

AWS Clean Energy Accelerator

Inaugural Startup Cohort



Ionomr Innovations is advancing the development and manufacturing of ion-exchange membranes and polymers for clean energy



Advanced materials to harvest waste to generate carbon-free electricity and cooling circular economy solutions.



Low-cost, emissions-free, on-site generated hydrogen to costumers with a novel electricity-free electrolysis technology.



Smart Energy Trading, AI supported, monitoring facilities in real-time, from energy production to consumption through (IoT) infrastructure.



Hydrogen fueling network, Harnessing Hydrogen To Power The Next Generation of Electric Vehicles.



Centralized, cloud-based application. Intelligent carbon footprint management & reporting platform & sustainability reporting.



A hybrid energy system that harnesses offshore altitude wind combined with subsea oceanic pressure to produce clean electrical energy and grid scale energy storage.



IoT and AI based cloud computing giving second life to solar panels, connecting to smart grid and preventing e-waste.



Storing electrical energy within zinc metal, store hundreds of hours of energy capacity cheaper than battery technologies.



Blockchain-based software traces where your green energy really comes from, every hour, and its related carbon.

SmartPulse aims to be the “super platform of energy trading” which enables companies to connect all “energy exchanges, grid operators, power plants, consumers/prosumers and service providers” via an end-to-end, comprehensive, cloud native SaaS platform for monitoring and automating daily operations, market-based balancing activities and intraday trades with the help of its unique smartBOTs. We are focused on addressing the current and future challenges of power trading and our solutions help reduce costs and increase operational efficiency of renewables significantly.

About the Founders

Mr.Önder AKAR - Co-Founder & CEO



Önder is the co-founder and CEO of smartPulse. With over 15 years in private sector with companies such as RWE and Deloitte, Önder has unique and hands-on experience in power trading, software development and consultancy. Önder earned an MBA from Hacettepe University and a BS degree in Computer Engineering from Anatolian University.

Mr.Ozan KORKMAZ - Co-Founder



Ozan is the co-founder of smartPulse and APlus Energy Consultancy, with 15+ years of experience in fundamental and statistical energy demand&price forecasting, feasibility analysis of electricity generation technologies and optimization modelling. Ozan holds BS and MSc degrees in METU Civil Engineering and is a PhD Candidate in ITU Energy Engineering.

Ionomr Innovations is advancing the development and manufacturing of ion-exchange membranes and polymers for clean energy. Ionomr's Pemion® and Aemion® technologies provide cost, performance and sustainability advantages for fuel cells, hydrogen production and carbon capture & conversion.

About the Founders

Ben Britton - Co-Founder & CSO



Passionate about decarbonizing the planet, and so is team Ionomr - our breakthrough materials bring a step-change in the cost of green hydrogen production; fundamentally enable the most efficient carbon utilization for carbon-negative plastics, fuels, and chemicals; and bring to life long-lived, low-BOP-cost FCEVs as the most efficient use of hydrogen - all while replacing the most intractable use-cases of the last great toxic/bioaccumulative (& F-gas generating) chemicals.

Bill Haberlin – CEO



Tim Peckham - Co-Founder

Steven Holdcroft – Co-Founder



Producing Clean Electrical Energy and Grid Scale Energy Storage

<https://hw.energy>

Developing a disruptive technology to solve 3 of the biggest challenges of the 21st century, low-cost clean electricity, grid scale energy storage, and seawater desalination. All ultimately from wind offshore using vertical axis wind rotors and offshore based kite systems. We have also developed and commercialised the world's only low-cost handheld seawater desalination device (QuenchSea) for humanitarian purposes.

About the Founders

[Lee King](#) - CEO and Co-Founder

Is the concept architect, co-founder and CEO of the company. He is a graduate of the University of Aberdeen holding an MA and MSc International Business. He has over 10 years of experience in business management, business development, investment funds, project finance, investment and technology strategies, as well as within projects focusing on water desalination, water security and energy.



Hayk Vasilyan - CTO and Co-Founder

Is a renowned researcher in manufacturing technologies and materials. He holds a Mechanical Engineering BSc, MSc from the University of Turin, Italy, and a PhD in the field of Computational Engineering and Design at the Rolls-Royce Technology Centre from the University of Southampton. He has a wide range of experience in product design, systems integration, manufacturing technologies, robotics, materials science and renewable energy.



Abdulla Ghaly - Co-Founder

Is a renowned researcher in manufacturing technologies and materials. He holds a Mechanical Engineering BSc, MSc from the University of Turin, Italy, and a PhD in the field of Computational Engineering and Design at the Rolls-Royce Technology Centre from the University of Southampton. He has a wide range of experience in product design, systems integration, manufacturing technologies, robotics, materials science and renewable energy.





