

Dr. Diego Ibarra - From Harvard Back to Chile | Transcript

Announcer ([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 ([00:33](#)):

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Charlie ([00:58](#)):

Yes. Hi everyone. Welcome to the next episode of the Green Building Matters Podcast we're over a hundred episodes now and I just wanted to just say thank you for all the listeners and we've got another green building professional with us today, a LEED fellow, a recently minted LEED fellow, Dr Diego Ibarra coming to us from Chile. Diego, how are you doing today?

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

Charlie, thank you for the time and thank you for the invitation.

Charlie ([01:24](#)):

I've been wanting to have you on here for a little while and just to talk about what sustainability is like in your region and how far you go with some of the work you do. I know you've lived in the states, you've gone to school in the states and I think that's where I want to start. Where'd you grow up? Where'd you go to school? And then, you know, we got to talk about some of your advanced degrees as well, but where'd you grow up and go to school initially?

Diego ([01:47](#)):

So I was born and raised here in Chile, until I did high school and then did some architecture and architecture engineering here in Chile and then, some schematic design in Madrid before returning to Chile for just a little over a year and then I went to the US.

Charlie ([02:03](#)):

Gotcha, gotcha. And then did you know you wanted to go on and get a masters? Was that always in the plan or did that come a little later?

Diego ([02:14](#)):

Well that's actually a very good question. You know, again, Chile the end of South America, you know, I was a very ambitious kid and I always wanted to, you know, study in the US, you always look at what are the best universities in the world? You think you want the best university in the country, you know, a whole different story is getting into one of those best universities in the world for a masters degree or something. I basically crafted my detail plan of excelling in school if you will, but also work with the right professors and with the right people that could be mentors

Diego ([02:54](#)):

There is that then tried to apply for a scholarship, full scholarship has the prestige to get you into one of those universities and then I did, but how would I get the full ride? I need even more resumes so then I decided to work with a professor that had relationships with Madrid with___ let me take the off Madrid. So I said, okay, I worked with this professor. He gets named to one of the Spanish universities. I do a good job, post graduate credits over there, come back to Chile, demonstrate that I'm contributing at a very high level, applied to the Fulbright and with that in my hand, of course I have a chance to go to Harvard and MIT. To your question very early on that I wanted to pursue an advanced degrees if you wish, and some of the best universities in the world. But it was not easy, right? I had to create my plan. It took me a few years. We get all the cards in the right place. We can make that happen.

Charlie ([03:51](#)):

Wow. You had a vision there even at a young age and sounds like you're very resourceful. And for those listening, he's being humble. He couldn't decide. So he went to both Harvard and MIT. So before we get to that, tell me a little bit about, how'd you know at what point I'm going to do something with sustainability? I see your master's from Harvard in environmental technologies. Was it then, was it more when you were younger? How'd you know, sustainability was something you might want to make a career out of.

Diego ([04:21](#)):

It didn't happen at a specific kind of like a ha moment to be honest. Growing up in Chile, you can imagine for those that are not familiar with a very narrow country between the Andes 20,000 feet high mountains, the ocean, trace landscapes, amazing mountaineering and tracking and so on. Very much an outdoorsy person growing up and at the same time I knew that I Liked everything and it was the intersection between technology, construction so when I started, I did architecture or conditional engineering, that's where I went to the old structures, you know, construction management. That was kind of originally my focus. And then it was not until I went to Spain to study bio chromatics design and they had the chance to basically participate in the Spanish expert committee for the implementation of the European commission directive on energy labeling of buildings. With energy efficiency in building I really saw the power or the impact that we could have moving the build,the build environment. The building structure towards sustainability that basically when it kind of like clicked the merging of two passions, right. Outdoor, nature with the whole technology, business side of building and then the build infrastructure. S

Charlie ([05:42](#)):

I've got to ask, because you know my, I got my degree from Georgia Tech and I was around construction. My dad was a gentleman carpenter, my grandfather was an engineer in New York city, even on the Holland tunnels. So you know, and I grew up in a small town in the mountains so I appreciated the environment, the outdoors. Did you have any of that influence? Like how'd you know buildings for example, how did you know, not say traditional architecture but this, did you have any mentors along the way?

