

Mechanical Engineer by Trade, Sustainability Consultant by Nature: Kristy Walson

Introduction ([00:02](#)):

Welcome to Green Building Matters. The podcast that matters for green building professionals learn insight in green buildings as we interviewed 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 ([00:33](#)):

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Charlie ([01:01](#)):

Welcome to the next episode of the Green Building Matters Podcast. I just have a blast every single week where we typically interview a green building professional, learn about their journey, tell some old stories, and that's what we're doing today. We've got Kristy Walson coming to us. She's in the Orlando, Florida area. Kristy, how you doing today? I'm doing great today. How are you? Yeah, all things considered actually doing great. Life is good. Podcast interviews always inspire me and I think they will for our listeners. Can't wait to learn more about the credentials and letters after your name, even the engineering influence, but take us back first, Kristy, where'd you grow up and where'd you go to school?

New Speaker ([01:42](#)):

I was born and grew up for the first 10 years of my life in Michigan, right outside the Detroit area. When I was 10, my parents decided to sell all of our things and move to Florida and buy a sailboat. We lived on a sailboat for five years. That experience shaped me greatly and influences a lot of the things I do today. We lived on it, we cruised, I was homeschooled, came back, went through high school and then went to Virginia Tech for undergrad, go Hokies. Majored in mechanical engineering and then had to figure out what exactly I was going to do with that degree because there were a lot of options. Given my boating background I decided to get a masters in Naval architecture and Marine engineering at the

University of Michigan and then dove into work. Proceeded to work in the Marine industry for about seven years before I got into our industry building construction. So that's kind of the reader's digest version of my journey.

Charlie ([03:00](#)):

You've already shocked me and I'm sure that's one of your fun facts when you're introducing yourself. Amazing. I believe you're on over 150 interviews here and the common theme is just that early childhood influence. I don't know if you had a vote in that or not. "Hey, Let's move and sail", but just tell us a little more there. That's so fascinating. What certain parts of the world your family were at? Or tell us a little more about that.

Kristy ([03:25](#)):

Sure. Well, I certainly didn't have a vote because at 10, in fifth grade I would have voted to stay where my friends are, but it ended up being a fabulous experience. So we moved down here, bought a 40 foot sailboat. It was my parents and myself and my sister and we primarily stayed in the Caribbean. My parents didn't do anything that made us rich or anything like that. We would sail for six months outside of hurricane season, basically and go to places like The Bahamas, the Turks in Caicos, Puerto Rico. I've been to the Virgin islands, both the US and British. The Bahamas are a large string of islands. There were multiple trips spent just exploring each pocket of that country. We'd come back. My sister and I would go to school for a little bit and my parents would work for a little bit and make some money. We get back out there and do it again. Overall, we did three, six months trips over the course of a five-year period, but we did live on the boat the entire time. When we'd come back, we'd be at a doc and my sister and I would go to school, but we were always living on the boat during that time.

Charlie ([04:43](#)):

Cool. Thank you for that. Obviously that influenced your master's degree there and then that early career at Virginia Tech ACC, I went to Georgia Tech. So good. A lot of what we're learning here. Student athlete, if I'm understanding your bio right there. Was that also cool?

Kristy ([04:59](#)):

That's right. I played division one volleyball at Virginia Tech. I was a walk-on so I played all four years as a walk-on as a defense special defensive specialist.

Athletics has largely kind of helped with my discipline as well. It's also taken up a lot of time that I could've used to have a more normal experience in some of these things, but it's been a great influence in my life.

Charlie ([05:29](#)):

So cool. Love it. Thank you for that origin story and kind of the followup there is, tell us some more about, did you maybe have an ah ha moment about sustainability and green buildings or at what point did you kind of start getting into green buildings?

Kristy ([05:43](#)):

My whole life I've been sustainably minded, even if I didn't have a word to put to it when I was in college, there wasn't that terminology quite yet. I think it was coming in the next couple of years, but I've always, even when I was working in the marine industry, it's not the most environmentally friendly manufacturing process to make a boat, especially the boats that we made, which were fiberglass, but I was always the one in the office, starting the recycling program and asking why we're wasting this and things like that. I've always been kind of minimalist in that way, probably going back to my sailing days. I'm always interested in renewable energy and conservation. I remember back in 2005, I was reading a magazine, Dwell magazine and I saw the words LEED and US Green Building Council for the first time and that was it

Kristy ([06:46](#)):

I was like, "Oh my gosh, there's an actual word now that I can associate with this thing that I've been doing forever." There's an opportunity for a career even with my current degree, I don't have to go do anything because I had this mechanical engineering degree that I realized I could apply in a design and construction scenario. Within a month I attended a US Green Building Council meeting for our local central Florida chapter. I still know all those people today. In fact, that person I met at my very first meeting, he was the president of the chapter, Mike Hest, he is who nominated me for LEED Fellows. So these people have been around this whole time and it was kind of game over for me after that. A year later after volunteering with that chapter, I got embedded enough to get a job offer from TLC. In 2007, I moved from boats to buildings and I really haven't looked back. It's been a joy to be able to work in the sustainability world.

