Dr. Kath Williams - From Montana to India, Taiwan, and More | Transcript

Welcome (<u>00:00</u>):

Welcome to Green Building Matters. The podcast that matters for green building professionals learn insight in green buildings. As we interview today's experts and 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 (00:33):

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Charlie (00:58):

Welcome to the next episode of the green building matters podcast. I'm your host, Charlie Cichetti. I think today I've got a LEED fellow coming to us from Montana. She's had an incredible green building career. We actually met mutually at Greenbuild Europe a couple of years ago of all places, but Kath Williams. How are you doing today?

Kath (<u>01:20</u>):

I'm doing great. Thanks.

Charlie (<u>01:22</u>):

Well, I appreciate you being willing to hop on the podcast, share a little bit of your green building journey. It was a water class that I sat in on at Greenville Europe. So fun. Well, I always like to learn that origin story. So if you would tell us where did you grow up and where'd you go to school?

Kath (01:41):

I grew up in Ohio farm country and I kind of know I came at sustainability from a totally different direction and most people who come through the design world and my background was really a mixed bag in regard to sustainability. Of course, we didn't even know what that word was and never used that word, but my dad was a landscape architect for the state of Ohio and designed roadside parks. So I spend my life explaining what landscape architect was, which is kind of cool now that people do know what a landscape architect is.

Kath (02:28):

And my mom was a registered dietician. So we were into food and nutrition and healthy foods from the time I grew up. The dichotomy or the contradiction was like with dad working in roadside parts, we were never allowed to throw trash out the window of the car, even though that's what everybody else did as a disposal mechanism. But at the same time, he was in charge of the weed spray program along the highways. And used DDT and agent orange? And ultimately he died of all kinds of tremors, brain malfunctions that came from exposure to agent orange. Then another part of grown up, although my mom cared about food, ushe didn't care about the trash and the waste. We stayed at my grandmother's cabin up on the Ohio river every summer. We took turns everyday fighting over who could walk out to the end of the dock on the Ohio river and throw the trash, all the trash bags into the river.

Kath (03:46):

So I did, I did. I grew up caring about parts of what we call sustainability and not being part of my life and the other part, just bad, total trash polluter, everything you wanted to call.

Charlie (<u>04:04</u>):

It sounds like you were really noticing. So getting your degrees there in Ohio, tell us about when did you really know you were going to make a career sustainability.

Kath (04:17):

Well, again, this is quite different than most people. My job was at Montana State University as the assistant to the vice president of research. My job in his office was to kind of look over the laboratories and care about the laboratories. We had heavy duty research labs on campus, and all I kept seeing was how much money went into utility bills and how much human

behavior it could change to help save on utilities, be conservative with water and what we dumped down the drain.

Kath (<u>05:00</u>):

And I had a lot of chemistry labs. So we had lot of fume hoods with the open sashes. So there was no conservation of energy. We actually couldn't support the number of students and researchers because we wasted so many resources. And that bothered me a lot because I was trying to find money for scholarships. What happened at that time, was an opportunity through the department of commerce to do green building research and green building techniques and they were looking at fume hood that were more energy efficient, and they were looking at products that could replace Portland Cement. It ended up my boss, the vice president at the university was able to secure over the course of several legislative sessions in secure, of course at that time we called it pork, but enough pork to start a green building technology,research program. He put me in charge of the research program and what was really cool about that was that was at the time when US Green Building Council was starting.

Kath (06:22):

In fact, it was David Godfried who put together an industry partners program for us. We were able to support green building technology research in places like our companies like Fisher Hamilton. We were able to support Lawrence Berkeley lab as they looked at low fume hoods. Then people like Judy Heerwagen who were working on human health and productivity and trying to measure that and Fish as he was trying to do life cycle analysis. I got to know all of these people mostly because I was the principal investigator and I had the money, but it was an opportunity and pushed me into green building where, for me, it was just another research project. It was like, Oh, I care about sustainability and I'm out there hugging a tree or anything like that. Part of my job.

