INVEST IN **ICARUS RT, INC.**

Hybrid PV/Thermal Solar Plus Storage Cogeneration System

PITCH VIDEO | INVESTOR PANEL

icarusrt.com San Diego CA

Technology | Infrastructure | Hardware | Social Impact | Clean Tech

LEAD INVESTOR

Bruce Jones

My wife and I have invested in ICARUS because we believe in Mark Anderson and his vision for the future of solar power. Through Marks brilliance, he has developed cutting edge technology in the field of solar energy that ultimately will provide a cost effective solution for green, sustainable power at a time in history when the need is the greatest it's ever been. With energy mandates and legislation as they are, ICARUS timing to market is spot on.

Invested $25,000 this round & $170,000 previously

Highlights

1. ⚡ Boosts Solar Photovoltaic (PV) efficiency while generating hot water.
2. ☀ Icarus takes back more than half of the waste heat rejected by PV systems.
3. 🏙 Ideal for high density housing, commercial and industrial buildings.
4. 💰 Reduces ROI from 6-8 years to about 3-years

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5. 🎄 Every Megawatt of Icarus installed saves the emissions equivalent of 480 cars.
6. 📈 $100M targeted early market. US Commercial & Industrial PV market $13B.
7. 💵 $1.1M grants (California Energy Commission, Shell/NREL, Qualcomm) + $679 k private funds.
8. 🏭 Two commercial demonstration projects scheduled for Q4-2021.

Our Team

Mark Anderson Founder & CEO

Anderson has 40+ years of energy industry experience and has consulted on renewable energy projects globally for the past 12 years. Anderson was the Project Director and Engineer of Record for the 29 MW Chevron BrightSource Solar to Steam Project.

We are proud to be an American company that is 40% veteran. Our Team is passionate about renewable energy because carbon fuels are not a sustainable solution to producing energy. Solar power is a viable, clean alternative but today's PV technology is not efficient enough at only 20%.

Ron Pitt CTO & Vice President

Pitt has been a C-suite leader in alternative energy and energy efficiency technology companies for over 20 years. Pitt founded two energy startup companies and is the inventor on multiple energy-related patents.

Kathrine Lukes Operations Manager

Lukes is a former Captain in the United States Marine Corps and completed her MBA with a focus in Operations and Supply Chain Management. Lukes leverages her military experience in global supply chain, and logistics to lead the operations department.

Oyku Demirel Materials Engineer - Nanotechnology Specialist

Demirel received her BS degree in Chemical Engineering and her MS degree in Nano Engineering from University of California San Diego. Demirel is a globally published researcher, working to develop efficient materials to optimize Icarus' technology.

Alex Yeh Electrical Engineer

Yeh received his BS in Electrical Engineering from UCSD and is currently an Electrical Engineering graduate student at SDSU. Specializing in power and energy systems, Yeh has research experience in solar energy and wind turbine control systems.

Brian Beachnau Mechanical Engineer

A current MSME student at San Diego State University, Beachnau's research has focused on heat transfer analysis and optimization through computational modeling. He is committed to developing efficient, sustainable technology.

Jarred Druzynski Mechanical Engineer

Druzynski received his BS in Mechanical Engineering at San Diego State University and is continuing there for his MS in Mechanical Engineering. He will be specializing in Energy and Thermofluids and will also take coursework in Dynamics and Controls.

Dishita Shah Finance Manager

Shah graduated with a dual MBA/Master's in Finance degree from the University of San Diego. She is currently working to develop valuation models and financial projections for Icarus, and is interested in learning more about startup investing.

Alyssa Dugar Human Resource & Outreach Manager

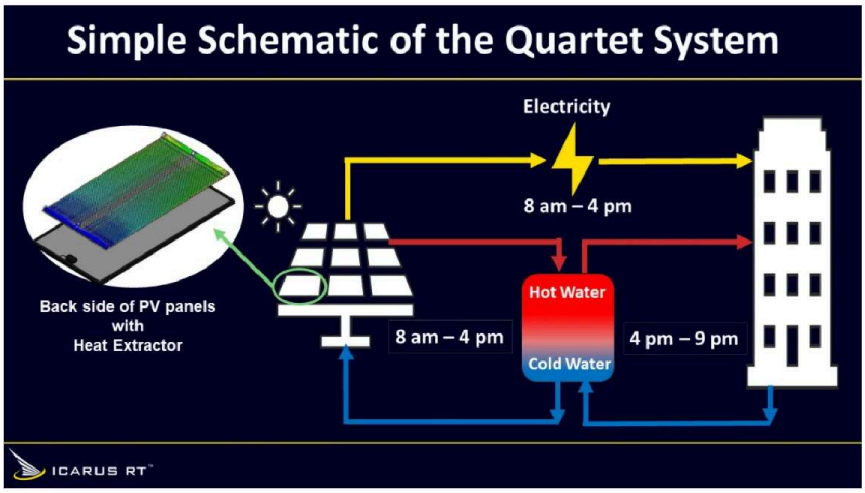
After retiring from the United States Marine Corps, Dugar joined the Icarus team to continue her fight for a better future. With a Bachelor's degree in Psychology and Hispanic Studies from Rice University, she is a natural fit for HR and Outreach.

