Building Resilience and Community in Central America with Federico Steinvorth | Transcript

00:02
Speaker 1
Welcome to Green Building Matters, the original and most popular podcast focused on the green building movement. Your host is Charlie Cicchetti, one of the most credentialed experts in the green building industry and one of the few to be honored as a lead fellow. Each week, Charlie welcomes a green building professional from around the globe to share their war stories, career advice, and unique insight into how sustainability is shaping the built environment. So settle in, grab a fresh cup of coffee, and get ready to find out why Green Building matters.

00:33
Speaker 2
Hey, everybody. Welcome to the next episode of the Green Building Matters podcast. I'm your host, Charlie Cecchitti, and today I've got one of the newest lead fellows. To be a lead fellow, you have to have been doing this work for at least 10 years, probably more. There's 200,000 lead professionals in the world. Somehow they let me into the club, but they also have honored Federico. So Federico is in Costa Rica. I can't wait to unpack his story. How you doing today, man?

01:00
Speaker 3
Hi, Charlie. Thanks for having me here. It's an honor and a pleasure. Just happy to be part of this group and happy to chat with you today.

01:10
Speaker 2
Well, yeah, it's going to be great. Well, I asked my podcast guests, you know, kind of give us some of that origin story. Where did you grow up and go to university?

01:19
Speaker 3
All right. I grew up in San Jose, Costa Rica. Been here my, my whole life. I studied my bachelor's in mechanical engineering here in the University of Costa Rica. Started working a little bit on design for construction, started getting into some electrical design as well. So I got into another career path for electrical engineer. So I got both careers, mechanical, electrical engineering, and then I

got a master's degree in construction management in Michigan State. My, my dad has been involved in real estate. He's a lawyer. He's not an engineer, but he's been in real estate. And at some point, you know, I, I thought I wanted to have a broader perspective on the construction industry, so I, I chose the construction management master's.

02:12
Speaker 2
Amazing. Get that Master's. So, yeah, connect the dots there. I'm. Fortunately, I've been to, I took my wife to Costa rica for our 10 year anniversary. Now we're 19 years married. We'll talk about that later. Flew into San Jose, went down to Evita. Amazing, beautiful place and the ecotourism. But let's talk about that early career. So, yeah, what kind of projects were you working on and when did sustainability.

02:35
Speaker 3
First show up for you know? Well, I started my, my career in MEP design in construction, doing residential, commercial projects. Basically, this was back around 2008, 2009, lead and some sort of sustainability started coming up. And that was just the point where I went abroad to do that, to do my master's. And when I got to. To the U.S. you know, it opened up my mind because this was a conversation and something that was happening much more advanced than what was happening here in the region, you know, and I got so much exposure to what was going on, to sustainability, energy efficiency, to lead, that it just blew my mind, just opened my eyes and I thought, you know, wow, there's a, you know, there's a way that I can do positive impact through the things that we do. I stopped doing design.

03:41
Speaker 3
I took another route. But that was like the moment that it really opened my mind when I thought, there's a better way to do things. There's a way that I can impact people in a positive way.

03:54
Speaker 2
That was that. Aha. I love that. And you're right, LEED, even though it first came out in the year 2000, really didn't start ramping big time to mid to later. The 2000s, 2008, as a reminder. I mean, that was a recession, and yet there were still a lot of green buildings happening luckily all over the world. Okay, so that's kind of early career, you know, Federico, I like to also ask about mentors. Sometimes a mentor someone, you read their material, you see them on stage,

they inspire you. Sometimes it's someone you have coffee with or lunch and they challenge you or maybe they open a door. Have you had any mentors in your career?

04:32
Speaker 3
Yeah, I guess I. I've had many. I guess when I started my design career, luckily I was, you know, surrounded by. By engineers that had a. That they were very careful with what they did. They were very profound in details. So, you know, I started looking at, you know, having care in what I was doing on my daily basis. But I think maybe the person that opened really that door for me was one of my professors in Michigan State, which, you know, we talk about sometimes. But now that I think about it, I don't know if I've actually expressed this to him. He's Tim Rososki from Michigan State, and he really taught me a lot about sustainability. He introduced me to my first lead project when I got to the university.

05:25
Speaker 3
He said, I remember he told me, we have a lot of civil engineers and architects in our program, but it's very rare to see a mechanical and electrical engineer. And I have just the right project for you. And he got me into a program with the Department of Energy where I started, you know, messing around with energy simulations, testing on actual buildings. And you know, I think that was really the moment joined with what I was saying before, you know, that I thought, well this, I love this. I mean this is amazing. This is a whole new world to me. So I'm very thankful for him for giving me that opportunity.

