Questions Asked during the Financing Residential Energy Efficiency with Carbon Offsets Webinar

Amy Hollander:
Q: "How much outside help does an organization need to hire to create a carbon offset project?" Would be a fulltime employee who would need to take this on?

Steve Erario:
A: It's one of the questions that MaineHousing faced. As in many situations, I think the answer depends. What might be some helpful guidance is that the more – I gave two examples earlier about the type of organization where it would take about one year to complete a project and the type of an organization where it would take about two years to complete a project, and the key differences between those two organizations were the amount of data that they needed to collect, the amount of changes they might need to make to their IT system, whether or not they've gone through a third-party monitoring and verification process before.

So where there's a lot of work to be done on the IT system, where there's a lot of work to be done for data collection, where there's not much familiarity with third-party M&V, it's going to take an organization longer. Either more dedicated staff time or more dedicated outside help.

And in terms of whether or not outside help is required to understand the carbon offset process, I would say that it's invaluable to have someone, if not inside the organization, then outside the organization, with experience in carbon markets because there are a lot of moving parts here, and it is helpful to get an expert opinion in terms of whether or not you're getting the right price for your carbon offset project and for each carbon credit. There are many different instances where it's helpful to have someone that's gone through the process before. It's also helpful to make sure that your agency is getting the best deal, the highest dollar per carbon offset from your buyer. There's often a return on invest for hiring someone that's qualified and experienced to provide advice related to carbon markets.

Amy Hollander:
Okay, so it sounds like a good combination of contractors or consultants. Plus, at least some dedicated staff would be appropriate.

Steve Erario:
Yes I would say that, in general, there are two sets of activities that need to be done to quantify offsets. One is the monitoring and verification process, so in essence that's Phases 3 through 6 that require data collection and going back and forth on data collection. And then there's the carbon-related part of the process, the carbon market, the carbon feasibility, and interpreting the carbon rules. Those are mostly Phases 1, 2, 7, and 8.

There are two parallel tracks of activity going on. It's important to have staff or consultants with competencies in both areas.

Amy Hollander:
Q: This is a very good question regarding work done in the past. "Can carbon offsets be completed – can weatherization projects, for example, be completed before a VERPA agreement is executed?" In other words, if you weatherized houses two years ago before the VERPA contract, can you account for the savings that was gained in the past?"

Steve Erario:
A: The core of the question is how far back can an agency go to count their carbon offsets, and the answer is that it depends more on the validation and verification process – so those were Phases 3 through 6 – than it does the VERPA. And so what that means is that it's very important –in the project description – to identify a start date for your project. It varies, but it's often from one to two years prior to the validation of the project description that a project may be eligible to begin creating carbon credits.

So the start date question is tied in with the product description. It's generally about a year or two. A VERPA can be set up to purchase carbon offsets that were created a very long time ago. So, again, it depends more on the project description, **generally about a year or two**.

Amy Hollander:
A: That's very good news. Thank you. Can you give examples of types of data that weatherization agencies may need to collect for selling residential offsets that they don't currently collect now?

Steve Erario:
A: One group of data that a lot of agencies that were contacting MaineHousing were asking about was whether or not they had to have **energy usage data**, so records of how much natural gas or electricity was used over time. And the answer is **that the data has to be available not only after the weatherization activities have occurred, but also before the weatherization occurred. Pre savings data is not necessary for all of the homes, but for a large sample size of similar homes.**
Some of the other areas where data collection might be required: **weather data**, so how warm or cool it is. At MaineHousing we were able to pull that data up from NOAH, the National Oceanographic and Atmospheric Administration, and so that is another set of data that needs to be integrated into the carbon offset calculations. **There is more data listed in the handbook on the MaineHousing website.**

Amy Hollander:

Q: "What kind of database reporting is needed to satisfy the third-party verifiers?" I think you answered this question, but what format does the data need to be in, or can any Excel spreadsheet suffice?

Steve Erario:
A: I'll take a step back and I'll say that the VIRPA auditors are most concerned about making sure that the **overall quantification of emission reductions is correct. So, in general, they can be flexible in terms of the types of databases and Excel spreadsheets**, etc. that they can work with.

I'll demonstrate with an example: At MaineHousing we worked with the auditor to provided them not only Excel-based extracts of our database, but also to provide them with reports that came out of our database in PDF form. We also walked them through our database structure and the architecture, and so if you have a database, that's probably a plus, especially if it's robust and can do good reporting, but I think that there was probably willingness as well to work in Excel.

Amy Hollander:
Q: One question everyone probably asks you is "**How were you able to engage Chevrolet** as a willing buyer? Clearly, this is a high-profile corporation. I think you mentioned they wanted to invest $40 million in carbon offsets. I know you had a broker who developed this relationship, but can you just talk a little bit more about finding that special sponsor?

Steve Erario:
A: The largest factor is **finding a good broker**. The second factor relates to **publicizing the project**. So, for example, MaineHousing had been issuing press releases and generating media coverage of their project for months, if not years, before we actually executed the sale, so that gave some public awareness that the project was under development, and that is a good thing for any agency to do, in my opinion.

And that just relates to, again, Phase 8, marketing, the overall importance of publically positioning the project as something that's happening that's creating good, positive impacts on local families and that might get a local business to even proactively contact a weatherization agency and say that they might be interested in developing a project. So generating media attention can definitely be a positive contributor to finding a buyer.

Amy Hollander:
Q: Are there any **legislative policies** that can support this type of program, and if not, do you have thoughts on what a supportive policy would include to help this type of program in states across the nation?

Steve Erario:
A: There is a growing emergence it seems like, of cap-and-trade policies around the U.S. For example, I mentioned the Regional Greenhouse Gas Initiative in Maine, and that

caps sector emissions, including electricity emissions in the state. **When institutions and legislation enabling REGI is created in other parts of the country, and if there are carve-outs that allow carbon offsets to be created from weatherization that would be ideal.**

Also, I think it's not really legislation, per se, but more execution of some of the carbon markets that are becoming active, for **example the markets spinning out of AB 32 in California. There is a possibility that residential offsets could be made eligible to be bought and sold on that market. That would create another positive impact on the residential offsets development process because there'd be a buyer that is well known and has a large demand that might make the process easier for residential offsets project developers.**

Amy Hollander:
Q: You mentioned in your slides that Maine could not count electricity as part of the savings that contributed to the value of the carbon offset, so in regions where homes are not heated by oil, and a REGI system does not exist, and one could count electricity, **how many more dollars could be captured without the REGI system, or with a system that allows weatherization carbon credits to be captured for electric and gas/oil?** You mentioned that $500.00 per weatherized house could be captured. How much could that increase, if you were to count electric savings? Say refrigerators, for example.

Steve Erario:
A: It depends on which state that electricity is being produced and consumed in. Some states have very low carbon intensities because their renewables are nuclear-based and others are more coal-based. I think the **general rule of thumb is, in states with higher emissions intensity, that developing a carbon offset project from residential offsets will be more lucrative. But I think that the financial calculator, which is available on the MaineHousing website, can help to sorta inform that sort of analysis.**