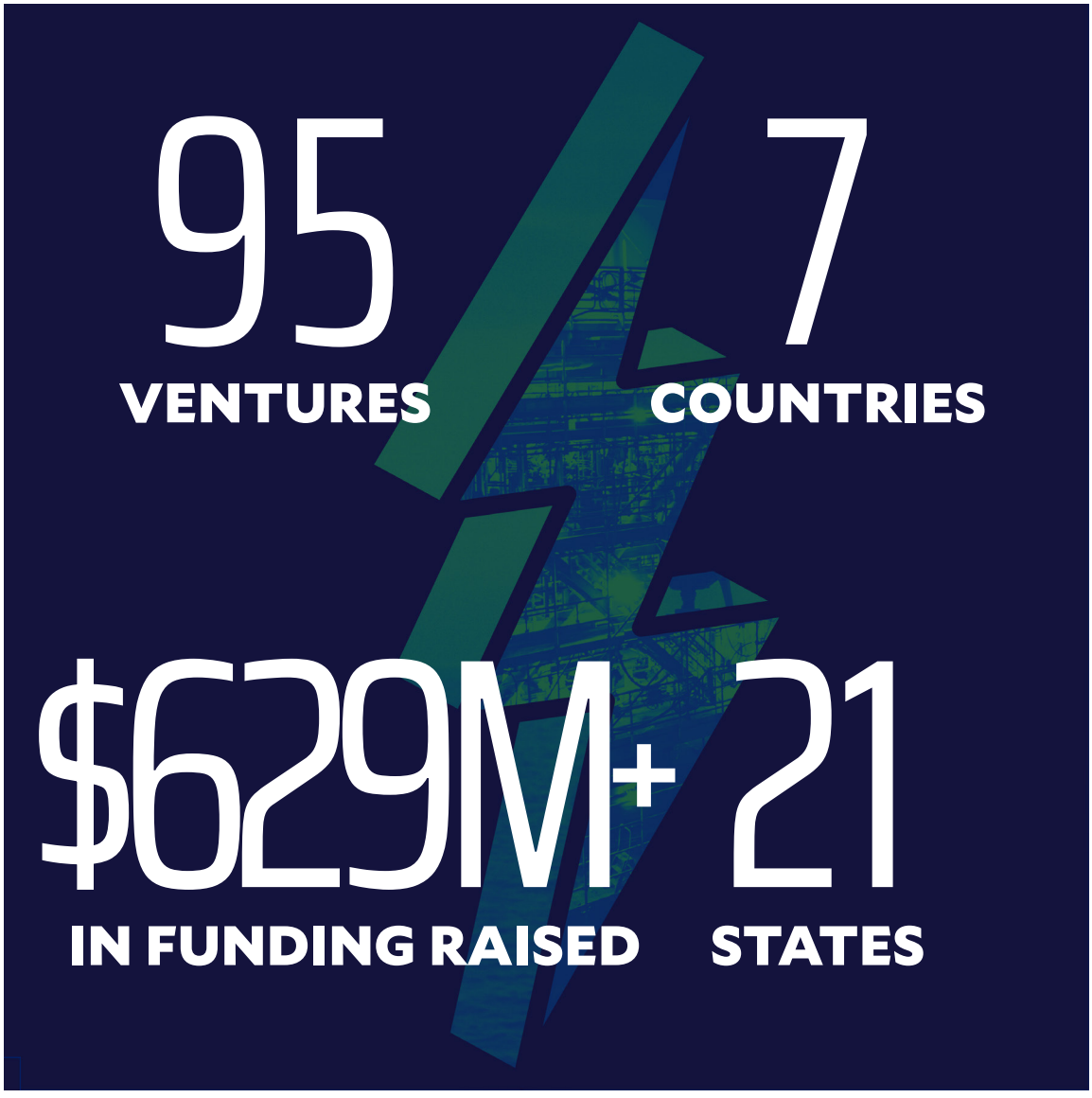
ENERGY TECH VENTURE FORUM

PARTICIPATING VENTURES



1s1 Energy, Portola Valley, California

There is an ongoing effort to produce low-cost green hydrogen. Looking at this problem from first principles, we found that most electrolyzers today use components made from materials developed 50 years ago. 1s1 Energy is creating new materials to unlock unprecedented electrolyzer efficiency, durability, and CAPEX levels, fundamentally changing the game's rules. We use our materials to make next-generation components and vertically integrate them into modular stacks to produce the world's cheapest green hydrogen in centralized and distributed settings. 1s1 will provide its modules to hydrogen producers with EPC partners, leveraging their balance-of-plant expertise and scale.

www.1s1energy.com

Thiago Figueiredo: thiago.figueiredo@1s1energy.com

AKOS Energy, Austin, Texas

AKOS provides operating companies in the energy sector with improved sustainability, reduced environmental impact, and more attractive economics by supplying proprietary oil, gas, and geothermal well intervention and drilling services. Rather than following the conventional vertical integration model embraced by most global service companies, AKOS delivers its services by partnering with regionally based service companies - enabling their existing, conventional conveyance assets to deliver smart, technology-based enhanced services. The company utilizes a Technology-as-a-Service (Taas) model and has offices in the United States, Saudi Arabia, and the UAE. AKOS' specialized equipment, processes, framework, and software are protected by a broad portfolio of proprietary technologies and a significant collection of issued and pending patents.

www.akosenergy.com

Kent Kalar: kent.kalar@akosenergy.com

Aperta Systems, Plainsboro, New Jersey

Algae-based biofuels are promising candidates in providing renewable energy sources while suppressing carbon dioxide emissions, associated with thermal power generation. Algae cell cultures demonstrate the highest lipids production rates among photosynthetic cell cultures. The challenge associated with algae-based biofuels is the high capital and operating costs of facilities. Due to limited photosynthetic efficiency, a substantial area has to be devoted to the growth of algae culture, accompanied by complex fluid management infrastructure. Aperta Systems develops a different approach to algae-based carbon utilization with a unique flow management system. Aperta Systems converts existing or abandoned open pit mines into large-area photoreactors. Algae and other single cells are capable of producing valuable ingredients such as bio fertilizers that can serve as valuable products.

www.apertasystems.com

Alexei Goun: alexei.goun@gmail.com

Atargis Energy, Pueblo, Colorado

Ocean wave-based electricity is a $500 billion opportunity, but every technology before Atargis is simply too expensive to make sense. The 2.5 MW Atargis CycWEC has a fully-loaded NREL model-projected LCOE of $0.06 per kWh at 1 GW. Lower at great scale. This is 10-20 times lower cost than any competition, and 50% lower than floating offshore wind LCOE projections. Patented hardware and critical, but undisclosed, software has proven capture of 95% of the energy in each ocean wave. Ocean friendly and survivable, CycWEC's will be located in 150 to 300 feet of water, operating autonomously well below the ocean surface, even during severe storms. Partnering with offshore energy developers to provide lower cost, more predictable, baseload, generation with much less impact on oceans. $4 million grant funding from the DOE and two energy majors to conduct prototype testing to achieve TRL 6 and close A round late 2024/early 2025.

www.atargis.com

Bill Hartman: bill.hartman@atargis.com

Ayas Renewables, Bessemer, Alabama

Ayas Renewables is a green chemistry company formed in 2016 with the goal of being self-sufficient in the production of a low-cost sustainable, carbon-reducing propylene glycol ("PG") for the aircraft deicing fluid ("ADF"), which is up to 88% PG. Our chief scientist won the US Presidential Green Award, the EPA's highest, and has since developed our technology from a 2-step liquid-phase process to a 1-step vapor-phase process allowing us to offer a leading 99.9% pure bio-renewable PG at the same cost or less than petroleum-based producers while reducing carbon by 78+%. Our CEO has bought and sold billions of pounds of PG and previously built and operated the largest ADF company in the USA. We are now commercial ready with a biofuel partner supplying feedstock, Gulf coast site, and offtakers and raising a final development round for FEL-3 engineering in prep for project finance (2024). Additional-products: HA, DHA, DPG, SAF-bolt-on.