06:10
Speaker 2
What a great set of mentors along the way. And then you're right. As you're really thinking of what's next for your career, that's when they can have the most impact. Well, one more look back. What are some of your proudest accomplishments so far? There might be amazing projects, lead fellow other things, personal and business. What's going on? What's on the highlight reel?

06:31
Speaker 3
Let's see. I think on a personal level, I don't know if this can be counted as an achievement, but becoming a father I have soon to be 5 year old girl, that changed my perspective on the world. I think that's more than an accomplishment. That's something that makes you rearrange your priorities when you're in the things that are important in life. So I think that's one

important thing. Also, I started just for fun. I started running and up to date I'm about to do my eighth marathon in January. That's a place I never thought that was going to be. But it just gives me a purpose also for starting my morning in a good productive way. And it has become a part of my life. And that accomplishment of finishing up marathons has been just incredible.

07:31
Speaker 3
I never thought I was going to get to that point, but I'm a crazy runner right now at this point.

07:36
Speaker 2
The mental toughness though, tell us about that. I've done some sprint triathlons and one Olympic triathlon, but I could not imagine a marathon. Is it true you hit a wall at like mile 18 or something and it's all mental? Like how does it work?

07:49
Speaker 3
It's very mental. I mean there's a training, you go for it and you have to train also your nutrition during the race. So actually one of the goals is not to hit that wall. So if you know, if you do the adequate training, you do the adequate nutrition during the race, you shouldn't be able to hit the wall. But it has happened and it's tough and it's a race between you and your mind and it's telling you stop right now. Why are you doing this? I don't know. You Just keep going.

08:24
Speaker 2
Well, what a huge accomplishment that the lead fellow here. You know, I've had 400 plus guests and many have are lead fellows. Just, I don't know, what does that meant to you to earn this honor?

08:38
Speaker 3
You know, it's, I see it, of course, it's, I can't leave aside, you know, the personal satisfaction of being named a fellow. Like you don't start your career saying I'm starting my career because I want to be a lead fellow in some time. I mean, it just, you know, organically happens and it kind of, you know, feels good that you recognize the effort that has gone through to get to that point. But I also see it like as a big responsibility. Like in our region we don't have many fellows and I think it's a big responsibility first to open the door for more professionals to go

through the process. And I know they have good qualifications. But also because here in the region we still have many challenges. Right.

09:31
Speaker 3
And this kind of recognition only puts you in the spotlight, you know, to be a better leader to push a little bit farther our limits and the bar that we're setting. So I'm trying to look at it, you know, as a big responsibility, you know, as just trying to push the limits a little bit harder, trying to make a deep impact in our community and in our Central America region, which is still full of challenges.

09:59
Speaker 2
And let's transition a little bit to what you're doing present day. But you mentioned the challenge. So maybe we start there and then we'll talk about Sphera and the work you're doing. You know, I get to interview people from all over the world and maybe I'm, you know, I'm here in the US and we might have really good construction recycling in some cities, but not all. And so I don't know what's harder to do in Costa Rica when it comes to sustainability and green buildings and what's maybe a little easier to do, like maybe a moderate climate?

10:26
Speaker 3
Well, I think probably what we have to battle the most, I would say it's a thing about governance. We don't have support from our government authorities. There are very good initiatives, but I don't think there's enough enforcement of complying with sustainable and environmental initiatives. It's getting there, it's moving, but at the same time it's very difficult sometimes to tell people, let's do something. And you don't get recognition from entities or other points. So there's, I think that's probably like the, like, the hardest part, there's some market barriers of course, but we've been doing this for a long time. Lead has been implemented here for a long time also. So you know, there have been some myths that being tackled down. So I think that's been getting a lot better.

11:22
Speaker 3
And something that I think that it's going to be very positive at least here in Costa Rica is, I don't know if you knew this, but we've been having for the past five to eight years our grid has been run for 99% of renewable energies. So when we start talking about electrification, when we start talking about decarbonization, I think we're on a very good stand, you know, to jump to that next level because our grid and our country has been very well prepared for that.

So that's something very positive that I look into the future and I think that's going to be kind of not easy, but less complicated for us. Wow.

12:11
Speaker 2
I've heard about how clean your grid is there and so thanks for giving us that geographic check in. So now let's talk present day. So tell us more about your company and your role.

