Green Potential: Moving Sustainable Development Forward through Finance

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Karen de Nie: *Welcome to the Federal Reserve Bank of Atlanta's* Perspectives on Real Estate *podcast series. I'm Karen Leone de Nie with the Atlanta Fed. Today we're talking with Scott Muldavin, executive director of the Green Building Finance Consortium. Scott founded the Consortium in 2006 to address the development industry's need for better valuation and underwriting practices to assess sustainable or green projects from a financial perspective. Scott has worked with many corporations and organizations on their sustainability strategies in order to understand the challenges and potential opportunities they face.*

Scott served as the closing keynote speaker at a conference hosted by Tulane University and the Atlanta Fed in March 2011. The conference was called Strengthening the Green Foundation: Research and Policy Directions for Development and Finance. This podcast will discuss the highlights of his speech and further explore valuation and underwriting of green real estate development.

Scott, thanks for joining us today.

Scott Muldavin: You're welcome.

de Nie: *To begin this interview, I'd like to ask, what is green finance, and why is it important?*

Muldavin: First of all, green finance relates to all of the capital, whether it's equity or debt or equipment loans or public finance—so there are all these different sources of capital. And so when I talk about green finance, it's really any of these capital sources that is pushing forward the green investment. And why it's important is that finance—and actually it's the decision makers, whether you're a corporate CFO that has to make a decision to invest in your properties or a lender making a loan or an investor/owner, or homeowner, that is making an investment— that decision maker at the end of the day has to process all of the information about a green property and make that decision. There are many efforts in improving performance measurement, lots of new technologies from windows and roofs and solar and better lighting systems. You have green rating systems, both at the city level, where there are new disclosure laws, and also green building rating systems, or Energy Star for homes, and lots of regulations and codes. There are all these efforts around the country to push forward sustainability, and at the end of the day, it is some finance person that has to interpret and analyze it, and so understanding how they think is critical to getting the funds to make the investments.

de Nie: *With all of these different strategies, programs, performance measurement systems, rating systems, we know green finance has received a lot of attention, but it still is not universally adopted. So, what do you see as the biggest opportunity and the biggest challenge to green finance going forward?*

Muldavin: There are many opportunities in green finance, both for the owners of properties and people producing products and workers that want to do green landscaping and so forth. But I think that the best opportunity to move forward with green finance relates to improved risk analysis and mitigation.

Let me just explain that a bit. What's happened, and this is particularly in the commercial property market, is that investments in green property are limited to what you can get paid back in two or three years. So, for example, if you invest $100 and you get $30 a year back in energy cost savings, that would be a three-year payback. And so, essentially, what the market is saying is that if I'll only invest the amount of money to where I can get it in two to three years, that implies a risk or a return of 30 to 50 percent on a simple basis. And that's just a risk that is far in excess of the actual risks related to sustainability.

The opportunity is to really do the analysis of the process of green building, whether it's energy modeling and the contracts and integrated design, and there are lots of processes that can be improved in commissioning, and also in the features. And if you actually analyze those risks and then the positive risks related to developing a property that is attractive to both regulators and tenants and users going forward, there are actually significantly lower risks. Perhaps a risk that would be a 20 percent or 15 percent or 10 percent risk instead of 30 to 50 percent, and that adds a substantial value.

As far as the challenge, it's really the fragmented market. Real estate properties are really one property at a time. They're very different, even if you're looking at a retail or even a single-family home, there are so many different types that developing the curriculum and the solutions and delivering them to the market requires a significant educational effort.

de Nie: *I understand that you've also done a good bit of work around the concept of "value beyond cost savings," and I was hoping you could talk a little bit about that*

Muldavin: Yeah, it's kind of an interesting story. When I got involved, I wanted to work specifically to quantify value and risk at a property level. And in doing that, I analyzed the information that was available and all the research that was done.