Charlie ([08:04](#)):

Did someone there influence a good relationship? It's about relationships. Did anyone else have influence along the way, Kristy? Anyone you might call a mentor?

Kristy ([08:15](#)):

Yeah, absolutely. So I've had a variety of mentors over the years, but I would say that the person who's influenced me the most in sustainability and has been on my side and in my court this whole time is Kim Shin. He is a LEED Fellow. He also just received USGVCs leadership award at Greenbuild this past year. He is just a rockstar in the sustainability world. He also happens to work at TLC and has since I started working here and he's just been in my corner this whole time. He pushes me to go outside of my comfort zone sometimes, and he's always been at the table for me. Kim would be my primary mentor and someone I just trust and seek true, honest information from whenever I need it.

Charlie ([09:13](#)):

That's amazing. Well, tell us more about TLC engineering and some of the kinds of projects you and your team work on.

Kristy ([09:21](#)):

Yeah.TLC, we're primarily a mechanical electrical plumbing, structural engineering consulting firm over the years, primarily due to Kim's influence. We have from way back in 2000, been involved with the US Green Building Council from its infancy. When I came to TLC they already had a reputation for being a consulting engineering firm, but who also helps sustainability as one of its core values and that was really the primary reason I came to TLC. Over the years, we've added a discipline, like many other firms we call it energy services and it encapsulates the sustainability work that we do, which we've always done. We just hadn't had a specific group with a name that did it. I manage our energy services group out of our Orlando office. We do LEED administration at any green building certification, energy modeling.

Kristy ([10:31](#)):

We do commissioning a lot, especially right now, energy auditing, anything related to the engineering side of sustainability, we provide as an energy services group. We've had a lot of fabulous opportunities to work with the folks in central Florida,

the municipalities, the universities. It's been a great experience on the project side. My most exciting work has been, I go back and forth, there's always, I was listening to one of your podcasts earlier and he was talking about platinum projects and things like that. We all have those special projects. I was trying to think of what my favorite projects are. I think when it comes down to it, the projects that have the widest reach for me and because I am an engineer at heart, that would be the projects that have the largest square footage where I can have the most impact in saving energy and water and, and things like that.

Kristy ([11:35](#)):

My work out at the University of Central Florida has really provided that in large part, for me, it's a huge university. It has over 60,000 students. I think it is in the top three or four in the country for the student population. They are extremely dedicated to energy efficiency, water conservation, sustainability, and the work I've gotten to do out there has been a way to like interact and make a difference across over a million square feet at this point. I feel like I'm making a big impact when I do work out there.

Charlie ([12:15](#)):

So cool. Yeah. That's what we want impactful work. If you were to look back on the highlight reel, Kristy, what stands out? What are you really proud of?

Kristy ([12:24](#)):

When you're looking at your impact as an individual, you only have a certain reach. I think where I get the most pride from the work that I do is when I can look at something later as I'm driving to work, driving to the grocery store or taking my kids to school and be like, "Hey, I worked at that. And that building is a LEED Gold Building and it saved this much energy." I am really involved in the local central Florida sustainability world, whether it's a work locally for clients, but also I sit on a number of advisory panels for the city of Orlando, for the city of Winter Park, for Orange County and being able to be a voice at the table really excites me and also to help move things along on a local municipality scale really excites me.

Kristy ([13:22](#)):

That's kind of where the rubber meets the road and where things get done, ordinances get put into place and being a part of that. I've been able to watch it grow and really progress and being a part of that has really been great for me. I

mean, I drive my kids over to UCF and we'll drive around and I'll point out all the buildings, all the LEED certified buildings that we worked on and they think it's cool. They get to see it. I think it's exciting so that's been really a big joy for me.

Charlie ([13:55](#)):

Thank you for telling that story. It seems like you really enjoy all the work. You're doing amazing projects, and you've got the high honor. You said a colleague has it, but you, too LEED Fellow. Tell us what that's meant for you here in your green building career.

