BEYOND INCUBATION

Eastern Sierra can help grow clean energy businesses

By Rick Phelps

mall business incubators that help nurture the aspiring entrepreneur are flourishing in many larger communities around the country. Often they are created and supported by local governments or regional organizations that recognize the economic benefits. Over the last 10 years, the "incubator" movement has expanded and is proving to be a popular model for growing "clean energy" businesses, as explained by The Alliance of Clean Energy Business Incubators in a description of their network:

"To assist clean energy entrepreneurs and support the Alliance, the Alliance members and the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) have developed an impressive network of investors, energy experts, and industry leaders who stand ready to provide mentoring, financing, and introductions to the global energy community."

But where does the baby go when it leaves the incubator?

It would be a good diversion to take the incubator/baby analogy through all the stages of raising children and draw out the parallels between growing babies and growing businesses – and there are a lot, but that would not add much to the story other than some laughs. Instead, let's think about what happens to a clean energy business when it leaves the incubator. The business thrives, fails, or needs more help to succeed. When that "baby" business needs more help to succeed, the Eastern Sierra region of California can help.

The Eastern Sierra, can be a "propagator," which Webster defines as "causing (something) to increase in number or amount." Alpine, Inyo and Mono counties are geographically bigger than six states and provide an appealing environment to nurture a clean energy business that needs to refine a product technology, test



HSEF Executive Director Rick Phelps market, or "roll out" strategies to different market segments.

The Eastern Sierra offers a diversity of land use from remote rural to more concentrated commercial and residential neighborhoods. Technologies that are being developed for off-the-grid applications are easily tested with real customers in extreme weather conditions. Marketing case studies will naturally follow and customers can provide realistic reaction to product economics and pricing.

The Eastern Sierra also has a wealth of ready-to-harvest renewable resources including sun, wind, hydro-power and geothermal. Specifically, there are myriad locations in Alpine, Invo and Mono counties to test wind generation with high wind velocity and harsh weather conditions. We have year-round sun plus lots of snow, offering a laboratory to test solar collector technologies in a winter environment. Throughout the Sierra there is flowing water that provides opportunities to test all aspects of micro-hydro. We also live in a proven geothermal area and deliver significant renewable electricity to the grid. And, there are even more opportunities for low temperature geothermal for power generation and space heating. All those geothermal possibilities can be demonstrated and market-tested in the Eastern Sierra.

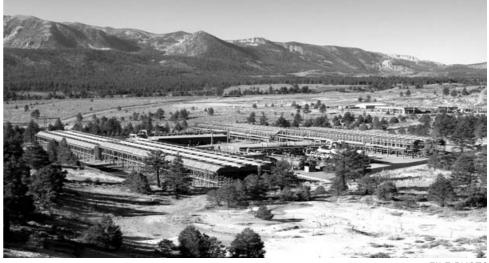
The Eastern Sierra has people and governments that are stewards of the land and support innovative energy technologies with positive environmental and economic benefit. The Eastern Sierra, while huge in area, has smaller populations that can be used to test technologies and market strategies in a focused manner. In effect, our smallness allows marketers to gauge the qualitative face of the customer – not just the quantitative demographics.

Importantly, the people of the Eastern Sierra will demand that any clean energy technology be environmentally friendly and not adversely impact the pristine nature of our region. Environmental factors cannot be ignored in today's market and the Eastern Sierra will continue to place the bar high for environmental standards. In this sense the Eastern Sierra is like New York (New York): "if you

can make it here, you can make it anywhere."

The logic of the Eastern Sierra being a clean business propagator appears sound, but how do we move in that direction? The appeal of the unique character of the region to clean energy entrepreneurs argues for a regional approach. The idea's promoter could be a public or private sector entity, but a substantial commitment in time and funding would likely be required. I suggest now is the time to start thinking and talking about it.

Rick Phelps is Executive Director of the High Sierra Energy Foundation. The views expressed in this column are those of the author and not necessarily those of his employer.



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Geothermal is just one of many commodities in the Eastern Sierra that could help grow clean energy businesses.



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