ULI New York

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INSIGHTS & INSPIRATIONS

Program Steering Committee's Financing decarbonization event threads connection between decarbonization plans, investments and price appreciation

Over Climate Week our Program Steering Committee in partnership with **ULI Greenprint** explored ways that developers, designers and financiers are tapping a range of traditional and emerging incentives to materially cut the amount of carbon in their buildings in ways that often benefit the bottom line. Featured speakers in a packed breakfast panel hosted by **K&L Gates** included **Marta Schantz**, co-executive director, ULI's Randall Lewis Center for Sustainability in Real Estate; **Lauren Brust Moss**, senior vice president and chief sustainability officer at Vornado; **Christopher Cayten**, principal at CodeGreen and **Shanta Tucker,** director of New York's Atelier Ten office. Read our 20 key takeaways, below:

1. **Even if payback for energy consumption reduction in a building is years away, a green revamp can boost the perceived value among tenants for a faster ROI from rent hikes**

For example, after Vornado reclad its PENN 2 building and added triple pane windows at considerable cost (for a more distant ROI), the larger windows it installed and lower heating and cooling costs that resulted favored rent increases since tenants desire such changes for sustainability and aesthetic reasons. "We extended the size of the windows which everyone loves," said Lauren Brust Moss, senior vice president and chief sustainability officer at Vornado Realty Trust. Even "PENN 1, where we did not do as in-depth a retrofit, saw rent increases for tenants. In the end it was a better carbon reduction project because it had a business case to it. And, from a social perspective, more daylight and the campus-like environment make tenants feel better. This holistic retrofit provided a better return on investment to our shareholders."

2. **A whole suite of other building decarbonization financing options exists beyond utility grants and green bonds and loans**

These range from internal capital budgets from sustainability improvements to CPACE financing to federal tax credits from IRA 179D (which is only now emerging) to green loans, according to Marta Schantz, co-executive director of ULI's Randall Lewis Center for Sustainability in Real Estate. Added Ms. Brust Moss: "It's not just capital investment. There is still low hanging fruit. A lot can be done by operations. We harness meter by meter savings where we can."

3. **The holy grail to secure sufficient funding for building decarbonization projects is making the connection between decarbonization, sustainability and financial performance**

As a starting point, Divya Bendre, head of Sustainable Fixed Income for the Americas, within the Sustainable Banking Solutions group at the Bank of America, stressed the need for early planning and a strong team. It's important to set clear impact metrics for success, she added. "It can be any metric. But to the extent you can elevate that up and out of your planning, costing and financial conversations at the asset construction or management level, these are points of clarification to the market." Chris Cayten, a Partner at energy and consulting firm CodeGreen Solutions concurred on the imperative of the right teams and incentives. These may be operations people or asset managers. "There's a serious learning curve required for educating the team that you work with," he said. "You want to talk to the people running these buildings. Get them excited about it. You're going to [need to] help building operators see how improving building performance will make their own jobs easier." Ms. Brust Moss also singled out setting 'big lofty goals' as a motivator, strong teams, and the right metrics as critical success factors. "We have public goals and keep plugging towards them.' Progress is progress," she said.

4. **Traditional utility incentives remain a great way to suss out real estate decarbonization options and their payback—painting a big picture of what's possible and its price**

The most valuable financing vehicle for Mr. Cayten is The New York State Energy Research & Development Authority (NYSERDA)'s Flextech Program, and utility incentives that help fund analyses to identify the most effective ways to reduce emissions in existing buildings. These studies "identify project costs and utility savings of various decarbonization measures" he explained. "Expectations after these deep dive studies have increased," he added, noting that their decarbonization modeling approach looks at lighting and controls, heating, ventilation, and energy storage, with about half of the cost covered by NYSERDA. "These models are foundational and can be used for long-term planning," he said. Added Ms. Brust Moss: "We have used a lot of NYSERDA money for energy consumption reduction projects." Shanta Tucker, New York director of sustainability consultancy Atelier Ten concurred. "We looked into Flextech to build the value of the building along with the vision. It helps to support the creative thought process for our clients. [Utilities] NYSERDA and ConEd have tried and true processes and as Flextech consultants, we understand how to help fund projects. It may not be cash in pockets during the design stages but allows you to explore the opportunity to make good decisions to meet sustainability goals."

