

Backgrounder

March 14, 2016

Energy New Venture Competition

What is the Energy New Venture Competition?

Now in its third year, the Energy New Venture Competition is a platform for advancing emerging energy technology companies and concepts to the next level. Hosted by the Hunter Centre for Entrepreneurship and Innovation at the Haskayne School of Business, the competition offers seed-stage companies, budding entrepreneurs, researchers and students a chance to benefit from a share in almost \$150,000 in cash and in-kind prizes. Competition finalists submitted applications in October 2015 to have the chance to pitch their concepts and companies to a panel of seasoned entrepreneurs and investors. Thirteen finalists have moved forward to the final pitch and have received mentorship from experts in entrepreneurship, innovation, company creation and investment development through Innovate Calgary.

Who are the judges?

CONCEPT STREAM JUDGES

Terry Booth, Partner, Collins Barrow
Robert Bowman, Global Account Director, Schlumberger
Brian Gregg, Manager, Global Research – Canada, GE Global Research
Heather Herring, Board Member, TECTERRA and Innovate Calgary
Henry Kutarna, Executive Director, Invest-Tech
Matt McCulloch, Sr. Technical Advisor, Greenhouse Gases, COSIA

VENTURE STREAM JUDGES

Juan Benitez, Senior Specialist, Strategic Partnerships, Cenovus Energy
Andrew Boland, Operating Partner, Energy Ventures
Henry Kutarna, Executive Director, Invest-Tech
Tony Loria, Managing Director, Head of Energy Investment Banking, Dundee Capital Markets
Hull McKinnon, Partner, Altira Group LLC
Cameron Plewes, Managing Director, Corporate Finance, Peters & Co.
Myron Tetreault, Chairman, Calafate Holdings Ltd.
Suzanne West, President and CEO, Imaginea

Who is the keynote speaker?

David Kelly, P.Eng, Founder and CEO, SkyFire Energy Inc., Western Canada's leading solar contractor who designed and installed grid connected and off grid solar power systems throughout Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, Northwest Territories and the Yukon.

Who are the finalists?

Concept Stream:

- 1. **Aesop Technologies** (Norfolk, VA, USA), is a solar technology startup that provides products with convenience, while promoting a healthier, cleaner environment. Aesop Nucleus, the company's latest project, is a two-foot diameter solar concentrated dish that caters to residents and businesses that want to save money, time and energy. Regardless of the location, weather or terrain, Aesop Nucleus is the perfect alternative, compared to photovoltaic systems that can provide maximum power at minimum costs.
- 2. **BFH Corp (Bitcrude)** (Calgary, Alberta), is a new way to process, transport, store and profit from Alberta's crude oil. This patent pending method of processing Alberta's liquid crude oil (Western Canadian Select), turns it into the world's only solid crude oil. It can be packaged and transported to global markets using existing worldwide infrastructure. The modified refining process produces value added products such as gasoline and diesel, only now with a much lower capital structure.
- 3. **Invisible Predictions** (Calgary, Alberta), is a cloud-based web platform. It provides real-time estimation and prediction of electricity generation from behind-the-meter solar photovoltaic systems for a neighbourhood to the national grid level. It is intended for power system operators, and generation and distribution companies with considerable solar photovoltaic capacity. The information is critical to tackle the challenges associated with significant growth of unmonitored solar photovoltaic systems in power systems.
- 4. **METEOR BioTech: Microbially Enhanced Thermally Engineered Oil Recovery** (Calgary, Alberta), develops technology and services for lowering greenhouse gas emissions intensity and increasing productivity from heavy oil and oil sands reservoirs. METEOR BioTech's technology and expertise in reservoir characterization, petroleum geochemistry, field development and petroleum microbiology provides novel greener solutions for challenging reservoirs. This technology offers reductions to production cost, water consumption and steam-to-oil-ratio. METEOR is logical, scientific, easy to deploy, and a safe and cost effective solution for heavy oil developers dedicated to efficiency and lower emissions.
- 5. **SMACK Energy Forecasting** (Calgary, Alberta), founded by five Engineering students, is a fast, accurate and robust wind power forecasting system. The system is designed from the ground up using the best technology available. Best-in-class advanced predictive algorithms are used to get the most accuracy using a large amount of data. The result delivers up-to-the-minute customized predictions to utility companies and system operators who will find it invaluable towards grid reliability, system planning and risk mitigation.
- 6. **Solar Biocells** (Calgary, Alberta), has radically rethought biomass production, leading to an entirely new concept for the production of climate neutral fuels. Low costs and the simple nature of the process makes it possible to first produce an educational package targeting elementary schools. This enables students to extract CO2 from the atmosphere and produce biomass, while allowing Solar Biocells to demonstrate the value of the product to the world in a transparent way and ideally positioning it to move into industrial markets.

Venture Stream:

1. **Aquatricity** (Boulder, Colorado, USA), a power and water control system, addresses the problems of energy and water scarcity faced by underserved communities worldwide. Our self-contained system combines and controls diverse and intermittent power inputs such as solar, batteries and diesel into an efficient and

consistent power output. The system optimizes the mix of renewable energy, delivering power at the lowest cost with the lowest carbon footprint. Aquatricity's system is an affordable, repeatable, drop-in solution.is improving the science and practice of geological modeling through software. Enersoft's WellTools SaaS platform provides the energy industry advanced data hosting, visualization and analytics through a simple web interface. Enersoft's products and services are deployed at some of Canada's largest energy companies.