Diego ([06:08](#)):

That's a good question and I think of that question maybe in two ways. One, I did have a mentor on pursuing, kind of like the passion and you know, having a plan, make it happen and take the risk in building our business in my case as well and that was from my dad, but my dad and my mom, they were both engineers. My dad always had a business. So I was kind of from birth that mentality in a way. And they had mostly you asked for, you know, early on for a little over a year to study as well, so they, they really encouraged me to pursue that, that that was an option. You gotta work hard, but you can do it. Then more from sustainability or constant perspective to navigate how to really become an expert. I think Christoph Reinhardt, Dr Reinhard, I worked around 80 years with him. He was my advisor, my master's degree and my PhD degree.

Diego ([07:08](#)):

He was at Harvard when I first arrived or he arrived with me at the same time, the director of the energy and environment or the environmental technologies program at Harvard and then, he moved to MIT. Now he is the head of the building technology program at MIT and I had the chance to work with him at MIT as well. So he was pivotal in understanding where the future of green buildings going from a more scientific, I would say more, more professional content point of view. He's such a nice guy down to earth. It's like he's one of those people that he's a genius but also, it's like talking to a friend, approachable, I think.

Charlie ([07:43](#)):

Incredible. Well, I can already tell you're pretty humble and approachable here. So walk us through, you're in Boston and you're going through Harvard's masters and you got the cross enrollment at MIT, but then you just decided to stick around for some more education or what was that next decision like to go for your doctorate?

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

Honestly that's a lot to do with, again, the influence and thoughts from another of my fellow classmates or colleagues, the Harvard MIT relationship, they're like both in Cambridge maybe 15 blocks away. You can take MBA classes, engineering, BT and so on. There's so much to learn and

everybody's is so driven and intellectual that if you are in the learning mode, it's the place to be in the world if you asked me. So if you have the chance to stay, and you're proving to yourself that you can contribute to your field. I think when I had the opportunity to stay, it was like, I'm going to regret it when I'm like 60 years old or 80 or a bit more like a 100 years old, one of the things you're gonna regret in life, perhaps getting that PhD degree or doctorate degree,

Charlie ([08:55](#)):

That sounds like an amazing place and you were there at a good time when sustainability and the green building movement were really growing. Now you get these advanced degrees, you get out and you get to continue your career. Tell us a little bit about the next few places where you had some experience. What kind of work were you doing there after you left Harvard.

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

That's also interesting. Before I went to Harvard, I already had started my consulting firm, a cofounder consulting firm with a Chilean German partners here in Chile and we were doing buildings in Chile and Peru and Columbia. When I was done with Harvard after many, many years of all that studying I had the opportunity to join BCG, the Boston Consulting Group as a management consultant in San Francisco and that was really exciting. That was a point of you're leaving this environment where you've been learning so much and now there's the opportunity to really implement all that knowledge at a different level in terms of strategy surveying fortune 500 companies and doing Cleantech and utility transformations of the future, kind of a whole different scope of, of work. And that it was really intrigued and although I was serving as part of the energy and operations group of course as a management consultant you are doing anything from technology or healthcare or whatever strategy projects come your way. Well I've been there a couple of years. That was really interesting for me to travel a lot. Of course it's consulting, right? So you're on a plane Monday-Thursday every week and after that I returned to Chile and preparing to for our business. Kept growing it again for a couple of years then and now I recently actually joined Engie impact with the mathematician director for their lifetime operation and that has been incredibly exciting. Super busy I'll have it to tell you more about that as well.

Charlie ([10:47](#)):

Yeah, because along the way, like you said, clean tech, clean energy, some lead consulting in there, some life cycle work, supply chain. Fast forward to today and you know, we do have a lot of international listeners, but for those not as familiar with Engie, I would say very, very large company, right? French power company that has tentacles and some different markets. Do I have that, right? What's the role in Santiago where you're based?

