



SUCCESS STORY

Improving Energy Management in Kazakhstan

Introducing energy management systems and ISO-50001 in Central Asia



Photo: ICF

Kazakhstan's most energy-intensive companies attended hands-on energy management workshops, a first step towards ISO-50001 certification.

In cooperation with the US Department of Energy/Oak Ridge National Laboratory, a KazPhosphate audit identified more than \$1 million in potential annual energy cost savings. Payback periods for all measures identified were less than 3 years.

USAID's Central Asian Energy Efficiency Support Program (CAEESP) is working to reduce greenhouse gas intensity and emissions by stimulating investments in energy efficiency technologies and programs. A key step towards industrial energy efficiency is the development and implementation of sound energy management systems, as developed under the ISO-50001 standard. An effective energy management system enables a company to follow a systematic approach to continual improvement of energy performance, including energy efficiency, energy use and consumption. The concepts of energy management and ISO-50001 are still new in Central Asia. Kazakhstan's energy efficiency law, for example, directs energy-intensive entities to introduce and develop energy management systems within their organizations. USAID is working to expand awareness of the benefits of an energy management system and help selected large industries prepare to become accredited under the ISO-50001 standard.

In 2012, CAEESP presented a series of workshops in Astana, Kazakhstan where participants were introduced to best practices on energy audits, energy resources management, elements of the ISO-50001 standard, and energy management planning and implementation. The workshops were attended by over 70 participants including governmental agencies and industrial enterprises from the national holding group, "Samruk-Kazyna."

USAID initiated work with four of Kazakhstan's largest industries on the development of energy management systems in their facilities. In December 2012, CAEESP experts conducted an ISO 50001 gap analysis at one plant for KazPhosphate, a large phosphate mining and processing industry. In cooperation with the US Department of Energy/Oak Ridge National Laboratory, an audit was conducted on one of the KazPhosphate processing lines. The audit identified more than \$1 million in potential annual energy cost savings that could be achieved. Payback periods for all measures identified were less than 3 years. Implementing a strong energy management system typically saves 15-20% of energy costs, due to continuous monitoring and management of energy consumption. CAEESP is also working with KazChrome, Almaty Electricity System and KazakhMys. All four industries are on their way to becoming ISO 50001-certified in 2013.