12:21
Speaker 3
All right, so we started, we started 15 years ago. We actually had a great party a couple of months ago celebrating our 15 year. You know, we always, I, I have a, a, a business partner. We started the company. We've been friends for many years. Going back to school, were in the same school, were in the same high school. We've, we've known each other for a long time. And when we started the company we wanted to see or the design teams or the project teams. We wanted them to see us as integrators of the process of people who were able to establish KPIs, people who were established to establish goals and then how to lead those teams for achieving those KPIs and those goals. So that's how were born.

13:13
Speaker 3
Of course evaluation systems like lead, like, well, these systems help us a lot design a framework of how we should work on achieving those goals. And it's just been a great journey. I mean we've been able to move along the region. So we work a lot in Central America, we work a lot in Panama, in Guatemala, Salvador, Honduras. We've been moving a little bit to the Caribbean, we've worked in Puerto Rico, we worked a little bit in Mexico, a little bit down in South America. So I mean that has been one of the. Going back a little bit to the accomplishments as well. Understanding how even though we are very close and we are broader countries. We have so many different challenges and ways to understand how people work, how people think, how the government works, what the challenges are.

14:10
Speaker 3
So for me, that has been very fulfilling. Just not getting just one sense of only Costa Rica, but getting the sense of how sustainability has moved in the region in these 15 years. And I think that's one of the things that makes me more proud, knowing that we are having an impact in our region and having connection with so many great professionals also in the region, because I think that has been key.

We don't pretend to be doing everything by ourselves, but we've created like a network of sustainability nerds and sustainability lovers that we help each other. We understand. We talk about like, hey, we've been having this issue here. How have you handled it in your countries? And, you know, it's just been a network of support that it has been incredible and very supportive over these years.

15:07
Speaker 2
Man, that's exciting. I love your energy towards it. You've expanded across Central and into South America. One thing I've noticed in Central and South America is the consultant usually gets brought in earlier than maybe in the U.S. sometimes if it's a big commercial project in the U.S. the architect gets hired early, but maybe the sustainability consultants hired a little later. I've noticed though, in Central and South America, and I think I heard you say it, you're getting involved pretty early in helping guide projects. Is that, is that more common or is it maybe 50? I don't know. What's it like down there?

15:43
Speaker 3
You know, I think we've had the privilege of working with the main developers and, you know, with the big project makers here in the region. So they know how it works. So that has given us a chance to start early on, but there's still, you know, a big chunk of design teams and professionals that they're starting in this journey and it takes a while for them to make the decision. So we're used to getting halfway through the design phase or even getting closer to the final of the design phase. We've even entered projects when construction has started. So it happens a lot. But yeah, I think people that have that sustainability in their mind, I don't know if it's a little bit of nervousness or anxiousness, but they do want that support from the beginning of the project.

16:40
Speaker 3
They do not want to go back and then redraw drawings or replan anything. So we see all types of cases.

16:50
Speaker 2
Okay, no thanks. Each one's different. Give us an idea of what Kind of projects are these schools, hotels, office buildings. What kind of projects are you seeing right now?

17:03
Speaker 3

It varies a lot. Here in Costa Rica we're having a very big expansion on manufacturing projects. So the government has settled few tax free zones for manufacturing projects. And of course that brings a lot of international companies that want to establish their manufacturing plants here. And of course all these manufacturing corporations, they already have their corporate policies about sustainability. So I think aligns very well because these are very complex projects, they are very energy consuming. So at the same time it makes me happy that these projects are very engaged with sustainability at this point. It's important to consider that. So I think here in Costa Rica we've, most of the projects we've been working on are manufacturing plants. Of course we have some commercial and some other stuff, but I think that's the high volume.

18:09
Speaker 3
And in the rest of Central America we've seen a little bit on, increase on commercial projects. That's what we work most on outside. And some warehouses I think warehouses. It's also like on the rise for types of projects.

18:23
Speaker 2
Lots, lots of warehouses. Well, before we talk about the future Costa Rica, I mean I, I just, a lot of people like to visit. I mean do you see your, the country, they're growing. I mean just what do we need to know about Costa Rica in general? This is your plug for the ecotourism and all the good things. And then we'll talk what's next.

18:42
Speaker 3
Yeah, Costa Rica, it's right now is a tourist based economy. So it's what the government cares the most, the people care the most. So you know, I feel that this is a country where tourists are more than welcome. Everything is very client service oriented because you know, it's what brings in much of the income for the country at this point. We've had locally our governments in the past, they've been very conscious about conservation. So we have. At least half of the land in Costa Rica is protected land. So it's forest, it's national parks that you cannot develop anything in those lands. You know, I think that was something that government from the past have established very well and it has been kept that way in the future. And I think that's something that people here are very proud of.