Charlie (07:29):

I love it. And so I guess that's what brought you to Montana doing that? Graduate work, these additional projects Oh, involved with Montana. And that's where you wanted to set up shop

Kath (07:33):

Well, that's a real long story, but basically we ended and this is pretty famous. And it's been written up a lot, was a project, a green building demonstration project that we were doing Portland Cement substitutes and all of these things that I was talking about and the students decided we were gonna do a demonstration building and would have been off the grid, a biological wastewater treatment. This was in the mid 1990s. And so it was something that hadn't been done at least on a university scale. And we ended up with an amazing design that's been published and mimicked a lot. A very technical report through the national Institute of standards, a nest but the building was never built. The building was never built because my boss, the vice president retired and the president of the university died and they closed my project. So I got to the point where it was either to leave Montana, which was a real option or become a consultant. It was funny because the people who started calling me the institutions and the corporation said, what happened? You were the little engine that could, you were ahead of all of us. I pretty much started my consulting business based on lessons learned of what not to do in a project.

Charlie (<u>09:33</u>):

Then you go and you've worked all over the world, right. I know a lot of projects in India, down in Guatemala, out to Taiwan. So tell us how did you go from that to really being this resource for all things sustainability, even special projects, of course, a lot of LEED projects around the world based out of Montana. Tell us about building your company up.

Kath (10:00):

Okay. I always have to say thanks to my husband because he paid the bills for the first five years, like any other consulting firm or starting a business, even though everybody, and for those of you who know what a Rolodex is, I was known for having a golden Rolodex. My start really was being a resource and it came through both being vice president of the U S Green Building Council for the first seven years. And then working as president and vice president or vice chair of the board for the World Green Building Council. That's how I got introduced to India and Australia and got to help. That's one of my great pride and joys is having helped start green building council's and been a founder in India and Guatemala. I helped with Greenstar in Australia, UA Mexico, Taiwan.

Kath (11:12):

And the biggest thing that I've seen is the power in green building councils, whether they being local or they'd be national in the capacity to lead. The leadership, which I've given several talks about, is the fact there's so much power in volunteers and volunteers coming together because like at the beginning with the LEED. I was a LEED faculty member, I'd start talking about LEED and immediately there's a critic in the audience and it's the same as we get today, 20 years later, there's critics but the opportunity is to say when it was a whole group of volunteers, which we all were, is to say to them, great, you know so much about this, you can help us advance our rating system, give me your card and join us as a volunteer, help us advance this cause. It's been pretty much a global response if you never hear from them again, they go away.

Kath (12:27):

They're pretty much interested in being critics, but they're not interested so much in helping us with our shared mission. And the other thing with green building council's that has been fabulous is it's brought the industry together. We've gotten out of some of our silos of just being contractors or just being designers or just being facilities or just being product manufacturers. It gives us an opportunity and I've seen that to me one of the biggest changes in the world has been green building council.

Charlie (<u>13:09</u>):

Sure. Tell us a little global perspective for those listening. You may be familiar with the US Green Building Council that invented LEED, keeps it up. It's a global brand now with LEED rating systems, but other GBC is green building council's around the role. You've helped start several Kath, do they have their own rating systems? You're planting someone to advocate for green buildings in that country. So can you tell us more about those GBCs what are they really trying to do?

Kath (<u>13:36</u>):

It's a combination. Again, that's one of the things I've always thought about and learned about sustainability and moving down the path towards sustainability. Sustainability is a goal. It's a goal. None of us are there. We're trying, the green building council's have to start wherever they are locally.

One of the things, like taking the Guatemala Green Building Council, they we're living in a country with basically no codes, no enforcement of the codes they did have very few standards. This was 15 years ago, but the green building council was able to educate the legislature. They were able to work with the mayor's office, do workshops and convince the mayor's office that sustainability was something that would benefit the country at all levels. Taiwan was in a situation where it was high manufacturing and the Taiwan Green Building Council was able to get the major industries, my client Taiwan Semiconductor, to take leadership and sustainability as a way to save money as a way, not to waste resources and even on the social equity level.

Kath (15:07):

Again, that was, I think 18 years ago, we started working with Taiwan Green Building Council, but the idea was that the industry could be a driving force. In Australia, it was the real estate market. It was the property managers who said, wait a minute there's an opportunity here. So it was the property council that pushed and helped with the green building council. Brazil was really started by a group of educators, the original Brazilian green building council. They have to start locally and locally meaning as a national level. But then you look at what happens with the green building. Council's in cities here that are, there are now the regional green building council. They're all different in lots of different ways, tackling local challenges and local issues.

