Greening the City of Boston with Senior Architect John Dalzell | Transcript

Introduction (00:02):

Welcome to Green Building Matters. The podcast that matters for green building professionals. Learn insight in green buildings as we interview today's experts in LEED and WELL. We'll learn from their career paths, war stories and all things green because green building matters and now our host and yes, he has every LEED and WELL credential. Here's Charlie Cichetti.

Charlie (<u>00:33</u>):

Be sure to check out the green building matters community where you can have one minute exam prep for any of the professional credential exams you're tackling next, as well as putting your continued education on autopilot, saving time with GPS reporting your hours on your behalf. Check it out. Gbes.Com/Join now and enjoy this episode of the Green Building Matters podcast. Welcome to the next episode of the green building matters podcast. We've been fortunate this year to have just some amazing guests on to hear about their green building journey here about what's keeping them busy and, and even I love to ask them, Hey, what's coming up, what's around the corner today. We have John Dalzell with us. He's a senior architect for sustainable development as part of the Boston Redevelopment Authority, John's up in the Boston area. John, how are you doing today?

John (<u>01:27</u>):

I'm good, Charlie. Great to catch up with you.

Charlie (<u>01:30</u>):

Yeah. Excited to have you on just to talk about your experience, talk more about what's happening and obviously Boston, it's a city that I love, but I've got to ask you to take us back. Where'd you grow up and where'd you go to school?

John (01:42):

Great questions to start out by Charlie. I'm actually a New Yorker, studied architecture even back in high school and started architectural school in New York, Long Island where I grew up, but was much more interested in

the practice of architecture, even when I was starting in school and found the Boston Architectural College. A good friend I met at school was from Boston, knew the school and we did a road trip to learn about the differences in their approach to architectural education. We both found it to be a great fit for our interests and a few years later completed the program and moved right into practice. So it was a pretty seamless endeavor, certainly hard. It's a tough school, BAC, but you learn some important life lessons. You learn a great deal of architecture, obviously, and it's a key approach. It's unique that it runs a full-time work study program. The schooling is from morning to evening in the office and from evening to later in the evening in the classroom and the studio.

Charlie (<u>03:01</u>):

A lot, a lot of hours they're worth it. And then you transition into a practice, but it must have been great going there, going to college with a buddy. I'm going to ask you, I didn't know that Yankees or Red Sox, John.

John (<u>03:12</u>):

Oh, I'm a Red Sox fan. I crossed that bridge a while ago. It wasn't an easy journey

Charlie (<u>03:21</u>):

Had to make sure as an Atlanta Braves fan here, of course, I don't like the Yankees, but let's continue. Sustainability, clearly as we look at some of your titles, the fact you're a LEED Fellow, and a lot of the work we're going to get into in this conversation you've done green buildings, but when did you first become a little more sustainability minded?

John (<u>03:45</u>):

Sure. I spent a lot of my professional career in private practice which included affordable housing and, coinciding with one of our economic downturns. I was offered a position with the city's affordable housing division, which was a great move for me at the time, aligned with my interest in practice at the time as well. That position though, interestingly enough, also included economic development or business development activities and led to the city's main street program. So under Mayor Menino, we launched what turned out to be the largest urban main street program in the

country. So commercial district revitalization in partnership with the local community is quick of that, but what was really kind of interesting about it is the sustainability aspects of that. We have these built environments all around Boston and most of our cities around the country where we have fabulous commercial infrastructure in the traditional downtown or urban downtown form, and these areas are vital to the livability of the city.

John (04:57):

They also have enormous environmental benefits in terms of being in close proximity to dense population centers, affording people a lifestyle with far less vehicular dependency, but really enrolls up to a much bigger picture of the whole idea that cities are these vibrant places where we can live together, closely enjoy amazing amenities because of that density. And then really all of this comes around to being about a sustainable community, walkable, dense, full of goods and services. So revitalizing our commercial districts was really a very fundamental sustainability strategy, interestingly enough, that led right into the green building work. In fact, one of your prior interviewees, Rebecca, Oh boy, what's her last name from Pittsburgh? It'll come to me, was a leader in the main program and then left the effort in Pittsburgh to begin work on green buildings.