www.ayasrenewables.com

Joe McGrail: joemcgrail@ayasrenewables.com

Ayrton Energy, Calgary, Alberta, Canada

Ayrton's liquid organic H2 carrier (LOHC) storage technology presents an opportunity for large, scalable and efficient transport of H2 over long distances, while mitigating H2 loss and pipeline corrosion. The storage technology provides a dense H2 storage medium without cryogenics or pressure. Ayrton's proprietary technology stores hydrogen in a liquid, making it as manageable and transportable as gasoline. This breakthrough allows hydrogen to be utilized as a fuel for auxiliary power generation systems, which can be scaled from kilowatts to megawatts in size to meet energy needs above grid capacity or in the case of power outage. Ayrton's technology not only facilitates safe and efficient hydrogen storage but also enables its transportation through existing infrastructures, including tanks, transport trucks, and pipelines.

www.ayrtonenergy.com

Natasha Kostenuk: nkostenuk@ayrtonenergy.com

Carbix, Quincy, Massachusetts

Carbix captures point source emitter CO2 and transforms emissions into raw materials, like carbonates, which can be used in a wide range of products, specifically, but not limited to, building materials for the global construction industry. CO2 is permanently stored in the product throughout its' lifecycle. CO2 and mineral feedstock(s) are combined in our proprietary fast batch and continuous flow reactors. We create salable materials that are low carbon, carbon neutral, and carbon negative. The Carbix X-2 (advanced photo-bio reactor) is designed to work as a drop-in carbon capture and use (CCU) technology that is primarily installed onsite of point source emitter plants. Alternatively, CO2 emissions can be processed off-site of the host facility in the Carbix reactors.

www.carbixcorp.com

Johann Sammy: johannsammy@carbixcorp.com

Carbon Loop, New Haven, Connecticut

Our mission is to make carbon capture and conversion scalable, competitive and circular by upcycling industrial emissions into valuable green chemicals. We will do this through carbon dioxide electrolysis using our proprietary catalyst to convert captured carbon dioxide into methanol in the first known one-step and low-temperature electrolysis of CO2 into methanol.

www.carbonloop.earth

Perry Bakas: perry.bakas@yale.edu

C-Quester, Los Angeles, California

C-Quester, Inc. offers state-of-the-art services and equipment to capture carbon dioxide (CO2). Based upon original research and development done at Caltech under Professors Hunt and Hoffmann, C-Quester delivers carbon neutrality for traditional electricity production without sacrificing cost or reliability. Our patent-pending granulated metal carbonate sorption technology (GMC) captures over 90% of the CO2 emitted from post-combustion point-sources (flue gases). With a low footprint and few permitting requirements, GMC is easily and quickly fitted to existing gas-fired power plants. As such these plants are able to continue operating through their full life-cycle, as well as at night and during poor weather when renewables are forced to rely upon previously stored energy. We are able to offer carbon capture and storage (CCS) as a service for approximately $60 per ton of CO2. The client keeps ownership of the CO2 captured and can obtain applicable tax benefits (e.g., 45Q).

www.cquester.net

Clement Cid: clement@cquester.net

CryoDesalination, Houston, Texas

CryoDesalination is a freeze desalination process that can remove salts and heavy metals from produced water, seawater, and industrial wastewater. It can also harvest valuable minerals from water and brines. When using conventional energy, the Capex and Opex are 40 - 50% lower than reverse osmosis or thermal desalination. When using ìcold waste energyî from sources including Air Separation Units or LNG regasification, the CryoDesalination process can desalinate water at 1/10th the cost of competing processes, and with zero carbon emissions.

www.cryodesalination.com

Billy Buchsbaum: billy@cryodesalination.com

Deep Anchor Solutions, College Station, Texas

Deep Anchor Solutions LLP (DAS LLP) is a spin-off startup from the NSF fundamental studies on developing innovative and cost-effective anchor systems for securing single or multiple floating offshore renewable energy platforms into the seabed. DAS LLP will provide IP-based anchor designs and relevant geotechnical consulting services to prospective customers: anchor installation methods, anchor design depending on soil and environmental conditions, anchor logistics, and operation and management of the anchors. Our vision is “Innovating for a Sustainable Future,” representing DAS LLP’s firm commitment to the highest customer satisfaction, as well as qualitative growth.

www.deepanchorsolutions.com

Junho Lee: DeepAnchorSolutions@gmail.com

DG Matrix, Cary, North Carolina

DG Matrix produces next-generation modular, reliable, and adaptable power electronics that resolve the size, speed, and versatility requirements for fast DC electric vehicle charging and microgrid markets. With unmatched size reduction up to 10:1, DG Matrix enables rapid installation and deployment in areas previously inaccessible with existing technology. Our industry-leading multi-port architecture allows anyone, anywhere to power anything with any energy source, AC or DC. The product dynamically integrates all energy sources, including solar, wind, battery storage, grid, fuel cells, generators, and more, actively alleviating utility constraints for implementation and enabling increased reliability while reducing emissions.

www.dgmatrix.com

Haroon Inam: haroon.inam@dgmatrix.com

Digital Carbon Bank, Calgary, Alberta, Canada

Digital Carbon Bank presents an AI-powered platform tailor-made for businesses striving for efficient carbon asset management. Designed to cater to both standalone enterprises and joint ventures, our solution streamlines the intricate process of tracking and optimizing digital emissions. By demystifying the complexities of carbon tax implications and maximizing the potential of carbon credits, we empower our clients to meet stringent ESG standards with confidence. Our primary target audience includes diverse industrial organizations with extensive facilities and assets, joint venture partners, and any enterprise confronted with emissions management, carbon tax liabilities, and sustainability reporting obligations.

www.digitalcarbonbank.ca

Ron Visser: rvisser@DigitalCarbonBank.ca

Drishya AI Labs, Calgary, Alberta, Canada

Drishya AI is an award-winning Calgary based Industrial AI company specializing in creating digital twins of legacy industrial facilities in sectors such as Oil & Gas, Petrochemicals, and Utilities. Their innovative use of AI enables them to rapidly and cost-effectively generate digital twins, providing asset owners with valuable insights to optimize operations, accelerate decarbonization efforts, and achieve sustainability goals. With their expertise in Industrial AI, Drishya AI is at the forefront of revolutionizing how industries leverage digital twins and historian data for improved efficiency, digital transformation from the ground up and environmental impact.

www.drishya.ai

Amardeep Sibia: amardeep.sibia@drishya.ai

Earthbound.ai, San Francisco, California

Earthbound.ai is an AI platform to predict where the environment causes wear and tear across infrastructure. Infrastructure, such as pipelines and power lines, extend for thousands of miles across different landscapes, vulnerable to changing weather, water, soil, temperature, and terrain. Energy companies need a way to predict the state of their assets in real time, at scale, and at any location, even when there are no observations for that location. With our platform, companies can infer risk at any point along their physical infrastructure, accounting for the distinct environmental variables that change along the way. This helps companies generate a complete and consistent view of their assets. Our initial focus is in Oil and Gas and we are helping companies infer geohazard risks to pipelines in real time, and at any point along the pipeline network.

www.earthbound.ai

Mollie Hector: mollie@earthbound.ai

EarthBridge Energy, Tomball, Texas

An abundance of renewable energy is being wasted due to a mismatch between when solar and wind energy are available and when power is needed. EarthBridge Energy is developing grid-scale technology to store power that would otherwise be wasted for when it's needed, wherever it's needed. Current energy storage is high cost, requires emission-intense mining, and can only supply power for a few hours. Our GeoBattery solution safely stores waste power as heat energy underground for hours to months. When energy is needed, the stored heat energy generates renewable power or is used directly for heating or cooling.

www.earthbridgeenergy.com

Derek Adams: derek.adams@earthbridgeenergy.com

EarthEn, Chandler, Arizona

Our patented novel thermo-mechanical storage solution uses CO2 in a closed loop to store 4-100+ hours of energy at a low cost & highly scalable manner. Our modular technology decouples the energy & power units, so that as customer's grid needs increase, they can continually upgrade their main frame system to support their increased needs. Our solutions are more cost effective, scalable, safer & uniquely future-proof than the current storage solutions. We leverage AI to optimize peak demand pricing for our customers to continually lower their OpEx & enable grid resiliency with predictive analysis.