Charlie (<u>16:10</u>):

Okay. No, thank you for that context, that helped a lot. You mentioned that golden Rolodex, you mentioned David Godfrey for those that don't know he was one of the original founders of the US. Green Building Council and LEED . Who else would you consider? Maybe a mentor. Good influence.

Kath (16:29):

Totally. That's one question I get asked a lot and it's ABI, and I'm assuming a lot of your listeners would share this in Bob Berkebile. Bob led us and was our guru in lots of ways in sustainability. Taught me. He was on my original epicenter project up here at Montana State. He changed my life and another person who changed my life was in India. And now was dr. Prem Jane, who passed away a year ago or so, we feel his presence all the time. So those of

you Prem Jane Wood,know exactly what I'm talking about, but he was like the Bob Berkebile of India and the other person who really, really changed my life.

Kath (17:25):

It was Ray Anderson, Ray as the head of Interface. He worked with us at the beginning of the green building council, came to Montana a bunch and supported me in every way, personally and professionally to keep going. He led by example in a quiet way, but yet at the time he could be the fire and brimstone preacher too. I miss him all the time, but the three of them changed my life and got me to where, and this wasn't, as I told you from my beginnings, this wasn't what I intended to do with my life. My goal was to be a university president that's why I went through and got my doctorate. That's why I was working at university. I wanted to be a university president, but somehow my path got diverted by these three people. I'm in a totally different place than I would have been.

Charlie (<u>18:30</u>):

Well, those are fantastic role models. Thank you for doing that. So we've talked about your company and tell us a little more about what's keeping you and your team busy today.

Kath (18:42):

Oh, lots of things. 2013 we finally had a legislature here in Montana, had a few legislators that kind of started talking about high performance buildings and they patented mandated a high performance building standard in the state of Montana to be developed. So since 2013, I've been working with all the state agencies and now we're working on a data management projects so that we can report or at least know what we're doing, right with high performance building standard for the state of Montana. That's a challenge and it keeps us pretty busy. Our whole team, we all work in national parks. We support right now for national parks through Xanterra Parks and resorts as the concessionaire.

Kath (19:45):

So we work with the park service salon. Two weeks ago we got a LEED operation and maintenance version, four platinum for Mount Rushmore. That was a five year effort to line up sustainable operation and maintenance and

a really isolated place. So the challenges there kept us really busy. Of course we're doing all kinds of things, a couple of living buildings, a couple of WELL buildings, a resort that's using WELL as a standard. Yeah, every day there's something new and exciting and challenging to us. There's never been two projects alike. That's for sure.

Charlie (20:34):

Oh, and I'm looking at your project list, a lot of international. The highlight reel, what else stands out? What are you really proud of? What am I seeing next? Or what am I working on? I think the question is what are you most proud of looking back? And then we'll go to the what's in the future. You've covered a lot already, but is there anything else, is there a project or two that even though it might not be the biggest project it really was special. Just curious, any other projects you're really proud of. For example, you're a LEED fellow. Can you tell us about being in the inaugural batch there and you can just LEED fellow 2011. What did that mean for you?

Kath (20:54):

Being a LEED fellow, particularly in the first class, which was 34 of us, it matters because it's a recognition that you have spent a good portion of your time, if not all of your time working in sustainability and specifically using LEED, it meant a lot to me because I was just doing what I thought was right and leading projects that were fun and trying to advance the mission.

Kath (21:59):

I really didn't pay much attention. So what was happening in the arena of awards because we're a small firm based out of Bozeman, Montana. We're not designers, so we don't compete, so just kind of like it happened out of the blue and I was named as a LEED Fellow. It does matter globally and matters to the owners of my projects. I'm very proud of it. It's definitely help get jobs without having to explain how you work in Montana and live in Montana and have any impact. So for me, that was pretty special. Just say, you can live in a place you love. Now I'm just living in the land of Zoom, but I started there long before you all did. So it's special. It matters to me. I'm very proud of it.