John (<u>06:03</u>):

And in fact, she pulled me into work, creating the LEED for neighborhood development rating system. So I had the opportunity to spend a number of years with leading experts around the country, crafting the rating system. It was a unique moment for the US GBC because it partnered with the Congress for new urbanism and a couple of other organizations to create the leading standard and that was a unique operation for the US GBC as well as the partners. So that was my true foray into formal green buildings and partnering with the US Green Building Council from there. It wasn't too much of a trip to the more formal green building work that the city began to undertake. In fact, included the first large city to enact green building ordinances, utilizing the LEED rating systems.

John (<u>07:05</u>):

We're fortunate, I think to find the US GBC to find a very holistic approach to sustainability that certainly fit with the city's perspective on holistic

sustainability and be able to borrow the LEED rating system to use that in a regulatory context to certainly leverage the market value of LEED, but also to leverage again, this holistic consensus based approach to verified practices. So that's an awful lot there. Charlie, I've probably gone way beyond your question, but I do have Rebecca Flora to thank for an early introduction to green buildings.

Charlie (<u>07:49</u>):

It's great to give those shout outs and who influenced you that stuff plan is something I always love to know who would you consider a mentor, but for those not as familiar with LEED For Neighborhood Development, it's a fantastic program. Well-Rounded, and not just looking at 1 building at a time, right, that entire master development. Now we've even seen LEED for Cities LEED for Communities come out. I think you were early in some of these macro LEED programs and the site planning and the master planning. So that's really fantastic. Sometimes we just do one building at a time and it's cool. You're early in that so well, who else, John, might you consider a mentor? Did anyone else open a door for you along the way?

John (<u>08:33</u>):

There's a really Interesting story that I don't tell often, but there was literally a very specific moment when our green building effort in Boston launched and as it happened to be, I was at a local architectural conference. It was called Build Boston and it's hosted by the Boston of Architects, but the particular moment happened to be listening to our mayor give opening remarks. I happened to be standing between our brand new city, chief planner and a colleague Mike Davis. Who's a principal at Bergmeyer Associates. Mike had just returned from, I believe one of the first Greenbuild Conferences in Austin. He was so enthusiastic. He just turned to me. So what is the city doing about green buildings? It's become real, it's measurable, it's legitimate, it's market attractive. He went on and on. And since I happen to be standing next to our chief planner, I simply turned to Rebecca Barnes and I asked the same of her.

John (<u>09:38</u>):

What are we doing? What should we do? And to cut to the chase about a year later, we had sat the mayor's green building task force and spent a year

working with local leaders. These were all suit and ties, dress suits executives that were involved in the real estate and design industry. We were tasked with making Boston a leader in green buildings. Through that research through a great deal of analysis and a year long public process concluded with an action plan, a 10 point action plan that included recommendations for city buildings, city funded city land disposition, and then most importantly, or regulating private development in the city. And that was the specific requirement for private development to demonstrate their sustainability strategies utilizing the LEED rating system. And so that was a pretty bold move back then. I think it's a very solid move as I look at it now, and as I look at other cities around the country that have emulated our practices, in fact, in many cases, even outgun us. They've lowered the bar the threshold for the requirement that raised the LEED outcomes. It's really become a very good workspace, I think, especially for municipalities that really ought to be viewing sustainability holistically.

Charlie (11:11):

Yeah. LEED is a great program, a great tool for that, a great mechanism. It's great that you guys were able to frame that. Connect the dots a little bit on the career timeline. I know you've been very active also with the USGBC local chapter and national, but career wise. Really over 20 years there with the city of Boston. Tell us more about how your roles maybe evolved a little bit. For example, John, I see on your bio, words like resiliency and climate change preparedness. So not just energy efficiency, not just LEED and green buildings, but has your role evolved over those 20 years.

John (<u>11:49</u>):

Sure. I think it's evolved pretty organically with our understanding of the impacts of climate change. Going back to my beginning at the BRA, which by the way, is now the Boston Planning and Development Agency, we certainly recognize the impacts of climate change, the urgency to start to act upon that now. We also recognize that within our practice community, our real estate industry, that community was also looking for leadership, that there were shared values there. We think in that regard that the city wisely and the mayor wisely started us down that path in response to a lot of that work. I think we began to dig deeper into critical issues and hosted so many meetings and dialogues and conferences around the various challenges,

driving climate change the impacts, and especially the impacts for our coastal city.

