ICC INNOVATION & COLLABORATION CENTRE

The Innovation & Collaboration Centre (ICC) is the University of South Australia's startup incubator.

The ICC engages with the community through the delivery of community events, workshops and programs which draw on the research and professional expertise of UniSA and our partners, to support the generation of new startups and the growth of existing companies.

The ICC is headquartered in Adelaide and has a regional centre in Whyalla, South Australia.

icc.unisa.edu.au

VENTURE CATALYST

The ICC's flagship program is designed to develop and grow founders with innovative or disruptive ideas. It targets early stage ventures and works to make their journey more achievable, accessible and focused.

FURTHER INFORMATION

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IRIS ENGINEERING

Green hydrogen power for communities and industry

BENEFITS

- Carbon neutral energy generation
- Hydrogen as a renewable energy medium
- Future proof of energy assets and increased energy security
- Transforming to a cleaner source of energy.

BACKGROUND

Iris Engineering is looking to change the world's environment by driving the usage of hydrogen for storage or energy from a renewable source. Current technologies and processes allow for 100% + renewable power generation for communities and industry. The energy is stored in the form of hydrogen which in turn can be used for power storage, transportation, reliability, security, sold, exported, used as a feedstock for other processes, and assist in many other aspects of industry.

The team targets communities and industries located near low-cost renewable energy generators and off-grid areas. Where possible taking advantage of excess or very low-cost energy to develop the most efficient and reliable opportunities to supply and drive down the cost of hydrogen production and usage.

Iris Engineering has partnered with CSIRO and Charles Darwin University to further their services to clients for microgrid research and design, and provide the latest technologies and best Australia has to offer for designing and testing all of their systems.

Australian Government
Department of Industry, Science, Energy and Resources
Government of South Australia
WHYALLA

IRIS ENGINEERING

Joel Albertson
Founder, Director, Engineer

Lyell Blackman
Business and Sales Manager, Field Delivery Manager

Jarrad George
Technical Supervisor, Electrical and Instrumentation Supervisor

Michael Green
Inventor, Process Supervisor, Electrical and Instrumentation Supervisor

Sonia Kaur
Marketing and Finance Director, Data Scientist

TECHNOLOGY

Iris Engineering is taking renewable power generation through a means such a solar wind or tidal power. This power is stored by converting water into hydrogen and oxygen through the process of electrolysis. The hydrogen is captured and liquified for storage and used as a battery for when solar power is not available, it can be burned as a gas in a turbine, injected into a gas pipeline or used in a fuel cell to create power.

Iris Engineering has developed proprietary optimization processes by which they evaluate communities and industry and in turn, provide solutions to their energy needs complete with a substantial power back up system.

Through their design processes, they have discovered several means to reduce the equipment costs, increase process efficiencies up to 30%, and also provide fit for purpose designs and projects for power to power delivery.

POTENTIAL MARKETS

Iris Engineering's current global market is remote area power systems (RAPS), as well as any company in the energy generation sphere. As the business continues to increase capacity to deliver projects, the market will continue to expand as well.

PARTNERING OPPORTUNITIES

Iris Engineering is partnering with equipment manufacturers, technology companies, energy providers, Indigenous organizations, science organizations, research and development companies, engineering companies across Australia, Alaska, Germany, and the United Kingdom.