



SUCCESS STORY

ISBCO Credits Teamwork for Savings in Water, Energy, and Materials

Changes in energy consumption, water use, and material handling save ISBCO 125,000 JOD/year.



Eng. Elyas Elnajmeh with a compression gas analyzer to measure emissions of CO₂.

Eng. Elyas Elnajmeh (pictured above with a newly purchased portable combustion and emissions analyzer), oversees 120 workers at the facility. “Together as a team,” he says, “we have accomplished huge savings.”

The International Storage Battery Company (ISBCO) facility, in Jordan’s Abdullah II Ibn Al-Hussein Industrial Estate at Sahab, made several improvements recommended in a USAID pollution prevention assessment. As a result, ISBCO:

- Reduced electricity consumption by 1.2 million kWh/year for a savings of 82,000 JOD
- Reduced carbon dioxide (CO₂) equivalent emissions by 650,000 kg/year
- Reduced water consumption by 22 m³ each working day
- Saves a total of 125,000 JOD/year

The electricity consumption was reduced by means of energy efficiency and systems upgrading measures, which in turn reduced the carbon dioxide (CO₂) equivalent emissions.

ISBCO implemented a water conservation measure that the USAID assessment showed would have a payback period of less than a year. ISBCO now saves approximately 9,500 JOD/year in water use and wastewater discharge costs.

ISBCO was able to save another 37,000 JOD/year by improving their handling of materials, including both raw material and production waste. They improved the ways they handle lead resources, dross and dust piles, and the pasted grids used to manufacture batteries. They also improved the lead oxidation process and reduced indoor air emissions.

Eng. Elyas Elnajmeh, the Factory Director, appreciated the way that USAID assistance helped ISBCO look closely at energy, water, material handling and waste management. “With assistance from USAID’s Water Reuse and Environmental Conservation Project,” he says, “we saved water, energy and material resources at our facility.”

The ISBCO facility is one of 30 industrial partners working with USAID to reduce industrial pollution and conserve scarce water and energy resources – in ways that benefit the bottom line. The Water Reuse and Environmental Conservation Project examined water and energy use, material and waste flow, production processes, quality control, and other aspects of each facility’s operations. The assessments suggested options for minimizing pollution and saving water, energy, and money. Costs and payback periods for various options were also analyzed.