Essentially the market was focused on the benefits of energy cost savings. But what has happened in the last couple of years is that there's been tremendous value created by sustainable property investment because regulators, the users of properties, and investors have significantly increased their demand for sustainable properties. Three years ago, when I was getting started in this, there wasn't a single municipal government in the country that regulated or acquired sustainable properties. Today, the number is in the thousands. That demand translates into value through expedited permitting and incentives and rebates, and the evidence that users are interested in green finance has also gone up significantly. And I have to clarify that the story is a lot different for the larger commercial properties and the corporate real estate users, where this transformation is well along, whereas in the single-family home and smaller markets, it hasn't moved quite so fast. But there is substantial value from this increased demand by investors, users, and regulators, and the trick is, how do you actually calculate it? That's what I focus my work on.

de Nie: *So based on your work, what do you find to be the driving factors behind the accessibility and cost of finance?*

Muldavin: It's really performance and being able to measure the performance. When I got involved a few years ago, I started a big survey and study on failure and underperformance in sustainable properties, and what was interesting was that when you talk about underperformance or failure, you talk about process things, the things I mentioned earlier—I didn't get the engineer involved early enough, I didn't do commissioning, or the energy modeling didn't work, or you talk about a feature, or the membrane on the roof didn't work right, or the under-floor air ventilation wasn't put in correctly. And then there's building performance, because if you do process and features right, maybe you can get the building right.

But there was one thing missing, really a missing link, and that was market performance. And it is because even if you know how much energy you are going to save and you know the health and productivity benefits, you can't actually get to understanding value and the risk to finance unless you go to the market place and ask those regulators and the users and investors on that property at a particular point in time: How do you guys respond to this performance? And it's the ability to measure that market performance, which is really the key to driving the world forward.

de Nie: *Given that the values are driven by what the market will pay, how can green advocates and developers effectively work with the appraisal industry to mainstream the incorporation and valuation of green and energy-efficient features?*

Muldavin: Great question. The most important thing that developers and "advocates" can do is to actually learn and talk the language of appraisers and lenders. The problem is the difference between the way an investor or lender thinks. If you understand that risk mitigation is critical to a lender, and if you understand the nature of the way value is created in a property, then developers and advocates can present their information in a way that actually helps. And, I'm involved in many efforts where people are developing databases and information to assist financial people make decisions about green building, and 95 percent of those efforts are relatively misguided because they don't start with a clear understanding of exactly how the information should be formatted.

I actually talk about RAP being a key to sustainability, which is risk analysis and presentation. And so, it may sound simple, but it actually can be incredibly powerful. And part of the reason why it's so powerful is that the process of underwriting is very qualitative in nature. You do a lot of quantitative analysis, but at the end of the day it's an individual that's looking at the structured information that has to make qualitative decisions about what they think the rent and sales prices are. And because it's qualitative, well-organized and presented information can have significant influence on both value and underwriting.

And at the end of day, again this circles back to the very first question, which was, Why is finance so important? And the reason it's so important is that it serves as the filter for all of the information about the property. So the way that advocates can most help is by making sure that the information is appropriate for the people that have to use it.

de Nie: *Well, Scott, did you want to provide any closing thoughts about the future of green real estate finance? Are there any important next steps we should be talking about?*

Muldavin: Yes. I think probably one of the most important things is that we need to really get more into understanding the segmentation of the finance industry. Or, to put it another way, the industry in real estate has organized itself around property types and lifecycles. So if you wanted to go get a loan or an evaluation person, or even an architect, and you had a hotel, you would go get a hotel lender or a hotel evaluation person. It's the same thing for office—they have small-office and big-office specialties. Lenders in the lending community—the construction loan people are completely separate from the permanent loan people or the mezzanine loan people.

And so, there have been these ways that the real estate capital and the delivery of services have—you know, after many, many years we have these ways of delivering services, and the problem today has been that people talk about finance and they talk about solutions in general, and what we need to do is we need to step back and say, Well, what has worked in the past? Sustainable finance is not that different than regular finance —maybe we need to think about delivering it and organizing our execution in a way that has proven to work historically, or change what hasn't worked. But, we really need to think back to what has actually worked, and if we are going to change it, know exactly why.

de Nie: *Well, Scott, thank you for joining us today.*

Muldavin: You're welcome.

de Nie: *This concludes our podcast with Scott Muldavin, executive director of the Green Building Finance Consortium. For more podcasts on this topic and others, visit the Atlanta Fed's website at frbatlanta.org. If you have comments or questions, please e-mail podcast@frbatlanta.org. And thanks for listening.*