

## REAL ESTATE DECISION MAKING – GREEN BUILDINGS

*Professor: Greg Smersh, Ph.D., Guest Speaker: Lacey Willard*

OK. Lacey Willard is back with us today to talk a little bit about green buildings. And so a very interesting topic in commercial real estate.

There's a lot of people interested in it, absolutely. I mean, there's a lot of occupiers who are interested in green. There's a lot of academics who are studying the impact of green to productivity. There is a lot of investment funds who are investing only in the green, in green space. So thank you so much for bringing this topic up.

Tell us a little more about it.

Absolutely. So BOMA, which is the Building Owners and Managers Association, brings together the National Advisory Council. So these are the movers and the shakers, the players within the commercial real estate industry. They are what we would go to for where are these trends, this is kind of where it starts.

And so what are we seeing from them? That the market sectors are positive. Technology, we're going to this, which is such a huge driver in the concept of green. The capital flow for real estate investments. We are actually posting positions for project managers to complete capital projects on commercial real estate.

What a great trend that we're seeing. Greater workplace density, but more collaborative spaces. And we see the industrial space development around e-commerce, what a fun topic, not only for industrial. What a not-fun topic for clicks and bricks on retail, but that's for a different time.

And then that brings us to what is going on with green within all of this. So you have all these statistics, all these focuses. And what was originated as almost a fad, almost a, oh, real estate's concentrating on this again, but really what is originated-- we'll take a look at some of the comparison-- but 3.1 billion square feet of LEED-certified space in 150 nations.

And LEED v4 will be coming out as soon as the chair for the US Green Building Council for the Florida Gulf Coast chapter-- and I've had the benefit during this, our green week for our company, to spend several days with Dave Pogue, who is the Global Leader of Corporate Responsibility and Sustainability. And he was kind enough to lend some of the research that he's been tracking, and gosh darn it, probably been driving, being such a staple component of green build, and some of the other research components within green building.

So just to take a quick look. What happens in 15 years in commercial real estate? Maybe something different, a different perspective on this fad. Because it's really not a fad. This is a staying power, driving investments, investment decision-making.

So then, in 2000, there's the very first label in 1999 for an Energy Star, very first one. There were fewer than 500 buildings that were on the way to get the EPA Energy Star. No cities or states had disclosure requirements. It's a huge advocacy topic, we'll talk about the next segment. But disclosure requirements were not even heard of. And then there was no Partner of the Year for commercial real estate. Perhaps GE for a light bulb, or other examples of this Partner of the Year, but it just wasn't there.

So now with Energy Star, when you take a look at what's going on this year, 260,000 buildings have been benchmarked. In the portfolio manager, if you study the Energy Star, what rich data we have on energy and consumption and trending for that. 25,000 labels, and so, there was 500 buildings in total.

And now, in L.A., in Chicago, in D.C., each one of those have 500 buildings with labels, Energy Star labels. 12 cities are adopting disclosure laws, and 12 more are pending for mandatory disclosures. And 11 real estate firms, including ours, are on the Partner of the Year.

And I love how this is referenced with the information that Dave is able to bring. If you're not on this list, you're not getting business. That's kind of where this is coming. I mean, this is wow, this is in our discussion points. And so I'm going down to the USGBC, a US Green Building Council, and LEED, the [INAUDIBLE] certification process.

The first certification was launched for new construction in 2000, but there was no buildings officially yet certified. There were no people accredited, either. There's no accreditations then. I think it's 186 now, so bringing us to the now as a globally recognized brand. I think it was yesterday, the GBCI, which is in coordination with the USGBC, purchased GRESB. We'll talk about that in a second.

But what an important global presence on every front. Building the buildings, and trending what investors want to look at as it relates to sustainability. So again, this 3.1 billion square feet in every major global market of certified buildings.

And so what comes with that-- so we then did not have any Energy Star or certification process. And so when it starts to happen, people want to know why are we doing it? How often are you doing it? What are the standards, the qualifications? Let's get some transparency, and let's get some reporting to this.

So out came several type of-- in 2000, some of these weren't even contemplated-- and now we see that all but one of the GRA or CDP are on the S&P 500. These firms are reporting to the standards. And for GRESB it's 640 investment funds, that's \$2 trillion.

So when a firm is looking to define as sustainability, either in the United States in 10K terms, or in Europe, or a firm is looking to invest in sustainable type of operations, because it's just part of their culture and they believe in it, these are the types of transparency and reporting that they're going

to. And so all of a sudden you see all but one of the S&P 500 who are utilizing these reporting structures, and this really makes that staying statement that it is a progression within the industry.

And we always like to say there's a triple bottom line with USGBC. We're bringing benefit to people, we're bringing benefit to the planet, and the decision making here is because we're bringing benefit to profit. We're not going back to the time frame where profit is the only generator. This corporate responsibility model has a sub component of the profit, but there's so much more to it. And firms are realizing that, and reporting on it.

So we were talking earlier, with our particular firm-- this is again, an extension of a very recent report that CBRE was able to partner with academic institutions, and it will be followed by formal reports early next year. So you take a look at the adoption index of the difference between what was going on in '05-- so this is no longer 2000, we're even going up to '05. And this progression, from '05 to '14, we're seeing from 5.6% of a green building, to almost 40% of these buildings.

