

PARTICIPATING COMPANIES



1S1 ENERGY, Portola Valley, California

Rice Alliance Clean Energy Accelerator Class 4

1s1 Energy is unlocking low-cost (green) hydrogen production by developing next generation electrolyzers using boron-based materials. 1s1 applies proprietary boron-based materials to enhance its electrochemical cells, resulting in much more efficient and durable electrolyzers at a lower upfront cost. 1s1's materials also enhance fuel cells, so 1s1 is offering core components to the fuel cell market. 1s1 has demonstrated the superior performance (meeting the EU's 2030 electrolyzer performance target) and durability (meeting customers durability requirements based on the US-DOE's Accelerated Stress Testing protocol) of its electrochemical components with both academic (NREL, UC Merced) and corporate partners (Tier-1 fuel cell manufacturer).

1s1energy.com | **Thiago Figueiredo:** thiago.figueiredo@1s1energy.com



360 Mining, Austin, Texas

360 Mining is an oilfield service company that deploys modular data centers in the oil field. These data centers allow oil and gas producers to earn more money on their natural gas production and help to reduce flaring. Generators convert natural gas into electricity that powers the data centers at the pad site. 360 Mining has developed this technology for 3 years and has deployed it for numerous clients across Texas.

360mining.com | **Chris Alfano:** chris@360mining.com



Acceleware, Calgary, Alberta, Canada

Acceleware is an advanced electromagnetic (EM) heating company with highly scalable 'EM Powered Heat' technology solutions for large industrial applications. The Company's patented technologies provide a pathway to economically electrify and therefore decarbonize processes previously considered difficult to abate and which could have significant impact on global emissions. With over \$50 million invested in EM related R&D to date, EM Powered Heat cracks the code for solid-state EM energy generation at temperatures of up to 2,000 degrees Celcius. Until now, EM heating could not economically scale due to technical limitations. Our core technology, the Clean Tech Inverter (CTI) addresses these barriers, providing reliable on-demand, decarbonized heat – a critical breakthrough for large-scale industrial heating.

acceleware.com | **Mike Tourigny:** mike.tourigny@acceleware.com



Acculon Energy, Columbus, Ohio

Acculon Energy leverages 4TB of battery testing know-how, accrued over 15 years of cell testing across automotive customers, to select best of breed cell chemistries for customer's end use application. Acculon has developed a modular architecture and is capable of mass producing battery modules and packs with multiple cell formats (i.e cylindrical and prismatic) and chemistries (LFP, NMC, NCA, LTO, and NA+). Acculon has 2GWh of manufacturing capacity in the U.S. going live in 2025. Acculon is positioned to be one of the first to market with NA+ battery products in the U.S.

acculonenergy.com | **Andrew Thomas:** athomas@acculonenergy.com

PARTICIPATING COMPANIES



AmpsUP, Houston, Texas

Imagine a world where energy is used with almost zero waste. Our team in Houston, Texas, has made this a reality with our groundbreaking Patented superconductor wires. Unlike traditional wires, ours have no resistance to electricity, making them super-efficient. Currently, over half of our energy is lost due to inefficient electrical machines, costing billions. Our wires are not only ten times cheaper than our competitors but also half the cost of copper. We've already produced these wires in lengths of up to 50 meters and are scaling up to 500 meters. This innovation will revolutionize electric motors, wind turbines, power cables, and more, leading to smaller, lighter, and more cost-effective solutions. We're driving a clean, green future with efficient energy use, starting with superconducting motors rated above 5 megawatts, reducing their size and weight while significantly cutting costs. Join us in transforming energy efficiency and sustainability!

selva.me.uh.edu | Chirag Goel: cgoel@uh.edu

Anabaena, Cleveland, Ohio

Bacteria in rice paddies can use nitrogen and methane to make hydrogen and methanol, we're taking this process and making it happen at higher temperatures encountered in deep oil reservoirs

anabaena.co | Derin Fasipe: derin@anabaena.co



Andium, New York, New York

Andium's exception-based platform runs at the site of operations to replace half-a-dozen other expensive legacy tools. The data generated creates insights that improve operations at large energy companies. A single instance of the platform leverages advanced object detection, tank telemetry, real-time asset monitoring, and advanced flaring and emission tracking tools. Andium's flare monitoring technology for example leverages AI to facilitate round-the-clock monitoring of flaring activities. The technology marries thermal and optical gas imaging to create a hyperspectral data graph that is interpreted by the Andium AI stack replacing expensive and arcane manual monitoring processes.

andium.com

Jory Schwach: jory@andium.com



PARTICIPATING COMPANIES



Anessa, Fredericton, New Brunswick, Canada

By using anaerobic digestion (AD) one can capture harmful methane gas from organic waste to be used as clean energy. But, if you were in possession of organic waste materials, can you measure how much clean energy you can generate? Do you know how to best mix these materials to maximize biogas generation? Our innovative software can be used to answer these, and many more questions around the technical, environmental, and financial aspects when considering an AD solution. Using analytics and artificial intelligence we can predict outcomes when assessing construction and operating AD facilities thereby de-risking AD solutions. Our value proposition is in providing a priori answers in comparison to competing approaches which provide reactive solutions; we provide answers that are multi-dimensional considering technical, environmental and financial aspects; and we provide optimized answers in a fraction of the time to permit intelligent decision-making processes.

anessa.com

Amir Akbari: aakbari@anessa.com



Ardent, New Castle, Delaware

Ardent's patented and proven membrane technology harnesses membrane chemistry for point-source carbon capture and other challenging chemical separations. With its modular, bolt-on Optiperm™ platform, Ardent provides proven, scalable, energy-efficient, and cost-effective separations for a variety of industries and applications. Headquartered in Wilmington, Delaware, Ardent has over 30 years of manufacturing experience and has a proven track record of taking new technologies from the lab to the field, partnering with global leaders like Chevron, Pfizer, and Braskem to deliver end-to-end solutions at commercial scale.

ardenttechnologies.com

Erica Nemser: enemser@ardenttechnologies.com



Audubon Energy Group, Houston, Texas

Audubon Energy Group is a privately held independent oil and gas exploration holding company focused on Black Sea energy resources. We organize and support energy exploration, drilling and production partnerships where our primary role is risks and opportunities analysis, prospect generation, lease acquisition and maintenance, joint venture investments, acquisitions and divestitures. Houstonian legend Gene Van Dyke, founder and president of Vanco Energy Co. said multiple times that the Black Sea remains the only wildland in the world and has a phenomenally huge potential. Prominent think-tank Atlantic Council states that the Black Sea will emerge as the world's next great energy battleground. Despite the Russian war in Ukraine, we believe it is the right time to explore potential fields and borders, evaluate risks, make partnerships and start preparing for the after-war opportunities.

audubon.energy

Rostyslav Semikov: r.semikov@audubon.energy

PARTICIPATING COMPANIES

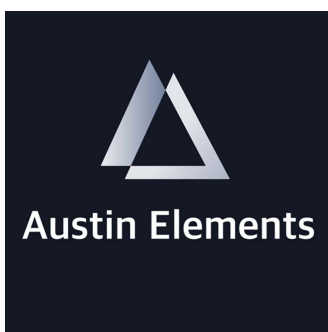


Aura Informatica, Katy, Texas

At Aura Informatica, we help clients tackle complex energy infrastructure challenges using our industry-first software, EnergyConnexions. This connected energy data platform unlocks hidden insights by connecting pipelines, storage, and more for a holistic view. This empowers clients to gain a competitive advantage by optimizing the value chain, identifying M&A opportunities, and mapping low-carbon infrastructure for a seamless navigation of the Midstream landscape

aurainformatica.com

Prasun Chaudhury: pc@aurainformatica.com



Austin Elements, Houston, Texas

Austin Elements Inc. leads the industry with innovative recycling technologies, securing feedstocks from tier-one EV and ceramic glass manufacturers. Our differentiation lies in enhancing the economics of recycling Lithium Iron Phosphate (LFP), LFP and NCM mixtures, ceramic glass, and oilfield produced water. We produce battery-grade materials like lithium carbonate, nickel sulfate, cobalt sulfate, and LFP precursors with over 95% recovery, validated by tier-one vendors and US DOE labs. Our robust processing capabilities handle "Dirty" black mass efficiently. Leveraging interdisciplinary expertise, we use proprietary methods to eliminate impurities and separate metals efficiently. Our facility is R2 RIOS certified, meets ISO standards, and has passed stringent EHS auditing. We aim for "zero" landfill certification, reflecting our commitment to environmental sustainability. Future plans include a giga factory with zero wastewater discharge and reduced waste, reinforcing our leadership in eco-friendly recycling and high-quality material production.

