



2S Water
Edmonton, Canada

2S Water have developed a sensor to detect metals in water in realtime. The current solution is to grab samples which are sent to the lab, a time delayed and error prone process. Realtime information is essential for process optimization, regulatory compliance, and early issue identification. Our first target in oil and gas is boiler water for sagd operations, where scaling agents can degrade machinery and send costs skyrocketing. Most of these issues focus around metals that, until now, no one could detect in real time. 2S Water's fully automated sensor provides realtime data, giving the instant feedback facility operators need.

Anthea Sargeant | asargeant@2swater.com



Abyssal
Matosinhos, Portugal

Abyssal helps energy companies by converting any existing video or drawings into a digital model so that data can be extracted, cataloged, analyzed, visualized and made accessible remotely in real-time from a secured, cloud-based server. The data is used from cradle to grave within three main phases:

1. Engineering and operational designs, procedures, and reviews.
2. Augmented overlay during ROV (remote operating vehicle) operations for enhanced visibility and auto metadata extraction.
3. Control and monitoring of AUVs (autonomous underwater vehicle) with real-time communications and recording.

*<http://www.abysal.eu>
Joao Ferreira | jferreira@abysal.eu*



Acoustic Wells
Somerville, Massachusetts

Reducing lifting costs and cutting methane emissions is a constant challenge for E&P operators. Acoustic Wells is democratizing Industry 4.0 innovations through a combination of MIT-developed novel signal processing, acoustic physics know-how and the latest in AI with easy-to-use edge-capable IoT hardware & software to monitor, control and optimize production equipment in real-time to maximize both output and equipment lifetime. From tanks to the wellhead, including our proprietary stethoscope for the well, our solution allows operators to reduce lifting costs & energy usage, streamline operations, and monitor & minimize methane emissions, all at a price point far below alternatives.

*<https://www.acoustic-wells.com/>
Sebastien Mannai | smannai@acoustic-wells.com*



AeroShield Materials
Hyde Park, Massachusetts

Invented by our founders at MIT, AeroShield manufactures a super-insulating, nanoporous form of glass for energy efficient windows. Our material can be placed between two panes of glass - replacing the gas-fill in a double-pane window - to create a product 50% more insulating, but with a payback period 5 times faster than windows of similar performance. We have achieved this insulating performance while maintaining glass-like optical clarity.

*<https://www.aeroshield.tech/>
Aaron Baskerville-Bridges | baskervillebridges@aeroshield.tech*



Akselos

Lausanne, Switzerland

We're working towards speeding up the exascale deployment of offshore wind by lowering the cost of energy, and making infrastructure more resilient, with condition-based monitoring and predictive maintenance at the centre of our efforts. We've taken the technology ubiquitously used in design, and applied breakthrough mathematics to make it powerful enough to also be used in operations. The result is our flagship product, the Digital Guardian, which monitors the structural condition of critical infrastructure in real time, by combining next-generation simulation software with sensors and data analytics. This offers asset owners/operators the ability to have eyes on their assets 24/7.

<http://akselos.com>

Mat Podskarbi | mat.podskarbi@akselos.com



Anthro Energy

Stanford, California

Based on patented research from Stanford University, Anthro Energy is commercializing robust polymer materials that function as electrolytes and binder materials in lithium ion batteries. The use of a nonflammable electrolyte enables our batteries to have unprecedented safety in comparison to other flexible batteries. In the short term, we aim to license our polymer technology to wearable electronics companies interested in radically improving the performance of their devices with flexible batteries. In the long run, our robust and safe polymer electrolyte can improve batteries in all applications.

<http://www.anthroenergy.com>

David Mackanic | david@anthroenergy.com



AquaNRG

Houston, Texas

AquaNRG is an environmental and energy tech company. We offer a pay-as-you-go SaaS application for state-of-the-art simulation platform built on BIG3 technology: chemistry-physics (BIG SCIENCE) informed AI (BIG DATA) powered by high-performance cloud computing (BIG COMPUTE). AquaNRG's technology has been used by major independent E&P companies for energy production and optimization, EOR, and CCUS. Through merging our platform with a novel waterflooding technology, we offer workflows resulting in 10%-30% improved oil recovery in tight formations. AquaNRG has been awarded 3 prestigious Small Business Innovation Research (SBIR) grants (\$1.4M) from the US Department of Energy and National Science Foundation.

<http://www.AquaNRGconsulting.com>

Babak Shafei | babak.shafei@AquaNRGconsulting.com



Archilex Holding

Nicosia, Cyprus

Lex Company with its HQ in Moscow provides innovative Electrical Submersible Pumping equipment for wide range of downhole conditions. Lex equipment technology takes its origin from aero-space pumps & motors designed for extremely high operating speeds, efficiency, velocities & cavitation requirements. Aero-space pumping requires the highest level of reliability and compact design. Lex ESPs designed for nameplate rotational speed of 10,000 rpm with a wide operating range between 1,000-12,000 rpm; 3-4 times higher than any other ESP in the world (typically rated narrowly from 2,400 to 4,200 rpm). Since 2016 Lex has successfully installed over 400 ESPs.

<http://www.lexsp.com>

Anton Shakirov | shakirov@lexsp.com



Ashaw Energy
Calgary, Canada

In Ashaw Energy we developed a software name “Eushaw Dynamic Software” that provides a platform for operators to keep all their data in a digital format and to easily analyze and model their wells with a state-of-art simulation engine. This helps to integrate complex modules and modeling into all areas of a business. The software that keeps the operator data, all service providers tools and most recent researches in academia into fully parallelized software, and user have access to such platform in a fraction of a second.

<http://ashawenergy.com>
Mazda Irani | mirani@ucalgary.ca



Battery Streak
Newbury Park, California

Battery Streak has successfully implemented our materials in 1000 mAh pouch cells capable of reaching 80% SOC in 10 min (6C charge) and retaining 85% of the original capacity after 3000 cycles. Additionally, the 10-min charge operation only raises the cell temperature to 95F. Our proprietary material has entered the production stage and is ready for cell builds in larger formats using existing battery manufacturing lines. The high power intake and output, with reduced heat generation, have shown potential for many applications, such as power tools, warehouse robots, and mobile applications including electric scooters and vehicles.

<http://batterystreak.com>
David Grant | dgrant@batterystreak.com



BeeX
Singapore, Singapore

BeeX is the first in Asia to manufacture our own hoover-capable AUVs and deploy them off Unmanned Surface Vessels, all controlled with our proprietary distributed software from Surface to Underwater. Our vehicles are designed with an Autonomy-First concept. This means unprecedented levels of optimisation and computational power subsea to make decisions real time, enabling superior asset integrity data collection as a seamless workflow, with greatly reduced costs and risks.

<http://www.beex.sg>
Grace Chia | grace@beex.sg



Belmont Technology
Houston, Texas

Belmont Technology has harnessed a wide range of Artificial Intelligence and Cloud technologies to automatically consolidate information available across your organization and enable real-time scenario evaluation. Belmont Technology is releasing its first commercial product Sandy 1.0 as an enterprise content management solution featuring advanced team collaboration capabilities. Belmont Technology is now building a central information and computation hub as a media for energy transition and climate change analysis. Sandy 2.0 will power the first collaborative media dedicated to the energy transition and providing an innovative concept of storytelling for scientific information.

<https://www.b15y.io/>
Jean-Marie Laigle | john@belmont.tech



Bluefield Technologies
Claymont, Delaware

Bluefield offers the ability to instantly monitor every critical emitting site on the planet, at high precision and at an affordable cost for large scale monitoring. We use proprietary satellite-based remote sensing and AI to capture methane emissions (and other gases) and offer emission data and analytics to our clients via a subscription. Bluefield will help monitor progress towards reducing these extreme greenhouse gases by becoming the “breathing monitor” of our planet.

<https://www.bluefield.co>

Yotam Ariel | y.ariel@bluefield.co



CalWave Power Technologies
Oakland, California

CalWave's solution and IP represents the next generation of transformational ocean energy technologies needed to finally unlock the vast carbon-free energy resources that exist in our oceans all around the world. In 2016, CalWave spun out from Cyclotron Road and was awarded a multi-million open ocean demonstration contract by the US DOE. In 2019, CalWave received two additional awards by DOE to 1) build a commercial scale drive train in parallel to our open water demo and 2) design the next generation of our technology. CalWave's “xNode” was awarded the Grand Prize of the discovery-stage of the Ocean Observing Prize.