- 2. **Endeavor Technologies** (Edmonton, Alberta), delivers advanced computational modelling for the drilling industry. The first product, Drilling Safety Training Systems, utilizes real-time mathematical models packaged as a drilling simulator to deliver highly detailed and realistic scenarios for training users to conduct optimized drilling techniques for vertical and horizontal drilling jobs in a virtual jobsite. Rigs, well-control equipment, down-hole tools, formations and well plans are customizable to deliver the most advanced drilling simulation in the energy sector.
- 3. **GEM Services: SmartMat** (Calgary, Alberta), has revolutionized the industrial matting industry. SmartMat[™] is our innovative mat tracking solution that was designed to solve the problems of access matting. With embedded RFID tags and GPS tracking, we are able to track the exact location of every tagged mat in the field, providing project information and analytics through an online platform.
- 4. **Interface Fluidics** (Calgary, Alberta), is an engineering laboratory services company specializing in microfluidic reservoir modeling and fluid characterization for the upstream oil and gas industry.
- 5. **Oplii** (Calgary, Alberta), is an operations management system that uses mobile and cloud technology to connect the office and the oilfield. This turn-key software solution enables oil and gas producers to reduce capital expenditures and increase operational efficiency with an easy-to-use and comprehensive suite of tools for managing sites, structures, equipment, pipeline, asset integrity, projects, work orders and more all under the same roof. And with one of the most innovative digital inspection solutions on the market, Oplii extends into remote offline areas, allowing field users to conduct inspections, log work orders and administer projects via smartphone or tablet.
- 6. **Spectralog** (Calgary, Alberta), is advancing the science and practice of resource recovery through hyperspectral technologies high-resolution, big data that can solve the industry's most challenging technical problems, such as where and how to drill for maximum resource recovery with the lowest environmental impact. Backed by decades of world-class research experience, and proprietary hardware and software, Spectralog provides clients with full-service hyperspectral data acquisition and interpretation to maximize E&P asset value while minimizing costs and risks.
- 7. **Zeel** (Calgary, AB), is using software to disrupt the pipeline integrity world by putting inspectors on the ground at a lower cost, helping them gather more useful information and get their engineers back to the tasks that have the most impact. Zeel has listened to customers' needs and goes beyond just regulations and focus on social license, return on investment and profitability.

What are the prizes?

Concept Stream:

First Place: \$7,500 cash and \$17,500 consulting services

Second Place: \$5,000 cash Third Place: \$2,500 cash

Venture Stream:

First Place: \$25,000 cash, \$30,000 consulting services, opportunity to pitch at the PROPEL Energy Tech Forum

Second Place: \$15,000 cash and \$20,000 consulting services Third Place: \$10,000 cash and \$10,000 consulting services

What is the Hunter Centre for Entrepreneurship and Innovation?

The Hunter Centre for Entrepreneurship and Innovation at the Haskayne School of Business is focused on shaping a new generation of entrepreneurial thinkers. Entrepreneurial thinking is a way of approaching decision-making and problem-solving through an entrepreneurial lens. It involves creative, progressive thinking and an interest in continuous improvement – recognizing opportunities and knowing how to capitalize on them in real time. The centre promotes an inclusive, action-based and practical methodology for applying entrepreneurial thinking across all organizations, large and small. Research in the areas of entrepreneurship and innovation provide the impetus for curriculum development and new program ideas. Both undergraduate and graduate students benefit from action-based learning in all aspects of entrepreneurial thinking and action, and have the opportunity to test their skills in class and in partnership with industry.

Haskayne's Hunter Centre for Entrepreneurship and Innovation was established in February 2013 thanks to a lead donation of \$5 million from Doug and Diane Hunter and nearly \$3 million in additional support from Calgary entrepreneurs Wayne Henuset, David Robson, Charlie Locke and Keith Brown.

Media Contact

Janelle Morris Senior Communications Strategist Haskayne School of Business, University of Calgary

Phone: 403-220-6153 Cell: 403-585-1436

janelle.morris@haskayne.ucalgary.ca

About the University of Calgary

The University of Calgary is making tremendous progress on its journey to become one of Canada's top five research universities, where research and innovative teaching go hand in hand, and where we fully engage the communities we both serve and lead. This strategy is called *Eyes High*, inspired by the university's Gaelic motto, which translates as 'I will lift up my eyes.'

For more information, visit <u>ucalgary.ca</u>. Stay up to date with University of Calgary news headlines on Twitter @UCalgary. For details on faculties and how to reach experts go to our media centre at <u>ucalgary.ca/news/media</u>.

About the Haskayne School of Business

The Haskayne School of Business was founded at the University of Calgary in 1967, and was named in honour of Richard F. Haskayne, OC, AOE, FCA, in 2002. The business school has approximately 3300 full- and part-time students enrolled in bachelor's, master's, doctorate, and executive education programs, and stays connected with its more than 21,000 alumni in 80 countries worldwide.

The vision of the Haskayne School of Business is to be an internationally recognized centre of excellence for business education, research, and community outreach, with a special emphasis on the distinct elements that define Calgary and Alberta: energy, entrepreneurship, and ethical leadership.

For more information, visit <u>haskayne.ucalgary.ca</u> or follow us on Twitter @HaskayneSchool.

Issued in partnership with:



About Innovate Calgary

As a leading technology transfer and commercialization centre, Innovate Calgary works closely with startups, entrepreneurs, researchers and investors from the advanced tech sector to take innovation and ideas to the next stage of growth. Innovate Calgary has been successfully contributing to the growth and acceleration of the advanced technology sector for more than 30 years. Our integrated approach to commercialization focuses on facilitating connections among stakeholders and offering a comprehensive range of programs and services to achieve success.

To learn more visit: innovatecalgary.com