

Philip Santiago, Association of Climate Change Officers

Navigating the Challenges of Renewable Energy Purchasing and PPAs

*For organizations serious about reducing their carbon footprint, engaging in meaningful renewable energy work has increasingly become a must. The price of renewable energy has dropped dramatically in recent years, particularly for larger organizations that can leverage sizeable demand to negotiate lower prices. This change, increasingly volatile market prices for fossil fuels and conventional electricity, and efforts to meet organizational GHG goals have been key drivers prompting companies, governments, and academic institutions to pursue renewable energy projects and power purchase agreements (PPAs). However, beginning work on a renewable energy project or a PPA can be a daunting prospect. ACCO caught up with **Kevin Rabinovitch (Global Sustainability Director – Mars Incorporated)** and **Chris O'Brien (former Director, Office of Sustainability – American University, now Director, Higher Education Programs – Altenex LLC)** to find out what lessons they learned as they built successful renewable energy programs at their organizations.*

Philip Santiago: What are the main barriers you have faced in procuring renewable energy for your organization?

Kevin Rabinovitch: One of the problems with all of this is that you're not just buying a different type of energy, but in the same way you've always bought. For example if you want to buy a hybrid car, you don't go somewhere different to buy it. The sales transaction isn't really any different than it would be if you were buying a non-hybrid car. Even the way you use it isn't any different than a regular gasoline car, you just don't have to fill it up quite as often. In contrast, here when you start talking about utility scale renewable energy projects or onsite renewable energy projects, you aren't going to the same store to buy the product. The whole nature of what you're doing is completely different; it almost has nothing to do with the way you normally buy energy. I think at a high level that's the biggest barrier, if this was just about changing the specification for the energy that you buy but other than that the transaction happened the way it's always happened, then other than cost, there wouldn't really be any barriers. But the problem is you have to sort of circumvent the normal way of doing things and get involved in all this crazy stuff, and that's the biggest barrier, it's just different.

PS: Is it so different that getting people on board with the idea is difficult in some cases?

KR: Yeah... people are inherently conservative in that we don't like to change things in general, so if you're going to talk people in the organization into getting involved in different ways of doing stuff, there's got to be a compelling motivation. Either you've got to have a target you're chasing, or you've got to be able to show that there's going to be some big savings... it's not something that you can just kind of slip through. So you then have to have some other reason to justify this change that is pretty compelling, and it's tough to just show up and in one breath argue that there's this compelling reason we have to change and that's why I want to justify doing this big project. You almost have to have

this conversation separately because otherwise it looks like you're creating a problem so that what you want to do becomes the solution to the problem.

PS: Chris, are there particular barriers that were most pertinent to American in its renewable energy journey?

Chris O'Brien: Some barriers when we began to address them actually turned out to be benefits.

PS: Right, as Kevin was saying risk is always a barrier but once you've done some meaningful renewable energy work you've protected yourself against the risk of volatility in conventional energy markets.

KR: Yeah, although even there there's a presumption that you have identified and internalized the next 20 years of volatility in energy markets as a risk to your business, which most organizations probably haven't. It doesn't mean it isn't true but it's not something that really on my "list of things to worry about today."

CO: It's interesting that you say that because in working with a renewable energy consultant on our project, one of the benefits that they pitched a lot was lowered risk of exposure to price volatility, but as you just said, yeah that's a benefit, but not one that we were looking for. Because we had not internalized that risk, we had structured our utility budget in such a way that could stretch when it needed to and contract when it needed to, and that wasn't enough of an impact on our organization to be worried about it. So it is a benefit, but is it really a risk reduction if we hadn't identified the risk to begin with? I don't know.

PS: Chris can you talk a little bit about how American's renewable energy project got started and the early things that happened to make that deal go through?

CO: What drove our investigation of solutions was our commitment to the President's Climate Commitment. What allowed us to do the deal were the financial benefits. So what drove us to find a solution was a climate commitment, and what allowed us to execute a solution was that the solution saved us money. In my mind those are different phases of the project; the carbon commitment was really the driver, but if there hadn't been a solution that was cost effective, then we'd still be looking.