<http://www.calwave.energy>

Marcus Lehmann | marcus@calwave.org



CarboEvolution
Houston, Texas

Associated natural gas flaring has become a growing environmental concern globally given the significant amount of CO2 emitted and the energy that is wasted. Oil producers often flare associated gas because its value is less than the gathering & processing cost. CarboEvolution, LLC (“Carbo”) is a development stage company which was formed to solve these issues utilizing small-scale, mobile, integrated gas processing/LNG plants. Carbo's initial fleet of liquefaction and ancillary equipment will be located in the Delaware/Permian Basin to collect wellhead gas streams that are otherwise flared and wasted, thus recovering energy, reducing CO2 emissions, and creating tangible value.

John Godbold | john.godbold@carboevolution.com



CarbonFree Chemicals
San Antonio, Texas

Our team has developed and operates SkyMine®, the world's first industrial-scale carbon mineralization facility, producing baking soda, and is ready to take SkyCycle®, our second act, to industrial scale. SkyCycle® is a patented industrial-chemical process that can tackle CO2 on a gigaton scale, converting it to safe secure calcium carbonate, and in-time to make a difference – US Patent granted March 2020. SkyCycle is the only tri-technology that has the potential to deliver:

- Carbon utilization (CCU);
- Carbon storage (CCS), and;
- CO2 direct air capture.

Backed by energy-savvy investors including Fortistar, Braemar, BP Energy Ventures, Husky Partners, Carl Berg and Apollo.

<http://www.carbonfreechem.com>

Martin Keighley | mkeighley@carbonfreechem.com



CCT Energy
Highlands Ranch, Colorado

In 2011 CCT began developing an affordable, versatile and long lasting large-scale thermal battery. In 2012, CCT Energy Storage produced its first working scale prototype Thermal Energy Device. Known as TED, the battery accepts any form of electrical input and converts and stores energy as latent heat. In 2019, TED was unveiled to the world and the first units tested in the field. In 2020 we achieved a superior levelized cost of storage to Lithium Ion batteries. We exclusively licensed 30 approved and pending patents and are ready to launch into several verticals in the US market.

<https://www.cctenergystorage.com/>
Scott Taylor | scott@reservoirimaging.com



CEGEN Environmental
Okotoks, Canada

CEGEN provides clients with holistic, innovative, and effective solutions to lower industrial environmental impact. CEGEN's products and services fall into four categories including Modular Data Center design and operation, Datum E Consultation and Mitigation Technologies, Clean Energy Gensets, and Industrial Noise Abatement.

<https://cegenenvironmental.com>
Steve Morgan | smorgan@cegengreen.com



Century Fathom
Seabrook, Texas

Century Fathom presents a novel method for sustainably producing natural gas from sub-sea petroleum reserves. Our patented process enables production of reserves which are deemed stranded either because of small production capacity or a high content of impurities (including CO₂). Introducing the latest advances in hydrate technology and NASA experience in pressure vessels, the method uses hydrates for the storage and transportation of natural gas, slashing costs by upwards of 50%. The Century Fathom approach will eliminate natural gas flaring and permit retrofitting of existing flare stacks. A useful byproduct is partially desalinated water.

<https://centuryfathom.com/>
Michael Kezirian | kezirian@centuryfathom.com



CRA-Tubulars
Almere, Netherlands

CRA-Tubulars applies superior aerospace proven material to completion designs that will push well performance from months & years to decades & life of the well. Adaption of advanced materials with efficient manufacturing, addresses a \$91B/Yr. cost, CORROSION (\$3.4 B/Yr. Premium Pipe). Reduced workovers & streamlined installation process dramatically reduces HSE, delays in cash flow (92%) and CAPEX/OPEX (68%). Advanced carbon fiber technology enables rapid scaling in manufacturing / market penetration. CRA-Tubulars is comprised of veterans (150 years of experience). This team has patented IP, designed, built, and tested prototypes, exceeding expectations & competitors. All this accomplished with sweat-equity and self-funding.

<https://www.cra-tubulars.com/>
Emile Burnaby Lautier | eb@cra-tubulars.com



CTFusion

Seattle, Washington

CTFusion is an early stage company dedicated to the commercialization of fusion energy. Fusion is the process that powers stars. When commercialized as an energy source it will provide unlimited carbon free electricity that is safe, efficient, affordable, scalable and clean. CTFusion's competitive advantage is its "Imposed Dynamo Current Drive" technology that unifies magnetic confinement, heating, and sustainment allowing fusion to be on par with the lifetime cost of natural gas power plants. CTFusion has received two U.S. ARPA-E grants (OPEN & BETHE) totaling \$5 million and is currently seeking \$30 million for its proof of concept project.

<https://ctfusion.net/>

Derek Sutherland | dsutherland@ctfusion.net



Danomics

San Francisco, California

Danomics is a cloud-based interpretation platform for the oil and gas industry with solutions for petrophysics, geoscience, and reservoir engineering. The Danomics platform is focused on leveraging the power of the cloud and smart automation to allow interpreters to rapidly scale projects to 1000s of wells and quickly progress from data loading to actionable results, through built-in workflows and QC tools.

<http://www.danomics.com>

Cameron Snow | csnow@danomics.com



Data Gumbo

Houston, Texas

Data Gumbo provides a trusted transactional blockchain network for tomorrow's industrial leaders. GumboNet™ is a massively interconnected network that automates smart contracts by utilizing the unique combination of distributed ledger technology (DLT) with terms confirmed using Industrial Internet of Things (IIoT) operating field data. Available as a subscription service, GumboNet delivers unprecedented speed, accuracy, visibility and transparency to drive efficiencies and cost-savings.

<https://www.datagumbo.com/>

Andrew Bruce | andrew@datagumbo.com



Datch

San Francisco, California

Datch is an intelligent voice assistant for industry. The Datch Assistant allows you to replace tedious front-line work processes with intuitive, natural on-the-floor conversations allowing data entry of work orders, maintenance logs, safety reports and other records using just your voice. Datch intelligence allows company jargon to be used to enter and access company records in real time, whilst structuring and integrating onsite and field observations seamlessly into current ERP, CMMS, SCADA and CRM systems.

Junaid Faruq | junaid@datch.io



DC3 Control
Corpus Christi, Texas

DCiii (DC3) Control provides transparent, optimized, and reliable production chemical monitoring, remote control, and real-time data & analytics. We are the only full solutions digital provider in this market. DC3's solutions are fit-for-purpose for ease of use and deployment in the oilfield. We offer direct integration for E&P's as well as cloud-based solutions for Chemical Service Providers. In today's downturn, chemical programs cannot drive out any more cost, operators and chemical companies must think outside the box - Automation is the answer.

<http://www.dc3control.com>
Chad Hammond | chad@dc3control.com



DeepCast.ai
Houston, Texas

DeepCast.ai is a Houston-based B2B software company founded in 2017 that focuses on providing economic optimization solutions through a scalable SaaS platform. Our platform enables users to quickly map and organize their data and automatically build predictive and prescriptive models tailored to their use cases. Our technology helps users increase the resolution of their data, facilitate anomaly detection, predict operational trends, and generate recommendations that lead to improved economics. We are currently selling licenses of our product and looking to scale to a broader customer base.

<https://deepcast.ai/>
Arturo Klie | aklie@deepcast.ai



Deluge Technologies
Sun City, Arizona

The Thermal Hydraulic Engine technology is a breakthrough in mechanical engineering. The new hydraulic engine is an "engine that runs on hot water" and delivers more torque with less energy input providing the perfect solution when powered by solar thermal hot water or low temperature geothermal water. The engine has been proven to operate at temperatures lower than any other engine and operates at full horsepower with 180-degree Fahrenheit hot water. Our primary focus is using the hydraulic engine for low cost desalination and can generate electricity. Our contract manufacturing provides modular fabrication along with full tech support to customers.

<http://www.delugeinc.com>
Brian Hageman | bhageman@delugeinc.com



DemandQ
Watertown, Massachusetts

DemandQ's patented Intelligent Demand Optimization software integrates seamlessly with Building and EV Charging energy management systems, dynamically optimizing equipment utilization which reduces demand charges and energy usage. Deployed as a secure integrated software service, DemandQ unlocks dramatic/quantifiable economic value by enabling the digital transformation of energy utilization, frees our customers from the expense and volatility of building management system hardware upgrades, and accelerates the financial return on corporate energy management programs. DemandQ also supports customer environmental sustainability targets by reducing their carbon footprint.