Austin Bond Chemical Engineer (Intern)

Bond received his BS in Chemical Engineering from UCSD and will continue there for a MS in the same with a specialization in nanotechnologies for energy and the environment. Bond is pursuing his engineer in training certificate through the NCEES.

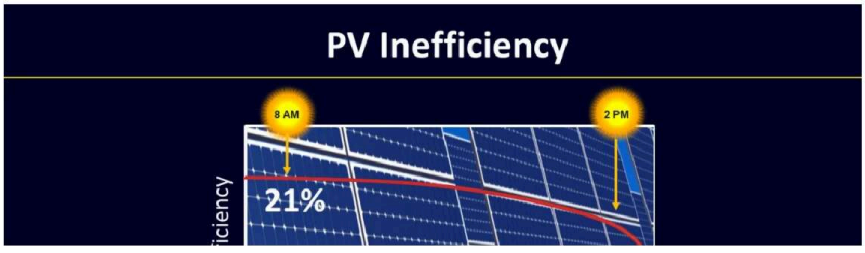
Solar electricity systems waste 80% of the sun's energy... we take it back!

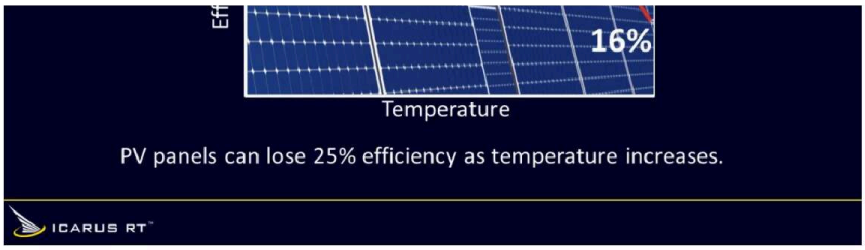
Icarus RT's revolutionary Quartet Hybrid Solar Energy technology combines the best of solar photovoltaic technology with solar hot water systems to capture twice the energy from the sun in the same footprint with only a minor increase in cost. With the Quartet system, building owners no longer must choose between generating electricity or hot water with their solar system – they get both! End users gain higher solar energy conversion and thermal energy storage without expensive, toxic batteries.



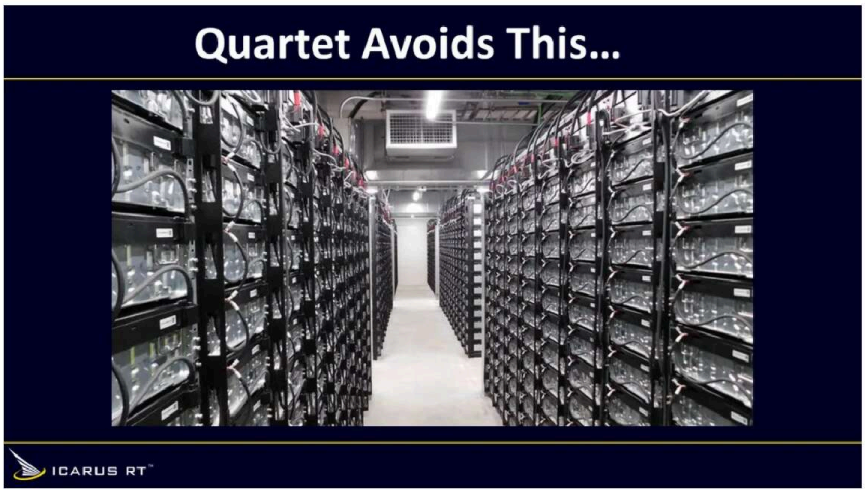
Hotels, apartment complexes, hospitals, factories, and schools can obtain all the electricity and hot water they need to be self-sustaining while saving tons of carbon emissions annually. The best part: because of its higher efficiency, the Quartet solar system can return the entire initial cost in just 3 years due to the high energy cost savings, rather than the 5-10 year payback of current solar technologies. The faster payback makes the Quartet Hybrid Solar System a more economically attractive investment and in-turn, improves the air quality around the globe due to reduced fossil fuel emissions.

Current photovoltaic systems become less efficient as they heat up, defeating the whole purpose of using the sun to generate electricity. The Quartet system cools solar panels to improve their electric efficiency while the sun shines and recycles the excess heat off the panels to generate hot water. Quartet provides double the energy output within the same footprint of a comparable photovoltaic array alone.