Kristy ([14:12](#)):

It's a high honor and I look around at the group of other LEED Fellows and you are always like, "Well, I got to really step up my game here. They think I'm doing this good work. I better do a lot more good work for me." The title of LEED Fellow is kind of this culmination of all the cool projects that I've gotten to work on. I think the first thing I thought when I found out that I got the designation is "Okay, what's next? How can we use this? Maybe we take it on a more national scale." I am on a number of national peer groups and boards, but how do we make this work for the sustainability world for the planet and for climate change in general.

Kristy ([15:02](#)):

And that's kind of where I want to go with it. I've recently been doing a lot of presentations on embodied carbon, which isn't necessarily a new concept. However, it's not a concept that everyone is necessarily educated and up to speed on. I wanna use things like the LEED Fellow to really get access to educating industry professionals on these types of things, especially embodied carbon right now, because we can make such big strides in this. We kind of have already done some of the things you need to do in operational carbon really apply to what we need to do with embodied carbon. I'm just educating folks and helping them understand the impact of these types of things is where I want to take that influence.

Charlie ([15:59](#)):

I have that megaphone now and even bigger megaphone, so to speak and to those listening, many of the podcast guests have said, look, not just operational carbon, this shift to embodied carbon. You're hearing it yet again here from Kristy's so pay attention to the hot topic right now. It's a good segue for my next

question. What else is around the corner? If you had a crystal ball, Kristy, what else are you reading up on? Excited about coming at us in the green building?

Kristy ([16:29](#)):

There's so many things embodied carbon is the biggie right now. I've been working on operational carbon, my whole career and the second I learned about embodied carbon. I was kind of like, what have I been doing with my life? Why did I not know about this thing? The cool thing is we have the tools as long as people are educated on it. The other thing that I've been doing a semi deep dive into is really this past year, 2020 was a doozy for everyone. We witnessed this confluence of events surrounding climate and social justice and a pandemic and all the things that come together. And it all came together at one time. The realization, or maybe a reality, showing us that this thing we thought to be true, is really true.

Kristy ([17:31](#)):

Climate change has a very large social equity component to it. Wrapping my head around and trying to understand and dive in real deep on all the things that come with climate change, not just how do we, as a people reduce our energy use, but then how do we equitably reduce our energy use and how do we equitably apply renewable energy? That's been a really big topic of conversation I know in the industry, but it's also been a deep dive for me too trying to understand even the bigger picture, because I do think that when you tackle climate change from an equitable standpoint, like I said, I like to have influence over as large of a square footage as possible. You're making a much larger impact and you're basically traveling toward your end goal quicker. So that's where I'm at, but it's kind of a side project because I'm an engineer to do energy modeling and trying to incorporate that social aspect has been meaningful.

Charlie ([18:47](#)):

Thank you for that. Energy Modeling. We actually don't talk about it too much here. We talk about high-performance buildings, but give us a quick practical. What softwares do you use? Do you usually IESV or Train Trace or E quest, or does it depend on the project? What kind of tools? Do you have one that you use?

Kristy ([19:06](#)):

We use all of the above. However, for energy modeling specifically, IESV pros are standard. We've been using that for probably seven years now. We switched over

to it. The primary intent of switching over was to coordinate running HPAC loads with the energy modeling activity, trying to save us a little time in our process. It is an extremely powerful tool. We use it for all our models. However right before we logged on to this call, I actually opened up EQUest. I also use that for quick down and dirty schematic level analysis when I don't want to take too much time, but I need to give some real hard numbers to help a project move in the right direction and then Train Trace. We still use it for loads. We don't really use it for energy modeling, but I know other people do.

Kristy ([20:01](#)):

My theory on energy modeling and I've done a presentation that was originated by Kim Shin called the SD Wizard modeling show. The theory on it is not necessarily what software you're using, but how early in the process of design you start it. If you can even start it before there is a design, that's what we really like to promote. The presentation is actually a game where I run a live energy model and split the group into two teams and they have to compete against each other to see who can bring down the energy use of this baseline building that I give them the most. It ends up being a fun activity. It also ends being a very eye opening activity and we primarily do it for architects because we don't get our hands in the building until a little further down the road when some decisions have been made already. Whatever is being used in terms of software, the real critical thing is to model early and then continue modeling through the design to validate that the design is operating the way you intended.

Charlie ([21:13](#)):

It's so fun when we can gamify some of our work. I love that. So cool. Let's do a few rapid fire questions here. Kristy, what do you think is your specialty or gift?

Kristy ([21:26](#)):

Well, I have a lot of energy, but I can bring that technical engineering side with it. I find that folks, clients like the energy, how energized they get when we talk about sustainability, but I can actually give real life like a systems level, technical information along with it that helps them quantify things. I think that's probably been the most useful tool that I have in my career.