www.earthen.energy

Manas Pathak: manas@earthen.energy

Element Resources, Houston, Texas

Element Resources is in progress to build, own, and operate the Lancaster Clean Energy Center in Lancaster, California. The Lancaster Project comprises 1400 acres for an off-grid PV solar power green hydrogen development. Expected to be ready to take FID at the end of 2023. The project will deliver 20,000 metric tone per year of green hydrogen from later 2025. Element has secured an additional 7,000 acres for its Borax project that will be developed subsequently. In addition to green hydrogen this project is being designed to deliver a range of derivative products including Ammonia, SAF and other eFuels. At both sites Element will capture the oxygen produced from electrolysis such that it can be made available for local community medical facilities as well as for commercial sale.

www.elementresources.com

Ian Dunderdale: idunderdale@elementresources.com

Enoverra, Houston, Texas

Enoverra has developed a patent pending (x3) low energy, hydrothermal reactor that has re-purposed proven petrochemical infrastructure and technique to convert biowaste to a carbon neutral feedstock for transitional biofuels, SAF, renewable chemicals and carbon sequestration. Deployed at source and at scale in a small footprint high volume system it enables onsite waste management enabling industrial producers to eliminate 3rd party disposal while monetizing biowaste streams, decarbonizing and producing monetizable carbon credits and offsets.

www.enoverra.com

Mukesh Kapila: mukesh.kapila@enoverra.com

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equipcast, Houston, Texas

What We Do: We're addressing the next Energy Crisis. The Skills Gap. By combing subject matter expertise and operational data with Generative AI. We create digital engineer or "DigiEngineers". To do more with fewer resources, increase worker safety, and lower environmental impact for a lower opex.

www.equipcast.com

Sergio Tuberquia: sergio.tuberquia@equipcast.com

Eugenie AI, Cupertino, California

Eugenie is an AI platform for industries, using digital twins to monitor emissions, optimize performance, and reduce environmental impact. It offers comprehensive solutions for measurement, reduction, and management, with Explainable AI and satellite imagery. Eugenie empowers manufacturing companies to meet sustainability goals and comply with regulations, enabling eco-friendly practices throughout projects.

www.eugenie.ai

Soudip Roy Chowdhury: soudip.chowdhury@eugenie.ai

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ezNG Solutions, Spicewood, Texas

Our technology licenses allow 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 (iPLNGî) 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 ìbig switchî to less costly, lower carbon natural gas liquefaction and use. Near term, ezNG offers technology licenses for storage and transport of LNG or PLNG and LCO2. Longer term, ezNG will lead projects globally using its technology to help the world switch to greener liquid fuels.

www.ezNGSolutions.com

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

Feelit Technologies, Houston, Texas

Feelit is a company at the forefront of Industry 4.0, specializing in Predictive Maintenance for sustainable smart manufacturing. The company's innovative ink-based sensing technology employs a printed nanotechnology sticker sensor, wireless edge device, and proprietary analytics to detect parameter changes and predict upcoming failures in industrial systems. By offering real-time alerts of potential failures, Feelit prevents unscheduled downtime and optimizes system availability, ultimately contributing to the efficient use of resources and increased value creation. Feelit's asset monitoring solution delivers proprietary data analytics, which can easily integrate into current User Interface and IoT systems with a quick ROI. This end-to-end agile sensing and analytics solution combining hardware and software provides actionable insights that optimize the usage of the monitored assets in real-time.

www.feelit.tech

Shoshi Kaganovsky: shoshi@feelit.tech

Flash H2 Synthesis from Waste Plastic at Zero Net Cost, Houston, Texas

Hydrogen gas (H2) is the primary storable fuel for pollution-free energy production, with 90 million tonnes used globally per year. More than 95% of H2 is synthesized through metal-catalyzed steam methane reforming that produces 11 tonnes of CO2 per tonne H2. Our scalable procedure produces H2 in purities up to 94% at high mass yields. Sale of graphene byproduct at just 5% of its current value yields H2 production at negative cost. Life-cycle assessment demonstrates a 39-84% reduction in emissions compared to other H2 production methods, suggesting the flash H2 process to be an economically viable, clean H2 production route.

www.jmtour.com

Jim Tour: tour@rice.edu

Fluid Efficiency, Pasadena, California

Fluid Efficiency Corporation makes self-assembling high molecular weight polymers (ìMegasupramoleculesî, MSMTM) that have many applications, including drag reducing agents (DRAs) in pipelines, viscosity index improvers (VIIs) in lubricants, thickeners in hydrocarbon resins and mist control agents for fuel safety. Our business model is to produce these materials and sell to end-users, initially in the midstream pipeline space. We offer substantial material and cost savings over the incumbent products due to the unique nature of our MSM technology, and this translates to considerable value for the customer and high operational efficiencies.

www.fluidefficiency.com

Simon Jones: simon.jones@fluidefficiency.com

FluxWorks, College Station, Texas

FluxWorks is creating self-healing magnetic gearboxes that offer >99% proven efficiency, 4x quieter operation, and unprecedented reliability. Our lubrication-free magnetic gear technology unlocks unparalleled performance everywhere from outer space, to the ocean floor, to the inside of the human body. Our U.S. owned and operated, HUBZone-certified venture offers exclusive access to a range of defense and space opportunities. We aim to leverage venture capital and strategic partnerships to rapidly commercialize our unique protected intellectual property and offer a low risk, innovative, premium solution.

www.fluxworks.co

Bryton Praslicka: bryton@fluxworksllc.com

Forge, Lake Como, New Jersey

Forge is a decarbonizing waste refinery business with a proprietary transformation technology process that converts landfill-bound waste into superior biofuel products. Aiming to dethrone coal in heavy industry, Forge will first target cement providers and quickly expand into other industrial consumers of low-quality heat, such as steel and power. By introducing sustainable biofuel products, Forge has the opportunity to usher in a highly profitable market structure for heavy industry circularization by disrupting cementóan industry that contributes 8% of global emissions and commands a $700B market capófrom the inside out.

www.forgeindustries.co

Chelsea Boyle: chelsea@forgeindustries.co

Galatea Technologies, Calgary, Alberta, Canada

Galatea: The energy industry's best technology platform to digitalize, optimize and automate transportation workflows ñ enabling businesses with the data and tools necessary to maximize operational, financial and environmental performance. Galatea Technologies enables users to find the optimal combination of receiving facility and transportation providers and offers insights that lower OPEX, quantify GHG emissions, and provide cradle to grave regulatory compliance.

www.galateatech.com

Chad Hayden: chad@galateatech.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. Specifically, H Quest pioneered a methane pyrolysis process powered by microwave plasma that thermally converts (cracks) natural gas into clean hydrogen and valuable carbon materials with zero CO2 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 has just raised $3M to support a series of pilots leading to commercial offering within 18 months, and is gearing up for a Series A in early 2024.

www.h-quest.com

George Skoptsov: gls@h-quest.com

Heimdal, Wilmington, Delaware

Heimdal builds machines to capture ambient atmospheric co2 profitably using 45Q tax credits as our sole income. We use an efficient sorbent that passively uptakes co2, using ~1 acre of space per 1000tCO2/yr capacity. We take advantage of cheap natural gas near sequestration wells/EOR wells to run our process profitably. We are building a demonstration unit of our DAC process in the continental United States to be completed by the end of 2024. We will scale this up to 100kt+ upon completion.

www.heimdalccu.com

Marcus Lima: m@heimdalccu.com

Highwood Emissions Management, Calgary, Alberta, Canada

Highwood's mission is to collaborate, innovate, and educate our way to a world with effective and affordable emissions management solutions. We leverage thought leadership, operational expertise and strategic partnerships across the emissions ecosystem to help understand and proactively manage evolving regulatory and climate risk disclosure requirements. Highwood is trusted internationally and is the preferred advisor for Supermajors, IOCs and international regulatory bodies. We provide an independent and technologically agnostic view to help the industry lower routine and fugitives emissions in a cost-effective, transparent and auditable manner.

www.highwoodemissions.com

Molly Reyes: molly@highwoodemissions.com

Horne Technologies, Longmont, Colorado

Horne Technologies is a private firm pursuing a practical, inexpensive, near future path to fusion energy. By using a novel hybrid confinement system coupled with the ability to use rapid iteration technology, we are developing the solution to fusion energy. Horne Technologies has demonstrated the world's first continuous-operation enabled, superconducting high-beta style research device and our expert team of engineers and advisors are pushing fusion development to commercialization.