The Quartet system includes a thermally-insulated storage tank to provide hot water on-demand on cloudy days and at night. Water thermal storage is cleaner, inexpensive and benefits the planet by reducing the vast quantities of lithium mined for current battery storage while significantly reducing the large amounts of toxic lithium waste being disposed every year.



How far along are we?

Icarus first installed a demonstration system at the University of California San Diego (UCSD) for prototyping and testing in 2018. This first system proved the efficiency gains and potential cost savings made possible with the Quartet technology. We are now installing two additional full-sized commercial scale prototypes at Palomar Community College in San Marcos, CA, and a second system at UCSD. Upon successful validation of these prototypes, commercial demonstration projects are scheduled at San Diego State University, a large multi-unit residential complex in Del Mar, CA, and a large government building in San Diego, CA.

Our team working on our first installation.

These installations are being developed with the support of multiple strategic partners including CalSEED, Shell-NREL, Black & Veatch, Qualcomm, Southern California Energy Innovation Network, the Berkeley-Haas Cleantech to Market (C2M) program, UCSD, and San Diego State University. These well-reputed organizations have strongly supported Icarus throughout the development of the Quartet system over the years.

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Why are we raising money?

The Quartet system has been fully developed and proven at the prototype stage. The funding from this WeFunder campaign will allow us to ramp up manufacturing and roll out a system ready to be installed for multiple early customers already lined-up.

Why Us?

Other companies have attempted to develop hybrid solar energy systems along the lines that Icarus has created. These alternative approaches have failed to meet the efficiency improvements and cost-effectiveness of the unique Quartet approach. However, new materials and design techniques have enabled the patent-pending technology that Icarus has developed and proven efficiencies, cost savings, and long life that will lead to Icarus RT's success where others have failed.

Our Market

"Full electrification" trends are becoming common in places like California and Colorado where local governments are forcing the gradual elimination of natural gas appliances, including water heaters, to reduce greenhouse gas emissions. Unfortunately, eliminating natural gas water heating in favor of electrical hot water heating is expensive but provides Icarus a tremendous opportunity to install Quartet systems throughout California and the United States. In fact, the world's Sunbelt is Icarus' market opportunity.

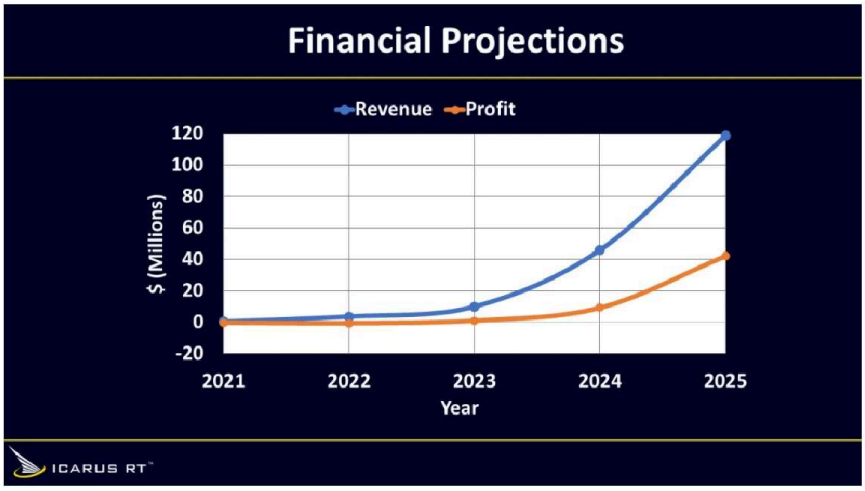
Forward-looking projections cannot be guaranteed.

High density housing complexes are our beachhead market. Other targets include commercial buildings such as hospitals, hotels, municipal buildings, schools, and manufacturers that benefit from replacing natural gas water heating with solar water heating while improving the performance of their PV electricity generation systems. Once market presence is established in the commercial sector, Icarus will pursue utility scale projects with investor-owned and public utility companies.

Our Go-To-Market Strategy

Initially, revenue will be generated through product sales and installation channels through 2022. Icarus will then transition to licensing as a primary revenue stream. Icarus will license its technology to Engineering, Procurement and Construction (EPC) contractors who will sell and install Quartet systems.

Icarus' forecasts installations totaling 5000-kW of new and retrofit solar installations in the first year of full production (beginning 2022). In years two and three, we project reaching 24,000-kW installed in California alone. By 2024 and 2025, we will scale to 108,000-kW and 480,000-kW installed throughout the US and global markets. These assumptions are based on conservative projections of deployment as compared to the large value proposition of the increase efficiency using the Icarus technology.



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How Your Investment Helps Make All This Possible

Your investment will accelerate commercialization of the Icarus Quartet system. The faster we reach the market the sooner we realize annual emission reductions equivalent to that of 480 cars per 1000-kW of power from Quartet system installations.

To learn more visit icarusrt.com or contact us at info@icarusrt.com