

## Frost & Sullivan Applauds OXIS Energy for its Lithium-Sulfur Battery Chemistry that Delivers Superior Energy and Safety Profiles



*OXIS Energy aims to offer its products at prices that are comparable with lithium-ion batteries*

MOUNTAIN VIEW, Calif. — December 8, 2014 — Based on its recent analysis of the advanced lithium-based batteries market, Frost & Sullivan recognizes OXIS Energy with the 2014 European Frost & Sullivan Award for Technology Innovation. OXIS Energy has developed a unique technology based on a lithium-sulfur battery chemistry that resolves some of the issues in the batteries currently used in military, automotive, and solar energy storage applications. As this battery technology offers energy density greater than 300Wh/kg., it is lightweight and offers enhanced safety chemistry that prevents fires and retains functionality, even after accidents.

The significant weight reduction makes the technology ideal for soldiers or electric vehicles. For specific military applications, OXIS Energy is confident of achieving a significant weight reduction in excess of 50% in the near future.

“OXIS Energy presently targets the electric vehicle, defense and solar storage markets, having already developed prototypes boasting technological advantages such as light weight, high gravimetric energy density, and better safety,” said Frost & Sullivan Senior Research Analyst Avimanyu Basu. “The patented lithium-sulfur battery chemistry is flexible enough to be tailored to fit other applications, such as marine transportation and advanced nanotechnology-enabled batteries.”

Unlike other market participants in the commercial lithium-based battery market, OXIS Energy is not looking to design low-cost/low-quality batteries. Instead, it is looking to deliver premium products with respect to safety, eco-friendliness, and energy density in a financially viable way. To achieve this, OXIS Energy plans to reduce the price of its battery technology to be on par with lithium ion through large-scale production.

“Additionally, OXIS Energy’s lithium-sulfur battery has long lifecycles,” noted Avimanyu. “Its premium product, which will be launched in two to three years, is expected to successfully achieve 2,000 cycles before the capacity reduces to 80 percent of its beginning-of-life (BoL).”

Significantly, OXIS Energy collaborates with and supplies battery pack manufacturers that offer complete products. For example, it has collaborated with both Steatite and Hans H. Schive to develop advanced lithium-sulfur batteries that combine its unique cell technology with their expertise in designing and manufacturing battery packs.

OXIS Energy also recently supplied the third phase of a research program (part of a Defense Science and Technology Laboratory research program) aimed at boosting the performance of its lithium-sulfur cells for Lincad Ltd and the UK Ministry of Defence. The highlight of the new technology is a 60 percent increase in capacity over the second phase; OXIS Energy is striving to further increase this capacity by 20 percent with the help of advanced materials.

With these numerous technology innovations, Frost & Sullivan expects various stakeholders to seek partnership with OXIS Energy. Its strong overall performance makes OXIS Energy richly deserving of Frost & Sullivan’s 2014 Technology Innovation Award.

Each year, Frost & Sullivan presents this award to the company that has demonstrated uniqueness in developing and leveraging new technologies, which significantly impacts both the functionality and the customer value of the new products and applications. The award lauds the high R&D spend toward innovation, its relevance to the industry and the positive impact on brand perception.

Frost & Sullivan's Best Practices Awards recognize companies in a variety of regional and global markets for outstanding achievement in areas such as leadership, technological innovation, customer service, and product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research.

### About OXIS Energy

Since it was founded in 2005, OXIS Energy Ltd. has been at the forefront of developing Lithium Sulfur battery technology. During the first phase the company invested heavily in design and development. Having invested just under \$50m, OXIS is now ready to move into the production of Lithium Sulfur cells for a series of applications in both the USA and Europe. With 19 families of patents, OXIS has been granted 60 patents with another 55 pending.

One of the most important breakthroughs achieved by OXIS relates to safety. One of the problems with Lithium ion is its volatility but OXIS now has demonstrable empirical data to demonstrate the safety of its battery technology.

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