

IVCA Private Equity Profile



Firefly Energy Inc.

Management: Mil Ovan, Senior Vice President and Co-founder

Venture Capital Partners: **KB Partners**

Peoria is no stranger to technology and industry. As the long-time world headquarters to Caterpillar Inc., large machines and their components play an important role in the local economy. And as technology continues to advance, Caterpillar's offshoot, Firefly Energy Inc., could mean the future of manufacturing, industry and defense.

In 2003, engineers at Caterpillar began to experiment with ways to improve lead-acid batteries by exploring ways to reduce corrosion and sulfation, the process in which lead-sulfate crystals form on the battery plates, hurting the battery's ability to hold a charge. Kurt Kelley, now Firefly's chief technology officer, discovered an effective way by substituting carbon graphite for the lead acid. Caterpillar realized the concept's potential, provided seed money to spin off a separate business to research and develop carbon-graphite batteries and Firefly Energy was born.

It's an appropriate name since fireflies are incredibly efficient at using energy, emitting no heat when they beam their glow. That means 100 percent energy conversion—a goal Firefly Energy dreams of coming close to achieving.

Firefly set up operations in Peoria and brought in other engineers and researchers to continue developing carbon-graphite batteries. Experts also study and establish the batteries' applications. They could take the place of lead-acid devices for industrial and manufacturing equipment, like that being produced at parent company Caterpillar, or for use by other customers like the military.

What Firefly Energy Means to Illinois

- ✓ **Thirty-five jobs in the state of Illinois.**
- ✓ **Cutting-edge technology to enhance other industries such as manufacturing, construction and farming.**
- ✓ **A contract with the federal government for \$5 million to aid in developing defense electronics.**

The continuing development and research into better power sources, however, proves to be an expensive endeavor. Firefly has turned to other sources of capital beyond the seed money provided by Caterpillar and at the heart of their partnership. It found the necessary funds from multiple sources, including the federal government and venture capital firms, like KB Partners.

Focus on the Midwest

Based in Chicago, KB Partners is a firm of entrepreneurs for entrepreneurs. It places a prominent emphasis on investing and supporting business in the Chicagoland and surrounding Midwest area. Like Firefly, KB Partners has a passion for technology and the potential successes that cutting-edge developments can deliver.

Given these two primary investment focuses, the venture capital firm considered Firefly an optimal investment. After a year of operating, Firefly found it needed additional funding for its continued expansion. It also needed capital to pay for its research and engineering of products. The promise within those products convinced KB to lead a round of Series A funding.

KB Partners led a group of investors in securing \$6.1 million for Firefly, based on what, Byron Denenberg, KB Partners managing director, called Firefly's "seasoned management and market-leading technology."

"We are excited by Firefly's potential to revolutionize the lead-acid battery industry," Denenberg said at the time of the deal.

KB Partners hasn't been the only outside investor to show their enthusiasm for Firefly.

Firefly Energy and Venture Capital

- ✓ **KB Partners led a group of seven investors, including Uncle Sam in providing the seed money for Firefly.**
- ✓ **Venture funding has allowed the company to operate in pre-revenue stages as it continues to research and develop technologies.**

Within two years, Firefly went through a Series B round of funding and secured another \$10.7 million. The company has continued to arouse the enthusiasm of many industrial and construction companies, the U.S. government and leaders in science and technology.

Ready for Revenues

In the year since the last round of funding, Firefly has developed its technology and is poised to hit the market hard. While it remains in a pre-revenue state, the emerging corporation is hardly flying under the radar.

The federal government found Firefly's developments so promising that the two entered into a \$5 million contract for military applications of the batteries. Companies like Caterpillar also wait in the wings. And Firefly has plenty of admirers in the scientific research-and-development communities.

In 2007, Firefly won an R&D 100 award and *BusinessWeek* listed the company's products as a scientific technical development to watch. Firefly also was featured in *Defense Electronics* in 2007 and has received other extensive recognition in recent years.

With so many groups and individuals eyeing Firefly's development, the promise of the young company appears clear.

The **IVCA Private Equity Profiles**, a continuing series of portraits of Illinois venture capital and private equity investments, spotlights companies that are emerging or proven successes. Each account furnishes information about the company and the private equity firm or firms that invested in it, illuminating the important role they play in nurturing the companies.

IVCA is a non-profit trade association that serves the Midwest venture and buyout community. It focuses on expanding the size of the industry in Illinois

and the Midwest by improving the local ecosystem for investors, entrepreneurs and limited partners. On behalf of its members, IVCA advocates pro-growth government policies, provides a virtual community via www.illinoisVC.org for deal flow and networking, and hosts educational and entrepreneurial events that offer networking opportunities for local investors, entrepreneurs, governmental stakeholders and tech-transfer groups.