Diego ([10:59](#)):

Engie is a \$70 billion company, right? French, originally is the number one independent power producer in the world. The number one company globally, Mica grid, second name EV charging stations and so on. Massive by the hundreds, 50,000 people. Engie group has created, of course, different business units, and different companies. And one of those is Engie Impact and the role of impact is really the merge, if you ask me, of a management consulting firms, an MBB what we would call McKinsey, Bain or BCG, an energy company or an energy abiding. So it's right in the middle. You want to help clients navigate the sustainability transformation towards a carbon free economy. You're helping the roadmap planning and assessing specific technologies, proving business cases. It's super interesting because in a way you are, you know, you are leveraging the inside insights that you have because you are an energy company and you have access to all this crazy amount of professionals. But you also really tried to think strategically on how you help clients. Again, scale up and speed towards, a more sustainable or business model or again, a [inaudible] operation.

Charlie ([12:26](#)):

Yeah, I can tell you're stoked about this new opportunity for you and just having the resources there and the network and you're gonna be able to make some big changes there with the Engie impact. So we'll look back on the career, personal and career. What stands out? What are you most proud of? Diego congrats on your LEED fellow, what a distinguished mark there. So, congrats. Talk about that and what else stands out. What's on the highlight reel?

Diego ([12:55](#)):

One of the things I would say to achievement is always trying to make a bigger impact and finding a way of doing that. I did many, many years at the building scale. I did green building from energy modeling and specific

performance modeling and diving into algorithms Trying to save the world one building at a time of one facade at a time even.

Charlie ([13:23](#)):

Sure.

Diego ([13:24](#)):

Try to go to the next level of the consulting approach and now try to do even bigger change with the resources of these other companies, Engie and Spawm. I consider it a personal achievement, some people stay where they are and feel comfortable by, you don't want to owe you. You are very, you're an expert in this. We all know in this hope of work I'm going to [inaudible] forever. Right. I'm comfortable. And in my case I always tried to push myself and tried to think of the next big way of making it even bigger and okay. Well, I think I would consider that a try not to be material on, on achieving a specific degree or you know, university or things like that. I think [inaudible] [inaudible] evolution point of view, I think that would be nothing on product.

Charlie ([14:09](#)):

Well thank you. That's really awesome. Talk about some projects. What are one or two that over your career really stand out for various reasons. What comes to mind when I say "Hey, what were some of your favorite projects you've worked on so far?"

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

One of the favorites was a 14-13 story high office building here in Santiago called Castaneda Lion. This is 2007-2008 LEED is really just picking up, specially in Chile. Perhaps there was one building already certified, most of them would just be in the process and green building with something not many people do it. But this architect and developer actually, had been a classmate at Harvard and was back and was really convinced to push this real estate company on doing kind of like a corn shell development that really had some value from sustainability on the quality of the space and it was interesting because he was like, I feel that we clearly understood each other and there's still the value of the process and the outcome. But we were having to prove to everybody else and the design team, shareholders,

Diego ([15:17](#)):

It's stakeholders that it was the right thing to do. We were basically doing way more analysis and trying to educate at the same time we were doing deliverables and doing our own work and that was memorable memories. Yeah. Actually that project a few years afterwards got recognition from the World Green Building Council as one of the prizes for one of the new construction projects in the world I think because it was in the World Green Building Council, the business case of green building. It was selected to be the example of new construction. The architect did a magnificent work with the architecture and using a clear wall mask you know, providing an image and a valuable product to the market that it was not a glass box. Right. That was a tendency at the time.

Charlie ([16:05](#)):

Wow! That's a very exciting and it's kind of those projects that that first come to memory. They don't have to be the biggest project or the flashiest. There was always something special about itself. Well, my next question, Diego, is I love to ask a green building expert like you is, you know, if you, if you had a crystal ball, you know, what's around the corner in this green building movement and this sustainability movement, what should we be reading up on now?

