

Michael Driedger CEO at Airsset | Transcript

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Charlie: Welcome to Green Building Manners, the original and most popular podcast focused on the green building movement. Your host is Charlie Cichetti, one of the most credentialed experts in the green building industry and one of the few to be honored as a LEED Fellow. Each week, Charlie welcomes green building professionals from around the globe to share their war stories, your advice and unique insight into how sustained ability is shaping the built environment. Settle in, grab a fresh cup of coffee and get ready to find out why green building matters.

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Charlie: Welcome to next episode, the Green Building Matters Podcast. I'm your host, Charlie Cichetti. I've got a green building professional, entrepreneur, pro tech, air quality and wellness. We're going to have a great conversation today. I've got Michael Driedger with us today. He's up in Vancouver, British Columbia.

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Charlie: Let's learn a little more about you. You've got the LEED credentials, you spent some time in a green building working with a really cool architect, and now look at you. Take this back. If you would, where did you grow up and where did you go to school?

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Michael: I grew up in Saskatchewan, which most Americans think is a made up place, but the Middle of Canada, second coldest place in Canada, Winnipeg is number one. I grew up in a very, very cold climate. My last name, Driedger, is mennonite name. Family has builders and farmers all around me. I was always involved in building. My dad was a general contractor and I worked with him. The house that I lived in was built by my grandfather. The house that my grandmother lived in was built by her

husband. It's a very, very traditional sort of like mennonite, sachawan upbringing. My grandmother is a funny one. She grew up in a village where their source of heating was a cow. Born in the dirty thirties, so fascinating! Fascinating!

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Charlie: I'm sure clearly that's that influence on you and you get into the architecture and buildings and growing up around that. You have two degrees, Architecture, archeology and went to work a little and came back for some more.

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Michael: Growing up my dad was a general contractor that mostly did office buildings. I was standing in a dumpster for the drywall I had installed the year before and I was thinking this makes no sense. As a society how have we gotten tens of thousands of years into the future and and done this doesn't make sense to me. I want to understand how people used to build things. Obviously being in a menonite background I love that kind of thing. I ended up getting a degree in archeology, anthropology and spending some time in the middle-east which is where I made some good connections there and made friends. I lived in Japan for a little while teaching English, I pick up languages and like to pick up things around the world. When it came back to the US, after a sort of Canada, the US, my wife's American. It was around the time at that the USGBC was forming and getting started in. I was one of the very early people that started the green building professionals. I was one of the first three people that green drinks in 2005 or six. I was the fourth LEED Ap in Canada. I was very involved in working for architecture firms. All I wanted to do was sustainability stuff, LEED et cetera.

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Charlie: Besides your Childhood influence, how did you get into green building? LEED was coming on the scene. You got your LEED credentials. When did it click that this is really what I'm doing?

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Michael: I worked for a while for an architectural firm that was really focused on project management and then I did two or three really interesting LEED projects, and it was at that time no one wanted to do LEED because "it's new. It's confusing." You've got to read tons of books and and I didn't care. It was really not until I went to Perkins & Will and ended up just going into the sustainability group at Perkins. & Will. They had me really deep. I was doing at 1.85 projects a year ,all LEED or Living Building. The exposure was fantastic. I started my own firm after that and the reason I started my own firm was one of the things that I always found frustrated, because sustainability is a lot of different things. Growing up menonite and with family stuff and very sustainable behavior, having a cow as a heating source, pretty sustainable. I found in architectural circles the sustainability solution was always either a green roof or fin. On the mechanical side it was always like (inaudible vo or something like that. It just became one of those things where I just didn't like the idea that because your biases are hard to overcome. I started my own firm and just said: "ok, no biases. "We don't do design, we don't do mechanical design, we don't do. We just talk sustainability, energy modeling and all that other kind of stuff. So that was the first company I started in 2012: Edge. One of the things that people have always asked me: Did you do lots of research on sustainability. What's the biggest thing in sustainability? "Software integration", because we have everything we need: solar panels, good insulation, airtight windows, triple glaze. That exists. Our real problems are integration problems. The first company I started was a company called Aperto, it was a Protect company that was really focused to save energy in hotels. We were doing an energy model for project in South Arabia and the hotel had the same energy footprint as the outpatient clinical care center. It was like: is that right, an energy model? That's right. It's 247 facility that

never turns itself off. The purpose of Operator was to be able to set back the thermostat because most hotels run at 40% occupancy, 50% occupancy to the year. In reality nothing ever turns off. The purpose of my company was to save energy, but then it became its own sort of gas technologies platform. I transitioned out of that. I'm still a shareholder in part, but I've transitioned out of that to be full-time focused on Airsset, because air quality has always been sort of my biggest passion. I've got all the tools. I've got LEED sustainability projects, started a proptech start-up and now I have the tools to do the thing I've always been meaning to do.