www.hornetechnologies.com

Tanner Horne: tannerhorne@hornetechnologies.com

Icarus RT, Carlsbad, California

Icarus RT, Inc. is an award-winning advanced engineering company based in San Diego, CA developing Quartet, a low-cost hybrid photovoltaic/thermal (PV/T) solar plus storage cogeneration system that nearly doubles the energy output of PV arrays. The Icarus Quartet system stores daytime solar thermal energy and provides hot water while cooling solar PV panels which improves array performance by 12% or more. For a 100-kW PV array, cooling will improve generation 20,000-kWh annually. Quartet displaces natural gas required for heating. A 100-kW commercial scale Quartet system generates 334,000 kWh/year and prevents 220 MT CO2e emissions. Quartet results in system payback with a three-year return on investment compared to traditional solar plus storage systems with more than a six-year payback. The system improves affordability, reliability, and performance which enables increased integration, deployment and operation flexibility allowing solar power to better match demand.

www.icarusrt.com

Mark Anderson: Manderson@icarusrt.com

Impact Technology SystemsAS, Olso, Norway

Impact Technology Systems

Impact Technology Systems AS ("ITS") has developed a technology that "bolts-on" to existing injection systems. The technology through repeated high amplitude impact pulses improves sweep efficiency of the injection flooding, by overcoming capillary forces. Improving the sweep efficiency the technology can improve both oil field recover and potentially increase CO2 injection efficiency in CCS projects. The Technology has been developed under a research program funded by the Norwegian Research Council. Laboratory tests on sandstone cores and two pilot tests on producing oil fields confirms a significant increase in oil recovery. Improving oil field production and recovery significant improves all production metrics, and importantly significant lowers Scope 1 emissions. Further it has the potential to improve the economics of CCS projects by reducing the capital needed during the development. The company is negotiating with several Oil and gas companies to perform further R&D and operational validation of the technology.

www.impacttechnology.no

Nicholas Maden: nm@impacttechnology.com

Imperium Technologies, Cedar Park, Texas

Steam is a staple utility widely deployed in industry, with $500 billion worth transported through pipes each year. An astonishing thirty-seven percent of the fossil fuels burned in the US are used to produce steam. Up to 20% of that energy is lost due to mechanical devices, known as steam traps, that are not monitored, are failure-prone, and haven't had any major innovation for over 30 years. Imperium Technologies is the first to provide an electromechanical steam trap that dramatically reduces these unacceptable losses through a smart IoT device that is both far more reliable and provides near real-time notification of device status ñresulting in unprecedented visibility of an entire steam distribution system.

imperiumzone.com

Brad Medford: bradmedford@imperiumzone.com

INGU, Houston, Texas

INGU is revolutionizing pipeline integrity programs by providing pipeline condition information over the full length of the pipeline under operational conditions. This allows operators to take a targeted, informed approach to their pipeline integrity program and keep their pipelines operating safely and efficiently. The INGU PipersÆ patented solution pairs a powerful, free-floating sensor system with machine learning based data analytics. Using the multi sensor suite, PipersÆ accurately identify and locate potential issues like leaks, deposits, and changes in wall condition that threaten pipeline health ñ without disrupting operations. PipersÆ are the most efficient and economic pipeline inspection solution to reach Net Zero and ESG compliance for the pipeline infrastructure and thus positioned to be the first ever Operating System for Pipeline Integrity.

www.ingu.com

John van Pol: john@ingu.com

Khepra, Hunstville, Alabama

Khepra's chemicals manufacturing platform technology leverages the temperatures and pressures generated by focused ultrasound to react waste biomass into carbon negative chemicals for agriculture. Their novel process converts sawdust into chemicals that improve soil quality and nutrient use efficiency of nitrogen and phosphorus to eliminate the GHGs and pollution caused by fertilizer application. Khepra's technology has applications outside of bio manufacturing. Khepra can recycle plastics into fuels, perform hydrodeoxygenation with supercritical alcohols, and beyond. Their proprietary system reduces reaction times by 80%, increases energy efficiency, and requires fractions of the capital cost when compared to other process technologies.

www.khepra.io

Julie Kring: julie@khepra.io

LiCAP Technologies, Sacramento, California

Energy storage is an exponentially growing industrial opportunity that depends on the cost competitiveness and sustainability of manufacturing processes along the battery value chain. One of the most energy-consuming and environmentally problematic steps of battery manufacturing is the electrode production via ìwet coatingî process. More than 40% of energy consumed by a Gigafactory is associated with the ìwet coatingî. LICAP Technologies, Inc. patented an innovative Activated Dry ElectrodeÆ process that offers significant advantages over the traditional ìwet coatingî process, such as much lower energy consumption, reduced CO2 footprint, small manufacturing footprint, and elimination of toxic NMP solvent from theî wet coatingî process. Additionally, LiCAP's process can directly recycle up to 100% of electrode trimmings thereby greatly improving the manufacturing yield.

www.licaptech.com

Linda Zhong: linda.zhong@licaptechnologies.com

Lithos, Denver, Colorado

LiTHOS mission is to deliver sustainable lithium production without the use of evaporation ponds. We are a US Department of Energy FAST TRACK grant Winner and a Colorado Advanced Industries grant winner. We offer AcQUA, a patent-pending electro-pressure membrane process and method for recovery and concentration of lithium chloride from aqueous sources. This process spans the pre-treatment of raw brines through the DLE concentration of lithium chloride process. We have a fully commissioned brine processing facility in Denver, Colorado. LiTHOS is currently focused on processing continental brines from several strategic resource owners located in the United States, Argentina, and Chile.

www.lithostechnology.com

Scott Taylor: scott@lithostechnology.com

Luminescent, Caesarea, Israel

Luminescent Power is a pioneering energy technology company focused on revolutionizing waste heat recovery and renewable energy storage. Our groundbreaking liquid-based isothermal engine offers a highly efficient and cost-effective solution for converting waste heat into clean electricity. With a temperature range of 212∞F to 1300∞F (100∞C to 700∞C), our versatile technology can capture waste heat from various sources. Our solution provides both environmental benefits and compelling economic advantages, with a simple payback period of less than three years. Through innovation, collaboration, and a commitment to sustainability, Luminescent Power is driving the transition toward a greener and more financially viable energy future.

www.luminescentpower.com

Doron Tamir: doron@luminescentpower.com

Make My Day, Tel Aviv, Israel

MAKE MY DAY optimize, simplify, and manage Electrical Vehicle (EV) Charging for fleets and drivers. Using unique data and technology, MMD helps their B2B customers reduce costs and Co2/carbon and provides them with a positive ROI from day one.

www.makemydayapp.com

Nisan Katz: nisan@makemydayapp.com

Mantel, Cambridge, Massachusetts

Mantel is developing the material solution to carbon capture. Our molten borate technology is designed to capture CO2 at the temperatures found inside boilers, kilns, and furnaces ñ enabling highly efficient carbon capture that has not been possible until now. We're a seed stage start-up spun out of MIT and working hard to scale our solution from the lab to industry. Supported by Breakthrough Energy, The Engine, and New Climate Ventures we're building a strong team and a deep network of partners to realize our vision for the lowest cost path to decarbonizing heavy industry.

www.mantelcapture.com

Cameron Halliday: Cameron@MantelCapture.com

Mars Materials, Houston, Texas

Mars Materials is a venture and Breakthrough Energy backed startup working to sequester CO2 into everyday products. Today, Mars is commercializing NREL developed process technology to produce acrylonitrile (AN) using CO2 and biomass. Mars' drop in replacement AN will enable emerging decarbonization applications in carbon fiber and wastewater treatment.

www.marsmaterials.tech

Aaron Fitzgerald: Aaron@marsmaterials.tech

Microgrid Labs, Boulder, Colorado

Electrification of Transportation is capital intensive and complex. Microgrid Labs offers software (EVOPT) to minimize total cost of operation and risks in fleet electrification. The unique nature of the solution is the joint modeling of transportation and energy. The software is aimed at organizations engaged in planning and operation of electric fleets.

