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LAC Environment Learning Group
Private Sector Engagement



CASE STUDY

Strengthening Energy Sector Resilience in Jamaica

April 2022

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Activity Overview

Strengthening Energy Sector Resilience in Jamaica (SESR) is a three-year United States Agency for International Development (USAID) and Jamaica Energy Resilience Alliance (JERA) activity. JERA is an alliance of Jamaican and international private sector, non-profit, and academic organizations committed to renewable energy for a more resilient and sustainable Jamaica. Cadmus Group LLC, a strategic and technical environmental consultancy, is the JERA lead on this work. SESR's main objective is to strengthen the ability of Jamaica's energy systems to withstand or rebound quickly from natural or human-made shocks by creating an enabling environment for businesses to adopt solar photovoltaics (PV) technologies. This work is increasingly important in the face of climate change.

The activity aims to increase the demand for solar energy in key economic sectors. This is done by identifying the barriers and opportunities in Jamaica for solar energy companies and by building awareness of the cost savings and environmental benefits of installing solar systems within the hotel and tourism sector. The activity will also strengthen the local energy workforce, boosting the feasibility and sustainability of solar projects by creating a larger pool of well-trained local professionals in solar installation, inspection, and maintenance. Finally, the activity will encourage broader adoption of solar energy through two pilot projects that aim to provide proof of concept for other businesses and consumers who may be hesitant to install solar systems. If the activity succeeds, the market and capacity for solar energy will grow exponentially in Jamaica, providing the island with access to more resilient, cleaner energy sources.

Implementing Partner	Years of Implementation
Cadmus Group LLC (Alliance Lead)	2021–2024
Other Alliance Members and Partners	Role and Contribution to Outcomes
University of West Indies (UWI)	Oversee pilot solar projects and training programs for PV and PV+
Jamaica Hotel and Tourism Association (JHTA) (large organization representing interests of Jamaican hotels and other visitor accommodations)	Liaison between Cadmus and association member hotels
Rocky Mountain Institute	Advisory role, contributing its experience in PV+ projects and demand aggregation campaigns
Green Solutions International (GSI)	Provides accredited training programs for PV and PV+
Activity Objectives	
<p>Strengthen the Jamaica energy sector’s ability to withstand or rebound quickly from natural or human-induced shock by supporting enabling environments that facilitate the adoption of resilient renewable energy technologies, specifically solar PV and PV with battery storage (PV+).</p> <ol style="list-style-type: none"> 1) Identify barriers to widespread adoption of PV and PV+ 2) Strengthen buyer understanding of optimal performance and operations of commercial and industrial scale PV+ systems through pilot projects 3) Encourage market development and demand aggregation 4) Facilitate workforce development 	
Main Private-Sector Partners and Size	Private-Sector Role and Contribution to Outcomes
Wigton Windfarm, WRB Energy, and Xergy Energy (large energy companies)	Project finance/solar systems investment
LASCO Manufacturing and Distribution (large food and pharmaceutical distribution enterprise)	Project finance/site of PV+ system pilot project



January 2021 launch of the Global Development Alliance. Photo credit: USAID/Jamaica

Answering the Important Questions

Learning Question I: What impact does private-sector engagement have on environment and development outcomes?

“It takes people from the private sector working together to achieve a goal to make the country more resilient towards unexpected disasters.”

– Project Management Specialist, USAID

During SESR’s first year of implementation, UWI and Green Solutions International trained 63 people in solar system installation and inspection with international certification, an important first step in workforce development. During its remaining two years of implementation, the team plans to develop a pilot PV+ system of approximately 500 kilowatt/1200 kilowatt hour capacity serving the LASCO facility in St. Catherine, near Kingston. There are also plans for a much smaller system serving the adjacent community center. The LASCO pilot system aims to provide a model of the cost savings and energy quality of solar. The community center pilot system will generate greater public awareness of the benefits of solar energy.

Additionally, SESR aims to demonstrate the power of aggregating multiple hotels to reduce the price of solar installation through a partnership with JHTA. Following a successful launch event, 87 hotels and resorts contacted Cadmus expressing interest in receiving technical assistance to update their energy systems. This positive response is a signal to energy companies that solar technology in Jamaica is a promising investment. While it is still too early to share many concrete outcomes, SESR’s implementing and private-sector partners agree the project is on the right path.



Learning Question 2: What methods are being used to involve the private sector in conservation and development activities, and how effective have they been?

“We received two strong concept notes... We asked if Cadmus and UWI/LASCO would be interested in presenting a joint proposal to USAID. They saw the advantages and were willing to work together to combine a proposal.”

–Senior Environment and Energy Advisor; USAID

SESR was developed under the USAID Global Development Alliance. This approach was chosen intentionally to bring in private-sector partners willing to work within the parameters established by USAID to advance renewable energy goals. USAID found the proposals submitted by Cadmus and UWI to be equally compelling and asked the organizations to work together on a joint submission. SESR is the result of this co-creation process.

Though it was challenging to realign and refocus the separate proposals into one, Cadmus and UWI are satisfied the resulting activity will benefit Jamaica. SESR capitalizes on the expertise of a diverse array of partners from the private, nonprofit, and academic sectors to tackle different aspects of the solar energy gap in Jamaica. UWI conducts research on solar battery storage as part of the pilot solar energy project with LASCO and provides capacity training and solar certification training to enhance the local pool of energy professionals. Cadmus partners with JHTA to identify hotels needing technical assistance to update their energy systems and looks for ways to bring several hotels together to negotiate lower prices on solar power equipment.