Gary Morsches | gary.morsches@demandq.com



DIGITAL ENERGY

THE ART OF TECHNOLOGY

Digital Energy

Dubai, United Arab Emirates

Integrated predictive plans are essential to industrial operations. In our experience dealing with multi-billion dollar companies with multi-million IT and digital budgets, we enable simple procedures such as ordering materials, pay bills, schedule deliveries, monitor work efficiencies – let alone more complex digital operations such as optimization of the various workflows. Digital Energy makes this possible. At Digital Energy we solve complex value chain problems by embedding efficiencies in AI-powered solutions. We create innovative tools for industrial planning, supply chain optimization and work execution.

<http://www.digitalenergy.ai>

Morgan Eldred | morgan@digitalenergy.ai



DonTruck

DonTruck

Katy, Texas

DonTruck is the innovative logistics platform for brokers, agents shippers and carriers, to plan and execute their freight business. Works everywhere and provides real-time visibility. Identify inefficiencies, take action, and grow your business through data-driven actionable insights.

1. Make more money
2. Reduce your operational cost
3. Get more clients
4. Do more with less

<http://www.dontruck.com>

Leo Pardo | leo@dontruck.com



DroneDeploy

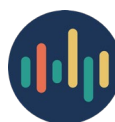
DroneDeploy

San Francisco, California

DroneDeploy is the enterprise-grade drone data platform. Trusted by leading brands globally, DroneDeploy makes the power of aerial data accessible and productive for everyone by transforming data collection and analysis across industries, including construction, energy, agriculture, and mining. Simple by design, DroneDeploy enables professional mapping, 3D modeling, and reporting from any drone on any device. Since inception, the company has mapped more than 150 million acres across 180 different countries.

<http://dronedeploy.com>

Mike Winn | dd@praytelligence.com



dynacloud

Dynacloud

Denver, Colorado

Dynacloud is an industrial internet of things ("IIoT") company focused on automation, controls, and optimization services. Dynacloud provides integrated hardware, software, AI, and cloud solutions that bring real-time visibility and analytics to the oil and gas industry and growth into adjacent industries.

<https://dynacloud.io>

Tim Krebs | tim.krebs@dynacloud.io

ECHOGEN

power systems

Echogen Power Systems

Akron, Ohio

Echogen's mission is to provide an efficient cost-effective, and reliable clean energy option, while increasing our customer's return on energy investment. Echogen is using a novel approach to solving the long-duration energy storage challenge called Electrothermal Energy Storage (ETES). Excess electricity is stored as heat and later converted to electrical power. Echogen has expertise in supercritical carbon dioxide (sCO₂)-based power cycle technology with safe, low-cost, highly-scalable storage to deliver a superior solution. The ETES system is modular, with duration based on customer needs. ETES is a disruptive new technology that can reduce storage costs by 40%-50% compared to battery systems.

<http://www.echogen.com>

Ryan Wackerly | rwackerly@echogen.com

EDLORE

Edlore

Dana Point, California,

Edlore is a patented mobile software platform that uses Digital Twin, 3D/AR, AI and ML technologies to provide management with Operation Scores for Maintenance and Safety in addition to operation cost by location, and equipment. It also provides all the documentation, including the tools a worker requires to service, maintain, repair and operate equipment critical to the operation of a plant. Edlore easily and safely integrates with customers' existing software through APIs and as part of the service provided, we take care of all the customer on boarding and software maintenance with minimum resources from the customer.

<http://www.edlore.com>

Javid Vahid | javid@edlore.com

ednaTec

eDNATec

St. John's, Canada

We innovate advanced genomics technologies that enable our customers to pursue both environmental stewardship and cost reduction. Customer Problems Solved:

- Cost reduction - conventional approaches for ecological assessment (direct sampling, visual/acoustic observation) are lengthy and expensive.
- Outdated technology - 'Catch and look' sampling, sorting and individually identifying organisms is lengthy, labor-intensive, imprecise and harmful or disruptive to rare or endangered species.
- Environmental Stewardship - Growing pressures are compelling corporations to adopt sustainable technologies that support environmental stewardship.
- Health & Safety - we help reduce number of personnel in offshore operations: improved safety and reduced carbon emissions.

<http://www.ednatec.com>

Steve Barrett | steve@ednatec.com

ENEXOR

BIOENERGY SYSTEMS

Enexor BioEnergy

Franklin, Tennessee

Enexor's goal is to solve some of the world's biggest problems, notably 1) reducing plastic and organic waste and harmful GHG emissions and 2) increasing access to affordable, renewable, and continuous energy. Enexor's system converts any type of organic waste or plastic into onsite power and thermal at a Levelized Cost of Energy (LCOE) significantly lower than any other renewable or traditional energy alternative. The system is modular, easily installed, and can operate in the harshest of climates. Our revenue model is "energy as a service" - selling the energy output not the system itself - enabling immediate Customer savings.

<https://www.enexor.com/>

Lee Jestings | Lee@enexor.com



EnPower
Phoenix, Arizona

EnPower is developing low-cost Lithium-ion batteries for battery electric vehicles that offer both high energy density (range) and fast charge capability in the same cell. Solving this fundamental trade-off is critical for auto OEMs crossing the chasm to mass adoption. EnPower's BEV-class batteries can charge three times faster and generate 70% higher power than today's best batteries, without degradation of service life. EnPower builds 4-8 Ah pouch cells in a pilot-scale manufacturing facility in Phoenix, AZ. Development from powders-to-test can be completed in less than three weeks. The Company is validating the technology with auto OEMs and seeking strategic partners.

<https://www.enpowerinc.com>
Annette Finsterbusch | annette@enpowerinc.com



ERMEO
Paris, France

ERMEO web platform & mobile application, helps industrial companies to digitalize and customize easily operational processes on site (forms, documentation, Databases & workflows) and all along your asset lifecycle: Digitalize your forms, upload your databases (through EXCEL or API) and connect both to automatize your reporting, structure your gathered data and optimize your execution process through analytics. Ermeo bring mobility to your IT ecosystem (CMMS, EDMS, sensors, ...) and act as a bridge between contextual site data & industrial software. You can cover several use cases (HSEQ, inspection, commissioning, O&M, ...) with proven and fast ROI.

<https://www.ermeo.com/en/>
Riadh Labayed | riadh.labayed@ermeo.com



FLITE Material Sciences
Montréal, Canada

FLITE Material Sciences transforms the surface of ordinary materials to give them extraordinary properties. This clean, patented process uses laser pulses to change the surface of metal, glass, ceramics and plastics. The resulting effect repels or attracts water or oil, or changes the color. This new surface can prevent ice, rust, mold and contamination without the use of a chemical coating. For industries from aircraft to pipelines and computer chips, this breakthrough lets our customers create safer, more efficient products without the negative impact of coatings.

<http://www.flite.tech>
Dan Cohen | dan.cohen@flite.tech



Fracture ID
Denver, Colorado

Fracture ID utilizes downhole measured BHA vibration data and patented processing technologies to provide a full suite of drilling, completions, and reservoir cost-efficiency focused tools. Our underlying high-resolution BHA efficiency measurement and rock property calculations allows for extended analytics around issues such as drilling dysfunction, perf efficiency, depletion identification, parent/child interaction and improved Cube development. FID has monitored over 600 wells to date over North America. Fracture ID is moving towards populating Basin-wide, multi-client databases to create high resolution, subsurface efficiency focused analytics solutions to real world development problems not addressable by other service company offerings.

<http://www.fractureid.com>
Christopher Neale | chris.neale@fractureid.com



FRCAST Technologies
Austin, Texas

FRCAST Technologies speeds reservoir simulation prediction time by over 100x by training deep networks on history-matched models. We let engineers managing conventional assets know and optimize the impact of their development plans, with simulation level accuracy, without waiting days or weeks.

<http://www.frcast.com>
Mohammad Evazi | evazi@frcast.com



Ganit Labs
Dallas, Texas

In the onshore O&G fracturing industry, high-pressure pumping equipment are often subject to catastrophic failures, resulting in loss of production and unplanned repair costs. An intelligent AI-based system can predict such failure and provide actionable advance warnings leading to timely intervention. Using machine learning (ML) and advanced data science, Ganit Labs Inc. has designed and developed an early warning system that monitors time series telemetry data from sensors and generates flags for anomalies and impending catastrophic failures. Founded in 2020, Ganit Labs is located in Dallas, TX.

<http://www.ganitlabs.ai>
Pradipta Ray | ganitlabs.ai@gmail.com



GatherX Analytics
Houston, Texas

GatherX provides data analytics software for midstream natural gas companies that need to optimize their active production time, and are dissatisfied with existing data analytics offerings that do not generate actionable recommendations. In three years we want our software to be the go-to option for any midstream gas company looking to increase return on investment. Unlike general engineering and data analytics consulting, our product is tailored to common optimization issues in the midstream industry, allowing it to frictionlessly provide implementable recommendations. Presently our team of Rice University engineering undergraduates is running a beta version of our offline software.