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Charlie: Entrepreneurship while on the green building side. I'll go back. Did you have any one you might call a mentor or anyone you looked up to that maybe opened the door for you?

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Michael: Honestly, it's my grandmother who's 94 years old now. Whenever I tell people about sustainable building strategy, the house I was telling you my grandfather built code minimum in the seventies. Let's call it R8. walls to imagine, or eight walls and minus 50, and she ran that thing. It's incredible how she ran it. She would control all entries through the garage. She'd used the garage as a giant windbreak. She would have a landing with tarps and drapes because air infiltration is your biggest enemy. I remember we would get plastic. In Canada we have milk in bags or we used to anyway in Saskatoon. She would cut the top of it and she would fill it with beans and radishes and whatever else and use it for freezing. Literally nothing went to waste. She's always been my mentor, but not in the same way as you think of most academic mentors. More of like leading by example, mentor,

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Charlie: Thank you for sharing that story, simple, but genius and had a big impact. Clearly, because that's what stuff a mind for.

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Michael: I've always been about simple things right, simple systems. I've done super complicated projects and then you hand it over to a guy who's used to running a boiler and he freezes your field because no one's explaining to him how to run geo field, you got to recharter. It's a lot of concepts that need to be explained. I've always been a fan of simple stuff. You can have really sustainable buildings that are very, very simple.

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Charlie: Back to simplicity. As you're looking back, what is something you are really proud of?

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Michael: That's a really good question. I'm always most proud of the teams that I've built. At edge, operto or air set? I'm so so focused on making positive change. The only way you can make positive changes is lots of different people, lots of different skill sets. I have limited skill set and I can't code. I am not good at accounting. There's all of these things that you need to. I'm really proud of surrounding myself with smarter people than me. That sort of fill out my rough edges and that's really cool.

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Charlie: The leadership side of building a business and hiring great people.

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Michael: And great business partners too. Right like you, always want to make sure that you're on the same page. You're mind, you're doing things for a shared passion, not just for money obviously important, but like you're also doing it because you care about where you are, because it'll last longer. The relationships last longer, that way, 20% so you look back.

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Charlie: I like to ask someone if there is a Project. Maybe in your programs or projects you are really proud?

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Michael: It was actually before that the project was more out of. It was a waste transfer facility because it was a waste sorting facility and no one had ever certified a waste sorting facility because LEED is written for an office building. We had to do tons of creative things around the doors that are always open. Is that considered a view like this would have been 2000? We had to get creative on what it means to have a green building? One was fun and then I also just was very proud of that project. I ended up working on two more, because once you've done one you're like this transfer.

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Charlie: Way to apply LEED to a building. Let's talk about today. Tell us about your company. What do you offer to the marketplace? How's that going? What keeps you busy?

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Michael: Yeah, that's keeping me the most busy. In all my years of doing sustainable buildings, I've never done any with great air quality, and that's it's kind of because if you look at the LEED scorecard, it's heavily weighted towards energy materials and IAQ is a tiny category. I'm a big believer that data is everything. If they do these audits, if you were doing an energy model for two days of the year or like one hour of the year, two hours of the coldest day in the hottest day. But there's 87 and 60 hours in a year, how useful this is. That's still how the industry goes, same with air quality. Air quality, you'll do a note before the building opens or you'll do like. That's one week and we all know the variability that happens in these buildings. Air quality in buildings is actually pretty atrocious when you start measuring it, but it's all fixable. It's all very easily fixable. as easily fix there my grandmother making sure that her windows are at the right time, turning on humidification to address low levels of humidity or the opposite.

Where you have high levels of humidity. You have to find a way to pull it out of the air through cooling or whatever may be. The solutions are complicated. It's just there's no triggers and there's no data to actually make air quality great. The platform we built is built on top of IAQ devices, indoor air quality IT devices and it's a wide variety of them, because sometimes you're not allowed to connect to the internet and so some of these devices will connect to LED and then others will connect directly via bus, because sometimes you have to connect directly to the HVAC system. We're connected to nine devices now the focus is devices in space, but we are connected to some devices that are induct, which is, in my opinion, a bit of a design flaw to put us to wondering and adduct, because, as LEED says, it should be between three feet and six feet off the ground. So that's the right place to put it. How often is that one? Not very often, sadly, obviously we have this wellness movement.