This multi-pronged approach builds a stronger market for solar in Jamaica and encourages investments by energy developer companies, such as Wigton Wind Farm, WRB Energy, and Xergy. In fact, investors are considering a loan for one hotel to update its energy system. JHTA praised SESR for engaging with energy companies on innovative financing structures for solar projects as a way to overcome the lack of access to affordable finance, which is currently the most significant factor keeping hotels from adopting solar energy in Jamaica.

Learning Question 3: What motivates USAID and the private sector to engage with each other on emerging natural resource markets?

“The motivation is business—business that has an impact.”

—Alliance Coordinator, Cadmus, Implementing Partner

Having more companies commit to solar technology use will enable the widespread adoption needed for the island to increase its energy resilience and reduce carbon emissions. The activity engages private-sector partners as models for other actors hesitant to invest in solar energy. It also builds a strong workforce to ensure solar energy is a sustainable and reliable choice for customers. USAID sought to engage with the private sector on this activity because it bears the most responsibility for installing and maintaining solar energy systems. The private sector is also likely to greatly benefit from solar’s potential cost savings. It was important for USAID to work with well-known, reputable, local private-sector partners to increase SESR’s credibility and encourage other private-sector actors in Jamaica to follow their example.

The activity’s private-sector actors have many different reasons for engaging, but the common motivation is financial. Partners want the opportunity to reduce expenses and increase income for their businesses. Cadmus’ work engaging with and educating potential solar energy customers in the hotel and tourism industry significantly reduces the amount of local energy companies have to spend identifying and developing customers for solar projects in Jamaica. LASCO is motivated both by the lower cost and the greater reliability of solar energy. The company’s current energy system can be down for significant amounts of time, affecting their ability to manufacture products.

Partnering with USAID is a motivator for the private sector, providing credibility to the activity. JHTA said participation in the activity has benefited their reputation as a good partner to the community. JHTA also noted the activity’s objectives are aligned with the organization’s goal to increase the sustainability of Jamaica’s hotel and tourism industries, something the association has been working on for 30 years.

Learning Question 4: What context-specific factors affect engagement with the private sector?

“Engaging with locals, we have local staff. That helps a lot in understanding because of cultural barriers, cultural things we need to understand and be cognizant of incorporating.”

—Alliance Coordinator, Cadmus, Implementing Partner

Culturally, Jamaica’s institutions tend to be formal and protocol adherent. People tend to appreciate details to make informed decisions. The activity has benefited from the presence of local staff and organizations who understand Jamaica’s culture and are able to develop personal connections. Most partners feel the communication within the alliance has been adequate for them to achieve their objectives.

Barriers to PV adoption in Jamaica include the lack of access to financing, limited knowledge or awareness of PV and PV+, confusing installation processes, and higher upfront costs. Previous efforts in the Jamaican solar market found the required resources to cultivate leads and educate consumers on the benefits of



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solar power systems were too high for the potential financial return. SESR is responding to these barriers with customer support, providing potential customers with resources for decision-making, helping with sales and installation, establishing third-party ownership to bring down upfront costs, and allowing payment for the systems over time.

During the COVID-19 pandemic, the priorities of hotels shifted from installing solar systems to keeping their doors open. In light of this, Cadmus remains very sensitive and understanding of the clients' perspective when raising awareness of solar energy. The focus is weighted more toward the economic benefits of solar installation rather than the environmental benefits.

Learning Question 5: What relationship qualities with private-sector actors influence results?

“There is quite a bit of transparency in communicating the outcomes and impacts. There is information on outcomes available that actually impact people and hotels on the ground.”

—Project Contractor, Jamaica Hotel and Tourism Association, Private-Sector Partner

Some challenges have arisen among alliance members around the disparity between actual project timing and expectations. Private-sector partners tend to be more time sensitive and want to move quickly once decisions are made in comparison to USAID, which has safeguards in place that can lengthen timelines. Cadmus is working to balance expectations and requirements of partners across government, private, nonprofit, and academic sectors. Despite varying timelines, partners say the objectives and project deliverables are clear and concrete, which helps keep the relationships focused on achieving shared goals.

Staff turnover on the implementing team has also been a challenge, requiring partners to adjust to shifts in leadership. Still, USAID, implementing partners, and private-sector partners agree SESR has built strong and productive relationships through JERA that will help achieve results. Local staff commitment to the project and frequent, open communication between alliance members have enabled positive relationships. A Cadmus Alliance Coordinator manages relationships and keeps engagement flowing between the partners throughout the different stages of the project. Alliance partners also have staff knowledgeable in the best ways to interact with the energy industry dedicated to the partnership. Private-sector partners praised Cadmus's commitment to keeping them updated and involved through emails and in-person and virtual meetings.



On the Horizon

SESR's five private-sector partners—Cadmus, LASCO, Wigton Windfarm, WRB Energy, and Xergy Energy—have committed to contributing to resource mobilization. The objective is a one-to-one private-sector resource contribution, matching USAID's \$4 million investment through investment in distributed PV and PV+ projects. Private-sector partners bring the ability to mobilize up to \$50 million in private-sector contributions (15:1 leverage ratio) if project activities and economic conditions generate extraordinary PV/PV+ demand during and beyond the life of the cooperative agreement. It is still too early to tell if SESR will meet these ambitious co-financing goals.

To ensure the long-term sustainability of activity outcomes, SESR recognizes the importance of involving the Government of Jamaica. The activity's final task will be to create an alliance between the public and private sectors to start a dialogue around private-sector engagement in Jamaica's solar market that will contribute to the scaling up of solar energy projects on the island.

Learn more about the USAID's [LAC Private Sector Engagement](#) learning group.

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