John Coleman | jmc33@rice.edu



GreenFire Energy
Emeryville, California

GreenFire Energy Inc. develops and sells proprietary technology to collect, transport, and apply geothermal energy for carbon-free power generation, grid balancing, and high-value industrial processes such as hydrogen production. GreenFire's "closed-loop" geothermal technologies exploit the full spectrum of geothermal opportunities starting with well retrofits (geothermal wells and depleted oil and gas wells) and later to large (50MW+) projects where conventional technology cannot operate. The company has become the largest aggregator of IP in the closed-loop geothermal segment. Similarly, GreenFire has developed the world's foremost thermodynamic and well cost models for calculating and optimizing the power potential of closed-loop geothermal systems.

<http://www.greenfireenergy.com>
Joseph Scherer | joseph.scherer@greenfireenergy.com

HEBI

ROBOTICS

HEBI Robotics

Pittsburgh, Pennsylvania

HEBI Robotics provides a platform for agile robotics development, consisting of modular hardware and software tools for motion control. HEBI's platform is used worldwide by over 100 universities, research institutes, and industrial partners to create custom, world-class robots quickly and easily. Additionally, HEBI is using its own platform to provide smart, next-generation robotics tools for industries whose needs are not currently met by existing industrial robotics technology. Our first products are focused on industrial inspection in the oil and gas industry.

<http://www.hebirobotics.com>

Bob Raida | bob@hebirobotics.com

i2k Connect

i2k Connect

Missouri City, Texas

i2k Connect delivers novel Artificial Intelligence technology informed by energy industry knowledge. Our platform transforms unstructured documents into structured data and delivers analysis-ready results directly to knowledge workers in-cloud or on-premise via a browser or REST API. Our software is embedded AI within Schlumberger's DELFI cognitive E&P environment providing auto classification against i2k Oilfield Places and our curated taxonomies from publicly available data sources. Our software development was funded by NSF SBIR Awards and our team of AI PhD(s) and industry experts give our team the ability to add value in days rather than weeks. i2kconnect.com #i2kai

<http://www.i2kconnect.com>

Becky Thomas | bthomas@i2kconnect.com



Iconic Air

Morgantown, West Virginia

Over the past 5 years, the leak detection and repair market has seen a rapid advancement in hardware innovation (\$24B market). Current emissions software leaders are antiquated and lack the capability of processing data from these new systems now being implemented. Iconic Air is a SaaS platform that automates the data analytics process for these cutting edge devices and provides insight on asset risk and performance.

<http://Iconicair.io>

Kyle Gillis | Kyle@Iconicair.io

InfiniteCooling

Infinite Cooling

Somerville, Massachusetts

Industrial plants are one of the largest users of water, mostly for cooling. We have an MIT-developed, patent-pending technology that uses electric fields to recover and re-use water from cooling towers, cutting water and treatment costs and reducing dependence on water resources. The technology has been deployed on two industrial sites. The market is over \$20B in power generation, data centers and other industries. The team comprises the inventors of the technology and won many awards including the MIT \$100K and DOE national Cleantech competition. The company has raised a \$4M seed round in 2019.

<http://www.infinite-cooling.com>

Maher Damak | mdamak@infinite-cooling.com

**Kuva Systems**

Cambridge, Massachusetts

Kuva Systems makes the invisible measurable and thereby manageable. Our industrial IoT platform is a low-cost, fully automated, image-based, continuous methane monitoring solution that enables the oil and gas industry to improve operations and meet ESG and methane intensity goals. The solution is designed for effortless automation, continuous leak rate quantification and pinpointing leaks with images, eliminating the need for secondary manual inspections. Kuva Systems has a strategic partnership with a world leader in industrial gas detection, Draeger Safety, and is about to start large scale field trials with Cenovus Energy and others.

<http://www.kuvasystems.com/>Stefan Bokaemper | sbokaemper@multisensorscientific.com**Locus Bio-Energy Solutions**

The Woodlands, Texas

Locus Bio-Energy Solutions (Locus BE) has technology that brings green biosurfactant treatments to the oilfield that outperform synthetic chemicals at a fraction of the dosage rates and cost. The environmentally friendly solutions have been nationally recognized for their proven ability to maximize ESG and profitability, solve top pain points and help operators do more with less. The treatments have unmatched success in boosting oil production, minimizing new drilling and qualifying users for substantial tax incentives—driving unmatched sustainability and financial security across the oil industry.

<http://LocusBioEnergy.com>Jonathan Rogers | jrogers@locusfs.com**M1neral**

Houston, Texas

M1neral is building the next evolution of the oil and gas transaction marketplace. By leveraging the power of AI and other digital technologies, we are bringing oil and gas dealmaking into the 21st century. The M1neral platform connects the dots from opportunity to close, allowing oil and gas transactions to take place in a fraction of the time within an institutionally secure and trusted environment.

<http://www.m1neral.com>Kyle Chapman | kyle@m1neral.com**MicroSilicon**

Houston, Texas

MicroSilicon began as a spinoff from Rice U Electrical Engineering with an innovative technology that extracts digital information in real-time from chemical molecules as they flow past a unique quantum sensor. We licensed the patents and added physics-based AI algorithms to create IoT packages that can be installed on the wellsite and thereby create flow-assurance solutions for oil-companies that allow them to reduce cost and increase production. We have received industry awards for innovation, now have over 10 patents, and are seeing revenue growth in the Middle East and USA. We are looking for funding to further expand portfolio.

<http://www.microsiliconinc.com>John Lovell | john.lovell@microsiliconinc.com



Mira

Los Angeles, California

Mira provides hands-free AR hardware & software solutions to transform the productivity and safety of the global distributed workforce. Our hands-free, industrial AR headset is powered by the smartphones you already own and secure, making it 10x more affordable, scalable, and easy to use. Our software platform enables real-time remote knowledge transfer, workflow guidance, and rich data & insights into your front line. Our customers are seeing between 10x-500x ROI in using our platform to conduct audits & inspections remotely, provide SME support to the frontline, and manage routine maintenance & operations.

<http://www.mirareality.com>
Ben Taft | BEN@MIRALABS.IO



Modumetal

Houston, Texas

Modumetal is a global nanotechnology company that developed and commercially deployed a proprietary nanolamination process to combat corrosion. Modumetal's proprietary process creates layers of nanolaminated alloys which adhere to the surface of base materials in a sustainable manner. These alloys have demonstrated superior performance and durability when compared to conventional products. All laboratory and field trial data has been independently verified by 3rd party sources and commercially adopted by customers. Modumetal's disruptive technology exceeds the performance limitations of conventional materials and is being produced at an industrial scale and a competitive price at our local Houston facility.

<http://www.modumetal.com>
Dennis Creech | Dennis.Creech@modumetal.com



Momentum Technologies

Dallas, Texas

Our Membrane Solvent Extraction ("MSX") technology was developed and patented by the US DoE to recover critical metals from electronic waste. MSX is cheap, modular, energy efficient, and closed-loop. This breakthrough allows us to bring the processing to the companies creating the waste such as Li-ion battery manufacturers where 3-10% waste is generated at each step of the Li-ion manufacturing process. We recover 99.9% pure Lithium, Nickel, Cobalt and Manganese Oxides from the Li-ion waste that can be reused to make new cathodes.

<http://momentum.technology>
Preston Bryant | Preston@momentum.technology



Mosaic Materials

Alameda, California

Mosaic Materials develops and manufactures high performance sorbents for carbon capture systems. The long-term potential of the technology is the ability to separate CO2 from nearly any gas stream. Our first target application is to use our ultra-high capacity sorbents to reduce the costs of direct air capture (DAC) systems to <\$100/ton. A single 1 Mton/year DAC plant will purchase over \$500M of materials in its 20-year lifetime. Gigatons of carbon capture or carbon removal technologies are needed over the coming decades to meet net-zero pledges, and materials for carbon capture systems present a >\$100B opportunity.

<http://mosaicmaterials.com>
Thomas McDonald | tmcDonald@mosaicmaterials.com



NeoCtech
Montréal, Canada

NeoCtech aims at producing high-quality rare earth metals from waste streams collected from end-of-life magnets, electric vehicles, electronics, wind turbines, solar panels, etc. Our 2ET process (Electricity for Electrification) is versatile so that it can be employed to extract other valuable metals such as nickel, cobalt, gold and platinum group metals (PGM). NeoCtech seeks to participate actively into the development of procedures and commercial ventures that support sustainable engineering and the circular economy, by conducting R&D on smart, versatile and clean novel technologies to maximize resource efficiency.

