Latin America and the Caribbean

US Trade Development Agency Fosters Latin America and Caribbean Geothermal Relations

Reno meeting showcases prospective opportunities for US geothermal energy industry

by John Galbraith

he US Trade and Development Agency (USTDA) held a business briefing for the US geothermal industry on January 27 at the Reno Silver Legacy to learn about procurement opportunities in the geothermal energy sector in the Latin America and Caribbean region. US company representatives had the opportunity to receive the latest information on new developments in

the geothermal energy sector and discussed their products and services during one-on-one meetings with project sponsors who are directly responsible for upcoming procurements and project opportunities.

The Latin American and Caribbean delegation included senior government officials and private sector representatives from El Salvador, Colombia, Peru, St. Kitts and Nevis, and St. Vincent and the Grenadines. Each country presented their repertoire of geothermal assessments and prospective opportunities.

Applications for geothermal energy in Latin America and the Caribbean included:

- Consulting Services
- Geoscientific Surveys

- Power Plant Design and Construction
- Geothermal Drilling Products and Services
- Power Generation Units
- Heat Pumps, Air Conditioning Products and Piping
- Desalination and Agricultural Applications USTDA works closely with the US private sector companies to identify and support activities that generate measurable commercial



Keith Eischeid, USTDA Country Manager for Latin America and the Caribbean (foreground), takes a few notes before addressing US geothermal energy industry representatives.

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Eischeid with Sergio Adolfo Montoya Mejia of Colombia and Francisco Montalvo Lopez of El Salvador field questions from the audience.

and developmental results across a wide range of activities, including the diversification of energy sources through the development of renewable energy sources. Furthermore, USTDA maintains an active portfolio in the renewable energy sector in the Latin America and Caribbean region.

"Today's trade mission is part of our regional renewable energy mission called the Clean Energy Exchange Program for the Americas – a series of six orientation meetings – for solar, wind, minihydroelectric, geothermal, waste-to-energy and renewable energy policy," said meeting host Keith Eischeid, USTDA's Country Manager for Latin America and the Caribbean to meeting attendees.

According to Eischeid, the goal of USTDA's program is to familiarize leading Latin American and Caribbean energy sector officials and project sponsors with US clean energy technologies, and there are many ways to foster productive and prospective interaction.

"We plan events like today which are reverse trade missions," he said. "We bring delegates from other countries to the United States to meet with US companies through business briefings and one-on-one discussions. We also have them visit infrastructure sites, such as the Steamboat facility in Reno and The Geysers."

Aside from the arranged tours and business briefings, USTDA also funds key research and technical support. "Funding feasibility studies and technical assistance for renewable energy projects is the bread and butter of USTDA, which is absolutely critical to the development

of projects including and especially geothermal," said Eischeid who cited a recent \$600,000 feasibility study to identify potential geothermal sites in Colombia.

Naturally, US company representatives were curious about the possibilities. According to Jim Lovekin of GeothermEx, a Schlumberger company, the forum is a great opportunity to stay current on developments in Latin America and the Caribbean. He views these reverse exchanges as positive for the geothermal industry.

"It's an opportunity for the US geothermal industry to do what they do best – show their skills and expand their markets," said Lovekin.

While Lovekin was impressed with the various presentations, he also expressed the need to be patient. "Obviously in Central and Latin America, there is quite a bit of untapped potential in these countries. The markets are evolving. The legislative frameworks are evolving. Nothing happens quickly, but you just have to keep informed and stay in the loop."

Lou Capuano, Jr. of ThermaSource echoed Lovekin's sentiments, but lamented the slow pace of progress. "ThermaSource drilled the first exploration well in Nevis three years ago and it's still sitting there – nothing is happening because the developer is struggling to come up with financing," he said.

Capuano also cited Chile as an example of a country with rich geothermal resources, but it is taking a long time to process their exploration and exploitation permits. Obstacles and challenges aside, Capuano enjoyed listening to the respective representatives discuss their geothermal resources



Ernie Stapleton, representing St. Kitts-Nevis, outlines opportunities for US suppliers.



Colombia

Colombia has no installed capacity but has an estimated 3,000 MW in geothermal resources. Colombia is looking for technical assistance to validate and update prior geoscientific studies in the Ruiz Volcanic Complex. Contact Sergio Adolfo Montoya Mejia, Head of Energy Research and Development at Sergio. montoya@epm.com.co

Sergio Adolfo Montoya Mejia.

El Salvador

El Salvador is the largest producer of geothermal energy in Central America and has 204 MW of installed capacity and four concession areas: Ahuachapán (95 MW), Berlín (109 MW), San Vicente, and Chinameca. El Salvador wants to increase generation in Ahuachapán and Berlín, while developing San Vincente and Chinameca. Contact Evelyn de Velis, Human Resources Manager at evelis@lageo.com.sv



Evelyn de Velis and Francisco Montalvo Lopez.

St. Kitts and Nevis

St. Kitts-Nevis has no installed capacity, but a 10 MW Nevis single flash geothermal plant is planned for 2011 and a 40 MW single flash geothermal plant is planned for future development. Opportunities for U.S. suppliers include substations and installations; cables and installations; and a Power Plant (St. Kitts). Contact Ernie Stapleton, Permanent Secretary at stapleton116@yahoo.com



Ernie Stapleton.



Jorge Aguinaga Díaz and Mardo Mendoza Jorgechagua.

Peru

Peru has no installed capacity, but has a Master Plan for Geothermal Energy Development and 10 promising fields. To date, seven companies have filed hundreds of applications for the development of geothermal projects, but no rights have been granted. However, some permit approvals are expected during the first quarter of 2011. Contact Mardo Mendoza Jorgechagua, Director de Concesiones Electricas at MMENDOZA@minem.gob.pe

St. Vincent and the Grenadines

St. Vincent and the Grenadines has no installed capacity, but past studies suggest potential of 100 MW may exist, although yet to be proven by drilling. Contact Leonard Deane, Director – Energy Unit, Prime Minister's Office at energyunit@vincysurf.com



Leonard Deane.

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potential and he's encouraged that they are moving toward the direction of offering leases. "But, I'd like to see more incentives, more expediting of permits and concessions, so that we can get in there and get started," he said.

For more information on USTDA's program in Latin America and the Caribbean, please contact Regional Director Nathan Younge or Country Managers Keith Eischeid and Gabrielle Mandel by telephone at (703) 875-4357.



Attendees listen intently to a Spanish-language presentation.

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Crews view the N-3 well - a 2,900 ft. slimhole on Nevis. PHOTO BY MAKEDA WARNER.