5. **Getting granular with data helps capture a green decarbonization project's expected mid- and long-term value, to prioritize investment decisions**

The importance of demonstrating the delta of decarbonizing interventions was underscored by Ms. Bendre. "Fully capturing the risks and opportunities from an impact perspective in disclosures helps debt issuers or borrowers drive better engagement with investors. Borrowers who do this tend to have improved access to capital. Green bonds can be useful to drive this type of issuer-investor engagement on decarbonization."

6. **Financials for sustainability improvements in buildings require far more rigor than in the past**

There is a new language for ESG that is now important to understand, according to Ms. Brust Moss. "The finance piece of the carbon neutrality puzzle is much more scrutinized," she said. "Today, 'Where that building is now on a path to carbon neutrality and how will it do in five years is getting reprioritized." That said, financing is still attainable. "From where we sit in the CRE world, it's hard to get financing but not impossible," said Ms. Brust Moss. "We are lucky enough…that we have a strong balance sheet. That has allowed us to get commitments for projects."

7. **Future (and rising) energy costs should be considered when evaluating sustainability investments today, rather than what has been paid in the past**

Study the electricity, steam and gas rates, advised Mr. Cayten. There are going to be double digit increases in these rates, he noted. "Don't look at today's rate," he said. "ROI calculations [should] look at future energy costs, how they will pencil, and how they impact paybacks."

8. **The 'when' matters too, to tap incentives when they are available, at the right time**

"Think hard on when to start financing studies," advised Ms. Tucker. Using a cost estimator can be valuable because one can only be successful with the needed approvals on financing to move ahead—and details like this can help in securing it, according to Ms. Tucker.

9. **When to retire or repurpose certain assets—or a 'managed phase out'—is becoming an important part of the discussion**

Creating an ambitious decarbonization plan may require retiring equipment before it dies or becomes completely outdated. Make sure you have a plan in place for upgrading equipment so when equipment reaches its end of useful life it can be upgraded to improve efficiency instead of being replaced in kind, advised Mr. Cayten. "You have to think about the useful life," added Ms. Bendre. "We are starting to talk about the extent to which we need to have a phase out. Waiting until the end of life is not going to get us to decarbonization."

10. **The sale or lease of some buildings can help finance marquis buildings' green upgrades**

Vornado's revolver fund, for example, used proceeds from the sale of 220 Central Park South to finance its building retrofits in the Penn Station district, specifically at the Farley (post office) building. Ms. Brust Moss said. "It's important to discuss with your controller where to make investments now, "looking out for 2029," she advised. Consider where they fall in terms of marketability, and the mortgage or debt on the building, she added.

11. **When it comes to institutional investments, robust labels can be helpful**

Certifications like LEED serve an important purpose," said Ms. Bendre. "They elevate the key outcomes or impacts of a super complex concept," and allow for a somewhat comparable metric for performance. That said, "financial institutions are increasingly going beyond labels and asking for granularity on GHG emissions and energy performance," she added.

12. **Awards and public recognition for building decarbonization projects with slower payback can help secure funding for other green upgrade projects**

PENN 1, for example, won a $1 million NYSERDA award. The demonstration project reflected an exemplary commitment from above and public support. "The public commitment helps a lot," explained Ms. Brust Moss. "We're trying to figure out how we squeeze out as much savings as possible. NYSERDA is giving us $1 million, and because of that, our management team approved the $3 million investment to move this project along, based on carbon emissions reduction, because we know it will help us in the long run with our partner goals. It's a sevenyear payback, but it is a demonstration project and a commitment to something that could be replicable in the rest of our portfolio as we look to heat recovery."

13. Most green builds do not factor in expected IRA tax credits. They are likely gravy

Vornado Realty Trust is building a film studio on the Upper West Side of Manhattan with a big flat roof where it will install solar panels that will handle one-quarter of the electric load. "Those are the kinds of things we need to get over the finish line," said Ms. Brust Moss. "We need to show that 'Potentially, we can get some IRA money out of that. We don't know [if we can] because we can't get it until the end,' so it's not part of the initial metrics of payback." Also, because Vornado is a REIT, it doesn't utilize the tax credits. So it will have to determine how to sell credits. "This helps the payback of the solar project, but it means we are not factoring in the IRA in the original payback," she said. Moreover, tax credits are not made available until a building is occupied, added Ms. Schantz.