John (12:57):

Pretty clearly we're all correctly focused on key indices, sea level rise, being important, but so are key urban Island conditions or extreme heat events, extreme precipitation is also something, a factor that cities need to consider and manage. So there were some, and are some very wonderful moments in that journey. I thoroughly enjoyed our Boston Living with Water Competition, which was really a collaborative effort with the Boston society of architects again, but also with our local Harbor advocacy groups. We benefited from support with the state and some local foundations, but we were able to host a really thorough in-depth international design competition, looking at the challenges around sea level rise. In Boston, I think we, at that time, were also benefiting from a lot more research by experts in climate change and sea level rise and computer modeling that could really take some of these forecasts and translate them into regional.

John (<u>14:17</u>):

And then literally Boston Harbor specific outcomes. Those outcomes were then things that we could begin to map across the city. So we transitioned from looking backward at historic say flood conditions to looking forward and having computer models that were vetted and granular enough that we could then bring those into planning conversations and the bus and living with water competition gave us a really good moment to contemplate how to bring forth regulations that looked forward. What would be good for practices in the city, but more importantly, it represented a turning moment. I think we started the competition as figuring out how Boston could live with water, but we ended the competition realizing how Boston could thrive with water. We are a coastal city. We have always thrived because of our water proximity. I think we turned an important corner, recognizing certainly the impacts, but no longer in a posture of concern or retreat, but rather in a posture and action and how we can go forward. We can and need to address the impacts of sea level rise and climate change. But we can do this work in a way that genuinely makes Boston a better place and that ensures that Boston and her citizens thrive long into the future really fantastic moment.

Charlie (16:01):

I really applaud you for being early in all those climate risk models and the resiliency models and having that conversation. It sounds like you really advocated for the information probably with those building owners and operators. Just on my large portfolio, real estate clients, John, for example, or just now maybe getting into that, right. It's one thing to line up with science-based targets and really focus on the efficiency and the carbonalignment we need. But it's another thing to say, well, we've got to go ahead and model this out too, on how it's going to affect us from a resiliency standpoint. I'm happy to hear you're early in that. Looking back. What are some things that stand out on the highlight reel? Like what are you really proud of?

John (<u>16:47</u>):

I have to say one thing that I'm really proud of and really quite fortunate for is the colleagues that I've gotten to work with. I know that's probably not what you had in mind, but I have played a role that I am so happy to have played, but it's never been a role I played alone and going right back to looking for inspiration and mentorship, whether it's Rebecca Flora or Rebecca Barnes or folks at NRDC, Kate and company who really brought a passion to addressing these issues. It's really also the people in city hall, Mayor Walsh, Mayor Menino before him. The colleagues I work with I'm not the point person on our sea level rise work. I was fortunate because it grew naturally out of our sustainability and resiliency measures, but I have a whole bunch of colleagues in city hall who have grown and are advancing that work. In the same as true for our green building work. It's really a group effort and it's been a group journey. So I know that's not what you were asking about, but it's something I, in particular, as we're approaching Thanksgiving have had the opportunity to reflect upon. I think that is

Charlie (<u>18:10</u>):

No. I mean, these people, the relationships, we spend so much time with the people that we work with. It sounds like you've got a great roster there, man. I think it's an awesome answer, but you are a LEED Fellow. You've won other awards. You've been a big advocate here, so let's talk a little bit about some of your work with the US Green Building Council, but also on a local scale on this podcast, John, I always advocate for not just getting

credentials, but also volunteering and being a part of your local chapters of your different trade organizations. What has that meant to you and tell some more about the US GBC there locally.

John (<u>18:50</u>):

Being on the national board was truly a privilege, especially for the same sorts of things, opportunities to work closely with others, but at a very high level, the opportunity to grow our green building community, our sustainability expertise around the country, even leading to the work you're doing as far as educating professionals on different rating systems and the particulars of those systems and the outcomes. I mean, the neat thing about these rating systems is they're not checklists. They are data-driven outcomes, specific standards that speak clearly to this collection of sustainability and resiliency goals. And that's critical. The LEED checklist is such an understatement. But the national work was really pretty neat. It was a long run almost six years. What you quickly realize though, is we were stewards of a community.