austinelements.com

Jacob Jin: jacob.jin@austinelements.com



BiaTech, Houston, Texas

BiaTech's new energy universe will modernize the outdated traditional energy and natural resources industrial ecosystem where ? of all energy is lost... use and deliver energy better. BiaTech creates immersive superhuman insights to embolden leaders to know, act and connect in reality, from 100+ zettabytes of data ... produce more resources sustainably from existing sites. The clean tech ecosystem also pairs industrial site owners seeking highest and best use of their land with the optimal energy technology for location expansion as well as vetted stakeholders to accelerate the project... access new resources faster and maximize return on your investment.

biatech.com

Robert Alford: ralford@biatech.com

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Biodel AG, Maricopa, Arizona

Biodel develops, manufactures and sells products that restore soil health and function, intensify carbon sequestration and increase crop yields and farm economics. Biodel also generates new revenue streams for farmers and landowners through high value carbon credits by organizing and administering projects that develop and measure increased soil carbon storage of atmospheric CO₂. Biodel holds proprietary technologies in plant extracts and microbe populations, and uses the most accurate soil carbon measurement system in existence. The Biodel team is built of experienced growers, agribusiness people, scientists and subject experts.

biodelag.com

Ben Cloud: bcloud@biodelag.com



BioVeritas, Bryan, Texas

BioVeritas is a pioneer in the production of bio-based fuels, particularly Sustainable Aviation Fuel (SAF), utilizing a proprietary mixed-culture fermentation process to produce versatile short- and medium-chain Carboxylic Acids (also called volatile fatty acids or VFAs) from a wide range of low value feedstocks. The company has developed pathways to convert these VFAs into SAF at low cost, positioning itself as a technology leader in the SAF market. As a result of strong regulatory support and extensive airline commitments to reduce CO₂ emissions, the SAF market is expected to grow from less than a billion gallons today to more than 100 B gallons in 2050 positioning BioVeritas for rapid and profitable growth.

bioveritas.com

David Austgen: daustgen@bioveritas.com



Blue Sky Measurements, Houston, Texas

Blue Sky Measurements is a green tech startup focused on providing low-cost, fixed-position monitoring solutions for upstream and midstream oil and gas production and transportation. Blue Sky developed NIRview, a patented, non-imaging optical sensing technology, that will operate autonomously to provide daily monitoring and quantification of methane emissions at well pads, gathering centers, and distribution hubs. NIRview was started by Dr. John Lievois, an internationally recognized expert with over twenty-five years of experience in upstream oil and gas production measurement.

bluesky.eco

John Lievois: john.lievois@bluesky.eco

PARTICIPATING COMPANIES



C+Up, Chicago, Illinois

C+UP is revolutionizing the decarbonization of multiple industries with our proprietary carbon capture and utilization (CCU) technology. We convert CO₂ emissions into valuable, carbon-negative products such as propane, propanol, propylene, and ethylene using renewable electricity and water. Our innovative approach leverages existing fuel infrastructure, making it cost-effective and scalable. By transforming industrial emissions into sustainable resources, C+UP supports a circular carbon economy, significantly reducing reliance on fossil fuels and contributing to global climate goals.

cplusup.co

Hamed Heidari: h.heidari@cplusup.co



Capwell Services, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 4

Capwell Services Inc. is a methane abatement products and services company that works across the oil and gas industry. Our cost effective, modular, and easily transportable system can be applied to a variety of use cases ranging from casing vent capture, tank batteries, and end of life wells. Capwell focuses on low and intermittent flow vents and leaks, creating a cost-effective solution for previously unabated emissions sources.

capwell.org

Andrew Lane: andrew@capwell.org



CarboMat, Calgary, Alberta, Canada

Rice Alliance Clean Energy Accelerator Class 4

CarboMat, through their patent-pending multi-step technology, manufactures low-cost sustainable carbon fibers from a waste by-product of the petroleum refining industry. Our low-cost sustainable carbon fibers serve the large-volume lightweight composites market with applications in sports, automotive, unmanned aerial vehicles, marine, consumer electronics, and energy storage. CarboMat's proprietary carbon fibers offer a 60% reduced production cost and a 50% reduced carbon footprint, relative to incumbent commercial carbon fiber technology.

carbomatinc.com

Shabab Saad: shabab@carbomatinc.com



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

PARTICIPATING COMPANIES



Clean Incentive, Cypress, Texas

Clean Incentive manages the registry and marketplace infrastructure to rapidly accelerate the energy transition. We support low-carbon producers across multiple environmental commodities, such as emissions-focused renewable energy certificates (RECs), and attribute certificates for green hydrogen, green steel, low-carbon concrete, and others. Our blockchain-enabled registry architecture and industry-led methodologies create an auditable, transparent, connected, and secure technology infrastructure for environmental markets and data-enriched commodity attributes. We offer institutions trust to enhance their carbon reporting without the risk of greenwashing. In the power market, Power Emissions Certificates (PECs) ensure clear ownership and transparency of REC avoided emissions. We simplify corporate emissions matching and hourly energy matching procurement strategies for enhanced scope 2 reporting. At Clean Incentive, we are committed to helping producers deliver transparent, credible, and auditable environmental claims. This commitment is our response to the growing global demand for assurance and accountability on climate action and sustainability performance.

cleanincentive.com

Casey Martinez: casey@cleanincentive.com



Cool Edge Bits, Richmond, Texas

PDC drill bit manufacturing, sales and rentals business that specializes in a new technology, patented design which focuses on cooling the cutting edge temperature by 35% compared to all of our competitors which in turn allows us to check all the boxes for performance and reliability and stability better than the market.

coolegebits.com

Vasili Borissov: vasili@coolegebits.com



Corrolytics, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 4

Corrolytics is transforming the landscape of industrial asset management with our groundbreaking corrosion detection and monitoring technology. Our patented solution addresses the \$2.5 trillion global corrosion problem, significantly reducing the 1.2 gigaton carbon footprint associated with replacing corroded steel. By offering real-time, on-site corrosion analysis, we enhance operational efficiency, prevent catastrophic failures, and extend the lifespan of assets. Our innovative approach optimizes the use of chemicals, biocides, and inhibitors, saving industries hundreds of millions of dollars and avoiding costly shutdowns. Corrolytics is the future of sustainable industrial operations. As we continue to expand, we are committed to providing unparalleled asset integrity solutions that ensure safety and sustainability while de-risking the energy transition. Join us in revolutionizing the way industries handle corrosion and create a safer, greener future.

corrolytics.com

Anwar Sadek: a.sadek@corrolytics.com

PARTICIPATING COMPANIES



Deep Anchor Solutions, Houston, Texas

Deep Anchor Solutions accelerates the adoption of renewable energy by specializing in innovative solutions for floating offshore wind and marine energy sectors. Our product, the Deeply Embedded Ring Anchor, is a compact anchor system that significantly reduces material, fabrication, and installation costs. Its simplicity and small dimensions allow for fabrication in existing local facilities, inland transport, minimal port staging upgrades, and substantial reductions in marine transport and handling vessels. This dramatically lowers mooring system costs and the necessary infrastructure investment for floating wind construction. Additionally, our installation methods are environmentally benign with minimal acoustical impact, promoting a marine life-friendly approach.

deepanchorsolutions.com

Junho Lee: deepanchorsolutions@gmail.com



DioQuest, Sugar Land, Texas

We have developed an integrated process for Useful to mine critical minerals, capture and store CO₂ in carbon negative building materials and save million of gallons of water. We can profitably capture CO₂ and make high value, decorative materials, extract lithium for <\$3000/ton and create industrially useful water. We have a highly qualified team of materials scientists, chemists and engineers. We can also help reduce emissions by using abandoned oil and gas wells. Our approach is unique in scale and mobility, truly disruptive.