Diego ([16:33](#)):

I would say I see three key trends, right? More of on a building scale. One is the power of computing, right? And, and, and you know, artificial intelligence, computer aided design, that's going to take us to a whole new level. I think everything from AI algorithm, to evolutionary algorithms of the mutation of the sign or to doing, you know, an existing buildings for detection and diagnostics, preventive maintenance, optimizing of operations and so on for new buildings as well as for existing buildings that that piece of technology, it's going to be one, one very interesting trend that is definitely going to start changing the way we design and we operate buildings. Then the second one would be about going a little beyond the building and the whole movement we see with WELL. Trying to focus on the health part of the building the experience and the health of the, of the occupants. UI think that is going to keep thinking forward now that coronavirus. It's all about Hepa filters and levels of ventilation, and filtration.

Charlie ([17:45](#)):

Antimicrobial surfaces elevator buttons. It's all going to be a really hot topic when we come out of this crisis we're in right now. Before you go to your third one, tell us about wellness in your area. If you don't mind, sorry to interrupt this but are some projects doing WELL or FIT WELL or are they just starting to say what is a healthy building? How is it going with Wellness in your region?

Diego ([18:09](#)):

That is a good point because I think that from talking about the well funded or the role that LEED had in the beginning, at least in developing countries, but in this region, all Latin America, South America, it's much easier to have a study or movement to reference, from those who tried to start proving the value from scratch here. Right? I think when people start thinking about Wellness, that question clearly comes up. But what is it? What are the topics I should be looking at? What is the impact? Have a lot of new people done it or not before ahead of us. That's I think the value of operating systems or international vendors is that you have that information that somebody went through a group of experts and really thought about how will you address wellness in a building, what are the key topics to address what is good, what is beyond good, what is minimum and those kinds of things. So people are starting to think about that here in the region. We've tried to get a few building owners and corporations to pursue WELL beyond just a feasibility analysis. As soon as you have to start getting engaged with multiple stakeholders, not only the signed team members or operations, but also processes and human resources and so on, so forth it becomes a little trickier. I would argue organizations that are not fully aligned, yet, to be able to accomplish that.

Charlie ([19:34](#)):

Yeah, that's a good point with WELL and FIT WELL and even LEED in the early days. I always like to tell people at least use these as the guidelines and the best practices. Start implementing it. Now if you want to go for the official plaque and the official third party validation, Hey, we did do it right. Go for the certification but at least for now use it as the best practices and as the guideline. So artificial intelligence, wellness, what else do you think's around the corner?

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

The next topic is the next scale. It's cities scale and community scale planning. I think again, a lot driven by technology, digital twin performance modeling of cities that are more accurate, including COD, urban effects, workability in that and things like that urban farming, now we have the data, we have the capacity to analyze big data to run the scenarios. Now there's more and more experiences also to calibrate the algorithm or whatever models you're using to try to analyze these scenarios. I think from climate change threats, digital twins are pushing, you know, Europeans are really using digital twins for planning and maintenance of cities and planning potential impact. Climate change. More specific CD level or government level energy efficiency program design and things like that. I think the next scale of city and community planning will be a big one.

Charlie ([21:00](#)):

I love it. No, the whole virtualization and I mean don't get me started on even loading that into virtual models and augmented reality and mixed reality. So it's exciting times and it's probably speeding up. Diego, let's talk more about you. If I were to ask you the question, what's your specialty or gift? What do you think you're best at? If you were to ask some colleagues what would they say your best at?

Diego ([21:25](#)):

Well, then I think it's the fact that I tried to think about all the levels of degrees of the problem or the times we're facing, right? From the technical to what is the business value? How are we going to implement this? And does it make sense at the end of the day, I think, I would argue a skill because perhaps in my experience I tried to understand the technical part as well as the business side.

Charlie ([21:48](#)):

Yeah, I could tell early on, you mentioned that at the beginning of the podcast interview here business, you want to know what you can do, Business, buildings and technology. You knew that early on that's not for everybody. I have a lot of friends that are engineers. I have a lot of colleagues that I've hired that are engineers and you know, you don't always get that cross pollination between the business side of it and the engineering side of it. So it sounded like you knew that early on and I'd say

that is a gift. Let's talk about best practices. Do you have any routines or rituals that maybe help you stay on point, good habits?

