

Reid Detchon: Getting those framework issues in the right space is sort of a precondition for everything else. Once you have that then clearly, markets work best. I think that we have too often on a sustainable path proceeded down a charity model. But, the advantage of energy is that it's a viable business. And, sustainable energy requires sustainable business models.

So you need to have a plan that includes, for example, our renewable energy service and maintenance and not just a one-time sale; you need to have business models that provide an income to the equipment provider, along with service and maintenance over time so that the customer remains happy. I think there's nothing worse than providing substandard products or then substandard service to a customer, have them become unhappy with renewable energy or energy efficiency as a result. So, the last thing I would say is that standards are surprisingly important.

Interviewer: Reid, let me follow up on something with the question that we haven't talked about. You mentioned fossil fuel subsidies, and I know there's a great movement to try to reduce those. And in some developing countries, there's been some pushback, especially by people who have trouble affording petroleum fuels, for example. Have you worked with how to end subsidies in a way that's equitable and that doesn't disadvantage the disadvantaged people in society?

Reid Detchon: One can argue pretty persuasively that providing low income people with the ability to access modern energy services is a good thing, and that if that requires some level of subsidy I would not be opposed to it. But in most countries, these subsidies are used to keep the price of energy down generally, so they apply equally to rich and poor. And it's just a terrible waste of money for the government in those countries.

Interviewer: I want to apply the same kind of question to rapidly developing countries with regard to energy poverty. What policies have you found to be the most effective in gaining market penetration of clean energy technologies in the rapidly developing countries?

Reid Detchon: Well as I mentioned earlier I think standards turn out to be surprisingly important. I would say standards in two senses: the first one is to make sure that the product quality is good. Too often I'm afraid some manufacturers try to dispose of poor quality product in rapidly developing economies, and frankly poison the well for the users because a product that is supposed to last for 10

or 15 years may last three to six months. And when people are scraping together the resources to purchase this very needed equipment, failure of that equipment is just a devastating blow. So quality standards are important.

I would also say, particularly in the energy efficiency arena that standards are important, particularly in buildings, because you want to have the building built right in the first place. It's much easier to get energy efficiency embedded into a new building than it is into an already existing building. So with fairly simple standards and enforcement governments and countries can assure themselves of a lifetime of savings on a building by getting it right in the first place.

But having said that I think the most important indicator of success is cost, of course. And so what is encouraging right now is to see the clean energy technologies outcompeting conventional technologies economically, whether it's a solar system that is cheaper than a diesel generator set, or on the efficiency side LED street lights are going to sweep the world because the savings in terms of direct operating costs and in terms of service and maintenance yield tremendous benefits to the governments.

And I would just say about energy efficiency generally the right way to think about energy efficiency, particularly in rapidly developing agronomies is not so much in terms of retrofit as we tend to think of in the north, but in terms of getting the standards right in the first place. And energy efficiency, by being embedded in a product, also makes clean energy more affordable.

To take the LED example, ten years ago if you wanted to support incandescent bulbs in a person's home you would have to have a pretty substantial sized solar panel on the roof. Now of course solar **innards** with LED bulbs are practically disposable products that also provide cell phone charging. So the efficiency of the product is making the energy more affordable and accessible.

Interviewer: Let me ask you, in your experience, especially dealing with energy poverty, are policies most effective at the national level or the regional or local level?

Reid Detchon: Well I think that it varies. Of course, there are different policies and different interventions that are appropriate each in their own place. At the national level, potentially the state level, depending on the size of the country policies like renewable portfolio standard

or feed-in tariff is certainly an effective intervention to jumpstart the use of renewable energy. But I think that at the regional or local level you end up with much more direct impact when governors or mayors set energy efficiency standards. They're certainly responsible for enforcement, which is critical. And the procurement policies at each level can jumpstart markets.

Interviewer: In summary, looking at all the experiences you have in this area if you could give one piece of advice to policy makers at the national level out there what would that be in regard to clean energy?

Reid Detchon: Well I would say don't be intimidated by the complexity of it. Do what you can do. There are many things that make sense economically, politically in every way. And feel free to take the low-hanging fruit. Be sure that you look at the benefits as well as the costs. So if a technology may cost you a little bit more in the short run but have very low operating costs that's going to be a good return on your investment.

And finally, use the Clean Energy Solutions Center. I'm a big believer in this as a resource. Let us know whether the site is working for you, whether you need to have more support in different languages, and whether the information provided is useful to you or if it's at the right level of sophistication. The Clean Energy Solutions Center is meant to be a resource that connects you with experts. And it's meant to answer your questions so that you can make the best policy decisions. Don't be bashful about using it.

Interviewer: Lots of good advice there, Reid. Thank you very much for spending time with us and I hope to talk to you again soon.

Reid Detchon: Always a pleasure, Bill. Thank you.

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