www.myevopt.com

Namit Singh: namit@microgridlabs.com

Mirico, Didcot, Oxon, United Kingdom

We measure climate gases (inc. methane, carbon dioxide, nitrous oxide and ammonia) , across wide areas (up to half a square mile) and in all conditions (rain, fog, sand , etc.). A key differentiator is our super sensitivity, so we can quantify emissions as well as detect and locate leaks. We help clients reach net zero by giving them accurate real time awareness of emissions from their infrastructure, no matter how large or complex the facility. We are initially targeting methane as this is a huge issue in energy, but also an area with major reductions possible by 2030. The fossil energy industry alone is expected to deploy measurement solutions worth >$2Bn+ p.a. Our initial solution is available, honed through >20 projects with partners. We are already engaged with energy companies inc. Shell who are also an investor. And we have run measurement projects in agriculture, landfill and biogas too.

www.mirico.co.uk

Bob Flint: bob.flint@mirico.co.uk

Mobilus Labs, London, United Kingdom

Mobilus' mission is to reinvent voice communications for frontline workers, empowering teams to communicate, collaborate, and enable digital workflows safely and effectively in any environment. The company is currently focused on the energy and manufacturing sectors, where improvements to safe communication and team productivity can have the greatest impact in improving safety, reducing downtime, and reducing project costs. Mobilus' hardware/ software solution includes the mobiWAN, an ear-free, noise-free, and intrinsically safe headset, built on their patented two-way bone conduction technology,. The mobiWAN enables clear voice communication in and out of extremely noisy Industrial environments (95 dB+) and is compatible with both single and double hearing protection. Likewise, Mobilus' voice communications software, mobiTALK, brings digital / VoIP to the field with a Push-to-Talk (PTT) software solution designed for the frontline workforce.

www.mobiluslabs.com

Jordan McRae: jordan@mobiluslabs.com

Moblyze, Houston, Texas

Recruitment technology used in the energy industry today was literally invested in the last century. And yet the need for smarter ways to connect workers and projects is greater than ever. Moblyze builds on the success of the talent marketplace model from the retail, creatives and healthcare industries and applies it to more the complex and highly regulated energy industry. Energy companies are crying out for innovative ways to find talent and Moblyze provides a digital means of building their on demand, all energy workforce whilst offering a means to track and optimize workforce carbon footprint. For workers Moblyze empowers freelancers and contractors to participate in the energy sector workplace on their own terms, thus addressing the cultural shifts of the pandemic and the rise of the gig economy. Put simple we (a) connect talent and opportunity in real time (b) enable fuel source cross skilling (c) track CO2 footprint.

www.moblyze.me

Mark Hannigan: mark@moblyze.me

Muon Vision, Cambridge, Massachusetts

Muon Vision mission is to boost the efficiency, sustainability, and safety of the mining industry by leveraging a transformational, deeply penetrating subsurface visualization technology called muon radiography. We use this to characterize, digitally map, and continuously monitor subsurface bulk densities and fluid saturation content, allowing operators to shine a light on non-productive zones and areas at risk of collapse in leaching heaps, mineral stockpiles, and mine tailings storage facilities.

www.muonvision.com

Tancredi Botto: tbotto@muonvision.com

MyPass Global, Sydney, New South Wales, Australia

MyPass is a workforce compliance ecosystem designed to help companies in highly regulated sectors to ensure that they have the right workers with the right skills at the right time, performing their tasks on a site or facility. We enable companies to get off spreadsheets or standalone systems to manage safety-critical worker data, and also reduce their operational costs. The key difference with MyPass is that workers are empowered through a digital Skills Passport that they own and control. This creates a single source of truth of verified information that is portable, and with that individual's permission can be shared with one or more companies across the industry, or across multiple industries.

www.mypassglobal.com

Matt Smith: msmith@mypassglobal.com

Nano Nuclear, New York, New York

NANO Nuclear's subsidiary, HALEU Energy Fuel Inc., will focus on the future development of a domestic source for a High-Assay Low-Enriched Uranium (HALEU) fuel fabrication pipeline for the broader advanced nuclear reactor industry and providing fuel to power NANO Nuclear reactors. NANO Nuclear's products in technical development are ìZEUSî, a solid core battery reactor, and ìODINî, a low-pressure coolant reactor, each of which represent advanced developments in portable, on-demand capable, advanced nuclear micro reactors.

www.nanonuclearenergy.com

Jay Yu: jay@nanonuclearenergy.com

Natrion, Champaign, Illinois

Natrion is commercializing a new plug-and-play battery component called LISIC that can be rapidly implemented by OEMs into existing production lines to mitigate fire risk, improve durability, and enable the use of new high energy capacity chemistries. Natrion's solution is a lithium-ion battery (LIB) solid-state electrolyte (SSE) component designed to overcome hurdles that have prevented the mass market adoption of electric vehicles (EVs). With Natrion's LISIC, automakers will be able to immediately implement fast charging capabilities, realize significant safety improvements as well as double the driving range of their EVs.

www.natrion.co

Thomas Rouffiac: trouffiac@natrion.co

NobleAI, Concord, California

Noble AI enables chemicals, materials and energy companies to develop better performing, more environmentally sustainable and more reliably sourced products. Our innovative Science-Based AI technology and powerful cloud-based NobleAI Reactor Platform dramatically speed up product development and substantially reduce costs. NobleAI is already delivering real value in commercial use cases at leading chemical, material and energy companies around the world.

www.noble.ai

Sunil Sanghavi: sunil@noble.ai

NovaSpark Energy, Houston, Texas

NovaSpark unleashes the power of Green Hydrogen for reliable energy. NovaSpark is a revolutionary company that is leading the way in green hydrogen production. We believe in the importance of renewable energy and strive to produce it in an efficient and cost-effective way. Our innovative hydrogen generator is capable of producing hydrogen on-site without the need for external sources of energy. NovaSpark can be deployed most anywhere & provides a more reliable modular energy source with lower lifetime costs versus traditional energy sources. Our mission is to provide a sustainable and reliable source of hydrogen, so our customers enjoy the benefits of cost-effective sustainable energy. With NovaSpark a customer can save up to 70% in Energy Costs Powered with our H2 Energy generators. Reduces Annual Operating Expenses with faster payback and higher revenues.

www.novasparkenergy.com

Rick Harlow: rick.harlow@novasparkenergy.com

Numat, Skokie, Illinois

NuMat is a global leader in the field of precision chemistries. Our solutions are changing the way industries around the world capture and separate the hazardous chemicals negatively impacting human health and the environment. NuMat has been at the forefront of Metal-organic framework (MOF) research and production for over a decade, and is the first company to successfully commercialize MOFs. Our world-class platform integrates MOFs into existing products and processes, merging chemistry innovation with manufacturing at industrial scale. Through bold and transformative chemistry, we're helping our global customers and partners make meaningful progress toward their net zero and innovation objectives.

www.numat.com

Ben Hernandez: ben@numat-tech.com

Oceanways, London, United Kingdom

Oceanways is an underwater transport solutions company building low-cost, zero-emission & long-range AUVs(Autonomous Underwater Vehicles) for energy transport, offshore carbon storage & ocean restoration/data collection. We call our solution underwater virtual pipelines. We have completed our sea trials in Florida and currently working to deliver our first commercial paid pilot. These AUV(s) costs $100k and can generate $1.4m annual revenue from an ideal site. We are currently focusing on hydrogen transport which has high off-taker risk. Energy producers who do not want to install large scale production sites and a sized pipeline. (Nord Stream 2 costed $10bn and 10yrs deployment time), Oceanways provides the energy producer a low-cost way to build a smaller production site with 40 electrolyzers/10 submarines which can scale-up with off-taker demand, instead of investing huge capex building a full-scale production site & pipeline. Pipelines have seabed interference, decommissioning emissions/costs , and high stranded asset risk.

www.oceanways.co

Dhruv Boruah: dhruv@oceanways.co

Octet Scientific, Cleveland, Ohio

At Octet Scientific we design and manufacture electrolyte additives that extend cycle life, increase energy density / capacity, and raise efficiency for aqueous metal-based batteries like those made of zinc. Our products are proprietary organic chemicals that we produce and sell to battery manufacturers in markets such as grid storage, stationary power (backup batteries), consumer electronics (AA, AAA, etc.), military, medical, and others. Over 30 battery manufacturers are testing our portfolio of products, covered under six patent applications so far, and we are already producing and selling trial material to customers in North America, Europe, Japan and Australia.