<http://www.neotech.co/>
Samira Aghae Sarbarze | saghaei.1987@gmail.com



NeuDax
DATA ANALYTICS

NeuDax
Houston, Texas

NeuDax mission is to develop, market and sell superior performance AI-based software tools and services that dramatically improve the predictive accuracy, effective recovery, and lower the costs of unconventional oil and gas exploration and production. As the first product, NeuDax offers Hurax, a cloud-based AI software tool, which helps reservoir engineers and directors to accomplish field development design more efficiently. Using Hurax, clients can lower their break-even price from \$50 to \$27-\$35 per barrel. In addition, Hurax reduces the field development design time to less than a week compared to current 3-4 months with existing tools.

<http://www.neudax.com>
Naser Tamimi | n.tamimi@neudax.com



New Dominion Enterprises
Austin, Texas

New Dominion Enterprises Inc. (NDE) is a "deep technology" company commercializing the first Inorganic Liquid Material for lithium-ion batteries that increases durability (up to 50% more charge cycles), improves cell safety and enables increased energy density. Material has been manufactured and is available for use NOW. NDE will enable its customers to use the material and purchase it from NDE's authorized manufacturer and then pay royalties based on sales to end-users. NDE will continue to perform the business development and marketing functions, and promote the technology in technical forums

<https://www.newdominionenterprises.com>
Jay Fraser | jfraser@newdominionenterprises.com



Nexus Space
Calgary, Canada

Nexus Space is a space and technology company with the capacity to provide cost-effective, leading-edge satellite-based Earth Observation (EO) services to North American and global customers. Nexus Space will launch a satellite-based, hyper- and superspectral monitoring system, providing superior monitoring of the complete North American and global energy infrastructure, e. g. pipeline networks, facilities, refineries, pump stations, storage facilities, wells and other assets. This satellite constellation will be the first to provide a full scan of the Earth every 5 days.

<http://www.nexuspace.net>
Gerald Bartels | gerald.bartels@nexuspace.net



Nhu Energy
Tallahassee, Florida

Future electric power systems will require unprecedented flexibility, with orders of magnitude increases in variability and distribution of energy resources and loads. This requires significantly more sophistication in electric power system operation, automation, intelligence, and decision support that scales to a coherent, integrated solution across the power system. We accelerate transition of best-in-class intelligent, controls, and decision support solutions from research prototypes to fully de-risked and commercial-utility grade solutions. With non-dilutive funding and our own investments, we have the elements of a superior grid-scale solution offered as a service to unlock energy and demand savings, resiliency, and grid services.

<https://www.nhuenergy.com/>
Rick Meeker | rmeeker@nhuenergy.com



Offshore Hydraulic Innovation (OHI)
Houston, Texas

Offshore Hydraulic Innovation (OHI) is singularly focused to improve offshore subsea oil and gas production systems, to greatly reduce CAPEX while adding little increased OPEX, so that operators of these offshore fields can realize greater financial performance, greater versatility, and better reuse of materials. OHI's goal is to provide major Oil and Gas Operators an innovative approach to the architecture of a subsea field development with as little subsea field development service umbilical as possible. The solution reduces umbilical installation, sunk-cost, and tubing cost by replacing the umbilical with the subsea hydraulic and chemical pumps and tanks.

<http://www.offshorehi.com>
Daniel Krohn | dankrohn5@gmail.com



OneStep Power Solutions
Houston, Texas

OneStep Power Solutions is a technology company founded to mitigate operational risk by providing a solution to perform non-destructive power system testing on dynamically positioned vessels. Non-destructive testing with fast and repeatable results provides an indication of the system's overall ability to function correctly in the event of electrical or mechanical failures. We are the only company that can provide comprehensive power assurance on low voltage vessels including OSVs, dive support, and pipelay etc. OneStep's GVRT and ZeroDip technologies allow vessel owners and their clients to safely demonstrate fault ride through capability associated with a short circuit.

<http://www.onesteppower.com>
Mark Craig | mark@onesteppower.com



OriGen.AI
New York, New York

Reservoir engineers invest months into building simulations, creating field development plans, and optimizing existing assets, and are still forced to make decisions based on suboptimal information. This results in unnecessary capital expenditures, excess operating costs, and reduced production and reservoir recovery factors. OriGen's PROTEUS platform enables full reservoir simulation up to 10,000x faster, actually solving the representative differential equations in order to provide pressure, saturation, velocity, and more at every location. Blazingly-fast automated history-matching massively enhances field development planning and enables real-time optimization, increasing project NPV up to 20%. OriGen offers simulation freedom. Better understanding. Less risk. Maximized performance.

<https://www.origen.ai/>
Ruben Torrado | rubentorrado@origen.ai



Osazda Energy
Albuquerque, New Mexico

Solar panels are warranted to operate near their maximum efficiency for 30+ years outside. During their lifetime outdoors, solar panels are exposed to harsh environments for decades often resulting in cracks in the solar cells. These cracks can severely degrade the efficiency of the panels. Osazda Energy developed a unique, innovative, and cost-effective product to alleviate crack-related solar cell degradation. Solar cells made with our technology can have extended operational lifetime at their maximum efficiency. This results in a lower cost of renewable energy for consumers and an increased return on investment for solar project financiers and developers.

<http://www.osazda.com>
John Chavez | ceo@osazda.com



Osperity
Houston, Texas

Osperity works with many energy companies, and allows them to do more with less. Osperity is a SaaS/ Cloud platform providing major cost reductions in the field with significant improvements in HSE/ ESG protocols by: Capturing massive amounts of data, from any number of video sensors; analyzing that data with computer vision, a specialized type of artificial intelligence; and delivering personalized and actionable alerts via exceptions-based management. The platform works on legacy equipment from any connection in the field by connecting to existing SCADA systems, allowing for open API integration via any cellular or LTE connection. Do More with Less!

<http://www.osperity.com>
Scott Crist | scrist@osperity.com



Perceptive Sensor Technologies
Tucson, Arizona

PST provides the petrochemical industry with actionable real-time critical data on fluids throughout production and logistics processes - including fluid identification (acoustic fingerprint), material flow by volume and weight, fill level, product quality and software analytics in real-time with non-intrusive technology. Our patented acoustic fingerprint technology can identify fluids non-intrusively. No other product on the market can perform this function from the outside of metal pipes and tanks. Our strategy is to use our core technology as a platform for a variety of applications including manifest verification, monitoring liquids, product movement, flow rates, inventory control, process optimization and asset utilization.

<http://www.perceptivesensors.com>
John Schlitt | jschlitt@perceptivesensors.com



Perfobur
Houston, Texas

PERFOBUR is an oilfield services technology company with its own R&D centre, testing facility specializing in new drilling & wells stimulation technologies. Technology is based off the modernized and life proven short radius short lateral radial mechanical bit-drilling technology for the next generation of well completions & stimulations. Besides of conventional oil & gas asset, where Perfobur drills out to overcome well known reservoir challenging phenomena, Perfobur also provides the unique services to prepare horizontal wellbores for multistage Fracs & Re-Fracs Completions. Technology is cost-effective with advantages of controlled & surveyable trajectories, re-enterable channels, deep rock jet-acidizing & customized chemical treatments.

<http://perfobur.com/en/>
Andrey Platunov | aplaturnov@perfobur.com



Petroleumsoft
 Aberdeen, United Kingdom

Petroleumsoft is a 11 years old company focuses in oilfield digitalisation. We specialise in well stimulation, EOR and production optimisation. The company have 15 years of experience in simulation software development and has gone from zero revenue to \$250K revenue. The company have four software solutions and 20 members team who work on its products. Currently we have one paid customer in Qatar. In addition, we have multiple high level discussion going on with companies globally. The company is going under its software evaluation with several companies globally including Chevron, Aramco, ADNOC and ONGC etc.

<http://www.petroleumsoft.co.uk>

Rameshwar Paswan | rameshwar.paswan@petroleumsoft.co.uk



Planetary Hydrogen
 Gatineau, Canada

Planetary Hydrogen creates the greenest fuel on Earth. Our company is bringing to market a massively scalable process which generates hydrogen while capturing and storing carbon dioxide from the air, within the ocean. Our carbon negative hydrogen can be used to fuel trucks and other heavy duty vehicles, provide heat to buildings, power industrial processes, or even replace current fossil fuels within power plants. In addition, we leverage carbon credits to radically reduce production costs, enabling us to provide hydrogen to the world at a fraction of the current market price for today's conventional dirty hydrogen.

