This helps chemical customers - namely those producing polyurethane and polycarbonate - avoid paying for hazardous and inconsistent shipments of these very same gases, which can disrupt production and cause shortages and process inefficiencies.

turnoverlabs.com

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Utility Global, Houston, TX

Utility pioneers clean hydrogen solutions that power the economic energy transition for hard-to-abate industries such as steel, mobility, upstream oil & gas, refining, and chemicals. Utility's breakthrough H2Gen® technology harnesses energy from dilute, low-value industrial off-gases and various biogases to produce high-purity, low-to-negative carbon intensity hydrogen from water, without electricity, using its proprietary electrochemical process. H2Gen systems have been proven to provide the utmost operationally flexible and integrate seamlessly into existing infrastructure, enabling practical, cost-effective decarbonization.

utilityglobal.com

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Utiltyx, Milpitas, California

Utiltyx provides advanced cybersecurity and data analytics solutions specifically designed to meet the evolving needs of today's electric power grids. The company's comprehensive Grid Cyber Management platform enables end-to-end grid security, including visibility and continuous monitoring, detection and protection, and advanced analytics. Founded with a vision to transform electric grid security for the delivery of safe, reliable, and resilient power, Utiltyx helps utilities ensure all aspects of grid cybersecurity are effectively addressed.

utiltyx.com

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a xplorobot

Xplorobot, Houston, Texas

Xplorobot brings AI-powered field intelligence to industrial operations, equipping workers with cost-effective smart sensors—deployed by hand, drone, or robot—to detect anomalies, generate predictive insights, and streamline operations. We combine real-world data with humanin-the-loop validation to build the most accurate, scalable Industrial Al. The high cost and complexity of retrofitting legacy infrastructure restrict digitization, leaving systems inefficient, vulnerable, and costly to operate. Xplorobot addresses this with smartphone-based sensors that generate structured asset maps and localized multi-sensor data—enabling predictive maintenance, emissions detection, and infrastructure analytics. Our business model combines hardware sales and rentals with high-margin SaaS subscriptions, supporting scalable growth. Backed by EPA and DOE validation, we've deployed at 4,000+ sites across 14 countries with clients including ExxonMobil, Shell, and Waste Management. We're targeting the \$240B inspection market, starting with the \$15B emissions detection segment. Our sensor supports expansion into thermal, efficiency, and structural analysis unlocking transformation of legacy assets through vision-powered Al.

xplorobot.com

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Zenthos Energy, Albuquerque, New Mexico

Zenthos Energy is pioneering advanced aluminum-based battery technology to provide safe, high-performance energy storage for grid, military, and industrial applications. Our rechargeable systems deliver up to twice the energy density of current chemistries, operate at extreme temperatures, and recharge rapidly—all while using abundant, domestically sourced materials to eliminate reliance on critical minerals like lithium and cobalt. Designed for cost-effectiveness and scalability, our technology enables resilient microgrids, long-duration storage, and mission-critical power solutions. By combining innovation with supply chain security, Zenthos Energy is driving the transition to a clean, reliable, and fully domestic energy future.

flowaluminum.com

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A catalyst for entrepreneurship at Rice University and beyond

For more than 25 years, the Rice Alliance for Technology and Entrepreneurship has served as a hub for entrepreneurial efforts on campus and provided support to entrepreneurial students, staff, faculty and alumni, while also assisting founders and supporters in the broader Houston community and bringing top emerging startups to the Bayou City for networking and investment.

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Through top-tier experiential education and mentorship, the Rice Alliance hosts programs to accelerate start-ups. Rice Alliance programs support Rice University students, alumni and staff, and startups from around the world not affiliated with Rice.

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Designed to bring our city's startup, investor, corporate, and academic communities into collaborative spaces and programs, Ion District is home for advancing diverse knowledge, teams, technologies, and products that propel our world forward. Since 2024, the Rice Alliance has led programming and activation at the Ion.

alliance.rice.edu