Charlie (<u>23:04</u>):

Good. Before we go on the podcast, you had mentioned that you've done projects all over, so you had quite a bit of travel but you've been based in Montana. As you built your business and built it around your home, you have full time staff, you're on the go with these amazing green building projects

Charlie (23:23):

You really have been virtual in Zoom calls for a long time and the rest of us kind of get forced into it. So it's just interesting. We're resourceful there to build the business. So before we go to the futurist question, I met you a couple of years ago at Greenbuild, Berlin, and you had a fantastic course. You're talking about water, especially some really neat projects, what are one or two things, maybe some misconceptions about water. What do we need to know about water energy so heavily, maybe water, not as much I can tell you, can you give us one or two?

Kath (23:56):

Yep. I think water is one of our, if not our most valuable resource. And I think it's way more complex than people think about, it's not just flow and flush fixtures and that we measured the gallons per flush or the blow of a fixture. It's way more complex than that. It's one resource that I think we overlook in lots of areas, particularly in the States that have, and countries that have a lot of water on an abundance of water. And so it's easy to waste that resource and the projects don't pay any attention or much attention to the water because there's plenty of it. And then there's others of course, countries and cities and States that have huge water problems and therefore it gets the focus of attention.

Kath (25:13):

The thing that's always bothered me about water resources is other than it being taken for granted, it bothers me then things like rainwater harvesting. And reuse of water and purple pipe, which you and I saw a lot of in Berlin, the purple pipe idea is like some stretch goal or something way off. Well, we don't have to do that, or we don't need to do that. So it's going to cost too much money. So we'll immediately eliminate it on a first cost basis. And we also, we don't, I think the other thing about water is we don't think about downstream. We don't think about sewage. We don't think about the waste of storm water. Okay. If you ever want to really do something interesting, that's educational is go to your hometown waste water treatment plants. It

was one thing that changed my life, my home personal life in a dramatic way, because I asked the operators, they showed me the filters and all of this stuff.

Kath (26:35):

They have to use it to get the stuff that we grind up in our garbage disposals. They showed me it takes to get those particles out and they could be the best salesman for composting that there ever was. And I said, what would you outlaw going down garbage disposals? And they said two things: eggshells because of the ammonia that they had and the chemicals they have to use to neutralize that in water at the wastewater treatment plan and the other thing, and they said, we know you love it, but grinding up lemon peels in a garbage disposal. And I was like, man, I did that almost every other day because it smells so good. And well now it's been several years since I've ground up a lemon peel or put an age shell down the garbage disposal, but that's enlightening too. When you think about your image, it's you personally have an impact on infrastructure and having an impact, meaning we have to build another wastewater treatment plant. And the one here in Bozeman immediately dumps into the Gallatin River, which is one of the best fishing streams in the States. And we're dumping clean water from the wastewater treatment plan, 10 feet away under the gal tomorrow. I change my behavior after that.

Charlie (<u>28:08</u>):

Thank you for that perspective. And just sometimes it's just education. We didn't know. I'm loving the conversation here. Now let's talk about if you had a crystal ball, what should we be reading up on now? What, where do you think sustainability or green buildings is starting to shift?

Kath (28:23):

Well, a couple of things with the COVID-19 virus, obviously there's a lot of attention by buildings and building owners on the health and safety and wellness of the occupants and the people work, designing and building it. U I think that's, we're going to live with healthy materials and healthy cleaning practices. It worries me now that we're back to using bleach because we see that as the solution and the answer is bleach. I think we've gotta be careful about losing the gains for the environment that we've had. I see a big struggle, which I've always had and sustainability is making sustainability a

political issue. Sustainability. And I put it in the same category with education. Everybody cares about it. It's just that we can't let it become a political issue. And we talked about this a lot around the world with the different political parties, claiming being environmentalist's are being whatever the business people or whatever sustainability, isn't a political issue. We've more making it a political issue rather than all working together from all angles. And that's, that's a real danger. I think in the future for the United States, we lose sustainability as something we'll care about. And one of the things that the US Green Building Council taught me early on,

Kath (30:09):

Right from the very beginning was that sustainability isn't about being judgmental of who's greener, then who, and pointing the finger and saying, I'm greener than you are. My company is greener or we're more sustainable than you are. None of us aren't green. And none of us are sustainable. And none of our practices are, we've just got to work at it. And so as long as we take, okay, this is particularly advice for people. Starting companies is you have to take everybody, every company, every phone from where they are and start marching them forward and start helping them go forward. When I go into a factory ever since the very beginning, I walk around with a clipboard and they think I'm writing down everything. They do wrong. Everything that could be improved is what I'm writing down. And I'm not what I'm writing down is what they're doing, right? What are we doing right in the national park? What are we doing right in our institutions as we prepare for the next step. And then we help people as green building consultants or sustainability consultants take that next step. How can we help them from where they are not judging them about where they are?