Diego ([22:24](#)):

I certainly have something that I try to do every, every week and some every quarter to try to stay focused. One is, and actually I'm trying to remember which book actually said this, but, I read it at one point at HBS and I took with it and it's blocking time in my calendar for planning early in the week. Right. My Monday mornings I try to block an hour to really test the goals of the week and try to almost set goals for every day and prioritize what are the key activities that really contribute to that goal. Whether it's getting a proposal out or whether it's creating a new offering or whether it's achieving the next phase of the project. I do that again and again, I use that every day in the morning. I also try to dedicate the first half an hour to really plan the day and make a long list.

Diego ([23:13](#)):

I tried to highlight what of those to do is actually match my priorities. The three big goals for the week. Really the whole point is try to avoid becoming reactive every day or our agendas get packed and we start putting out fires instead of really chasing the things that will push us forward. Whether it's that on a project level or a company level. Well, I think that is really good. And the other kind of a routine that I tried to recently last year, but every quarter try to track your time. I spent two weeks where I really tried to log every hour of the week and what buckets they go into billable and nonbillable and try to summarize and take a look after those two weeks to really understand where you are spending your time because I don't tend to be too reactive. You have an agenda that you keep pushing, whether it's personal or professional and at the end of the day you think you are spending your time in one way but when you look at the numbers afterwards you realize that it's the time and location is not what you thought it was. There's a lot of growth to improve and he's not because you lacked the time. It's because you are allocating your time poorly according to you.

Charlie ([24:26](#)):

I love it. Unpack that a little bit for us. Diego, how do you track it? Do you have an app? Do you have a spreadsheet? Just in your head, you kind of

reflect, you take the time and give yourself permission to stop and reflect. How do you go back and quantify how you've actually spent your time?

Diego ([24:40](#)):

I do use an app, actually I used to do it like looking back at my calendar. Over a year ago really trying to dump everything in your outlook and then after those two weeks really looking spent one Saturday counting all the hours and making a nice chart in Excel. But nowadays last year I found an app, I'm actually opening it because I can't remember the name Clockify. It's an easy app that you can use on your desk and your phone actually and your iPhone. It varies where it starts off and you can edit and so on, you create your priorities anyway. Again, the idea of what some people say is great if you do this all the time. Honestly I think if you want to make it right, it takes too much time out of your productive day. But it's a good exercise to do for a week or two time period that you think is significant or representative of your normal last few weeks and there's a lot of valuable insight to get out of that.

Charlie ([25:39](#)):

Well, thank you for sharing. That's what this is about is you've given us a peek into your journey so far. Some encouragement. Hey, what's around the corner, but here's those, I call them pro tips. You know, a couple more questions here to get to know you more. I'm a fan of the bucket list. What are one or two things maybe on your bucket list?

Diego ([25:57](#)):

Oh, well, so from a traveling point of view, of course when everybody loves traveling free from coronavirus. I've been trying to get to Denali Park in Alaska. For so many years and I was living in San Francisco for some time and I never made it up to Alaska. Yes, definitely one of my bucket list. The second in terms of travel as well, it's always a Nepal going through the Himalayas. Again, I don't have the time anymore to take the vacations you need, time off, you need to really make that long trip. But that's definitely in my bucket list. The last one, it's always, I always wanted to read more to have the time to kind of like grab a book and try not to be reactive and learn something that you wanted. You had a goal for every, you know, a month. So every couple of months read a book because of time I kind of like

switching to Audible. So now at least on that bucket list moving along, because I am able to get a lot of books on audible

Diego ([26:43](#)):

That's a good segue to my next question since we're all learning how to work more remotely, maybe you can go to those beautiful places on the bucket list and do some remote work as needed. But yeah, so books, reading, listening, you know, I'm a big fan of Audible. Sometimes I'll just put it on 1.5 speed. I'm okay with that. It really gets through good books. Is there a book or two you'd recommend?