19:45
Speaker 3
So we always say like people here in Costa Rica, they are born like with a green

chip. You know, like everyone is very conscious about conservation, about our green areas, about our rivers, about everything. Of course we have issues at some point, but I think that Sustainable mindset. We, we, we thought about that since we're young. So it's really a green country. And as I talked before, the electrical grid is very clean. It's about 90% hydroelectric. Then we have some geothermal. You know, you get heat from the volcanoes, which we have a bunch of volcanoes, active volcanoes as well. So we have like a lot of heat from the volcanoes producing energy. And then we have some wind as well and some photovoltaic. So yeah, we've grown with greenness and sustainability since we were kids.

20:37
Speaker 2
Yeah. Oh, it's in your DNA there. I love it. Okay, let's talk about what's next. So you've been in this green building movement a while. I have to, I love to ask my guests. Federico is, you know what's exciting, what's coming up? What are you reading up on now?

20:52
Speaker 3
There's, I think there are two main things that we're, I don't know if preparing is the word, but we're trying to develop a strong purpose in our company to have these conversations with our clients. One is about resilience. And we've seen here in, I mean, we've seen everywhere but here in tropical countries when it rains, it really rains, and it's getting worse and worse every year. And it's important to start understanding the impact of this climatic change, of these climatic events on our infrastructure. We were looking at the news the other day and there was like this high end neighborhood where you wouldn't thought that these things were going to happen. And there was this enormous slot and they said, well, just the piping that we have for rainwater evacuation, it's not enough. We would have to change it.

21:48
Speaker 3
But that's going to cost like $4 million. And that's where you start trying to have the conversation about, okay, you have to spend $4 million on fixing a piping. And sounds like a lot of, but how much are you going to spend fixing everything that it's damaged by the rains? And it's going to happen again and again every year. Right. So I think that's one thing, important thing that we've been trying to focus on trying to tackle our resilience and how we're going to protect our infrastructure. And the other thing is getting more into the social and the community part. So we've been trying to partner up because, you know, I'm

an engineer, I have a thing for numbers and things that are easy to solve. So we've Been partnering up with a few local teams.

22:36
Speaker 3
You know, that they have the knowledge of how to go into the communities and talk about and talk with the people and understand what's important for them in the projects. Because, you know, even though sustainability, the frameworks they tackle a little bit those things, it's not the same to hear it from the voice of the community, to understand what's important for them, what means for them a successful project, what means for them a not successful project. You know, we just try to understand that a building is not just something you put in a piece of land. Right. Like you have an impact that you wouldn't imagine around it. So that's something else that we've been trying to focus on and strengthen our team on that social part and understanding how we can involve all that information in our designs and our projects.

23:27
Speaker 2
I agree with all that. And that word resiliency is definitely keep coming up over and over again. I think in the post pandemic, we're getting back to healthy buildings, resilient buildings, and maybe the new umbrella. Right. Is decarbonization. But green buildings and LEED projects, too, are a big part of that, so. Well, let's go to our rapid fire part of the interview. I'd love to get to know you even more. What would you say is your specialty or gift?

23:54
Speaker 3
My specialty or gift? I think I would say first, I think my discipline, and it helps me just doing analogy between running races and doing construction projects. I want to be there until everything gets done, until everything gets solved, until I see that finish line and I cross it. And I think that applies for both sides. I don't like giving up. I like sticking there until it finishes and it finishes good. And then I think the other thing is I have, I think, a very hard time letting people down. So my service, my customer service, I think has always been a little bit excessive because, you know, I just want to be there for people. I want to help them. I want to be there if they have questions, if they have comments, if they have complaints, whatever.

24:48
Speaker 3
I just want to be there and try to. To solve it. So I think that's. That would be my. My special gift.

24:54
Speaker 2
Oh, those are great gifts. One of the things you said reminded me of this coin I have. It's a stoic quote. It says, it's not over when you lose, it's over when you give up. So there you go. All right. So do you have any good habits or routines that help you stay on point?