A Novel Electricity-free Electrolysis Technology

<https://utility.global>

Utility Global aims to reshape the world's energy landscape with our low-cost, clean, distributed hydrogen production systems powered by our proprietary, high-temperature H2Gen™ electrolysis process.

About the Founders

Matt Dawson - CEO & Co-Founder



Strategic Business Leader, Venture Capitalist, Inventor, and Technology Manager with a passion for developing & commercializing breakthrough technologies. Specialties in sustainability & energy. Founded several successful start-up companies. Stewarded everything from small technology companies to large organizations as a Director, CEO, CTO, and Manager. Over 100 patent applications & publications. Proven track record inventing and commercializing high-impact technologies that have seen broad industry adoption

Jin Dawson - Co-Founder



Experienced Inventor, Technical Advisor, and Patent Agent with a passion for innovation. More than a decade of experience in the IP law industry, specializing in energy technologies & chemical processes. Strong business development professional with a Doctor of Philosophy in Chemical Engineering from the Massachusetts Institute of Technology.



Carbon Footprint Management, Sustainability & Reporting Platform

<https://www.persefoni.com>

Persefoni is a SaaS company that enables enterprises and financial services institutions to measure, analyze, plan, forecast, and report on their carbon footprint. The Persefoni platform leverages AI to provide users contextual sustainability performance scores for their organization and enables them to manage their carbon transactions and inventory with the same rigor as their financial ones. Built for both reporting companies and institutional investors, Persefoni is a complete carbon footprint management system.

About the Founders

Kentaro Kawamori

Co-Founder & CEO



Jason Offerman

Co-Founder & COO



Kim Stroh

Co-Founder & Chief Product Officer



Kim Stroh - Co-Founder & Chief Product Officer



Experienced technologist with a demonstrated history of leading software development teams in startups and Fortune 500 companies in multiple industries. Skilled in RPA, Enterprise Architecture, Product Management, Databases, BPM, SDLC and Business Intelligence.





Providing the Most Economic Form of Long-Duration Energy Storage

<https://e-zinc.ca>

e-Zinc is a company based in Toronto, Canada that has developed a breakthrough electrochemical technology for storing energy in physically-free zinc metal. This low-cost, safe, and long-duration (multiday) energy storage solution will provide the platform for the world's energy markets to be fully powered by renewable energy, enabling a zero-carbon energy future

About the Founders

James Larsen - CEO



James has significant experience in developing targeted strategic recommendations and mobilization plans for a broad range of companies across international markets. He has led initiatives in a wide array of areas, such as go-to-market strategy, performance improvement, customer strategy, mergers & acquisitions, IT, and organization, as well as commercial due diligence for private equity clients.

Greg Zhang - Founder



Dr. Zhang is a visionary and seasoned technology developer. He founded e-Zn in 2012 and has been the CEO till July 2018. As the inventor of the Zn Reactor technology Dr. Zhang led the development from conception to the success demonstration of a fully integrated energy storage system for solar power.

Prior to founding e-Zn, Dr. Zhang worked for 20 years at Teck Resources as a scientist and later as Manager of R&D leading a team to develop new zinc products for battery.

Scott Peever - VP of Business Dev





Transparent Information on Green Energy Sourcing

<https://www.flexidao.com>

FlexiDAO's software helps energy buyers increase the credibility of their renewable energy reporting. Thanks to blockchain, it can verify where the green energy really comes from and its real emissions, every hour of the day. This is linked to the official energy certificates for audits. Utilities offer this service to customers bundled with PPAs or green tariffs. With FlexiDAO, energy buyers become leaders of the energy transition and are prepared for future carbon regulations, while saving admin time in their reporting.

About the Founders

Joan Collell - CCO

Leading the commercial activity at FlexiDAO with both corporate energy buyers and utilities. Former strategy, sales & marketing experience from Bain & Co, Google and Henkel. Master in Marketing Management at ESADE Business School and Graduate in Business Administration. Spanish nationality.

Simone Accornero - CEO

Clean Energy Entrepreneur, Research Engineer and recipient of EIT EU 2018 CHANGE Award. Double MSc at KU Leuven and Universitat Politecnica de Catalunya. Expertise in energy management consultancy, wholesale and local electricity markets, smart distribution systems and blockchain applications for energy sector. Italian nationality.