Charlie ([21:59](#)):

Cool. Thank you. Do you have any good habits or routines you can share?

Kristy ([22:04](#)):

I saw this question, honestly, none related to work.

Charlie ([22:09](#)):

Yeah, anything day to day life, any pro tips?

Kristy ([22:14](#)):

I have tiny little things that I do. I would say the big thing that I do is I try to get regular exercise and I think that's over this past year when I wasn't thinking about that when I should have, I noticed a big difference just in my mental capacity, even so regular exercise get fresh air things like that would be a great ritual for me.

Charlie ([22:38](#)):

Good for you. The last year plus right with the pandemic has been heavy and sometimes it's been hard to keep those good habits going. I've got to ask, do you still sail? Is that part of your overall routine or how does that work today?

Kristy ([22:57](#)):

Sailing's a tricky thing. When you live inland or central Florida does have a number of lakes. My husband and I bought a 32 foot sailboat right out of college for dirt cheap and had it for about 10 years ourselves and then had to sell it when we got pregnant with our first child. The water has always been my place. My happy place. I was even just out paddleboarding on Sunday. We have paddleboards, we have a kayak, so not necessarily sailing, although we do it when we can, but being out on the water, connecting with nature is, is definitely a regular activity.

Charlie ([23:38](#)):

Let's talk about a bucket list. I'm a fan of the bucket list. Are there one or two things on your bucket list? Maybe some travel and that's a good thing to do on an adventure. Write a book. I don't know. What's what's on the bucket list.

Kristy ([23:50](#)):

That's good. Thank you for teeing me up on that one. I was struggling earlier trying to think of an answer to that from your list. We are big travelers, we're big campers and hikers. Bucket list wise, we are a happy hiking family. We want to hit as many national parks as we can. My big bucket list item is really to hike the full Appalachian Trail. Understand that. I don't think I can do that all in one shot. So

probably in segments, but I have a map that I've been checking, little portions that we've done and I just want to keep filling in the gaps.

Charlie ([24:33](#)):

I grew up in North Georgia, not too far from where the trail starts, so that's really cool in there. Thanks for sharing. Books, is there a book or two you'd recommend?

Kristy ([24:45](#)):

I'm an avid reader though. I'm not really a self-help or like nonfiction reader, but one of my favorite books of all time is A Land Remembered, it's based in Florida and it starts in the 18 hundreds and talks about what this state was like before it was developed and its history. It really changes your point of view after you read it. When you drive around and see some of the undeveloped areas, you realize it was not an easy place to live in without modern conveniences. It kind of really brings you right back to the original, natural state of the area. So that's one of my favorites.

Charlie ([25:36](#)):

Oh, well, thank you. I'm going to put a link in the podcast, show notes to the book. That's a great recommendation. Two final questions here because some listen to the podcast every week, they're there they've been doing this awhile. They might need that spark or maybe they're newer to this green building movement. Two parts here, one is just career advice. Is there anything you wish you had known a little earlier in your career?

Kristy ([25:59](#)):

I just wish that sustainability had been a word when I was starting my career and you really can't help that. I feel like not necessarily did I waste seven years working on boats, but I definitely feel like I could have had more that seven years to make an impact on the sustainability side of things. I guess being aware of the opportunities, career opportunities that are out there and aligning them with what you're passionate about. I think I could have sought out that I could have probably found something that tied in a little better with that passion, but I didn't know that it was there one.

Charlie ([26:44](#)):

Let's say there's someone listening right now and they're just now jumping into the green building movement. Any words of encouragement for them, Kristy?

Kristy ([26:54](#)):

Yes. Do it. We need you, here's the thing with green buildings. Those of us in it for a while get told no a whole lot. You gotta have that energy and you gotta have that drive to just kind of move past the no and accept what actually can be done on those projects. Maybe do a little extra work to get it, turn the no to aYes. I find that the folks coming into the industry that are coming in with that passion for green building had this untouchable energy and that energy energizes me and the rest of us who have been told no for a long time and we need it. We need you as much as you need us to teach you how to do this. So that is so critical to where we're going as a society, trying to combat climate change. I would say jump in feet first. Come on. We all want you here.

Charlie ([27:59](#)):

You really brought the energy to learn more about you, your journey from boats to buildings. I love it. Kristy. Thanks for bringing the energy today. Thank you so much. I really enjoyed it.

Charlie ([28:21](#)):

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.

Charlie ([28:46](#)):

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