dioquest.com

Brian Mueller: bmueller@semoplastics.com



Elementium Materials, Katy, Texas

Elementium Materials is a battery start-up based on technology developed at MIT. At the nexus of three disparate disciplines, a team of professors, supported by three Tier 1 automotive companies, discovered a novel electrolyte poised to disrupt the battery industry. This electrolyte has shown incredible potential to unlock ultra-stable, long-life, high-energy density batteries at a fraction of the cost of today's batteries. With a target of 500 Wh/kg, \$50/kWh batteries with a near unlimited cycle life, Elementium is poised transform everything from mobility to consumer electronics to grid-scale energy storage. With additional features like intrinsic flame retardant properties and ultra-fast charge capabilities, Elementium is positioned to become a leader in the multi-hundred billion dollar battery market.

elementium.io

Matthew Dawson: mdawson@elementium.io

PARTICIPATING COMPANIES



Emvolon, Woburn, Massachusetts

Emvolon, an MIT spin off, converts greenhouse gas emissions onsite into ready-to-use carbon-negative fuels and chemicals like green methanol and green ammonia. Using automotive engines as mini chemical plants, our modular, scalable, and cost-effective technology solves two important problems at once. It eliminates emissions in agriculture, waste management, and energy, while also producing a cost-effective green fuel for hard-to-abate maritime and aviation. We have generated revenues, have a site pilot in 2024 with a publicly listed company and have multimillion dollar product offtake agreements.

emvolon.com

Emmanuel Kasseris: kasseris@emvolon.com



ENP Technologies

ENP Technologies, Houston, Texas

Industrial equipment lacks a standard way to store information. Unlike retail with barcodes for each item, industrial equipment has no one source of truth. This makes it difficult for companies to share that information, hurting productivity, profitability, and accurate carbon foot tracking. UNIIEQ offers a solution as a decentralized, open master data management system. Its main objective is to standardize industrial equipment metadata, serving as the single source of truth across the entire value chain from manufacturing to retail. UNIIEQ will provide product visibility for manufacturers and validated data for buyers, fostering collaboration and efficiency. The need for high-quality and comprehensive metadata is becoming more evident and urgent. Equipment metadata is essential to efficiently implement advanced AI solutions. UNIIEQ (Blockchain based Web3) easily integrates with systems such as ERP, EDMS, DTWIN, and WMS. UNIIEQ does not have direct competitors.

enptechnologies.com

Pranav Tiwari: pranav.tiwari@enptechnologies.com



Excipio Energy, Houston, Texas

Excipio Energy was founded to bring oil and gas expertise and technology to bear on the offshore renewable energy and blue economy industries. Excipio quickly identified the biggest weakness in the industry as the silos in which the different segments operate. With backgrounds in engineering and economic analysis Excipio determined that alone none of the known technologies could produce power at a price competitive with onshore wind and solar. This study led to both our patented integrated platform and set us apart from our peers as knowledgeable in all forms of offshore renewable energy. In the process of studying Ocean Thermal Energy Conversion (OTEC) we realized that by applying technology from oil and gas we could make this 100 year old technology profitable. How we cut the LCOE in half, eliminated the cold water pipe, and tripled the thermal efficiency will be our topic at Rice.

excipioenergy.com

Roy Robinson: roy.robinson@excipioenergy.com

PARTICIPATING COMPANIES



ezNG Solutions, Spicewood, Texas

Our technology licenses provide ship owners and shipbuilders access to the world's most efficient tank technology for ocean transport of large volumes of Liquefied CO₂ as the CCS market is predicted to grow by more than 30% every year with global carbon capture reaching 7.6 billion tons in 2050. In addition, Pressurized LNG was proven to be much simpler, cheaper and GREENER than LNG decades ago, but the global gas industry had NO practical means for large scale containment. ezNG's innovations change the game, making possible the "big switch" to less costly and less energy intensive natural gas liquefaction. Near term, ezNG offers technology licenses for storage and transport of LCO₂ and PLNG. Longer term, ezNG will lead projects globally using its technology to help the world switch to greener liquid fuels. So, we are seeking funds to demonstrate and market our innovations.

ezNGSolutions.com

Nick White: c.n.white@ezNGsolutions.com



Fairbrics, Clichy, France

At Fairbrics, we are building a platform that uses CO₂, water, and electricity to replace oil and avoid CO₂ emissions. Our first product is a breakthrough technology that uses chemistry to upcycle waste CO₂ into textile fibers for fashion brands that want to reduce their carbon footprint.

fairbrics.co

Benoit Illy: benoit.illy@fairbrics.co



FlowCellutions, Pittsburgh, Pennsylvania

FlowCellutions unlocks our energy storage future through diagnostic and monitoring tools for grid-scale batteries, opening a \$45B market. Our toolkit consists of patent pending sensors, proprietary diagnostics software, and predictive maintenance. For grid-scale batteries, this is the first product to optimize any ML predictions, and ours improves OPEX savings by 25-40%. Our sensors uniquely provide instantaneous measurements using the internal battery chemistry and last 20x longer than existing generic sensors. Battery manufacturers now have the ability to monitor 24/7 and predict crucial battery health metrics, resulting in extending battery lifetime, improving uptime, and preventing catastrophic failures.

flowcellutions.com

Becca Segel: becca.segel@pitt.edu

PARTICIPATING COMPANIES



Free Form Fibers, Saratoga Springs, New York

Free Form Fibers is a manufacturer of high value materials that are needed for next level performance in challenging industries such as nuclear power and advanced semiconductors beyond silicon. The company utilizes a process, laser-driven chemical vapor deposition (LCVD) derived from the microelectronics industry to yield high purity materials that are often not capable of being produced by any other technology. As the only entity in the world commercializing LCVD to manufacture high purity materials at scale, Free Form Fibers is positioned to provide unique material solutions to a range of industries, particularly in the energy space.

fffibers.com

Shay Harrison: sharrison@fffibers.com



Geolabe, Los Alamos, New Mexico

Rice Alliance Clean Energy Accelerator Class 4

Geolabe is developing the first system capable of automatically detecting methane emissions in satellite imagery, down to the asset level, and without any human intervention. Our AI algorithms are able to parse and analyze large volumes of data captured anywhere on Earth, every few days. By drastically improving detection capabilities in open-source satellite data, we have similar detection capabilities than proprietary satellite constellations tailored for methane detection, at a much lower cost.

geolabe.com

Claudia Hulbert: claudiah@geolabe.com



Geothermal Radar, London, United Kingdom

Geothermal Radar is the first end-to-end geothermal modelling platform. It connects subsurface and industry data with interactive modelling and simulation. Geothermal Radar offers seamless end-to-end functionality to all stakeholders — geothermal operators, oil & gas, investors, and public authorities. It enables real-time simulation, prospecting, valuation, feasibility, and reserves assessment. The platform is open to third-party models and to proprietary data to co-evolve with the industry. It is a B2B SaaS solution with an Enterprise version allowing connection to client's data and systems. Additionally, it is offered for free to non-profit, academic, and selected public organizations.

geothermalradar.com

Vladimir Stroganov: vladimir@geothermalradar.com

PARTICIPATING COMPANIES



GigaDAC (Victory Over Carbon), Houston, Texas

Developed with aerospace engineering principals and backed by the National Science Foundation (NSF), GigaDAC is an airflow solution to the airflow problem of Direct Air CO₂ Capture (DAC). By getting airflow right, our results demonstrate a system at 1/3rd the cost to build, 1/6th the cost to operate, and less than half the cost to regenerate. With this, we can profitably sell carbon offsets at below \$100 per ton and tap into the lucrative 45Q marketplace.

gigadac.org | **Harrison Rice:** harrison@gigadac.org



Graphenix Development, Rochester, New York

GDI manufactures 100% silicon anodes for Li-ion batteries that enable >30% higher energy density, 3X faster charging, and better safety than current high-energy batteries. GDI anodes avoid graphite supply chain risks (>90% made in China), by using silicon precursors made in the USA. Silicon is the ultimate material for high-performing Li-ion anodes, but overcoming swelling and large-scale manufacturing has been elusive. GDI, a global patent leader in silicon-dominant anodes, has overcome these challenges. GDI has partnered with AGC, a world-leader in glass and thin-film coating, to produce high performance, scalable, and economic anodes that will revolutionize applications in multiple sectors.