<https://www.planetaryhydrogen.com/>

Brock Battocchio | brock@planetaryhydrogen.com



Power Tech Water
 Lexington, Kentucky

Intelligent water and wastewater management is increasingly important for many industrial sectors, including Traditional Energy (Oil & Gas), Petrochemical, and Energy Transition (Battery, Automotive, Semiconductor) which have undergone significant technological change and are subjected to increasingly challenging environmental discharge restrictions. PowerTech Water, Inc. (PTW) provides engineered solutions for chemical-free, low-energy, and low-cost water treatment. Our customers are automotive, chemical, battery, and electronics manufacturers, mining, municipal, and commercial real estate operators. Our business model generates recurring revenue from service contracts with industrial partners and licensing revenues from residential markets. We are raising capital to achieve \$10 million revenue.

<https://electramet.com/>

Cameron Lippert | cameron.lippert@electramet.com



Prieto Battery
 Fort Collins, Colorado

Prieto Battery, Inc. is a developer of advanced Li-ion batteries. The company has developed a new 3-D architecture that results in a battery that addresses all the current shortfalls of existing Li-ion batteries. Prieto 3-D batteries will have the following performance characteristics:

- High energy density
- High power density
- Operate at a temperature range of -20 to 120 degrees Celsius
- Fast charging – charge in 3 – 15 minutes
- Better safety to prevent fires
- Low cost
- Long battery life

The company has 26 issued patents covering 7 distinct inventions. The company is now scaling its manufacturing and initiating commercialization.

<http://www.prietobattery.com>

Mike Rosenberg | mike.rosenberg@prietobattery.com



ProDrone

Porto Salvo, Portugal

ProDrone empowers decision-makers with high-quality data, moving beyond inspections to continuous, comprehensive asset management. Having developed an autonomous drone inspection solution, drastically reducing downtime and cost with a reliable, repeatable and robust system for collecting high-quality data, we are now ready to develop our solution into a new game-changer for wind. With +10,000 blades inspected in 15 countries, our ambition is to fully digitalize the blade lifecycle, building on terabytes of data collected to predict evolution of damages over time and deliver predictive maintenance, while tapping into the wider repair market, becoming a global reference in the wind industry.

<http://www.prodrone.io>

André Moura | andre@prodrone.io



QD Solar

QD Solar

Toronto, Canada

QD Solar Inc. is a start-up out of Toronto, Canada, commercializing cutting-edge photovoltaic research out of the University of Toronto. QD Solar's IP-protected product is a drop-in compatible, low-cost, lightweight, and flexible high-power density solar sheet. The team combines two advanced light-absorbing materials (colloidal quantum dots and perovskites) to take solar beyond efficiencies achievable using standard silicon technology. Currently, these solar sheets gain efficiencies of 25% power conversion efficiency (PCE) on a road map to 40+% PCE that no other solar technology can accomplish. Standardized stability testing and ICE certification are well underway.

<https://qdsolarinc.com>

Dan Shea | dan@qdsolarinc.com



Quidnet Energy

Houston, Texas

Long-duration electricity storage for the power transition is a \$T-scale global white-space, within which Quidnet Energy will secure the lowest-cost position. Quidnet stores energy in the form of pressurized water in underground geologic formations to unlock an immense asset deployment opportunity for traditional subsurface players.

<http://www.quidnetenergy.com/>

Joe Zhou | jzhou@quidnetenergy.com



Rapid Flow Technologies

Pittsburgh, Pennsylvania

Rapid Flow Technologies uses AI to re-imagine mobility. Our Surtrac traffic signal optimization software, already purchased by 16 cities, reduces traffic congestion, emissions, and safety incidents by up to 40%. Our add-on solution Routecast, allows travelers to share additional information with Surtrac (e.g. location, route, speed, etc.), through their smartphone or connected vehicle technology, unlocking an incremental 40% improvement in delay reduction. Routecast allows for a self-funding, incentive-based tolling business model that will revolutionize the industry by delivering value to all stakeholders including a return on investment to fleets and individual commuters, and a new revenue stream for city governments.

<https://www.rapidflowtech.com>

Griffin Schultz | gschultz@rapidflowtech.com



RESC (Renewable Energy Storage Company)
Houston, Texas

RESC has developed Greenstore whose key technical innovation is the use of thermal energy storage (TES) along with compressed air energy storage (G-CAES) for long-duration grid-scalable electricity storage. By storing air in an impermeable salt cavern while associated heat is stored in an array of concrete and metal tubes, we achieve green, hydrocarbon-free long-term energy storage. Greenstore follows renewable generation trends while satisfying companies' targets for clean energy. RESC's managers are energy experts, thermal energy storage experts, and renewables, and sustainability experts. RESC has the diligence and conviction to innovate the power storage market. Greenstore: Carbon-Free Long-Duration Renewable Energy Storage.

<http://www.RESCcompany.llc>
Arthur Gelber | art@rescompany.llc



ResFrac
Palo Alto, California

ResFrac optimizes operators' return on investment by providing the industry's only genuinely coupled hydraulic fracturing, wellbore, and reservoir simulator. ResFrac describes both multiphase flow and fracture reopening and propagation, modeling parent/child fracturing and production (with detailed description of frac hits), refracs, and huff and puff EOR. Users can quantitatively optimize landing zone, well spacing, parent-child relationships, cluster spacing, fluid volume, proppant volume, fluid and proppant type, refracturing, and/or EOR huff and puff schemes. ResFrac is used by small independents and supermajors alike, and has been applied across nearly every major American shale play in the US, Canada, and Argentina.

<http://www.resfrac.com>
Garrett Fowler | garrett@resfrac.com



REVOLUTION
TURBINE TECHNOLOGIES™

REVOLUTION Turbine Technologies
Asheville, North Carolina

REVOLUTION Turbine Technologies (RTT) is developing a revolutionary, carbon-free power generation solution that solves pain points for upstream O&G. RTT is now seeking additional investment in order to complete development and to begin field trials with paying customers. RTT's technology is a micro-Expansion Turbine System (mETS). The mETS uses an existing source of pressurized gas, such as lift gas, to generate power for mission-critical equipment without burning or venting the lift gas, so no CO₂ is released.

<https://revolutionturbines.com/>
Christopher Bean | c.bean@revolutionturbines.com



Revterra
Houston, Texas

Revterra is bringing a new spin to energy storage for industrial and utility scale applications such as the storage of solar and wind energy with the development of our ultra-low-loss flywheel energy storage system that is comparable to lithium ion in power delivered but at half the cost. Current grid-scale energy storage technologies such as lithium-ion batteries make clean energy like solar and wind unclear due to their manufacturing methods and toxic byproducts. Our introduction of a highly efficient, low-cost alternative technology for large scale applications will enable higher penetration of renewables onto the grid.

<http://www.revterra.io>
Ben Jawdat | ben@revterra.io



Seaformatics Systems

St. John's, Canada

Seaformatics has developed the WaterLily, a portable water and wind micro-turbine that provides off-grid power to those who need it. For outdoor enthusiasts, the military, and remote workers, who are more frequently carrying multiple rechargeable devices, the WaterLily harnesses renewable energy to recharge batteries so that they can stay connected, use their devices more often and recharge 24 hours a day.

<http://www.waterlilyturbine.com>

Andrew Cook | acook@seaformatics.ca



SeebeckCell Technologies

Arlington, Texas

SeebeckCell Technologies is developing an ionic liquid-based thermoelectric cell which converts heat flow into electrical energy and also store it for later use. These thermoelectric modules can be tailored to meet the voltage, current, and efficiency requirements of different applications. SeebeckCell's patent-pending ionic liquid thermoelectric cells are cost effective, more efficient, use environmentally friendly ionic liquids, and lighter by volume, resulting in an easy to use and sustainable device. SeebeckCell's advantage is a product with higher (Unit Power Generated/Weight) ratio, greener production, and less expensive, synthetic materials that do not require mining. Unlike solid-state TEGs.

<http://www.seebeckcell.com>

Ali Farzbod | farzbod@seebeckcell.com



SeekOps

Austin, Texas

SeekOps, located in Austin Texas, provides comprehensive emissions inspection services for the oil and gas industry. The SeekOps methods employ advanced sensors, manufactured by SeekOps and integrated onto enterprise-grade drones, coupled with advanced data analytics. The SeekOps methods provides significant benefits over the status quo in terms of increased efficiency, reliability of detection, and comprehensive inspection. The data products generated reveal methane anomalies on-site, localization of sources, and accurate flow rate quantification. SeekOps performs data collection with its experienced staff pilots in the United States and international locations.