Grzegorz Bytniewski - CTO



Has been an energy and blockchain developer and analyst at Everis and a research engineer at CITCEA, UPC. Recognised by the Energy Web Foundation as an expert in the field, Grzegorz has been actively involved in the blockchain space since 2013, contributing to various forums, developments, and applications. He has a double degree in MSc Energy for Smart Cities at KU Leuven (Belgium) and UPC (Spain). He worked at PGE EJ1 (Poland), was a research engineer at Tohoku University (Japan), and a research student at The Hong Kong Polytechnic University (Hong Kong).



Transforming Waste into Resilient, Renewable and Revolutionary Energy

<https://ethosgen.com>

EthosGen is pioneering the use of advanced materials to convert waste into scalable, resilient, and renewable energy to provide carbon-free circular economy solutions to industry and infrastructure.

About the Founders

James Abrams - Founder & CEO



Clean Energy Innovator and Entrepreneur leading energy development projects both nationally and internationally. Featured lecturer at various industry forums and universities about alternative energy and entrepreneurship.

Paul Roege - CTO



Pursuing a life-long motivation to guide more sustainable approaches to energy. On my last active military duty tour, I had the privilege of coordinating the Army's approach to "operational energy;" shifting focus to expand those concepts to build national resilience through innovative energy approaches.





SmartHelio's Vision is to Become the Brain of Clean Energy Sources
<https://www.smarthelio.com>

SmartHelio, based out of Switzerland, is a deep-tech startup working in the clean energy domain. It uses its proprietary Edge sensor and intelligent software to make solar plants live longer and greener.

About the Founders

Naomi Savioz
Co-Founder

Neeraj Dasil
Key Management

Shankaransh Srivatsva
Key Management



Govinda Upadhyay - Co-Founder & CEO



Govinda is a serial entrepreneur. His latest startup, SmartHelio is an IOT and Deep data analytics company, helping solar industry to increase solar performance. Govinda is on the Forbes 30under30 list for his work in energy domain. He also received prestigious Swiss Ambassador award 2018 for his work in Education. He is also backed by the EIT (EU) CHANGE AWARD 2015, BITSAA 30 Under 30 Award. He has done three years of research in sustainable city planning in EPF Lausanne, a Masters in sustainable technology from TU Eindhoven and KTH Sweden.





Harnessing Hydrogen To Power The Next Generation of Electric Vehicles

<https://www.truezero.com>

Developer, innovator and disruptor of hydrogen fueling infrastructure with a mission to foster the widespread adoption of hydrogen vehicles and of hydrogen in the transportation sector at large. To improve the economics of driving, and reduce its footprint on our planet. To change the transportation industry. And with it, the world.

About the Founders

Joel Ewanick - Chairman & CEO

Mr. Ewanick is Chairman and Chief Executive Officer at FirstElement Fuel, Inc. where he is responsible for implementing the vision of FirstElement Fuel, including corporate strategy and product planning. He brings vast experience and skills in marketing, improving the customer experience, growing markets, and managing customer incentive programs. Previously, Mr. Ewanick served as General Motors' Vice President and Global Chief Marketing Officer and Vice President of Marketing at Hyundai Motors America. At Hyundai, he was critical to the auto's market growth. He's most recognized for a relentless drive, willingness to make bold changes that benefit the brand, and for the ability to forge mutual trust and respect between company and consumer.



Dr. Tim Brown – COO & Principal

Dr. Brown's responsibilities include technology oversight, project management, and business planning. Previously Dr. Brown led a sustainable transportation research group at the University of California, Irvine ("UCI"), and also managed the operation of the UCI and Orange County Sanitation District hydrogen station. Dr. Brown helped develop the 68 hydrogen station plan for California, which was referenced in the California Fuel Cell Partnerships' Roadmap document. As a hydrogen thought-leader, he's authored over 20 peer-reviewed journal articles on hydrogen infrastructure and alternative transportation and has spoken at scores of invited lectures. Prior to his time at UCI, Dr. Brown worked with automotive fuel system testing at General Motors for 6 years.



Dr. Shane Stephens - CDO & Principal

Dr. Stephens is in charge of investments, business development, government/policy issues, and overall growth of the company. Prior to FEF he conducted groundbreaking hydrogen infrastructure research at the University of California, Irvine (UCI) and led government relations and program development efforts for the National Fuel Cell Research Center. Dr. Stephens also interned at the Obama White House where he helped design and coordinate policy related to energy and disaster readiness. Dr. Stephens has authored more than a half-dozen peer-reviewed scientific articles and won awards for his work on fuel cells and how they integrate into the broader energy ecosystem including a fellowship from the Newkirk Center for Science and Society and a Public Impact Fellowship from UC Irvine.