gdiinrg.com | **Robert Anstey:** rob.anstey@graphnx.com



H Quest Vanguard, Pittsburgh, Pennsylvania

H Quest is decarbonizing natural gas at the point of use: carbon is extracted as a valuable solid product liberating a stream of clean hydrogen fuel. We pioneered a methane pyrolysis process powered by microwave plasma that thermally cracks natural gas into clean hydrogen and valuable carbon materials with zero emissions. The technology enables a modular, scalable system with a modest form factor (1 ton per day of hydrogen in a 40' CONEX container) that can be deployed directly at customer premises. With 4x lower energy requirement of water electrolysis, H Quest's process is poised to provide lowest-price clean hydrogen wherever natural gas is available, while eliminating the costs and hazards of hydrogen delivery. H Quest's pilot demonstrated operation with pipeline natural gas. In negotiations are: manufacturing agreement with O&G service company, JDA with specialty carbon producer, and customer contract with West Coast Utility.

h-quest.com | **George Skoptsov:** gls@h-quest.com

PARTICIPATING COMPANIES



Hazer Group, Perth, Australia

Hazer Group is an Australian clean-tech company, driving global decarbonisation with the commercialisation of the company's disruptive climate-technology. Hazer's advanced technology enables the production of clean and affordable hydrogen and high-quality graphite, using a natural gas (or any methane-rich gas) feedstock and iron-ore as the process catalyst. One technology that serves 3 valuable markets - the growing demand for clean H2, critical minerals and industry decarbonisation. Following 15 years of development, the company's FOAK Demonstration Plant has recently been brought online, the 5th successful scale-up - a world first demo of this breakthrough technology. Concurrently the demand for the tech has accelerated and the company has secured several global contracts with tier-1 customers in Japan (Chubu Electric & Mitsui), France (Engie) and Korea (POSCO). In addition, ongoing discussions continue with potential customers in hard-to-abate sectors that recognise value in Hazer's technology and its decarbonisation potential.

hazergroup.com.au | Glenn Corrie: gcorrie@hazergroup.com.au



Helical Solar, Leander, Texas

Helical Solar provides renewable energy solutions for agrivoltaics and commercial/military remote power generation. Our elevated, dual-axis agrivoltaic arrays are compatible with full-size livestock and traditional row crop applications. The articulating solar array can also combined with dense battery storage and a high powered microgrid on a mobile skid platform to supply commercial grade, 208/480VAC 3-phase power for expeditionary/austere locations in the agricultural, construction, military, telecom, EV charging, and Advanced Air Mobility (AAM) charging industries.

helicalsolar.com | Zach Hudnall: jzach.hudnall@helicalsolar.com



HELIOVIS AG, Wiener Neudorf, Niederoesterreich, Austria

Founded in 2009, HELIOVIS is an Austrian scale-up company that has developed and now markets a breakthrough solar thermal technology for the delivery of emission-free industrial process heat. Our versatile technology delivers thermal energy at competitive and stable prices in the temperature range between 90°C - 400°C, which is hard to decarbonize and correspondingly underserved. These temperatures are used across multiple industries, including oil & gas, mining, food & beverages, chemicals, etc., resulting in a huge addressable market. With the first commercial installation under commissioning for an oil field operator in Oman and a strong project pipeline, HELIOVIS is raising funds to fuel rapid growth.

heliovis.com | Holger Sindemann: holger.sindemann@heliovis.com

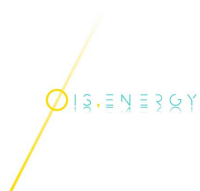
PARTICIPATING COMPANIES



Impact Cooling, Birmingham, Alabama

Impact Cooling offers a drop-in replacement for traditional server heatsinks, improving chip cooling for CPUs, GPUs, and FPGAs. Designed to fit standard server footprints and interface with current fans, it employs patented jet impingement technology to enhance convective heat transfer by 10x, reducing thermal resistance and supporting higher-powered chips. This revolutionary air heatsink decreases energy consumption, eliminates water usage, and boosts compute density while minimizing costs and complexity. Impact Cooling eliminates the need for liquid cooling, maintains optimal temperatures with hotter inlet air, and cuts airflow requirements by 50%, enabling significant energy savings without facility modifications.

impactcooling.com | J. Cliff Denson: cliff@impactcooling.com



Impossible Sensing Energy, Calgary, Alberta, Canada

Our company specializes in developing and building sensing systems for the energy sector. We achieve this by leveraging advanced technologies initially developed for space exploration. The primary objective of our systems is to enable energy producers to accomplish three main things: 1. Obtain unprecedented visibility into their intended production, primarily hydrocarbons, and unintended production such as groundwater and GHG emissions. 2. Reduce their environmental footprint by replacing outdated measurement equipment, such as test separators, which are known sources of emissions. 3. Reduce operational costs by eliminating the need to make trips to the field to take measurements or to conduct lab work on samples.

isenergy.ca | Ariel Torre: atorre@isenergy.ca



Kaizen Clean Energy, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 4

Kaizen Clean Energy manufactures high capacity, low or no emissions distributed generation that enables fleet EV charging in grid constrained or off-grid locations. The systems utilize hydrogen fuel cells and a proprietary methanol-to-hydrogen reformer. Utilizing methanol as a hydrogen carrier reduces the cost per kWh by 75% versus compressed hydrogen systems. The system is containerized, requires no permanent infrastructure and is transportable. It emits no NOx, SOx and particulates, a requirement in many urban areas and ports. The system is scalable from 150kW to multiple MWs. Permitting is simplified as no hydrogen is stored on-site and no LiOn batteries are used.

kaizencleanenergy.com

Craig Klaasmeyer: craig.klaasmeyer@kaizencleanenergy.com

PARTICIPATING COMPANIES



KC8 Capture Technologies, Durham, North Carolina

KC8 Capture Technologies are the developers of the UNO MK 3 solvent process for CO₂ removal from post combustion flue gases. UNO MK 3 is one of the lowest cost, scalable capture solutions currently available. UNO MK 3 solvent has a significantly lower energy requirement and, when combined with our patented absorber technology, will provide a capture efficiency of >90%. This makes UNO MK 3 one of the most cost-effective solutions available today. With over 15 years of development and investments over \$25 million dollars, the systems will be demonstrated on both natural gas and coal flue gases with wide range of CO₂ content. This will provide a broad platform of operating conditions enabling further commercial applications. The two commercial demonstration plants will be operational early 2025. This benign, environmentally friendly solvent is cheap to produce and is robust for long life, meaning lower operating costs and minimal handling issues.

kc8capture.com | **Greg Ross:** greg.ross@kc8capture.com



Loop CO₂, Marlborough, Massachusetts

Loop CO₂ is transforming the chemical industry with our innovative approach to sustainability. We promote a circular economy by reacting CO₂ and biomass into polymers with a negative carbon footprint and high chemical recyclability. Our CO₂ polymer platform can be adapted for a wide range of applications. Its reversible nature allows for easy chemical recycling back to virgin raw materials, maintaining the same quality at just 10% of the original cost, making eco-friendly choices economically viable. Loop CO₂ empowers industries to adopt greener practices without compromising on performance or cost.

loopco2.com | **Aone Wang:** aone.wang@loopco2.com



MicroEra Power, Rochester, New York

MicroEra Power is developing a patented responsive Thermal Energy Storage system for efficient, flexible, low carbon heating and cooling of commercial buildings using tunable phase change materials and smart software. Our THERMAplus system shifts heating and cooling loads to off-peak and renewable-intensive periods, reducing monthly energy bills up to 50%, while improving resiliency and sustainability. This system enables geothermal HVAC and District Energy projects by reducing the ground loop size by 80%, substantially reducing capital costs. With funding from DOE, NYSERDA, and our investors, we are responding to strong market signals for scalable grid-responsive energy storage solutions.