Diego ([27:43](#)):

Yeah, sure. So it's funny that you mentioned the 1.5 speed. We had this discussion with a friend. For some people that routine or that pace and secrets in life for a friend is actually doing that honorable but at 1.5 yeah. It's got her tips around things. So anyway, you're very accurate on that one or 2.5 but 1.5 I'm okay with. Yeah. You know, I haven't tried it yet, but fine with taking the pace and digesting it. Do it for about five minutes. Don't judge the first one minute. About five minutes and you let me know what you think. What kind of books would you recommend? One or two books? Yeah. So one that I really liked was Hard Things About Hard Things by Ben Horowitz. That's a really good one that, you know, Horowitz is one of the partners of the VC fund, Andreessen Horowitz and he basically tells the journey of when he was CEO of a company, if I'm not mistaken, later on, got acquired by HP for like 1.6 billion.

Diego ([28:31](#)):

But his whole journey on making the tough decisions and it's really open, right? This is a guy that's already a billionaire and so he has no trouble telling you how to deal with tough decisions. One of them did the work but they didn't work. You know, how he dealt with the board of directors there or you managing up, managing down, super interesting. I actually have that on my audible because you know, you love business. I love business, but it's, you know, I think he's a good storyteller in there about some crazy times they were going through in that book and at the time with that company. So it's definitely a good listen. Thanks for sharing. Yup. Yeah, exactly. So it's, it's also very digestible, right? It's, it's a nice story. The nice story and the other one is perhaps more applicable in any, in any field.

Diego ([29:18](#)):

Never Split the difference by Chris Voss and this guy was I think was the lead hostage negotiator for the FBI. It's one of those really fun books about negotiating. There's the classical, kinda like MBA style like how to get to yes and things like that. But kind of like, classical books in that field. But this guy in this one, it's really, it's really fun. It's teaching you the negotiation techniques but using real stories from his time at FBI negotiating, I think it's hosted in Panama or Columbia, I can't remember. But somewhere around Central America. And he really walks you through every step of the way and it is a fun story.

Charlie ([29:57](#)):

Well we need to share our book list because I like all the ones you're recommending. And so for those listening, if you haven't read these books, I'll put the links in the podcast show notes for sure. Diego, I've got a closing question. Two parts though. Two parts. The first one is, is there any advice you wish you'd known earlier in your career?

Diego ([30:13](#)):

I think it's not that I didn't know it earlier, but perhaps never got how important it is trying to find a mentor. The amount of people that are really willing to mentor younger people or more junior people. It's a lot. Don't be afraid to ask. People have gone through the journey. I can really tell you what things work where they don't work. You'd be surprised when you do ask how many people are really willing to take the time out of their busy days to really give you advice. I think when you're honest and you don't ask for help on a project with something specific, but you really ask for advice to see the light, it's incredible how people are open to give you support.

Charlie ([30:53](#)):

Great advice. And then finally you've made a career out of sustainability, green buildings. Any words of encouragement for someone that's jumping into this movement right now?

Diego ([31:02](#)):

I think again, perhaps it's tied to the three trends that I mentioned earlier, I think there's tons of opportunity in Greenbuild because you have basically

two types of people in the industry. You have this really savvy kind of like perhaps a little older school professional that comes from more classical architectural engineering point of view, but now they'd been faced to integrate technology at the different levels from a building scale, to city planning, to performance and we've been analyzing wellness and so on. I think there's a huge need for new talent in the industry. So for those that might be interested in jumping into green buildings there are tons of opportunities. Very easy to get a few digital skills on it and it's going to be very easy to find professional opportunities if you're able to equip yourself with some key skills.

Charlie ([31:52](#)):

That's some great encouragement. I think what I'm hearing is a tremendous opportunity. This is a great industry and you just got to go after it. So thank you. LEED Fellow, Dr Diego Ibarra from Santiago. Thanks for being on the podcast today.

Diego ([32:06](#)):

Thank you, Charlie. Thank you, I really enjoyed it and let's exchange that book list.

Charlie ([32:11](#)):

Let's do it.

Charlie ([32:15](#)):

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 we're 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.

Speaker 6 ([32:40](#)):

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