John (<u>19:55</u>):

There was a business to it as well, for sure, but at a higher level, we were stewards of a community and to be able to connect that national movement with a local city of Boston move, that was really a profound experience. And that I could sit with local folks here who share these values and shared this enthusiasm and optimism, and to think about how we best grew our community that led to an early version of a local chapter that was a really special journey. I was fortunate enough to be a founding board member of our local US GBC chapter. I moved off of that board when I went onto the national board, but was able to rejoin the board afterwards and in fact, many years as vice chair of that board.

John (20:50):

Really to the same end, how do we keep growing this? How do we continue to raise awareness? Volunteering for that, it's so good for your soul, but it's certainly good for our collective efforts. So, that's some of the professional volunteerism, I have to speak about, pending time at the Boston food bank though. We worked on an annual volunteer day today and it's humbling. We do just exactly what they want us to do, which is often sorting food that's

been collected into different boxes. The manual work, it's kind of fun because it's literally an assembly line operation with a conveyor belt picture. I love Lucy or something like that. You've got the scene, but you're also really connected to people in need. Ultimately it sort of comes around to still looking at how we function best as a community. I think in those regards, whether you're volunteering at a professional level in your town and your region or something, it's all an expression of caring and an expression of how we do better when we work together. Maybe that's an important message this time of year, and especially for these last few years.

Charlie (22:19):

Well, that's a message for the whole year, man. So I might use that for the title here that was well summed up, but tell us a little more about what's keeping you busy today. So tell us about Boston, some of the initiatives you have, and maybe some coming up. What's keeping you busy today?

John (22:37):

So we just had a real neat moment. A bunch of years ago now, I think it was around 2013. We had the realization that we needed to do more to walk the talk, if you will. And so we created what we ended up branding as the e-blast green building program. A demonstration program that took its inspiration from the cover projects from magazines promoting sustainability off grid living and things like that. The beautiful Vermont farmhouse that was now a private residence. It had a wind turbine and solar panels on the roof and it was a net zero energy home. It had great basics, lots of land, lots of roof, relatively small load, other economic factors like being far away from natural resources, like gas in the street, or even limited access to electricity.

John (23:44):

Right? So the quest was, could we do something like that in the city? What would happen if the homes became smaller and denser? At what point would we be able to achieve net zero, but also why stop at zero, right? Why, would we just strive for not having adverse impact? Could we take a step further and create more energy? Could we restore the environment? Could we increase social equity? So the plus program mostly known as energy positive. In fact, focusing on the energy environment and equity positive actions was launched. We have finished 14 projects in the city and they're

performing wonderfully. They've been highly feasible. We started this effort with a small subsidy to entice participation. We were incredibly flattered by a massive response, by the way, when we first offered this and we offered this as a city disposition model, but we ran it much more like a design competition, the visuals and the design and the innovation were critical to the process.

John (25:07):

And we were just so pleased with the responses we got. The hardest part in fact, was, , just choosing in the very first round, we chose three project teams to build on three different sites. We probably turned away 40 other proposals. And, and that in of itself was unprecedented. There was a silver lining though. I think it was at an event when we announced the, the winners that one of the teams came up to me and, , they hadn't been selected. And so it was looking to be a tough conversation and they, they just came up to me and they said how appreciative they were for the opportunity that they had figured out things that they had never challenged themselves to consider before, and that it would forever change their architectural practice. And that to me was, was an unanticipated benefit of the whole endeavor, but really a much more solid experience.

John (26:03):

If you will, today, we've gotten 14 of these completed. We've seen some stellar performances, 25% over the energy loads of the building. We're seeing there's a four unit project that I always cite that surplus is enough energy for another code compliant home. So we're not at zero. We're not striving for CRM, we're striving for positivity. And that's pretty cool. We probably have another hundred and 40 ish units in the work. So we're continuing to expand the program, but the true industry of our success was when others began to adopt our practices without us. Kind of emulation is the greatest form of flattery, right. Something like that. I was on a job site, not too long ago where a private developer finished up, maybe a six unit energy positive building pulling from all the best practices, Passive House strategies, onsite, renewable LEED certification pulling in all these great practices, but doing it entirely on her own.

