





Energy and Security Group: Expanding Access to Sustainable Energy Solutions

e believe that everyone deserves access to energy, and that the transition to sustainable energy is an opportunity. We have great potential to enable a sustainable energy future that is led by renewable energy and energy efficiency – to increase access to energy around the world, reduce greenhouse gas emissions, and increase the reliability and resiliency of energy production and use.



To help this transition, we focus on **expanding the use of sustainable energy** (renewable energy and energy efficiency) technologies and practices to enhance economic performance, promote energy security, improve quality of life, and advance resource sustainability.



We work with our in-country partners to implement solutions that are sustainable to not only grow energy independence, but also lessen the dependence on fossil fuel-based energy and create strong energy resiliency. We work internationally with agencies such as USAID and international development organizations – to provide realistic and affordable solutions in energy development, production, distribution, and use.



Our team has expertise in policy, renewable energy technology, energy transmission & distribution, energy efficiency, legal, energy planning, as well as communications and outreach. We apply these skills to find versatile, feasible, and practical solutions to international challenges related to limited natural resources. We offer a nimble and experienced team that thinks through solutions as systems – not as solutions for single issues.

Our Projects

We have experience working throughout Latin America, Africa, Asia (South, Central and Southeast Asia), and the United States. We have completed and are currently managing complex programs worldwide including the USAID/Central Asia CASA-1000 Secretariat project, USAID/Pakistan Power Sector Improvement Activity (PSIA), and the USAID Power Africa Uganda Electricity Supply Accelerator (PAUESA).

USAID/Central Asia CASA-1000 Secretariat Project



Kyrgyzstan and Tajikistan are two countries in Central Asia endowed with some of the world's most abundant clean hydropower resources. With summer rainfall and water flow, both countries have a surplus of electricity during the summer. Nearby in South Asia, Afghanistan and Pakistan suffer from chronic electricity shortages while trying to keep pace with a fast-growing demand. A new electricity transmission system, CASA-1000, will connect all four countries to make the most efficient use

of clean hydropower resources in the Central Asian countries by enabling them to transfer and sell their 1300 MW seasonal electricity surplus to the deficient countries in South Asia.

ESG supports the \$1.2 billion CASA-1000 project serving as the Secretariat. In this role, ESG provides technical assistance and maintains the project schedule; provides communications/knowledge management support; and provides coordination, governance, and conflict management for representatives from 4 countries, 11 engineering, procurement and construction contractors, and 4 donors. ESG developed the CASA-1000 technical code–including 150 chapters covering common operating principles and procedures, including technical specs, digital monitoring systems, and cyber security.

USAID/Pakistan Power Sector Improvement Activity (PSIA)



PSIA is a four-year, \$23.5 million activity to increase the financial viability, reliability, and affordability of **Pakistan's** power system.

PSIA supports USAID's focus on facilitating long-term solutions to energy issues through increased engagement with the private sector. This is achieved by leveraging private investment and providing technical assistance to improve governance, implement necessary reforms, and promote fair and open competition in the market.

Working together with Pakistan-based subcontractors, ESG supports Pakistani government efforts to transition to a competitive power market; improve energy transmission and distribution system operations; optimize the use of grid electricity; and increase the share of renewable energy production and energy efficiency utilization in the country's energy mix. Key considerations for the PSIA Activity include more fully engaging the private sector, coordinating with Pakistani and regionally based stakeholders, ensuring environmental compliance and climate risk management, and promoting gender equality.

ESG's work with **PSIA** supports the efforts of Pakistani government and local subcontractors to improve energy transmission and distribution systems, optimize the use of grid electricity. and increase renewable energy production and energy efficiency.

USAID Power Africa Uganda Electricity Supply Accelerator (PAUESA)



Uganda, commonly known as the "Pearl of Africa", is recognized in Sub Saharan Africa for its electricity regulatory framework and encouraging private investment in the electricity sector. Despite these positive features, Uganda has one of the lowest electrification rates in the world. USAID and Power Africa initiated a three-year activity in 2017, PAUESA, to support the Government of Uganda's efforts to accelerate investments in cleaner energy.

ESG managed PAUESA through its three-year term with impressive results. Working with an in-country team, ESG increased access to both on-grid and off-grid energy and improved electricity generation, transmission, and distribution. The project had an important influence in all key development sectors, improving agriculture, health, education, and commerce – ultimately enhancing the lives of Ugandan citizens. In three years, the project increased energy access for 4.1 million people, brought in over \$51 million investments into the energy sector, and facilitated over 850,000 grid connections.

Contact us to get started:

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We are ISO 9001:2015 certified. The ISO 9001 certification reflects an organization's ability to consistently provide products and services that meet stringent customer and regulatory requirements. ISO 9001 is the international standard that demonstrates reaching the highest requirements for a quality management system.