PS: Kevin, was it a similar situation for Mars, with the organizational goals driving the desire for the project and the financials were what sealed the deal?

KR: For our onsite projects it was having our GHG reduction and fossil energy targets that drove us, and then we looked for ways to do them that had a good business case and went for those. Our utility-scale project even more so – what we've done there is basically taken the market risk for electricity prices and done a forecast for what we think energy prices in Texas are going to be over the next 20 years. Basically in a mid-point scenario we'll just about break even, if electricity prices go up we could make money, but entirely possible that we would lose money on that deal. So in that case clearly we would not have done that if not for our GHG commitments, because why take a position that would potentially lose us money?

CO: Kevin did you do a financial swap?

KR: We're doing back-to-back PPAs, where we're buying the energy and getting the attributes with it, reselling the energy locally and then transferring the RECs to our sites across the country.

CO: So you've contracted at a PPA price but you're reselling at the floating market rate?

KR: Yes. And it happens that the developer we are working with is big in industrial materials, they actually had a wholesale energy business in Texas, so not only could they be on the project side with the wind project, but we have a different PPA with a different part of their business to then sell them the energy at market. So we know we'll never get stuck with the energy, but we are exposed to the market price.

CO: But you did it that way because you assume there is going to be an upside?

KR: We did it that way because we can live with the downside that we think is likely to happen, is probably more accurate.

CO: Why not just build that into the PPA price instead of reselling?

KR: Because we don't need that much energy in Texas. We don't need anything close to that so it doesn't make sense for us to contract for physical delivery. It was easier to structure as back-to-back PPAs, but the net of it is the contract was a contract for difference or "virtual PPA."

CO: The fact that Mars did it all in-house is at the opposite end of the spectrum in terms of customer capabilities; in [American University's] case we heavily relied on consultants to guide us through the process. The marketplace runs the spectrum in terms of customer needs for support, but there are service providers all along that spectrum all the way down to not having a service provider at all, like Mars did. Organizations should figure out what needs they have for support and find that support accordingly.

KR: I should clarify that we did not do this entirely in-house, we brought in legal counsel that knew how to do these deals, because I can't imagine anyone that doesn't run an energy business would have all the right in-house people.

CO: Right, we had internal people but we also hired external counsel for this.

KR: With expertise in energy deals, right?

CO: Yep.

KR: If we'd known at the start how much we would need to know by the end to finish the deal, I don't know that we would have attempted to be as self-reliant as we were. We were blissfully ignorant, at some level, of just how deep it would get. But, the deal we ended up putting together is definitely not a "vanilla" deal, it's a rocky road banana split with some things on it that you'd never even think would belong on an ice cream sundae.

PS: But it tastes good to you guys, right?

KR: Exactly.

PS: And Chris, now that you've been through the process with a consultant, if American were to pursue future renewables projects do you think you would go that route again or do you now know enough to do it on your own?

CO: I think we would use a consultant again but it would take us probably less than half the time.

PS: Did either of your projects have to meet certain financial criteria for energy procurement, or did you have more leeway because your organization needed to meet the GHG goals it had set?

CO: I promised our president that the plan as a whole would be cost neutral at worst. If I couldn't do it in a way that was cost-controlled or cost saving it would have been hard to justify.

KR: I would give a similar answer to Chris; the only caveat is that we don't have a normal target for energy costs over the next 20 years. There isn't an existing target or threshold for that. But obviously we're making a commitment over that sort of timeframe, so you get into sort of a weird space. Is the energy price 20 years from now going to be equal to or less than the energy price today? How do you decide what you think the energy price is going to be in 20 years? To even make that assessment you've got to answer some other questions you've never answered before about what your reference point is. Only at that point can you consider if you're at parity versus that.

PS: Thank you both for your time and your insights.

About ACCO

The Association of Climate Change Officers (ACCO) is a 501(c)(3) non-profit membership organization that defines, develops and supports the functions, resources and communities necessary for effective organizational leadership in addressing climate-related risks and opportunities. An industry leader in producing education and training events for climate change and sustainability professionals, ACCO's members include a broad range of organizations and executives in industry, government, academia and non-profit organizations worldwide. For more information about ACCO, please visit www.ACCOonline.org.

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