<http://www.seekops.com>

Andrew Aubrey | aaubrey@seekops.com



SENSORUP

SensorUp

Calgary, Canada

SensorUp is a NATO-award winning geospatial IoT platform. SensorUp optimizes and automates complex physical operations, such as oil and gas, logistics, public safety, by aggregating data from disparate sensors, extracting actionable insights, and dispatching resources with a workflow engine. SensorUp's key customers include Husky Energy, NASA, the US Dept. of Homeland Security. Customers can make just-in-time critical decisions, automate task efficiencies and achieve global visibility of disparate assets and people—resulting in millions of dollars in savings and reductions in worker safety cases. The SensorUp standards-based platform allows customers to future proof their investment and easily integrate new best-of-breed IoT technologies.

<http://www.sensorup.com>

Geoff Mair | geoff.mair@sensorup.com



Solchroma Technologies
Somerville, Massachusetts

Solchroma is building a reflective outdoor digital display for the smart cities of the future. Solchroma displays are the clear choice for digital signage in urban environments. Light pollution from LED-based signs has led cities to regulate or entirely ban them - not everyone wants to live in Times Square. But businesses, brands and governments need digital signs to communicate with consumers and residents. Solchroma displays are 100% reflective and produce zero light pollution; they work with sunlight rather than against it to display images in vivid color while consuming less than 1% of the energy of LED displays.

<http://www.solchroma.com>

Matthew Aprea | matt.aprea@solchroma.com



South 8 Technologies
San Diego, California

South 8 Technologies, Inc. has developed a novel Liquefied Gas Electrolyte (LiGas™) chemistry for next-generation rechargeable and primary lithium batteries and electrochemical capacitors. The LiGas electrolyte enables a wider operating temperature range of -80 to +60 °C, provides increased energy, and improved safety while maintaining compatibility with standard materials and manufacturing. South 8 Technologies started operations in 2017 as a spin out from UC San Diego. We are a diverse team which values integrity, creative thinking, and collaboration with a goal to deliver breakthrough energy storage solutions to advance a clean energy future.

<http://www.south8technologies.com>

Cyrus Rustomji | crustomji@south8technologies.com



Steelhead Composites
Golden, Colorado

Steelhead is dedicated to the design, manufacturing and testing of specialty lightweight composite pressure vessels to be used for weight-sensitive energy and fuel storage applications. With over 100 customers in virtually every industry, Steelhead's compressed hydrogen storage solutions are being used in gas transport, marine, stationary and on road applications.

<http://www.steelheadcomposites.com>

Andrew Coors | acoors@steelheadcomposites.com



Subsea Shuttle
Houston, Texas

Industry forecast most near-term deepwater development will be subsea well tiebacks to existing host facilities, saving billions in capex and accelerating first oil. These tiebacks also serve to prolong the economic life of the host facilities. One of the key challenges is safe and reliable supply of required chemicals to protect wellbore integrity and maintain flow assurance in flowline. Incumbent technology, umbilicals are costly, offer limited operational flexibility and many of the older ones (5000+) are failing. Subsea Shuttle's patented technology provides dual-barrier chemical storage and injection of chemicals as a service at the point of need, to 10,000 fsw.

<http://www.SubseaShuttle.com>

Art Schroeder | art@EnergyValley.NET



SurfEllent
Houston, Texas

SurfEllent develops advanced coatings that prevent the buildup of ice and scale on a variety of surfaces. Utilizing unique materials properties and proprietary technology, our coatings provide dramatically reduced ice and scale adhesion strength, outperforming other advanced coatings technologies across a number of metrics. Our coatings are highly customizable and can function on a variety of surfaces, leading to applications in aerospace, automotive, trucking, marine, rail, and infrastructure.

<http://www.surfellent.com>

Brian Huskinson | brian.huskinson@surfellent.com



Swirltex
Calgary, Canada

Swirltex uses ultrafiltration membranes in a novel way to keep them from fouling; enabling even the toughest wastewater chemistries to be recycled efficiently and at low energy consumption. The company is in early revenue stages in three market verticals including municipal, industrial and oil&gas for produced water recycling. We are a team of 6 located in Calgary and Houston, looking to help industrial customers save on disposal costs with our environmentally sustainable, modular, and cost effective solution.

<http://www.swirltex.com>

Melanie McClare | mmcclare@swirltex.com



Sylvan Source (SSI)
San Carlos, California

Sylvan Source's team of thermal energy management experts have developed novel industrial water treatment and energy recovery and re-use systems with game-changing, fundamental advantages in CapEx and OpEx, energy efficiency and process efficiency. Independent industry experts benchmarked the Sylvan Source Core™ water treatment system in several industrial wastewater applications with Sylvan Source consistently 40-50% lower in CapEx and Opex compared to all competitors. Recently, Sylvan Source received an LOI from a multi-national conglomerate for commercial systems. This entity is also expressing interest in investing in Sylvan Source, and exploring a regional JV Partnership. Sylvan Source is ready to initiate deployments.

<http://www.sylvansource.com>

Laura Demmons | ldemmons@sylvansource.com



Syzygy Plasmonics
Houston, Texas

Syzygy Plasmonics is developing a new type of photocatalytic reactor that is powered by high-efficiency LED's and used for high-throughput, single pass chemical reactions. Our technology will help to electrify the chemical manufacturing industry and reduce its reliance on fossil fuel as an energy source. Our first go to market reactions are focused on hydrogen production, these will reduce both cost and emissions by 50% or more for distributed hydrogen production.

<http://www.plasmonics.tech>

Trevor Best | trevor@plasmonics.tech



Terrapin Geothermics
Edmonton, Canada

Using a decades long-established Organic Rankine Cycle (ORC) technology, Terrapin can develop baseload waste heat to power projects from our client's infrastructure. For the waste heat not sufficient for power generation, Terrapin can develop direct heat use projects. Using the same ORC technology, Terrapin also has the expertise to identify and end-to-end develop baseload, renewable geothermal power and direct heat use projects that can also generate carbon offsets. In all cases, Terrapin's waste heat recovery and geothermal projects can generate the carbon offsets needed to help our clients get closer to meeting their GHG reduction goals.

<http://www.terrapiingeo.com>
Gray Alton | gray@terrapiingeo.com



Thermii
Richmond, Texas

Thermii Inc. is a Delaware corp., started in May 2018 with an initial seed capital of \$200K. Thermii's vision is to be an Energy Efficiency Leader in Liquid Heating & Cooling using its disruptive heat pump technology and save 75% of energy. It is headquartered in Houston, Texas. It progressed from the R&D to manufacturing & market validation. It is now ready for mass market penetration. Global market in liquid heating & cooling is \$300+ Billion per year for residential, commercial & industrial sectors. Thermii has potential to save 75% of the energy cost, making a major impact on carbon footprint.

<https://www.thermii.com/>
sunil sinha | sunil@thermii.com



TODAQ
Toronto, Canada

When applied to the energy sector, TODAQ services have been used for commercial shipments, essential process equipment for companies integrating waste recycling facilities. Tracking shipments through numerous sites across continents into a central warehouse. Built on the TODA Protocol that enables secure ownership of digital assets, commoditizes the settlement of value, and can be run on a network of mobile devices. All the supply chain assets have been registered each with their own embedded and immutable ledgers, transacted instantly, and with a final, universal p2p settlement between each company account node that capture ownership of supply chain equipment.

<https://todaq.net/>
Hassan Khan | hassan.khan@todaqfinance.com



Transitional Energy
Aurora, Colorado

Transitional Energy's (TE) goal is to be the bridge between traditional sources of power generation (oil/gas/coal) and the current renewable generation portfolio (wind/solar) by generating baseload, renewable power from existing energy assets. TE will utilize existing well infrastructure within oil and gas basins and proven, off-the-shelf heat power units to become a pioneer in sedimentary geothermal power generation. Our team has spent the majority of their careers in the natural resources and energy industries and are experts in the geology, engineering, and reservoir characteristics of existing oil and gas wells, in addition to our experience in power markets.

<https://transitionalenergy.us>
Salina Derichsweiler | salina@trenesol.com



Tri-D Dynamics
San Mateo, California

Connected, or “smart” infrastructure is necessary to bring the automated age of drilling, completions, and production for O&G wells. This transition to automation is currently stymied by the lack of high bandwidth telemetry and reliable sources of power due to high cost of implementation and lack of reliability. Our first product a smart production casing, named Bytepipe, with power and data conduits built into a seamless finish. We intend to make a fundamental change in the upstream O&G market by creating a new platform for reliable power and high bandwidth telemetry for sensing technologies and digitally assisted well completions.