Charlie (<u>31:44</u>):

Well, that's so good. I mean, it's, it's a continuous cycle. We'll eventually get the Simon Sinek book that just came out the *Infinite Game*. We just showed them, where are we at? And keep going. But you moved on something I want to double down on is the positive feedback loop. Those that are in buildings, we know we only hear about the windows that leak or what went wrong and human nature. You're right, Kath. We default to the negative when we really need to default to the positive, what works, make sure you do that again. I'd love to see that. That's fantastic. A few rapid fire questions here. Let's talk about you. What do you think your specialty is?

Kath (<u>32:23</u>):

One of the things at home to say is that I think I've been successful because I'm not a designer. I don't have any design capabilities in my heart or my soul. I don't know anything. Well, I shouldn't say I've learned a lot about design. So my job and why I've been successful, particularly back in the nineties and early two thousands was I had a special niche and built that niche around the back of my firm and my team that works with me. We're not architects or engineers. We're not designers. So our job is to provide a resource for architects and engineers we're no threat. We can also support contractors, which we do a lot, because again, we don't know how to build the building. We just know what the standards are and what we've seen as best practices here and best practices in India, best practices in Guatemala, what we've learned.

Kath (33:35):

That's been really, really helpful. The other thing that you asked me earlier about a proud accomplishment or, and one of the things I'm proud of, is I was the first inductee into the India green building hall of fame. I'm the first one that was inducted. I was humbled by this, but there were thousands of people in the audience. There was a gasph. Why would an American woman be the first person inducted into the hall of fame? And one of the things it made me realize, one of the gifts I have, and one of the things that I've been able to do is connect with the people I work with in India. I wanted to go home with them. I wanted to meet their families. My mother started making quilts for her Indian grandbabies.

Kath (34:50):

I learned how they lived. I met the people I worked with and that connection has helped me be successful. Whereas I've seen so many times, big corporate jets flying with big corporate sustainability experts who come and tell people around the world how to do this, and then to get on the corporate jet and they go home and it's part of me. I think maybe being from a big family, I have eight brothers and sisters and sharing, but for me, and that's what I miss the most right now. The hardest thing for me, I'm on zoom calls, that's half of my life anyway, because I live in Montana globally, but the other half are the hugs. The other half is the human contact. And yes, even

Delta airlines. I miss my seat on Delta. It's that part of my career. That is the most precious to me.

Charlie (<u>36:00</u>):

No, you're right. Those relationships, thank you for sharing that. You can feel that that is your gift you've been able to do. I hope to be successful. Do you have any good habits, any routines or rituals that you can share?

Kath (<u>36:19</u>):

What keeps me sane? This is being able to come home to Montana. Montana is pretty special. I've lived here almost 30 years now. When things get really uptight, which they do no matter where you work in the world, you are blessed to be able to get in the car and in an hour, be in Yellowstone park,in a half an hour be on a river. So that's a ritual I go through and I have to say, the best is living in Montana and being able to come home to a place.

Charlie (<u>36:59</u>):

What a great backdrop talk about bucket list, are there one or two things maybe you can share? It might be on your bucket list?

Kath (37:08):

Well, that's all tapered right now in the situation of being quarantined. I'm quarantined in a beautiful place, but I always want to travel more. And I always, there's so many places in the world, even though I have 2.8 million miles on Delta airlines, there's still a lot of places I'd like to see. My husband says 2.8 million is nothing to be proud of and he's right. But there's a lot more places I want to see. And I still think I have an opportunity to contribute to, particularly on my bucket list is to do more work with governments that are unsure where to go or what to do or what their leadership role is and sustainability. I've been encouraged a lot to write the history of the US Green Building Council, because I have all the original documents. I actually have one of the original LEED reference guides and it's five pages. There's one for each credit category. And now was the first LEED reference guide. So I figure I can put it on eBay someday, make some money on the reference.