14. The IRA $5 / foot update is attractive to developers

The 179D Commercial Buildings Energy Efficiency Tax Deduction, updated as a result of the Inflation Reduction Act, has been expanded, which will likely have an impact on commercial real estate. The deduction incentivizes building owners take to make their properties more energy efficient has, to date, not been used much by office buildings, noted Mr. Cayten. However, that may change with the new updates which kick in for the tax years beginning Dec. 31, 2022. These updates will lower the minimum threshold for obtaining the 179D deduction from a reduction in combined energy and power costs from 50% to 25%. "That's a more feasible option for existing buildings," said Mr. Cayten. Beyond this, the updates have ushered in a rebate of $5 a foot. "It's going to be a new gravitational force. It's not an overnight paycheck like NYSERDA. Now that you have the ability to transfer the deduction from REITs, more of the market will be interested in this, more people will push to make it work. If there's 5 bucks on the line, you're going to have more people in the room saying, 'Could we get a piece of this?'"

15. Today's more abundant information on embodied carbon should help drive building decarbonization decisions since operational improvements will make embodied carbon a much larger contributor to overall emissions

Ten years ago, we did not have many embodied carbon case studies and databases, said Ms. Tucker. Today a lot more information is available. "We now have directional guidance on how to reduce embodied carbon before you build. Case studies are a catalyst and enabling process. Cutting edge investors are asking about embodied carbon plays." Added Ms. Bendre, "Companies upstream of the construction sector are increasingly focused on embodied carbon. While embodied carbon remains several degrees removed from most financial institutions' discussions with real estate companies, there is tremendous focus from such institutions on decarbonization in building materials sectors such as steel and cement." Moreover, over time operational carbon will shrink its portion of a building's carbon footprint, said Mr. Cayten. "Embodied carbon from construction used to be 30% of the building's lifetime emissions, but as operational emissions approach zero this is shifting. We'll be done with operational carbon in 5 years," he said.

16. Tenants and investors are demanding building decarbonization well before lower emissions regulations take effect

"Current, existing and future tenants want to be in a decarbonized building," said Ms. Brust Moss. "You can't be a Class A building owner without decarbonization planning. The 100-largest tenants in Vornado buildings have their own ESG goals." That means building owners will have to consider the extent to which current and future institutional investors will want a decarbonized building as part of their ROI strategy.

17. Some housing financiers are increasingly demanding decarbonization as a precondition for funding

"We see it from the leasing and broker community. They are asking for certifications and decarbonization plans," said Ms. Brust Moss. This is also driving force for European investors and German banks who are asking for data on the current status of decarbonization, how much it will cost to reach goals, and where investments are being deployed. "It's a driving force to be able to answer those questions honestly and accurately."

18. Class B & C decarbonization projects can pencil, but their payback arises in different ways

Mr. Cayten noted that Class B & C building decarbonization projects can decrease turnover among tenants. "You can't charge higher rents for sustainable space, but you retain tenants longer. Meanwhile, family offices and private owners can be motivated to decarbonize their buildings for more personal reasons, like when principals are asked, "Do you have grandkids? Do they want to live on this planet?" he added. Often, they have a lot less debt on their buildings than other firms—and are thus open to funding 'low hanging fruit' upgrades, he noted.

19. Factoring in future fines can also help the search for funds

It's helpful to calculate the potential fines averted and money that will be saved for investment in improvements that add value, Ms. Tucker said. She recommends using a NYC LL97-2019 calculator from Building Energy Exchange. "It makes the building more valuable, so you have to start with the basics of 'What is the payback and how does it make the asset more valuable?' and then looking at those fines," she said.

20. Sharing success stories, pilot outcomes, case studies and best practices can help speed up the pursuit and delivery of building decarbonization projects

"Are we doing enough to broadcast success stories in sufficient depth and breadth?" one attendee asked. Increasingly, decarbonization case studies are available, from, for example, NYSERDA. Many real estate firms' ESG reports are also a valuable source of information on projects and best practices.

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