25:11
Speaker 3
I think. I think my. My running, I Think that's, you know, I, I love waking up having a run. It started as a hobby. It changed. I mean it's, I think at the end it's not about the races, it's not about the thing. It's how it makes me feel in the morning. You know, I come to my office energized. I come here more productive. I'm probably by 2pm I'm already sleeping because I like to wake up very early. But it just how it makes me feel, make me feel more productive, makes me feel like I accomplished something in the morning. So I think that's my special routine. Every day.

25:52
Speaker 2
When you're not training for a race, a marathon, do you go for distance or time?

25:59
Speaker 3
A little bit of both. Like during the week. During weekdays it's more a time oriented training. In the weekends it's distant based. So it's a combination of both.

26:12
Speaker 2
That's fantastic. Yeah. Okay, so I'm a fan of the bucket list. For some people it's travel, adventure, maybe write a book. I don't know. What are a couple of things on your bucket list?

26:22
Speaker 3
Oh, my bucket list. You know what? Travel I think is impossible to leave travel out of the bucket list. And I think my dream travel plan would be a safari in Africa. I'm animal lover, so it's, that's my, that would be my dream travel at some point.

26:43

Speaker 2
That's amazing. That's a great bucket list. All right. You're gonna do it. I know you will one day. When you do that, track me down, shoot me an email or a text or WhatsApp. I, I can't wait till you tell me one day you did that safari.

26:56
Speaker 3
Okay, I'll let you know.

26:58
Speaker 2
Amazing. Just a few more things as we start to kind of wind down. I like to ask my guests, is there a book you'd recommend? It doesn't have to be about buildings. If not a book, it could be a documentary or a podcast. Just how you like to learn.

27:13
Speaker 3
I read a book this year that really, I don't think it's specifically about buildings, but it's the Infinite Game by Simon Sinek. Or really first of all, made me a big fan of Simon. That was the first book I read about him. But even though it doesn't talk specifically about buildings, I think it gives, it aligns a lot with that because he, he talks a lot about how you do something, thinking about what's going to be your legacy and your impact in the future. Right. You don't do things for immediate recompensations. You have to think things on a very, very long term. So it was great. Inspired me a lot. This, this year, great.

28:01
Speaker 2
We'll put a link to that. The Infinite Game. As you look back on your career, is there anything you wish you'd have learned earlier?

28:09
Speaker 3
I. I guess I would have liked to start learning. I mean, I don't complain about the time I've been in the business and what I've learned, but I think it would have been good like in, during, I don't know, high school, but at least during my first bachelor's degree university, having more exposure to sustainability topics and sustainability things. I think I'm glad I have that aha moment at some point. But I really wished I would have more exposure beforehand, you know, and help me learn earlier about a lot of things that I had to learn along the way. Not a big regret, but I guess.

28:55
Speaker 2
No, that's okay. It's not about regrets. It's just, hey, this would have helped me if I knew that earlier. If I'd listened to someone or if I really had that self confidence. I'm like, dang. Okay, so now. Thanks for sharing. Okay, last question. Let's say there's someone listening. They're getting really inspired by your story. Not only do they want to travel to Costa Rica, but they want to really get into this work and maybe they're making a career change or they're a young professional. As we wrap up, any words of encouragement to someone that's just starting in this green building movement?

29:26
Speaker 3
I think I would have two main ideas. One, this is a game of patience. The market sometimes doesn't move as fast as you would like. The government doesn't move as fast as you would like. But you just have to keep pounding through, right? You have to do what you believe that is the right thing and keep pounding through and things will just get better and there will be a light at the end of the tunnel. So that's what should guide you in your motivation and your purpose of what you're doing. And I think that the second thing is, and this has been a very valuable lesson for me, you don't have to know everything, but you have to know the right people who to ask.

30:19
Speaker 3
So that's when I was talking about that community of people that you know you can get support from people. You shouldn't be afraid to ask. There's people with different strengths and different knowledges and it's not wrong. It's not bad. It's not shameful to pick up the phone and say, hey, I have this challenge. I don't know how to do this. How have you done it? And I've realized that once you do that, people are not going to hide information from you. They are very open to information and education. So reaching out to people, doing those connections, having a good community that supports you in your, in your path, I think that's an important thing.

31:00
Speaker 2
Wow. All right. I know we're going to be hanging out, Lauren, the lead fellow group, but here we are. Here's your story. What a great story. So to our listeners, make sure you connect with Federico on LinkedIn. Check out the work he and his team and say hi if you're ever in San Jose, Costa Rica, man. Thanks for being on the podcast today.

31:18
Speaker 3
Thanks for having me here, Charlie. It was a great honor and I'm sure we'll be connecting more in the future.