So the data in this study, we're going back to that 30-- the top 30-- and we're going back to leasable square footage. So that's that the data that's being studied here. This is such an important component of so much of what we study, is what's going on in those major markets.

And so what are the major markets that are doing well? Minneapolis, San Francisco, Chicago. And when you see the square footage mark 77% of the leasable square footage on the office product in Minneapolis would be considered in a green building. And so part of that is because of demand from occupiers. Part of that is because of mandates by governments. And coupled together, it becomes the market mandate.

And so I love how this is thought of. And I sat through, up in Tallahassee-- I do a lot of advocacy up in Tallahassee-- and sat through what was about the first set of true reforms, or changes, to recycling programs in the state of Florida in like 20 years. We're coming along on this. We are coming along.

There's a lot going on that we're watching on the advocacy front for energy and sustainability, like PACE-- Property Assessed Clean Energy-- but that hasn't gotten off on the residential side, because of lending reasons. And really not on the commercial side, because it requires subordination of loans. So again, we're talking debt, we're talking loans, we're talking capital structure. And so it's surprising sometimes to see Miami on the top list.

And we talk a lot throughout this. We want to relate everything that's going on the national front down to Tampa. And so we're going to go ahead and relate it back to Tampa. And what this means for us is we have a lot of opportunity in the green sector here in Tampa. We are ranked number 22, at a 27% adoption of green buildings. Definition defined by either LEED, or Energy Star certified of office space. So there is such a story to tell beyond what's going on in the office spaces.

Just saw some great articles, [INAUDIBLE] that the certification of green cities in Florida, those are just amazing stories. St. Pete and bike trails, there's just some great stories going around on that. But how does the market see it? Is this driving market decisions? Is an investment firm who is looking to purchase and invest on green adoption index is going to be looking here?

So again, that comes back to the concept of opportunity, and where we can start to focus. So much of our activity as it relates to green building and increasing that square footage. And so I'd be happy to-- this is a very, very, very recently released study, and again, with just a couple of comments that were offered from Dave Pogue, and the great thing that we're seeing is that there are these studies going on.

What has been missing in this realm for quite some time-- and we've had a lot of anecdotal evidence, and a lot of stories. But I think that's where we need to continue to drive. And conducting these types of studies, and making those cases for taking advantage of the opportunities for green.

I know that there's a lot of interest here on the topic of sustainability, and green, and how it impacts on operations, and how it impacts productivity of employees within the space. And what are employees looking for? We'll take a look at that a little bit later. But what are employees, or occupants of buildings looking for?

And LEED is fashioned based upon the expectation they're looking for natural light. They're looking for clean air. And if they're going to be spending this much time and space in the occupied space, there has a comfort level to it. And so that's a lot of what the green industry is looking at, and is a lot of what the adoption is looking at.

So let me see, are there any questions that we can bring up, or topics that we can cover with green sustainability?

What's the additional cost per square foot for green?

It depends. So if you wanted to go with an Energy Star, it depends upon what building you have, the year of construction. But typically what you see, is it's in a life cycle cost analysis. So--

[INAUDIBLE].

Exactly. So if you want to do a TA retrofit, you should have about a 2.5 year payback. And if you have an owner of property who has a 10 year discounted cash flow at a pro forma-- we don't really do pro forma-- let's just say they're on a 10 year. Two and a half years then they're getting full pay back for that. So the life cycle cost analysis becomes so important for every single project.

If you take a look at Energy Star, every single point you get is going to get you maybe about a 1% reduction. I think it's 0.84%, it's just below that, but that's going to be your reduction. So it's not

about the cost going into it, but the real analysis is with the payback. When are you going to pay that project off with the savings in energy?

The tough one is water, because it's not that expensive on the utility side, and so justification on the payback. But sometimes you're looking at changing out aerators for fixtures, it's not that expensive either. And so you can really do a reduction in gallons per minute for the different fixtures, because you're doing it at low levels, or you're doing it on a recurring basis.

So I think that that's what we've learned. If you making the case to an owner of real estate, it's not about \$150,000 for a retrofit of the lighting. It's \$150,000, and then two and a half years, you're making that back in this type of savings to your energy.

I think one of the benefits-- people talk about the energy savings, which is true, but productivity of workers being in a work space where they're more comfortable is something that is being studied. And I know USGBC has studied it as well. And that may be really the real benefit, I think, of green buildings.

Isn't that huge? And productivity has been out there, it's been talked about, and it needs to be studied. In this type of an industry, with this type of employee, you're going to save this much on your occupied-- and so it's going to be the fact that you are saving up to 10%, 20% of your rent by going into a green building. That's a market decision. Those types of things are driving market decisions. So the productivity is absolutely huge.

And there are complications, as we understand, going into that in confidentiality, with regards to HR departments, and kind of breaking through that. But to the extent that we can see those studies coming out, I think we will continue to see that that's where we're going to get to true adoption.

Because it's going to be driven not only by governments doing benchmarking, and landlords, and investors who have the money demanding it, but also the occupiers saying, we need this to be productive. That's the story that it needs to tell, and that's exactly where it's going, which is very exciting.