



ICL DEPLOYS BROMINE-BASED BATTERY TECHNOLOGY FOR ENERGY STORAGE

ICL, Responsible for Third of the World's Bromine, Deploys the Innovative Technology First in its California Fire Retardant Production Site

Battery to Manage Demand, Ensure Optimal Utilization of Power Sources, Reduce Energy Usage and Cost, and Maintain Critical Emergency Operations

Rancho Cucamonga, CA, October 19, 2015 – ICL (NYSE & TASE: ICL), a global manufacturer of products based on specialty minerals that fulfill essential needs of the world's growing population in the agriculture, processed food and engineered materials markets, today announced that it has deployed a bromine-based battery for energy storage purposes at its fire retardant production site in Rancho Cucamonga, California.

ICL deployed the battery utilizing a Primus Power EnergyCell system to enable management of power consumption from the grid and lower demand charges, and to reduce electricity usage by decreasing power demand at peak hours, when electricity costs are most expensive. ICL anticipates that the behind-the-meter battery deployment will yield a 16% reduction to its annual operating expenses, with no impact to the facility's operations.

“The deployment of our energy storage technology at our facility in California is ICL's next step in our commitment to the growth of energy storage technologies,” said Stefan Borgas, CEO of ICL. “Effective energy storage is vital for reducing the impact of energy consumption on the environment through improved efficiency and successful deployment of renewable sources. ICL's bromine-based energy storage technology presents a financial growth area for our business while also delivering environmental and social benefits.”

One of the greatest challenges to the success of renewable energy is the ability to ensure continuity of supply. This is achieved by storing the energy while it is being generated, thus enabling the constant generation of power whether it is needed at that time or not.

The facility where the battery is deployed produces Phos-Chek[®] brand long-term fire retardants, foams and gels, key products in ICL's world leading chemical solutions for managing wildland, industrial and municipal fires. Bromine-based batteries are ideally suited for the long-duration stationary market as a solution to help companies efficiently and effectively store electricity, allowing them to deploy power when it is needed most, which minimizes energy waste, reduces overall energy use and costs, and ensures operations can continue in the event of a power outage. ICL produces approximately a third of the world's bromine, which is extracted from its vast reserves of Dead Sea brines.



“Energy management is not only key to reducing cost but also demonstrates our commitment to maintaining a sustainable operation in the State of California,” said Tom Davis, Phos-Check Site Manager for ICL. “ICL’s bromine-based energy storage technology will also allow us to manage our facility’s energy use as demand changes throughout the day, leading to lower operating costs and improved operational efficiency. The battery will also allow ICL to better serve our customers and maintain emergency operations in the event of unplanned utility outage, which is critical as this facility serves the area’s population in emergency events.”

Charles Weidhas, CEO of ICL Industrial Products added, “We believe bromine-based flow batteries are the ultimate solution for smart grid energy management. Bromine is an abundant resource enabling cost-effective energy storage without supply concerns. This is a cost reduction project with the goal of proving the capabilities and benefits of ICL’s electrolyte solutions at our own production site. We look forward to sharing our results and working with our partners to deploy both grid-scale and behind-the-meter bromine-based energy storage solutions with utilities and businesses throughout the world.”

Video [courtesy: ICL]:

[ICL Industrial Products CEO, Mr. Charles Weidhas, outlines the opportunities of the new bromine based technology for energy storage](#)

[ICL’s innovative bromine based technology for energy storage](#)

About ICL

ICL is a global manufacturer of products based on specialty minerals that fulfill humanity’s essential needs primarily in three markets: agriculture, food and engineered materials. The agricultural products that ICL produces help to feed the world’s growing population. The potash and phosphates that it mines and manufactures are used as ingredients in fertilizers and serve as an essential component in the pharmaceutical and food additives industries. The food additives that ICL produces enable people to have greater access to more varied and higher quality food.

Other substances, based on bromine and phosphates help to create energy that is more efficient and environmentally friendly, prevent the spread of forest fires and allow the safe and widespread use of a variety of products and materials.

ICL benefits from a broad presence throughout the world and proximity to large markets, including in emerging regions. ICL operates within a strategic framework of sustainability that includes a commitment to the environment, support of communities in which ICL’s manufacturing operations are located and where its employees live, and a commitment to all its employees, customers, suppliers and other stakeholders.

ICL is a public company whose shares are dual listed on the New York Stock Exchange and the Tel Aviv Stock Exchange (NYSE and TASE: ICL). The company employs around 14,000 people worldwide, and its sales in 2014 totaled US \$6.1 billion. For more information, visit the company's website at www.icl-group.com.