microerapower.com | **Ellie Rusling:** emr@microerapower.com

PARTICIPATING COMPANIES



Mitico, Los Angeles, California

Rice Alliance Clean Energy Accelerator Class 4

Mitico offers state-of-the-art services and equipment to capture carbon dioxide (CO₂). Our patent-pending granulated metal carbonate sorption technology (GMC) developed at Caltech captures over 95% of the CO₂ emitted from post-combustion point sources (flue gases), including gas-fired power plants and boilers, and waste-to-energy and biomass-to-energy facilities. We are able to enable carbon capture, utilization, and storage (CCUS) as a service at a low cost. July news from Mitico: 1/ We secured non-dilutive funds from 10 industry partners for a pilot in Canada with planned operation in winter 2025. 2/ We are working with contract manufacturers to produce 100s of kg of our GMC sorbent for Fall 2024. 3/ Our Seed round is open for a total opportunity of \$3.5 M with a committed lead investor. There is still an opportunity to join the round before close.

mitico.tech | Clement Cid: clement@mitico.tech



Mote, Los Angeles, California

Mote turns wood waste into hydrogen and carbon removal with a uniquely-integrated gasification process. The technology and economics have been validated or funded by seven different expert groups including DOE, RMI, and industry partners. The patented process is a new application of proven components, with a commercial operating history for the key technology. Mote's first commercial project, near Bakersfield CA, is substantially supported by the California Hydrogen Hub and LOIs or term sheets for up to \$3B in revenue. Mote is over halfway to a \$15M Series A to bring that project to FID and support ongoing technology development.

motehydrogen.com | Erika Pham: Erika@motehydrogen.com



NanoSonic, Pembroke, Virginia

NanoSonic specializes in the design and manufacturing of innovative materials that are currently unavailable in the commercial market. These material properties include radiation durability, hypersonic stability, icephobicity, omniphobicity, and virucidal activity. With 18 patents granted, NanoSonic has been named to NASA's Nano50. NanoSonic's staff is comprised of more than 25 multi-disciplinary research scientists, engineers, chemists, designers, and fabricators. NanoSonic's customers include a diverse range of both small tech and large defense primes, as well as clients in the private sector. Government customers include the Air Force, Naval Nuclear Laboratory, U.S. Department of Energy, the U.S. Department of Defense, and NASA. NanoSonic collaborates on product development, research, design, and development, small-scale manufacturing and commercialization, allowing us to consider the sustainability of all processes and techniques.

nanosonic.com | Jennifer Lalli: jhlalli@nanosonic.com

PARTICIPATING COMPANIES



Noble Gas Systems, Novi, Michigan

Noble Gas is a US-based developer of advanced compressed hydrogen storage systems. The company supports a variety of applications within the mobility, remote power, aviation, bulk storage, and industrial gas markets. Founded in 2017, the company began shipping prototype hydrogen tanks to customers in 2019. In 2022, the company raised \$3.5M from AP Ventures, a significant hydrogen investor. Since then, Noble Gas became the first company in the world to complete design qualification testing for HGV2, the hydrogen gas vehicle design standard. The company has continued to expand its testing and manufacturing capabilities, and is entering low volume production.

noblegassystems.com | **Chris Kondogiani:** ckondo@noblegassys.com



Novapont Technology, Houston, Texas

Novapont Technology invented, designed, manufactures, and sells an after-market, bolt-on hydrogen generator system for diesel engines. It improves fuel economy up to 30% and reduces tailpipe emissions using existing diesel or CNG equipment. The unit pays for itself in 6 months to 2 years in fuel savings alone. Using the device will allow users to report lower greenhouse gas numbers on their annual reports while decreasing their fuel needed, thus improving their bottom line. We have identified 11 market segments from trucking to tugboats to oil and gas, each with unique requirements. Each will be in a separate division.

novaponttechnology.com

John McLean: JMcLeanJr@novaponttechnology.com



NovaSpark Energy, Houston, Texas

NovaSpark Energy Corp Air-to-Power Mobile Units are perfect for Rapid deployment, mobile hydrogen generation for immediate energy needs. Ideal for hydrogen refueling, critical missions, emergency response, and remote operations in challenging environments. Always ready, Always Reliable, Always on the Go. Pioneering Technology Our groundbreaking closed loop system is the first of its kind offering onsite hydrogen production with unmatched efficiency. Leveraging patent pending atmospheric water extraction we ensure a continuous reliable energy source that sets a new standard in the industry. And ready to incorporate emerging technologies when they are read. Modular and Scalable Each NovaSpark generator is designed with modularity at its core allowing for easy scaling from small set ups to large industrial applications. This adaptability ensures that no matter the size of your operation our technology can meet your energy demands without compromise.

novasparkenergy.com | **Rick Harlow:** rick.harlow@novasparkenergy.com

PARTICIPATING COMPANIES



Novastus, Cookeville, Tennessee

Novastus is a technology-driven company that converts waste into a carbon-negative fuel with a novel, patented non-thermal drying process. The NovaDry system pulverizes and dries waste feedstocks like mixed municipal solid waste (MSW) or biomass in one energy-efficient step, with no heat or pressure required. The waste-derived fuel created by this process can make cleaner cement, steam, power or even renewable fuels. By pairing NovaDry with off-the-shelf sorting equipment, Novastus has developed a Total Material Recovery Facility (TotalMRF) that can affordably divert over 90% of waste from landfills and avoid related methane emissions.

novastus.com | Jake Suski: jsuski@novastus.com



Nu:ionic Technologies, Tulsa, Oklahoma

Nu:ionic Technologies is a developer of proprietary technology and an OEM equipment provider who enables process industry customers to realize net-zero goals through electrification. The first commercial application is the Nu-X Smart Reformer, which uses electrified methane reforming technology to produce low-cost, low-carbon Teal Hydrogen™ for zero emission transportation, biogas upgrading, natural gas and industrial process decarbonization. Designed for on-site, on-demand hydrogen production of 1 to 100 metric tonnes per day, the Nu-X Smart Methane Reforming (Nu-X SMR) process requires 40% less natural gas, biogas or methanol feedstock, and when combined with carbon capture, reduces 90% of GHG combustion emissions.

nuionic.com | Jan Boshoff: jan.boshoff@nuionic.com



NuCube Energy, Pasadena, California

We are a startup technology company that is designing an innovative and economical fission nuclear technology capable of producing electricity via high temperature heat. Therefore, this technology is capable of servicing both the electrical and the industrial heat markets.

nucube.energy | Cristian Rabiti: cristian@nucube.energy



NxLite, Canton, Michigan

NxLite makes advanced energy control coatings for windows. Our coatings are designed to keep the heat outside in the summer and cold outside in the winter. Our Chemistry based on earth abundant materials that are nontoxic at lower costs. We are the only company in the world that offers a solar coating that is open air stable. This means we do not oxidize or corrode when exposed to oxygen. Lastly, we are the only company in the world that can provide energy coatings on Polymeric substrates like PMMA and PC. One of our first products is a light weight insert that can be slid into an existing window frame with no installation costs. This will save that customer by as much as 40% on their energy bill and lower their carbon emissions as much as 30%. We also have other solutions for commercial refrigeration, transportation, and the broader window market

nxlite.com | David Mather: dmather@nxlite.com

PARTICIPATING COMPANIES

OceanBit

OceanBit, Honolulu, Hawaii

Rice Alliance Clean Energy Accelerator Class 4

OceanBit converts our planet's largest untapped energy resource – energy stored as heat in ocean water – into electricity. Our proprietary technology developments, engineering breakthroughs, and monetization pathways will unleash coastal and blue economy markets, capital, and resources critical to humanity by providing a 24/7 supply of clean, renewable energy on the ocean.

oceanbitenergy.com | **Nathaniel Harmon:** nathaniel@oceanbitenergy.com

OSMOSES

Osmoses, Cambridge, Massachusetts

Osmoses is a climate tech company transforming the way molecular gas separations are performed. Separations are ubiquitous in the chemical, petrochemical, and energy industries, accounting for 15% of global energy consumption and carbon emissions. Our high-performance, energy-efficient membranes have the potential to dramatically cut these emissions. Our novel polymer chemistry gives Osmoses membranes unprecedented performance, enabling reductions in GHG, cost, and energy use in applications including hydrogen recovery, biogas purification, refrigerant recovery, oxygen generation, and helium recovery. Our mission is to decarbonize industrial processes by eliminating energy waste and rebuilding century-old infrastructure for molecular separations.