John (27:18):

There was no partnership with the city in this case, and the results are looking really quite great. I think that the projects are probably just about to finish up and should be in the market soon. I'm sure it'll attract a lot of interest and a great project for that developer, both in terms of a financially successful endeavor, but the kind of project that in this case, this developer is genuinely proud of. It'll be her first larger project on her own. She's just got a background in real estate development, but this is really an opportunity where she's stepped out to build the way she wants to see things built. And that she's doing that without our participation per se, is really true indices of success. So that's, that's, a real fun, special moment, I think for me.

Charlie (28:11):

Yeah. If there's more there, I'd love to learn more about that project. We all need encouragement. It sounds like that developers really had that aha like," Hey, I can do this the way, not just a minimum have to do, but like, what should we do." It sounds like they've really pushed the boundaries. So that's really exciting too. Now, let's shift gears right now. Let's talk about the future. Let's pretend we had a crystal ball, John. You've been doing green buildings for a long time now, but what's next in this green building movement? What should we be reading?

John (28:43):

We should be reading up on carbon neutral buildings, Charlie, and not little buildings we're talking big under the thousands of square feet of commercial buildings. We're in the process right now of developing zoning and policy that will set standards for zero net carbon buildings in the city. And this is for private development. The city has already adopted zero net carbon strategies for, for city buildings and for city funded projects. And so of course the big impact space w for our work is, is when we move forward into the private sector with this, a simple illustration is we might build a a hundred thousand square feet of city buildings, commercial city schools, police stations, things like that, city assets per year. On the other hand, we are building six to 7 million square feet of private development every year. So getting that sector of our building economy to lead with practices that are achieving net zero carbon is when the game truly changes.

John (29:57):

The collateral benefit of helping our existing building stock also improve its performance, both through market forces. If you have a choice between being in a net zero carbon office building, or an older one, you're probably going to pick the net zero carbon one, and some of it will create some good competition there, but we'll obviously pioneer design engineering strategies and products and practices. So we're pretty excited about that. Work ahead is a rigorous workspace. There's multiple fun fronts that are learned that are challenging, but I am optimistic. We have a great real estate sector in Boston. We had our first technical meeting on how to set standards around low carbon buildings. I so enjoyed looking across the Zoom screen and seeing some of the best practitioners I know, and having them lend their thoughts, their enthusiasm, and honestly planning out that's going to be hard. Here's where this stuff starts being truly challenging. So I think Charlie, the workspace ahead is going to be about our carbon neutral Boston 2050 goals. But our plan is to set standards for new construction in the very near term.

Charlie (31:19):

Even the recent Greenbuild Conference, this was a big talk, it's zero, it's carbon neutral and an aha moment I had, John was usually when you want to push towards net zero you would have to be as energy efficient as possible first, then you don't need as many solar panels, right. And that's still the best practice, but the infrastructure shift, Hey, don't forget, we're going to have a lot more electric vehicles that might want to plug up at your building. Now that's even an added load there and I've been driving electric cars for eight or nine years and I just charged at home. I didn't really think about that shift though. That's gonna be also part of those calculations so consider that too right. As we're pushing towards carbon neutral. Fantastic. Thanks for taking us into that glimpse of the future, John. Talking a little more about you here a few more questions. What's your specialty or gift?

John (32:16):

Oh, that's a fun one. What is my gift? I think probably like a lot of people I have more to bring on the upfront. I think I've always done better getting things started, and it's not to say I shy away from the work of getting things done, but I think I've been fortunate in my professional career to be given latitude, to explore the challenges ahead and craft the responses. So both

determining the exact direction and then setting in motion, the steps forward. And that maybe it's more to say that that's always been something that's truly exciting. It's certainly where you have to think of new challenges, assumptions and explore what might not have seen practical or promising for what it might be worth.

Charlie (<u>33:12</u>):

Yeah. I like that. Do you have any good habits, any routines or rituals that help you stay on point?

John (33:18):

I have loved riding. I'm fortunate we live in the city, so I have a nice commute to city hall. It's as little as 10 miles and as lovely as 15, but I think about it more in that it gives me opportunity to certainly practice what I preach, but it's more than that. It's a habit that has a lot of pleasantry too. I have routes that take me along the Charles River that are scenic and beautiful, but I think it's also worth noting. Cycling has this very pleasant speed for folks who are visually oriented and think about the built environment. You have the ability to see a lot of the built environment, but at a speed at which absorption is optimal.