www.octetsci.com

Onas Bolton: onas.bolton@octetsci.com

Ourobio, Indianapolis, Indiana

Ourobio is a young synthetic biology, biomaterials, and circular economy company. We develop engineered microorganisms to turn industrial byproducts into low-footprint, bio-based biodegradable plastic resins and additives. Our technology is unique in its ability to produce complementary bio-based, biodegradable products in a single fermentation process, and our proof of concept uses dairy industry byproducts to co-produce bio-based, biodegradable plastic resins and colorants - lowering the cost, footprint, and difficulty of producing marketable/brandable, fully bio-based biodegradable products and packaging.

www.ourobio.com

Alec Brewer: abrewer@ourobio.com

Perceptive Sensor Technologies, Tucson, Arizona

Perceptive utilizes on-edge, ultrasonic fingerprinting, from the exterior of pipes and tanks to identify and track liquids in real time without a physical lab sample. The technology is scalable to monitoring gases or industrial water. Acoustic identification provides continuous real-time information at the facility level, critical information for operational decisions, and a platform for continuous data throughout any supply chain with affordable products and services. Our two IIoT solutions are Fluid ID which identifies flowing liquids and their characteristics (density and viscosity). Future applications may involve blending and flow volume. Tank ID alerts users of overfills in AST tanks.

www.perceptivesensors.com

Jim Paladino: Jpaladino@perceptivesensors.com

PetroBricks, Arvada, Colorado

There's a shift taking place in oil and gas data technology. Yesterday, data moved through a linear stack with SCADA at the bottom and SQL-based well data management systems at the top, and for the most part, everybody spoke the same languages Modbus and SQL. Today looks more like a mesh. IIOT sensor platforms, SAAS applications,3rd party analytics, and they all speak new languages like JSON web APIs and MQTT. There's value in these tools, but to get at it companies need to connect them to the existing enterprise. PetroBricks provides a bridge to the old, and tool to automate the new. It's a turnkey solution for quickly creating and managing data automations between the systems you use to drive daily decision making.

www.petrobricks.com

Rudy Lacovara: rudy@petrobricks.com

Piersica, Tallahassee, FLorida

Piersica is a next-gen battery technology company, pushing the envelope to triple the energy density of commercial lithium ion. Our target is >630 Wh/Kg in energy density. We have a unique battery design that can achieve such ultra-high energy density. We own our 2 proprietary core technologies. In 2022, we received a number of grants from: NSF, US Army, US Airforce and DOE.

www.piersica.com

Claudiu Bucur: amir@piersica.com

Planckton Data Technologies, Houston, Texas

Planckton provides a solution that focuses on two major capabilities designed to make informed decisions on carbon management. The first component of the solution is to assist companies in gaining visibility to their overall carbon footprint and meeting regulatory reporting requirements. Following the principle that you can't manage what you cannot measure is an important starting point. The second component, and most valuable, is the insights on emissions intensity across the company's operations. Leveraging this information provides the quantitative insights needed to reduce carbon emissions while optimizing business performance. In most cases, these critical decisions are needed for clients to drive their climate reduction initiative portfolio. Our solution is to help our customers be better stewards to climate change while increasing shareholder value in the Energy industry.

www.plancktondata.com

Jim Soos: james.soos@plancktondata.com

Polystyvert, Montreal, Quebec, Canada

Polystyvert, a Montreal-based clean technology company, is revolutionizing the world of recycling and setting up a circular economy for plastics. Using its unique dissolution recycling process, Polystyvert can recycle plastic waste that is usually not recycled due to its high contamination level. The result is a recycled raw material of unparalleled purity that can replace virgin plastics while reducing greenhouse gas emissions up to 90%. This Canadian innovation has been patented in more than 20 countries and now offers a sustainable alternative to virgin plastics for industries such as electronics, toys, packaging and automotive.

www.polystyvert.com

Nathalie Morin: nmorin@polystyvert.com

Poseidon Minerals, Richmond, Texas

The company's objective is to use direct lithium extraction (DLE) technology to extract battery-grade Lithium Carbonate from wastewater that is a byproduct of oil and gas production. The Permian Basin, which produces 30M barrels of water per day, has potential to yield enough Lithium to power 5-10 million electric vehicles annually. Lithium is sourced primarily from three regions: South America, Australia, and China, which account for over 96% of the world's supply with 79% of batteries manufactured in China. However, with the increasing global demand for Lithium batteries across various industries, the current supply chain is both logistically complex and environmentally unfriendly, particularly considering the emergence of electric vehicle and battery manufacturers in the United States. The carbon emissions from transportation logistics are significant and could be considerably reduced by sourcing Lithium locally. Furthermore, Poseidon Minerals' use of DLE technology significantly reduces amount of fresh water required for Lithium production.

www.poseidonminerals.com

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Predyct, Sugar Land, Texas

The global level of wind power installations is forecasted to quadruple by 2030. Concurrently, there is a significant increase in reported downtime and massive service costs. Operators and manufacturers want to lower their costs by a third and continue with the growth. Operation teams would normally send people with specialized equipment for periodic inspections, but this leads to expensive downtime and high costs. Predyct offers a game-changing solution: a maintenance-free, easy-to-install monitoring system powered by Nano-Engineered Zero-Power (NEZP) sensors. Augmented with AI, Predyct's system proactively delivers insights to boost production, slash costs, and minimize emissions, paving the way for a more efficient and sustainable wind energy sector.

www.predyct.io

Himanshu Maheshwari: himanshu@predyct.io

Princeton NuEnergy, Bordentown, New Jersey

Princeton NuEnergy (PNE) a U.S.-based, innovative clean-tech company founded out of Princeton University, is focused on the direct recycling of lithium-ion batteries sourced from manufacturing scrap, electric vehicles, consumer electronics, energy storage, and black mass. PNE's patented low temperature plasma-assisted separation process (LPASô) produces battery-grade cathode and anode materials suitable for direct reintroduction into cell manufacturing. PNE's direct recycling process provides strong ESG values and delivers recycling efficiency rates of over 95% at half the cost of conventional methods. The result: A fully domestic - truly circular economy!

www.pnecycle.com

Chao Yan: chao_yan@pnecycle.com

Protein Evolution, New Haven, Connecticut

Protein Evolution was founded in October of 2021 to help the chemicals and materials industries transition to a lower carbon, more circular economy. The company uses a combination of green chemistry and enzyme technology to break down synthetic polymers. The first application of Protein Evolution's technology is polyester textile waste, but the company plans to expand to other materials like polyamides and polyurethane. The company was started by Yale University alumni Connor Lynn, in partnership with Dr. Jonathan Rothberg, a world-renowned scientist, entrepreneur and National Medal of Technology and Innovation recipient. Based in New Haven, Conn., Protein Evolution has a partnership with ESPCI Paris, Fashion for Good, and 4Catalyzer, a life sciences accelerator dedicated to making a global impact through bold innovations in medicine, engineering, machine learning, life sciences and biotech.

www.protein-evolution.com

Connor Lynn: clynn@pei.bio

Qult Technologies, Edmond, Oklahoma

We have invented a radical technology that optimizes production in Upstream/ Midstream, minimizes equipment damage and eliminates SCOPE 1 Emissions by up to 98%. 5 Patents Pending. Our SaaS-based technology harnesses physics, thermodynamics and scientific computing for the benefit of the enterprise and the environment -- a win win!

www.Qult.ai

Waleed Nasir: waleed@qult.ai

Relyion Energy, Santa Clara, California

Physics-based machine learning (ML) and artificial intelligence (AI) software backed by distributed control architecture for second-life battery energy storage system. Technology is validated with 20+ years of life, minimal degradation, and significantly lower cost. The control architecture provides live data analytics, monitoring, and control of battery components.

investor.relyionenergy.com

Surinder Singh: surinder.singh@relyionenergy.com

RIvotto, Oceanside, California

Rivotto's Nx25 is an alternative, clean source of energy. By entering combustion via fuel or intake, it can co-exist with traditional combustion, reducing net carbon and pollutive emissions from those systems. It can operate independent from combustion as an energy source and can scrub CO2 as a primary function. Rivotto is a seed-plus stage company, and Nx25 is TRL 7-8 technology. We need your help to fund market validation testing and commercialization activities. We are also looking for an outstanding strategic partner in direct air capture, coal, cement, distillate fuels, or in aviation as a range-extending sustainable aviation fuel. Rivotto's Nx25 is the answer to abundant energy and a reasoned energy transition.