Charlie (38:36):

That is so neat. I love it. Yeah. They re-reproduced that one for all the LEED Fellows. That'd be a nice token. Well, you've got the sky miles. You gotta tell us at least one destination when it's safe to travel again. What's on the map for you. Where do you want to go, visit or revisit?

Kath (38:53):

Oh, and I'm not giving up light, but I spent so much time thinking about it that this past weekend I was planning a Safari in South Africa and my husband says, we're not going to be gone for awhile. I said, I don't care. I feel good planning it. I feel good. Checking out everywhere. I'm hoping to get back to Australia in January, my friends say that's iffy, but I do have a plane ticket. I have a plane ticket to go to the India green building council Congress, the last week of October. And my husband says, that's wishful thinking, well, I guess that's the world I live in is somewhat of, I hope and wishful thinking,

Charlie (39:40):

Oh, I love it. Thank you for sharing some books. Is there a book or two you with recommend?

Kath (39:46):

I have friends at Grumman/Butkus Associates in Chicago, the engineering firm. And they do this is a really cool idea. Every Thanksgiving, not at Christmas time, but every Thanksgiving, they say thank you to people. They work with a book and everything. I don't know what I'm going to do if they ever cut me off as one of their gifts going my direction. But I'm in the middle of reading. The last one they sent, which was Brave New Arctic: The Untold Story of the Melting North. And maybe everybody's read it. I don't know, but I'm finding it.. Easy to read and explaining things that you don't really put all together at one time. When I need inspiration and I'm struggling with a company or an institution that doesn't get it, I still go back and read Ray Anderson's Confessions of a *Radical Industrial*. What he has to say, had to say brings true every single day. And so those are that's. So my go to book is raised book. So right now I'm reading this *Brave New Arctic*, which I like a lot,

Charlie (41:12):

Put the links in the podcast show notes so that you can check those out. Kath, thank you. As we come to a close two part question one is, is there anything you wish you'd known earlier in your career?

Kath (41:21):

One of the things, and this will go back because I mean, my gurus, my mentors really were, and I was really distressed and really upset. And I called Bob and he just said plain, and simply it's not about you Kath. And I wish earlier in my career, somebody would have said that to me, that it wasn't and all we're doing isn't about me. And yes, that changed my life and that was some of the best advice I ever have. When I get worried about me and I'm not doing this and I'm not doing that. Or I'm sad or whatever, hn the bigger picture, it's not about me.

Charlie (42:11):

That's lucky. All right. So some listening right now might even be a LEED fellow. And they ping me on LinkedIn and say, Charlie, that really lit a little spark for me or that validated something I am thinking. Most of the listeners Kath, are newer to this green building movement, maybe going through the LEED green associate right now. What words of encouragement do you have for them? If they're jumping into the green building movement right now,

Kath (42:35):

It's worth it to put in a time to get the credentials. It's worth it to put in the time to be a resource and learn as much as you can. Practically speaking, sustainability and experts in sustainability are needed everywhere. It doesn't matter what the industry, it doesn't matter what your background, my degrees are not in environmental anything. In fact, my doctorate is in conflict resolution. And so it's the idea that we can all work together and we can all contribute. Used to be you had to be an architect or an engineer. And that's where your sustainability passion or caring. That's where you had to go into those or environmental law. It's needed. Sustainability is needed around the world and across every discipline. And that's where I would, if I was choosing now what to do, I'd take whatever I love to be journalism, which is what I loved. Originally, be a journalism, be a business, be it engineering or architecture. And I'd make sustainability the core of what I study and what I'm going to put my passion and my work behind for the future. And for

everybody, if we don't, then you start reading all the negative things that are gonna happen. I thank you, Charlie for saying you know, let's look at the positive things on the clipboard.

Charlie (<u>44:14</u>):

No. What an encouraging conversation. Everyone. This has been Kath Williams, international green building consultant, and one of the first LEED fellows ever out of Montana. Yeah. Thanks so much for your time.

Kath (44:26):

Thank you Charlie.

Speaker 7 (<u>44:35</u>):

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 are stoked. And just so glad you 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. Thank you for listening to this episode of the green building matters projects@gbes.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 or 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, yes. 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.