John (34:20):

I have to fess up, I'm missing my commute to work. We've been working from home through the COVID pandemic, but I'm looking forward to getting back to that and certainly has health benefits. It's certainly been nationally and in Boston our cycling facilities are getting so much better. The city has come to fully realize the benefits and the opportunities and to watch that grow has been pretty neat, but that's my big regulator, Charlie. It's that routine I've had to make it up with more recreational rides. I'll still ride for errands and things like that, but having a 10 mile trip downtown and home each day, it was really nice. I miss it, Charlie.

Charlie (35:13):

I drove my electric car to our office and I'd catch up on some audible books or some podcasts. In your case, man cycling and the help and burst that mental clarity is you're right. Everything's changed. Let's get back to some of

those good habits. Bucket list. John, I'm a fan of bucket lists too. What are one or two things on your bucket list?

John (<u>35:36</u>):

I think I have two things on my bucket list. The professional one is to see the first zero energy large commercial building built. And that goal is not to rely on offsite solutions for energy, but to really see that fully optimized building, that finally figures out how to leverage the solar assets that fall on us and on our city. So that is absolutely in the hunt. I do see it being possible. We haven't seen the chest yet, so that's a big fun one. I think on a more personal list, I love to hike and I have spent many time climbing our local mountain up here in New Hampshire, Mount Washington. It's a beautiful, beautiful mountain and a challenging mountain. My bucket list is to get up there with all of my kids.

Charlie (<u>36:41</u>):

Wow, love it. I can see that visual now, man. Well, good luck makes that one happen. On the net zero side, I mean, that's got to come, the technology and the efficiencies and the approaches. Someone recently John told me that nature is perfect and we all keep trying to emulate nature with our building. So that really resonated with me. I think some of that goes back to what we're trying to do with carbon neutrality. I've loved our talk so far. Is there a book you'd recommend?

John (<u>37:16</u>):

What I keep coming back to from time to time is the ecology of commerce. And that's plenty enough that fits this conversation really pretty well. It's a very foundational piece. It's been updated as well, but the foundations that get outlined there are really pretty important. I do pick it up every few years. I think I must be overdue why it's coming to mind.

Charlie (<u>37:51</u>):

Dust that one off this holiday break ,too. And just for everybody, we'll put a link in the show notes there. Paul Hawkin, many good books. We'll put that down there, John great recommendation. Two closing questions, any career advice you wish you to know a little earlier?

John (38:09):

I reside within the architectural community, so I think I will keep it within that professional set. But I think for architects, we're often trained to think very broadly that we can challenge any problem with our solutions to the built environment. I think that's truly lovely. I think as a career advice for other architects, I would encourage people to always pursue what they hold near and dear. And that brings out the best of us as designers, as guiders of the built environment. It's a kind of following your heart and in a professional sense, but certainly recognizing that when we are doing what we love, we really do remarkable work. I'd stick with that.

Charlie (<u>39:07</u>):

Fantastic. Some listener are just now jumping into the green building movement. It's been good to you, John. It's been good to me. What words of encouragement do you have for someone listening that's just now jumping in as we come to a close.

John (39:23):

Impatients. Be very impatient.

Charlie (<u>39:28</u>):

Well everyone, this has been John Dalzell coming to us from Boston. Just some tremendous work there with the city of Boston, check out some of the initiatives they have going. It's all about working together and working towards carbon neutral buildings. John, thanks for your time today. Thanks Charlie. Great to chat.

Charlie (39:49):

I just want to say thank you to our loyal listeners. We actually are celebrating over one year here on the green building matters podcast. Me and the entire team were stoked and just so glad to continue to listen every Wednesday morning to a new interview with a green building professional here in this industry, or just some pro tips that we want to make sure that you are getting straight from us straight to you.

Charlie (<u>40:14</u>):

Thank you for listening to this episode of the green building matters podcast@gbs.com. Our mission is to advance the green building movement through best in class education and encouragement. Remember, you can go to gbes.com/podcast for any notes and links that we mentioned in today's episode. And you can actually see the other episodes that have already been recorded with our amazing guests. Please tell your friends about this podcast, tell your colleagues, and if you really enjoyed it, leave a positive review on iTunes. Thank you so much. And we'll see you on next week's episode.