www.rivotto.com

Steve Shallenberger: sshallenberger@rivotto.com

Roboze, Houston, Texas

Roboze is replacing metal parts, helping companies to cut costs, time and emissions. Roboze produces parts using superpolymers and composites through its patented 3D printing technology leveraging a customer centric business model. Thanks to the Roboze technological evolution in the 3D printing, the company has created Roboze Distributed Manufacturing, the new production and logistics model that brings 3D printing to the world of customized manufacturing. With this model Roboze wants to connect demand with supply, creating a distributed production model, which allows to produce avoiding waste, reducing shipments, reducing CO2 emissions and bringing production back to the point of use.

www.roboze.com

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Sage Geosystems, Houston, Texas

Sage Geosystems is at the forefront of the renewable energy revolution, specializing in geothermal technology and geothermal energy storage solutions. With a passion for sustainable energy, we combine science, engineering, and innovation to unlock the full potential of geothermal resources. Our advanced GeoTwin modeling tool accurately predicts and optimizes geothermal power generation, maximizing efficiency and performance. We offer a range of subsurface tools and solutions tailored for different geological formations, making geothermal energy scalable and economically viable. Our commitment to baseload renewable energy is further demonstrated through our innovative geothermal energy storage systems, ensuring a continuous and reliable power supply.

www.sagegeosystems.com

Cindy Taff: cindy.taff@sagegeosystems.com

Salient Predictions, Falmouth, Massachusetts

Given increasing weather volatility, companies in the energy, agriculture, and financial services sectors making weather-informed decisions are leaving historical patterns in the past in favor of superior forecasts weeks and months ahead. Salient delivers accurate, reliable, probabilistic forecasts for temperature, precipitation, and other weather variables 2 weeks to 1 year ahead ó the subseasonal-to-seasonal (S2S) timeframe. Our science is the outgrowth of decades of research by scientists at MIT and Woods Hole Oceanographic Institute, pioneers in probabilistic forecasting. Salient?s forecasting models combine new insights from ocean and land-surface data, research-based weather analysis techniques, and deep neural networks. The reliability of our S2S forecasts has been validated by leading companies; world-leading research institutions like Woods Hole, MIT, and University of Oklahoma; and, U.S. government agencies, including the National Oceanic and Atmospheric Administration (NOAA) and the Bureau of Reclamation.

www.salientpredictions.com

Matthew Stein: mstein@salientpredictions.com

Sawback Technologies, Calgary, Alberta, Canada

Sawback Technologies is a near-surface sensing company, that has developed a proprietary solution to collect, visualize and analyze near-surface data to assess soil conditions and fluid spills, identify underground utilities to prevent worker fatalities, and civil infrastructure health.

www.sawbacktech.ca

Neil Keown: neil@sawbacktech.ca

Shoreline AI, Los Gatos, California

Shoreline AI, offers a cloud-based, AI/ML industrial asset performance management (APM) SaaS solution, which enables asset-intensive industries to monitor performance, improve efficiency, and extend equipment useful life, while unlocking rich operational data. We target machinery serving the energy, manufacturing, pharma and data-center cooling industries and currently have contracts with large enterprise customers in above verticals. Shoreline commercially launched its sensor/software analytics SaaS platform in Q3 2022 and has quickly scaled to many industrial customer sites. The company is founded by AI, ML, Cloud, HW and industrial machine modeling experts from Google, Apple, Adobe, Cisco, Marvell, Intel, VMWare, Bently Nevada, SKF, Honeywell, ITT and Life cycle engineering.

www.shorelineai.us

Kishore Manghnani: KISHORE@SHORELINEIOT.COM

Solidec, Houston, Texas

Solidec is developing technology to remove carbon and produce pure, concentrated chemicals with renewable energy. We use electricity to directly produce valuable chemicals, capture carbon dioxide, and convert carbon dioxide into useful chemicals and fuels. By electrifying these chemical conversions, we aim to engineer a sustainable, low-carbon future.

www.linkedin.com/in/ryanduchanois

Ryan DuChanois: rduchanois@gmail.com

Spectral Sensor Solutions, Albuquerque, New Mexico

Spectral Sensor Solutions LLC (S3) is a small business with a history of solving challenging measurement needs of the defense and aerospace industries. A key environmental technology, GreenLITEô, offers unprecedented capability for continuous monitoring of atmospheric greenhouse gases with specific application to detection, quantification and localization of emission sources within the upstream oil and gas industry. S3 is seeking partners, or strategic investors, to advance the GreenLITEô technology to a commercial offering as a standalone company focused on emissions monitoring as a service. With the right partner/investor, the GreenLITEô business has potential to exceed $90M in annual recurring revenues within 5 years.

www.s-3llc.com

Jeremy Dobler: Jeremy.Dobler@S-3llc.com

Talisea, Covington, Louisiana

Talisea LLC is a Louisiana Limited Liability Company and is developing novel platform and navigation technology to enable offshore wind development in the Gulf of Mexico. The conventional offshore wind model is stressed by tropical weather conditions where developers are passively accepting the risk. Talisea is rethinking the conventional wind model and developing technology, Hysea, to actively manage the tropical weather risk with mobile and deployable offshore wind structures. Hysea will host wind turbine and green hydrogen production equipment to capture and deliver a premium commodity into a $17b U.S. hydrogen market.

Elliot Metzger: e.metzger.biz@gmail.com

Teren, Lakewood, Colorado

Denver-based Teren delivers environmental twins by combining remote-sensing technology, ecosystem science, and 3D data-driven insights to model the environment surrounding infrastructure, capture change over time, and support asset resilience.

www.teren4d.com

Tobias Kraft: tkraft@teren4d.com

Terradote, Houston, Texas

Our patented, carbon negative manufacturing process will reduce carbon emissions by producing petroleum-free chemicals and replacing fossil derived chemicals. Our first product will be renewable acrylonitrile. It is a chemical intermediate to manufacture plastics, and fibers (our customers) which is used in every day objects such as toys, containers, and in vital components of automobiles, airplanes, computers, and medical devices. We use biomass, and captured greenhouse gases, and our waste is recycled back into to the system making us a zero waste manufacturing company. Our process also doesn't have any hazardous byproduct such as cyanide like our competitors. Not to mention, we conserve >2lb. of carbon emissions compared to the competitors who are emitting >4lb. of it per pound of acrylonitrile. We have an LOI, and received $3M in non-dilutive funding which helped us validate our technology, and product/market viability. Our next milestone is to scale to a pilot plant.

www.terradote.com

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TexPower, Houston, Texas

Conventional wisdom tells us that cobalt is required in high-energy electric vehicle batteries, but is it true? All battery companies are trying to reduce their cobalt usage in a stepwise fashion. TexPower EV Technologies, Inc. leapfrogs this iterative process with zero-cobalt battery technology that does not sacrifice energy, power, safety or any other performance metrics. The future of EVs is longer range, more affordable and cobalt-free. Descriptions of TexPower's nickel manganese aluminum cathode chemistry R&D, scale-up from the gram to 1000s of kilograms, company growth from founders to scores of employees, and TexPower's future as a leading EV supplier will be included.

www.texpowerev.com

Evan Erickson: evan.m.erickson@texpowerev.com

ThermoLift Solutions, Novi, Michigan

ThermoLift, Inc. is a revolutionary and disruptive technology addressing the severe energy and emissions challenge associated with heating and cooling of the built environment (~15% global carbon emissions). The core product is a thermal heat pump capable of delivering the most energy efficient, affordable, and clean heating, cooling and hot water solution to the residential and commercial building sector. The company has paid demonstration contracts in place with many of US and Canada's largest utilities which it is executing on now. Meanwhile, the company is currently preparing (and fundraising for) initial commercial market launch in 2024.

www.thermoliftsolutions.com

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Thiozen, Beverly, Massachusetts

Thiozen Inc. is a venture-backed spinout from MIT commercializing a novel process to produce low-cost and low emission hydrogen gas from hydrogen sulfide and water. Currently, the dominant technologies to produce hydrogen gas require the burning of large amounts of fossil fuels, leading to significant emissions. By providing non-carbon-based sources of hydrogen gas, Thiozen's newly developed process can dramatically reduce emissions in the energy industry.