<http://www.triddynamics.com>
Deepak Atyam | deepak@triddynamics.com



Troposphere Monitoring
Austin, Texas

Fixing methane leaks is easy, but finding them is hard, and increasing pressure from regulatory and financial stakeholders makes quantifying and curtailing greenhouse emissions of strategic importance. Troposphere's stationary hydrocarbon sensors help oil and gas producers & landfill managers to quickly, remotely, and affordably identify methane sources. Their technology—piloted by market leaders like ExxonMobil—measures hydrocarbon concentrations on-site in real-time and remotely converts data into emission rates and actionable repair recommendations. Founded by a team of PhDs from Johns Hopkins University, the company is backed by the National Science Foundation, Techstars, and Caltech's RocketFund.

<https://www.troposphe.re/>
Anna Scott | anna@tropospheremonitoring.com



Uplift Solar
Las Vegas, Nevada

Through coordinating electronics, Uplift Solar will enable clean and infinite energy by making solar panels and batteries an easy-to-use building material -- as simple and ubiquitous as lumber or drywall. Our power electronics technology will be cost-reducing (at scale) AND efficiency increasing compared to the incumbent. We have received strong interest from residential as well as utility-scale module manufacturers.

<http://upliftsolar.com>
Darius Roberts | darius@upliftsolar.com



VEERUM
Calgary, Canada

VEERUM provides the primary visualization platform to combine all CAD, geospatial, document management IoT and operational systems. Clients can now elevate all their siloed and valuable data into an easy to use cloud-based platform. More than ever, the world needs the ability to work remotely and collaborate virtually with all their facilities and assets. VEERUM can be live and operational in 48 hours - this is unmatched in the market.

<http://veerum.com>
David Lod | david.lod@veerum.com



Veros Systems
Austin, Texas

Backed by Austin Ventures, Chevron Technology Ventures, Shell Ventures and LiveOak Venture Partners, Veros provides technology to allow industrial motors to talk. Highly sophisticated data-processing AI/ML techniques are used to decipher current and voltage waveforms associated with induction motors in order to gain valuable insights into the performance, mechanical condition and likelihood of failure both motors and their loads (pumps, compressors). Licensing agreements are in place with Fluke and Siemens.

<http://www.verosystems.com>

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Viking Cold Solutions
Houston, Texas

Houston-based Viking Cold Solutions has developed and commercialized Thermal Energy Storage (TES) technology that offers both sustainability benefits and rapid paybacks for companies in the temperature-controlled food business. This cold storage industry consumes over \$40bn in energy costs annually, and Viking Cold's TES delivers repeatable and documented 20% to 35% savings to the customer. The TES system also adds resiliency to protect the quality of the food, reduces maintenance costs, and provides benefits to the electrical grid and the environment. The company has multiple patents, copyrights, and trade secrets.

<http://www.vikingcold.com>

James Bell | jbelle@vikingcold.com



Virtuo
Houston, Texas

Virtuo is making AI-enabled Virtual Flow Measurement (VFM) a reality. Virtuo uses AI to optimize fluid flow in industrial processes through the virtualization and enhancement of physical flow meters. Virtuo's AI driven virtual flow measurement and optimization is enabling industrial companies to optimize their production processes and significantly reduce operational costs. Virtuo is a spin-out of Arundo's co-development partnership with ABB and has expertise in fluid dynamics, industrial processes, AI, and advanced analytics.

Piers Wells | piers.wells@virtuo.ai



Vitro Technology
Austin, Texas

Vitro authenticates and structures remote operating data into secure IoT Blocks. IoT Blocks protect data from the point-of-origin, then keep data secret in-motion and at-rest in the cloud. IoT Block data is served as authenticated, trusted input for virtual tools and automation (e.g. AI, ML, Blockchain). IoT Block data is served to Zero-Trust applications for Multi-domain users and applications through a centralized Broker controlled by the customer. Blockchain applications are served IoT Block data through a Blockchain Oracle, a specialized smart contract controlled by the customer.

<https://vitro.io>

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Volexion
Chicago, Illinois

Drop-in graphene coating & process solution, protecting Lithium battery cathode materials and driving game-changing improvements (5-10x power performance, 2x cycle life, low temperature performance and safety breakthrough). Volexion's coating further enables high-energy cathode materials, driving 35%+ increase in energy density and 30%+ cost reduction. Volexion is drop-in, highly scalable and compatible with existing and future chemistries. Developed at Northwestern University and Argonne, Volexion received the Ten@Ten award from DoE's Energy Frontier Center.

<http://www.volexion-inc.com>

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Voyager
Houston, Texas

Voyager is helping companies across the energy ecosystem re-think how they manage their marine supply chain. By adopting Voyager's workflow and analytics platform, customers are able to increase visibility, streamline communications, and gain deep insights into the performance of their supply chain. Voyager customers include refiners, traders, wind blade manufacturers, offshore drillers and more

<http://www.voyagerportal.com>

Matthew Costello | matt@voyagerportal.com



VUV Analytics
Cedar Park, Texas

VUV Analytics harnesses the unique properties VUV spectra to dramatically improve the analysis of fuels, petrochemicals, and lower carbon materials. Our VUV Analyzer for Fuels has been approved by ASTM for EPA testing of gasoline, replacing four legacy methods and reducing cost per sample by more than 90%. It has also been approved for testing aromatic content in jet fuel, with diesel and DHA methods pending. For low carbon initiatives, such as recycled plastic feedstock and biofuel blends, GC-VUV brings analytical accuracy that legacy methods lack, enabling critical process inputs and feedback. GC-VUV is used by over 50 major customers.

<http://www.vuvanalytics.com>

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W7energy
Wilmington, Delaware

W7energy will transform the future of energy and produce clean hydrogen at scale—reliably and affordably. Our innovative alkaline-based electrolyzer system introduces our new class of patented polymers. Using only pure water and renewable electricity, W7energy's cost-effective green hydrogen (CO2 free) solution has the potential to substantially reduce over 36% of the global carbon emissions.

<https://w7energy.com/>

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Wave9 Technology
Vancouver, Canada

Wave9 enables conventional oil producers to improve production, reduce operating expenses, and mitigate environmental impact by automating daily site inspections using our purpose-built technology platform, coupled with AI. We automatically inform lease operators or pumpers of issues in order to reduce site visits and allow management by exception.

Unlike either traditional remote monitoring or newer video surveillance technologies which tend to create a lot of data that still needs to be analyzed by operation staff, Wave9 delivers a streamlined workflow and minimizes the impact on the existing inspection process.

<https://wave9.co>

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Westgen Technologies
Calgary, Canada

Westgen Technologies is a remote power generation company focused on eliminating methane emissions on well sites worldwide. Using a solar-hybrid design, Westgen developed technology to generate provide remote power within the 5 kW to 30 kW range (known as the remote power generation gap). This enables cost-effective deployment of compressed air to remote well sites, which was previously prohibitively expensive. By replacing fuel gas with clean compressed air, gas venting from pneumatics is eliminated, resulting in a 99% overall emissions reduction for the system.

<http://www.westgentech.com>

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Xecta
Houston, Texas

Xecta's digital platform blends AI and adapted domain physics to solve complex engineering problems at scale. With an operator's eye, we cover one continuum from upstream subsurface to downstream gathering systems in a seamless cognitive twin

<http://www.xecta.com>

Jose Silva | jose.silva@xecta.com



Yotta Energy
Austin, Texas

Yotta Energy (Yotta) is a renewable energy storage company headquartered in Austin, Texas. Yotta has developed PV-Coupled™ architecture, a smart energy storage solution designed to effortlessly scale with rooftop solar PV projects. Yotta's patented panel-level energy storage solution seamlessly integrates with solar racking and features advanced thermal management to maintain an optimal working temperature even under extreme outdoor conditions. Yotta's solution also addresses grid outages by enhancing grid resilience and reliability at a much lower installed cost than any current solution available today.

<https://yottaenergy.com/>

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**Promethean Energy**

Mumbai, India

Promethean Energy is a thermal energy ESCO helping industries reduce their carbon footprint. Using a mix of ingrown as well as market proven technologies, combined with a full stack industrial IOT layer - Promethean Energy is able to deploy solutions in factories at zero cost to end users, and share savings with them over a contract period. With pilots and successful installations running in some of the largest factories in India, Promethean is looking to capture this 100 GW market.

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