osmoses.com | **Bob Bory:** bob@osmoses.com



Oxylus Energy

Oxylus Energy, New Haven, Connecticut

Oxylus Energy is an alternative fuel company that directly converts CO₂ into green methanol. This is the lowest cost green methanol production technology that enables on-site decarbonization.

oxylusenergy.com | **Harrison Meyer:** harrison.meyer@oxylusenergy.com



PARADIGM ROBOTICS

Paradigm Robotics, Austin, Texas

Paradigm Robotics is building the next generation of advanced robotics for hazardous environments. Our flagship robot FireBot is a highly rugged, fast, wirelessly controlled, semi-autonomous ground robot designed to enhance safety and efficiency in refineries and other O&G facilities by performing rapid incident response (firefighting/HazMat), detection of gas leaks/spills, and QNDE of high-heat apparatus (furnace, pipes, heat-exchangers) while operating in hazardous environments and temperatures above 650°C. FireBot is a highly robust robot, intrinsically safe, HazMat-proof, and adaptable, capable of navigating debris-filled areas, climbing stairs, and overcoming various obstacles. FireBot's award-winning technology revolutionizes the oil and gas industry by saving over estimated \$6B in maintenance and incident-related expenses, drastically reducing operational risks and enhancing safety measures.

paradigmrobotics.tech

Siddharth Thakur: siddharth@paradigmrobotics.tech

PARTICIPATING COMPANIES



PetroBricks, Arvada, Colorado

Winning the efficiency game requires getting the right data, to the right place at the right time. Modern oil and gas operators are drowning in data from IIOT sensor platforms and SAAS apps, all in their own disconnected data silos. PetroBricks is a turn-key solution that connects new tech systems to your core enterprise data systems, on day one, without months of delay, without using scarce and costly programmer resources. PetroBricks provides the tools operators need to win the efficiency game.

petrobricks.com | Rudy Lacovara: rudy@petrobricks.com



Porous Liquid Technologies, Belfast, United Kingdom

Based in Belfast, Northern Ireland, Porous Liquid Technologies (PLT) is at the forefront of developing cutting-edge chemistry and engineering solutions tailored for low-energy chemical separations. Central to our innovations are porous liquids, advanced materials recognised for their exceptional capability to selectively absorb and transport gases at minimal energy costs. This technology is core to our mission to tackle challenges in carbon capture, with a primary emphasis on scaling solutions for biomethane production.

porousliquidtechnologies.com

Andrew Osnowski: andrew.osnowski@porousliquidtechnologies.com



Predyct, Sugar Land, Texas

Global wind power installations are forecasted to quadruple by 2030. Concurrently, billions in losses and public outcry have been reported due to downtime and equipment failure (e.g., Vineyard Wind blade failure, July 2024). Operators and OEMs aim to lower costs by a third while sustaining growth. Typically, operation teams conduct schedule-based, manpower-intensive inspections, resulting in expensive downtime, high costs, and increased emissions. Predyct offers a game-changing solution: a maintenance-free, easy-to-install monitoring system leveraging Nano-Engineered Zero-Power (NEZP) sensors. Augmented with AI, Predyct's system delivers proactive insights to boost production, slash costs, and minimize emissions, paving the way for a more efficient and sustainable wind energy sector.

predyct.io | Himanshu Maheshwari: himanshu@predyct.io

PARTICIPATING COMPANIES



Proof Energy, Fremont, California

Proof Energy is commercializing next-generation Metallic Solid Oxide Fuel Cell (M-SOFC) technology developed by the Lawrence Berkeley National Lab. Proof Energy's breakthrough M-SOFCs use low-cost fuels including ethanol, methanol, ammonia and natural gas (hydrogen carrier fuels with much higher energy density than high-pressure hydrogen) to deliver carbon-neutral solutions for clean distributed stationary power generation and commercial EVs much faster and at significantly lower cost than building out MW fast-charging infrastructure or hydrogen production and delivery capacity. In response to immediate customer needs Proof Energy is commercializing its zero-emissions ClearTherm™ Range Defender™ heater in 2024 to maintain winter driving range of Battery Electric vehicles (BEVs).

proof-energy.com | **Tim Dummer: timdummer@proof-energy.com**



Pyran, Madison, Wisconsin

Pyran unlocks the potential of renewable crop resources (such as corn cobs, wood, and sugarcane bagasse) to make 5-carbon chemicals such as 1,5-pentanediol (PDO) a critical ingredient that enhances the performance of everyday materials, such as paints, coatings, adhesives and more. The company replaces expensive petroleum-based chemicals with its renewable 5-carbon products, allowing customers to expand the supply of better-performing, environmentally friendly, and cost-efficient products. Pyran's high margin business allows for highly profitable operations at relatively modest scale and capital requirements for the chemical industry and has completed demonstration scale operations and front-end-engineering-design (FEED) of our commercial plant.

pyranco.com | **Kevin Barnett: kjbarnett@pyranco.com**



QEA Tech, Markham, Ontario, Canada

Rice Alliance Clean Energy Accelerator Class 4

QEA Tech provides unparalleled insights into the building envelope while being fast and cost-effective. Our proprietary AI software pinpoints issues, quantifies energy loss, and recommends targeted retrofits to maximize energy savings from the building envelope. We use drones, thermal cameras, and IoT devices to capture large amounts of data for a building or set of buildings. This data is then analyzed by our proprietary software to calculate energy loss, preventable GHG emissions, and ROIs of targeted retrofit projects. QEA Tech has completed 600 projects across North America including various commercial, residential, institutional, and industrial buildings.

qeatech.com | **Justin Kim: justin@qeatech.com**

PARTICIPATING COMPANIES



QMS2GO, Ruston, Louisiana

QMS2GO is an innovative AI-powered quality management assistant aimed at revolutionizing traditional quality management systems for manufacturers. With a market size of 1.4 million companies, QMS2GO leverages advanced AI language models and industry-specific expertise to automate and accelerate QMS processes, ensuring compliance and operational efficiency at a fraction of the cost of traditional consulting. Accessible via web, app, and voice-activated devices, it requires no training and can be seamlessly integrated with existing ERP or other software packages, or used independently, making it accessible to companies of all sizes. By bringing back 65% of the time to quality managers, QMS2GO significantly improves efficiency, effectively enhancing the bottom line for all stakeholders. Our mission is to support quality managers in achieving unparalleled compliance and efficiency, fostering continuous improvement, and driving industry-wide excellence and reliability.

qms2go.com | Omega Ulanova: qms2go1@gmail.com



Qube Technologies, Calgary, Alberta, Canada

Qube is a technology company specializing in continuous emissions monitoring. They offer advanced sensor technology and data analytics to detect and measure methane emissions, helping industries such as oil and gas minimize their environmental impact. Qube's real-time monitoring system provides accurate, continuous data, enabling quick response to leaks and regulatory compliance. Their technology aims to improve operational efficiency and reduce greenhouse gas emissions, contributing to sustainable practices. Through its cutting-edge solutions, Qube Technologies supports companies in achieving their environmental and safety goals while adhering to regulatory standards.

qubeiot.com | Eric Wen: eric.wen@qubeiot.com



Rejoul, Houston, Texas

Rejoul Inc. extracts critical metals from E-waste including Battery waste using its proprietary Bio-tech process. Unlike traditional chemical based processes, we use wastewater sludge instead of expensive and toxic chemicals to extract the critical metals (Li, Ni, Co, Mn) from the battery black mass resulting into zero carbon and toxic emissions while significantly reducing the costs. These metals are extracted in sulfide form and are protein coated with superior semi-conducting properties allowing them to be reused in Battery, Solar Cell and Semi-Conductor manufacturing, ensuring a circular economy.

rejoul.com | Jenil Monpara: jenil@rejoul.com

PARTICIPATING COMPANIES



Renewell Energy, Bakersfield, California

Cleaning up the 2.6 million inactive oil and gas wells in North America will require \$287B, take >100 years, and leak more than 664 million tons CO₂e of methane. Also wind and solar will never achieve majority market share without energy storage capable of both low-cost short and long duration. Renewell incentivizes oil and gas companies to seal and convert over 1M wells to drastically increase the pace of clean up and reduce methane emissions to create 132GWh of highly flexible, low-cost energy storage.