www.thiozen.com

Ajay Bawa: ajay@thiozen.com

Tour Engine, San Diego, California

Tour Engine Inc. (TEI) has developed a high-efficiency low-emissions internal combustion engine that is protected by 45 issues patents. The first application to be commercialized is the Tour ENABLE System, an engine-battery hybrid Combined Heat and Power (CHP) system. TEI is in the process of teaming with financial partners, manufacturing partners, and marketing, sale, and service partners, to commercialize for the first time a high-efficiency and low-emissions micro-grid-in-a-box. The goal is to enable for the first time a prime-power Distributed Generation (DG) to substantially increase the efficiency and resiliency of the grid.

www.tourengine.com

Oded Tour: oded@tourengine.com

Triton Anchor, Chelmsford, Massachusetts

Triton Anchor provides affordable, locally fabricated, certified anchors for offshore renewable developers that are silently installed and removable in all soils. Our product has been supported by both private and government entities through ~$10M of highly competitive non-dilutive funding. The product utilizes highly efficient helical piles adapted for subsea use to solve the growing need of anchors for offshore industries. Triton is a Business Network for Offshore Wind Leadership Member, and a part of the Floating Offshore Wind Working Group.

www.tritonanchor.com

Nathan Krohn: nkrohn@tritonanchor.com

TROES, Markham, Ontario, Canada

TROES' "Microgrid-in-a-box" seamlessly integrates diverse power sources and load type to address power instability, peak charges, demand limitations, and off-grid diesel needs, yielding notably more affordable (as high as 50%) and environmentally friendly electricity. The solution is tailored for underserved midsize microgrids (30 KW to 2 MW) across applications such as commercial buildings, factories, EV charging, and remote locations. One typical application for oil and gas is to use this technology in a remote multi well production site with diesel generator and limited grid power. This vertically integrated approach transforms unprofitable microgrids into valuable assets, already securing $50 million in projects and $184 million in prospects through 15 long-term channel partners.

www.troescorp.com

Vienna Zhou: vzhou@troescorp.com

Trout Software, Paris, France

Software continues to eat the world, generating vast amounts of machine data (machine logs). These logs represent a crucial opportunity for companies to achieve operational excellence and bolster their cybersecurity postures ; but they are heterogenous, difficult to access and extract value from. To address this challenge, Trout Software has developed a state-of-the-art technology that provides the fastest route to unlocking value from logs. Our software empowers teams to seamlessly connect with their diverse systems, automate detections, and expedite responses. With our solution, customers like Thales have achieved a remarkable 65% reduction in response time for core business operations and established monitoring capabilities for restricted environments in a matter of hours.

www.trout.software

Florian Doumenc: florian@trout.software

Tuebor Energy, Ann Arbor, Michigan

Tuebor Energy is addressing the challenges of Lithium Sulfur (LiS) batteries by developing a nanoscale separator based on dispersed Aramid Nanofiber (ANF). Sulfur cathodes use abundant, inexpensive sulfur and have high specific capacity. However, commercial availability of LiS batteries has been hampered by lithium polysulfide shuttle (LPS), cathode expansion, and low electrochemical availability of cathode sulfur. Additionally, lithium metal anodes are susceptible to dendrite formation. Our scalable ANF material prevents LPS and suppresses dendrite formation. We have demonstrated LiS batteries with capacity of up to 1,268 mAh/g at 0.1C with 1.2mg/cm2 sulfur loading. In another configuration, our batteries exceeded 3,500 cycles at 3C.

www.tueborenergy.com

James Graham: jgraham@tueborenergy.com

Undesert Corporation, Los Alamos, New Mexico

Climate Change will cost corporations $200 billion by 2050. Governments and corporations need to combat climate change but current solutions are insufficient and lack transparency. Our initial target market of oil producers in the Permian Basin generate 1 billion gallons of produced water each day. This wastewater is currently pumped back underground as they do not have the ability to clean this water. Our patented water desalination technology can process this wastewater and use it for irrigation of desert forests in order to create novel nature-based carbon offsets. We are proud to announce that we are part of the Shell Gamechanger product accelerator and Techstars Industries of the Future accelerator. Nicholas Seet, CEO, Auditude Founder, who sold to Adobe for $120MM, won the RBPC in 2005 and received the first GOOSE investment prize and had two geese on his board at Auditude!

www.undesert.com

Nicholas Seet: nseet@undesert.com

Viridos, La Jolla, California

Current technologies are insufficient in meeting the dramatic increase in renewable fuels to decarbonize aviation and heavy transportation. Viridos is a CA based biotechnology company that leverages over a decade of leadership in synthetic biology, from its precursor company Synthetic Genomics, to produce the bio-feedstock of the future. Viridos creates microalgae with unprecedented oil productivity to generate an economical supply of low carbon algae oil that can be readily refined into SAF and RD. Viridos saltwater algae can be grown on marginal land and use very little freshwater, providing the scalable and sustainable solution to the low carbon fuel feedstock challenge.

www.viridos.com

Oliver Fetzer: ofetzer@viridos.com

Volexion, Evanston, Illinois

Drop-in, conformal pristine graphene encapsulation solution, protecting Lithium battery cathode materials and driving game-changing improvements (>3x cycle life, voltage range extension, safer materials & batteries, Increased power density and fast-charging, low temperature performance). Volexion further enables high-energy cathode materials, increasing energy density 30% and reducing cost 30%, a 10-year leap forward for the industry. Developed at Northwestern University by MacArthur fellow Pr. Mark Hersam, scaled-up at Argonne National Lab, Volexion received DoE's Ten@Ten award and is experiencing strong industry interest and traction from major battery players.

www.volexion-inc.com

Damien Despinoy: damien.despinoy@volexion-inc.com

Vroom Solar, Ozark, Missouri

Vroom Solar kits include our patent-pending control center, solar modules, and mounting or racking for do-it-yourself installation ñ no battery, grid, or solar experience needed. Our control center features solar-direct, multi-load management technology, which converts sunlight to usable 1,600 to 3,000 DC-watts power. Power influxes are managed like an automatic transmission, with power cycling through four standard AC outlets, based on available energy and load draw. A simple light bar across the front helps understand how to operate the system. Have portable power during daylight hours; add a battery of your choice for overnight usage if needed.

www.VroomSolar.com

Luke Phelps: luke@vroomsolar.com

Well Information Technologies, Littleton, Colorado

Well Information Technologies is a SaaS company building a job reporting tool for the oil & gas industry. The WiT Application focuses on consistent data entry, effortless data connection, simplified analysis, and confident decisions, quickly. We have simplified the job capture process saving time by reducing the need for data quality control, and saving money by increasing your well runtimes through failure analysis capabilities that you currently cannot find on the market.

www.wellinfo.tech

Cody Clickner: cody@wellinfo.tech

WellWorth, Houston, Texas

Granular well-level reserves data is too bulky for Excel, therefore, finance teams source aggregated data from engineering teams to build corporate models. Scenario analysis (e.g. price, costs, risking, drilling schedule etc.) requires weeks of to-and-fro between the two teams. WellWorth works with well-level data and helps finance teams: 1) perform asset valuation, 2) evaluate prospective deals standalone, or roll them up into a portfolio corporate model, 3) model corporate items like G&A, hedges, RBL, debt, equity etc. This integrated workflow lets customers flex asset-level and corporate-level assumptions, and see the effect on full-cycle economics and capital requirements, within minutes.

www.wellworthapp.com

Samra Nawaz: samra@wellworthapp.com

Xecta, Houston, Texas

Through our Products and services we help operators manage their assets to their maximum potential using a manage by exception system.

www.xecta.com

Jose Silva: jose.silva@xecta.com

Zsense Systems, Akron, Ohio

Zsense Systems aspires to commercialize innovative fluid sensor technology to bring to market an affordable and disruptive integrated oil condition monitoring system. Integrating these benefits provides monitoring capabilities for early detection, multi-material particle sensing, continuous, realtime and remote, harsh environments. This provides users with actionable information in assessing machine's health status and identifying/predicting machine failures and needed maintenance. Our technology helps solve critical problems in the power industry by addressing lubrication and component health assessment of turbines and other turbomachinery by providing realtime data for decision making and operational strategy.

www.zsensesys.com

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