renewellenergy.com | **Kemp Gregory**: kemp@renewellenergy.com



Revterra, Houston, Texas

Revterra is developing a grid-stabilizing kinetic battery to substantially boost the clean energy revolution. With our technology, customers can directly enhance the stability of their electric grids, protect their critical loads against outages and power quality disturbances, and overcome significant power bottlenecks and availability challenges. We enable cheaper, faster, and cleaner installation of DC Fast EV charging stations, help commercial & industrial firms eliminate uncertainty and unexpected costs from their business, and help grid operators drastically boost the stability and power quality of their grids with the most cost-effective solution available.

revterra.io | **Patrick Flam**: patrick@revterra.io



Rheom Materials, Houston, Texas

Rheom Materials, formerly Bucha Bio, is a specialty biobased material compounder. Founded in 2020, it's our mission to empower a sustainable future by creating biobased materials that seamlessly replace fossil fuel-based plastics. We achieve this by combining Earth-derived ingredients with global melt extrusion technology, creating biobased materials at the pace of consumer demand. Leveraging the ubiquitous global plastics industry, our materials easily integrate into existing supply chains, seamlessly scaling. At Rheom Materials, we produce materials in various form factors, including biobased sheets (such as Shorai™) and biopolymer resins (like Benree™). Our goal is to design materials that mimic the utility of their counterparts while eliminating their carbon impact. Welcome to Rheom Materials—change your impact, not your life.

rheom.com | **Zimri Hinshaw**: zimrithinshaw@rheom.com

PARTICIPATING COMPANIES



RiKarbon, Newark, Delaware

RiKarbon Inc. was founded to commercialize proprietary technologies that were developed by its founder. RiKarbon's mission is to promote health and environmental safety, mitigate regulatory challenges of customers/partners, decarbonize the manufacturing sector, meet consumer desire for sustainable and natural products, and create a circular economy. The company produces high value and high performance renewable oils from agricultural waste for cosmetic and synthetic lubricants markets. The market penetration of these products are driven by regulatory push, customers' desire for sustainable alternatives and end-users push for safer products. Products performant have been validated by global customers and cosmetic brands.

rikarbon.com | Basudeb Saha: bsaha@rikarbon.com



Rock Rigid Intelligence, Wilmington, Delaware

Rock Rigid delivers an end-to-end AI-assisted production data verification platform. It consists of modules for creating mathematical twins of oilfields, and AI modules to enforce calculations using data-driven approaches. Our clients achieve unprecedented transparency, high accuracy in calculations, and enhanced control over hydrocarbons production, processing, emissions, and losses, leading to sustainable decisions. Our unique edge lies in heavy focus on the traceability of calculations, ensuring that no deviation in production-related parameters goes undetected. The platform is applied to handle the following tasks:

- Virtual sensing and flow meters
- Anomaly detection
- Back allocation
- Well surveillance, performance monitoring, and flow assurance
- High-speed simulations

rockrigid.com | Salamat Kabdulov: salamat@dereket.net



RockyTech, Boulder, Colorado

RockyTech is a material innovation startup focused on developing sustainable plastic and composite materials for various applications, including clean energy, vehicles, medical devices, and 3D printing. We emphasize sustainability in plastics, from selecting initial feedstocks to ensuring responsible end-of-life solutions. Recognizing the essential role of plastics in modern society and their impact on environmental pollution, we are committed to transforming the lifecycle of plastics to make production and usage more sustainable and responsible. By advancing innovation in materials science, RockyTech aims to introduce novel functionalities for plastics while driving the industry towards a more sustainable, circular economy model.

rockytechs.com | Alex Koenigsberg: alex.k@rockytechs.com

PARTICIPATING COMPANIES



Samtracs, San Antonio, Texas

Samtracs designed a single-axis tracker that reduces the cost of building solar photovoltaic farms by 12% and increases its yearly revenue by at least 10% using generative artificial intelligence intra-hour forecasting. Both solutions add 30% more value to the utility solar farm, that is \$46 million per 100 MW.

samtracs.com | **Ahmad Abdullah:** ahmad.abdullah@samtracs.com



Sensytec, Houston, Texas

Rice Alliance Clean Energy Accelerator Class 4

Sensytec develops advanced sensors that provide real-time visibility into physical infrastructure performance. These sensors monitor material conditions, offering insights that enable customers to build faster, more cost-effectively, and more resiliently.

sensytec.com | **Robert Morales:** robert@sensytec.com



Sky Hunter, Calgary, Alberta, Canada

Sky Hunter's Airborne Hydrocarbon Sensing System (AHSS) concentrates and measures the hydrocarbons from reservoir micro seeps. The data is presented in plan view maps, for both oil and gas, over the gridded project area. This information is combined with geological and geophysical data to determine trap type and depth. The system works both onshore and offshore. Conventional exploration success is 3 wells in 10 wells (30%). Using this Direct Hydrocarbon (DHI) system the success rate is increased to 8 wells out of 10 wells (80%). This will significantly reduce finding costs (\$/BBL) and by drilling the sweet spots will decrease the time from discovery to first production. Sky Hunter has completed surveys in Canada, USA, Australia and India. We are working on a drone friendly unit that can be used for both reservoir surveys and detection of subsurface pipeline leaks before the show at surface.

skyhunter.ca | **Russ Duncan:** russ.duncan@skyhunter.ca

PARTICIPATING COMPANIES



SkyH2O, Houston, Texas

SkyH2O is a revolutionary water technology company seeking strategic partners and investors to scale our sustainable and industrial-scale water solutions. SkyH2O has developed the innovative AWG Maximus 4260 air to water engine, designed as plug and play, IoT device in a 40' ISO container format, designed to power multiple project applications. Our innovative technology extracts clean water from air, addressing global water scarcity and toxicity. With a strong management team and seasoned CEO, we're poised for growth. We're offering up to \$20M in Series-A Preferred Stock and up to \$300M in SPV Project Financing. Our focus is on large-scale government and commercial projects, with a secondary focus on micro-scale sales. Join us in pioneering a new approach to water sustainability and resilience.

skyh2o.com | **Terrell Jones:** terrell@skyh2o.com



Splight, San Mateo, California

Splight enables the energy industry to unlock vast amounts of clean energy and add reliability and flexibility to electric grids without trade-offs. That is a fundamental change in the energy industry. Splight adds a real-time operational layer based on inverter-based resources assets (IBR) to the grid to increase flexibility and reliability. Based on real-time IBR responses to contingencies, this new reliability layer enables unleashing up to 2x of transmission capacity. Since IBRs using Splight's technology can tackle contingencies dynamically and in real-time, massive idle transmission capacity that is now trapped in static assumptions can be unlocked. It is also the way to the massive deployment of DERs and batteries since every new IBR asset is a new grid-friendly resource. More IBRs, more reliability, more transmission capacity. Less grid congestion, no curtailment.

splight-ai.com | **Fernando Llaver:** fernando.llaver@splight-ae.com



Tendo Technologies, Princeton, New Jersey

No universal, cost-effective digital solution exists for managing industrial gas in-transit and onsite inventory. Tendo Technologies is the first to offer a unified, affordable digital solution for measuring, tracking, and managing billions of gas cylinders globally. Our patent-pending IIoT solution optimizes the fill and replenish network, providing real-time visibility and geo-location data. Companies using Tendo's technology can significantly reduce annual inventory and environmental waste, lower overhead costs, increase revenue capture, and enhance profitability.

tendo.tech | **Lindsay Cardoso:** Lindsay@tendo.tech

PARTICIPATING COMPANIES



Teren, Lakewood, Colorado

Teren transforms geospatial data into critical insights that help businesses and governments build and operate infrastructure for climate resilience. Harnessing remotely-sensed data, powerful cloud computing, and large-scale deep learning, Teren provides highly accurate, actionable geospatial intelligence for anticipating, measuring, and mitigating the impacts of our ever-changing environment on the built world. Teren's latest product, Terevue, is a novel software solution that predicts when and where weather will trigger physical threats to infrastructure. The Terevue Environmental Intelligence Platform enables infrastructure managers to anticipate, prioritize, and alert teams to evolving weather and subsequent environmental hazards threatening asset integrity, reliability, and safety across entire infrastructure networks.

teren4d.com | Tobias Kraft: tkraft@teren4d.com



TerraVent, Melbourne, Florida

TerraVent Environmental Inc. is a Florida-based corporation created to identify, acquire, and develop innovative technologies that sustainably address global environmental problems. Our founding team consists of Environmental Scientists, Engineers, and Financial Experts, each with a record of success in technical entrepreneurship. With a decade of prior development under L3Harris, minority partner, TerraVent is applying industrial microwave technology to the stimulation and production of in-situ Hydrogen. This production technology is under development in partnership with Texas Tech University's "Hope Group" formalized while under development under DOE programming. With a prior pilot in the O&G space we look to take prior learnings and deploy a fully electrified production system for low carbon Hydrogen with viable economics to bring to market.

terra-vent.com | Dylan Carbone: dylancarbone@terra-vent.com



THEMES, Katy, Texas

THEMES repurposes idle oil & gas wells to provide grid-scale geological long duration energy storage. We enable increased intermittent solar & wind generation on the grid to provide carbon-free firm dispatchable electricity cheaper than existing fossil generation. Our vision is to decarbonize electricity grids making it economically feasible to retire all base load and peaker fossil generation, replacing it with cheaper firm dispatchable 100% renewable electricity by repurposing oil & gas infrastructure. With over 2 million idle wells and 75% of the continental US having porous rock geology suitable for storage, Terawatt-hours of storage much cheaper than batteries is accessible.

themesllc.com | Ram Shenoy: ram@themesllc.com

PARTICIPATING COMPANIES



ThermoLift, Novi, Michigan

ThermoLift's innovation directly addresses the fundamental limitations of existing heat pump technology, and offers residential and light commercial customers the most cost-effective and carbon-friendly heating, cooling and hot water solution to most cold climate markets. The company's maiden product is a thermally-driven heat pump which leverages a natural and clean refrigerant (helium) and delivers concurrent heating, cooling and hot water from a single device. The company is targeting commercialization of this solution in 2025. ThermoLift is also currently fundraising a Series A round.

thermoliftsolutions.com | **Thomas Chick**: tchick@thermoliftsolutions.com



TrelliSense, Superior, Colorado

TrelliSense is on a mission to monitor all human infrastructure for gaseous emissions, starting with methane and later expanding to other gases (e.g. NOx, VOCs, etc.). We have developed proprietary continuous, ground-based and long-range optical methane sensors that can detect, localize and quantify methane emissions from point- and area-source emitters all at a fraction of the cost of existing monitoring technologies. Primary target markets include the full gas supply chain (upstream wells, midstream processing/distribution and consumer utilities), agriculture, landfills/waste and industrial facilities. Today, we are raising a seed round of \$2M to build a scalable manufacturing program and service paid pilots through the spring and summer before expanding those accounts to enterprise customers in late 2024 / early 2025.

trellisense.com | **Ben Silton**: ben@trellisense.com



UP Biochemicals, Lewis Center, Ohio

UP Biochemicals, based in Lewis Center, OH, is poised to become the leading producer of the world's lowest carbon intensity adipic acid, at costs equivalent to fossil processes. Our pioneering UP process and proprietary HeatPath™ catalyst technology platform transform chemical processes by delivering unparalleled energy efficiency and ultra-low CO2 emissions. Focused on sustainability, UP leverages robust R&D partnerships and collaborations with top universities to innovate in green chemical synthesis. Committed to excellence, UP is setting new standards in producing the highest quality, eco-friendly adipic acid for nylon production.

upbiochemicals.com | **Matthew Seabaugh**: matt@upbiochemicals.com

PARTICIPATING COMPANIES



Variablegrid Adaptive Power, Toronto, Ontario, Canada

Variablegrid offers AI-driven energy management solutions that enable efficient electric vehicle charging in buildings with limited electrical capacity, eliminating the need for costly service upgrades. Our patented IoT technology monitors real-time power usage at panel and transformer levels, safely allocating unused, available power to EV chargers. We enable dynamic load balancing, in 1-amp increments, coupled with smart grid integrations, optimizing energy distribution, reducing peak demand, and enhancing grid stability. By transforming buildings into smart energy hubs without expensive infrastructure upgrades, Variablegrid is not only saving billions for North American consumers and utilities but also supporting the transition to sustainable transportation.

variablegrid.com | Dan Lafferty: dlafferty@variablegrid.com



Vroom Solar, Springfield, Missouri

Rice Alliance Clean Energy Accelerator Class 4

Vroom Solar, Inc. is revolutionizing the solar power industry with our Smart Solar Management technology. Our innovative approach offers a cost-effective solution with straightforward installation for end customers. Our technology enables direct solar power management without the need for batteries or grid connections opening up a whole new classification of Solar.

vroomsolar.com | Luke Phelps: luke@vroomsolar.com



VulcanX Energy, Vancouver, British Columbia, Canada

Rice Alliance Clean Energy Accelerator Class 4

VulcanX is not your typical startup. We spun out from the University of British Columbia with a de-risked demonstration plant. We developed new systems that can produce hydrogen and solid carbon more efficiently and at a low cost. Our hydrogen cost is at par with current technologies (without having to sell the carbon) and with little to no emissions. We have secured non-dilutive funding to de-risk and scale up the technology and build a demonstration plant in Alberta, Canada. So far, we have secured \$4M from FortisBC, Alberta Innovates, and NRCan, and \$75k from the Centre for Innovation and Clean Energy for the front-end engineering design and detailed engineering design of the 1 tonne per day plant. We are now searching for investment to build a 1 tonne of hydrogen production per day by 2026.

vulcanx.ca | Omar Herrera: omar.herrera@vulcanx.ca

PARTICIPATING COMPANIES



Well Information Technologies, Littleton, Colorado

Well Information Technologies is an oil and gas (and geothermal) SaaS company that has built a modern well management application. We apply advanced technologies to essentially be your engineering tech that prepares data, provides insights and automates engineering workflows allowing your team to make more confident decisions resulting in longer equipment run-times, lower operating costs, and increased revenue.

wellinfo.tech | **Cody Clickner**: Cody@wellinfo.tech



Xplorobot, Houston, Texas

Xplorobot is transforming environmental compliance with its AI-driven technology, significantly reducing hardware and labor costs by 10X. Our platform empowers workers to mitigate emissions instantaneously and helps operators avoid fines and increase revenue, turning sustainability into a strategic advantage.

xplorobot.com | **Oleg Mikhailov**: oleg@xplorobot.com



XTS Energy, Houston, Texas

XTS Energy LLC ("XTS") is a US energy development company with principals experienced in developing, financing, building, owning and operating energy assets in the US and internationally. Over the past 30 years, XTS principals have been instrumental in raising over \$4.75 billion in capital to fund over 20 energy projects in the US, Europe, and Mexico. XTS focuses on developing products and solutions which will be instrumental in the energy transition to a lower carbon future. XTS is currently developing a project using alcohol to jet technology ("ATJ") to meet the growing demand for clean transport fuels by building, owning and operating the infrastructure to produce 29 million gallons per year of Sustainable Aviation Fuel ("SAF") using ATJ technology with low carbon ethanol as a feedstock and 2 million gallons per year of Green Diesel co-product from the ATJ SAF processing facility.

xtsenergy.com | **Dr. Robert C. Kelly**: rkelly@xtsenergy.com



ZEG Power, Lysaker, Norway

ZEG is a pioneering deep-tech company with over 20 years of R&D, offering the breakthrough ZEG ICC™ technology for compact, cost-efficient clean hydrogen production from hydrocarbon gas, featuring integrated CO₂ capture. Originating from Norway's highly recognized Institute for Energy Technology, ZEG recently launched the ZEG H1 plant, the world's first commercial clean hydrogen production plant with integrated carbon capture. The ZEG ICC™ technology's world-class efficiency, CO₂ capture rate, and compactness enable various end-user applications with affordable, sustainable, and reliable hydrogen. ZEG's owners include SLB, AP Ventures, Nysnø, SPARX Mirai and IFE Invest.

www.zegpower.com | **Kathrine Ryengen**: kathrine.ryengen@zegpower.com