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Charlie: One thing I've picked up on this conversation: it's important for the real-time so catch the trends, it's not the one time. I knew you were coming and I can use the bleach for the cleaning that night. How do we make sure at all times we've got much better indoor air? That's why I'm here and I'm out of your company.

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Michael: Absolutely.

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Charlie: Do you put out devices too or your software connections that are already in buildings and collecting data?

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Michael: I wish that they were deployed in buildings. Then we would just be the software layer on top. Sadly, we're also facilitating the hardware, which is fine. We don't mind doing that because it is all in one. It's easier for people because most people don't have devices. We'll often supply

devices. Our solutions consultant who actually helps people pick and through their journey, we'll say: okay, well, what are you trying to accomplish, what do you need to measure? You'll need this device right. No, no, no ration issues. Okay, you need this device type. He's also a rest, so he gets like he understands how to help people pick the right things. And then it's just a matter of putting the right information in the hands of the people at the right time. Facilities managers need alerts, real-time alerts and tell you to focus on building one out of your 20 building portfolio that week instead of randomly guessing which one to go do some work on. Tenants really just want to know the space they're in right. You're going to give them like not a full portfolio of information. I'm standing here in the lobby and this is what is good, good to know. It's good right now, but then we also have a module for reporting because a lot of our partners as clients are in their: air quality consultants, commissioning consultants, industrial hygiene, and one of the problems with massive amounts of data from IAQ is that it will fill up an Excel sheet and all of all the lines of code in the excelled sheet. We've built a reporting module as well so that they can still do full reports, like compliance reports from people saying ocean worksafe guidelines or the who or Fit well, or whatever the case may be.

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Charlie: It's exciting. Everybody check out. Airsett and connect with Michael. How would you explain the last couple of years?

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Michael: The awareness is definitely high on the policy side. It's going to be very good to finally see air quality be written in specifics instead of vagueness. We've all seen the least agreement that says a landlord must supply adequate air quality. What is adequate, and now we're going adequate, is 900 parts for millions, 200 parts like relative humidity of this, which are all written into Ashra 55 or 62. Right, but nobody really pays attention to them. So that's one good thing. From the pandemic. We've had good movement on facilities that are fully occupied. Bank branches where

people are still coming in, day cares, etcetera, etcetera, offices are slow, like we don't have a lot of office clients per say because everyone's going. We're at 20% capacity in our office because everyone's working from home. But that's slowly aging, we're seeing a massive wave of people coming back now that Omicron seems to be on the down slip. We're moving into people's offices much more than the last, I would say, last month. As they come back.

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Charlie: My next question is about the future. Let's say you had a crystal ball. Green. Your case, wellness and protection. What do you see? What's next?

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Michael: I've been in the industry so long. If you look at the history of rating systems like boma, LEED , very energy focused, extraordinarily, energy focused little bit, materials focus. Everything is coming out now and all the trends are: Fit well, WELL Reset. Health is really becoming the thing that everyone really wants to rally around. I'm not saying that energy is not important. We don't have to reduce carbon, the climate, climate emergencies problem. That seems to be getting the public imagination more. There's a lot of attraction in that direction which is great. I see that definitely rolling out at massive levels. 1952 when London had that crazy smog that killed all those people and it took till I think it was almost '71 for them to have clean air. This is what happens. We have these events and we go, 'We must have clean outdoor air.' This is the event. The pandemic is the event that is triggered by people going. We need to talk about indoor air. So that's definitely good. I'm hearing rumblings that you know work, as all these others are actually going to say, instead of us having very much like they've done. You've seen boma right, it's just checkboxes. Did you do an audit in the last two years? Did you like it? Everything's going from relatively vague to very specific and very prescriptive, which is a good thing. More education, case study and just, but it's good. It's moving that way. We agree, it's got to and right.

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Charlie: We're in the middle of it right now. It's a little more about you remaining professional. What's special to your gift?

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Michael: I think it's being a generalist. One thing that's always endeared me to clients when I was doing most by consulting, I don't do much consulting anymore, is I didn't have a bias. Have opinions with the civil engineer and I remember one time in a meeting saying: look, this is not related to LEED , but you know this is a bad storm water strategy because your pipe is full. I'm relatively pragmatic, I'm like the pipes full, you have nowhere to put it in a storm. Where are you going to flood? This is a bad idea. You want to flood places. Let's come up with a proper stormwater strategy. Forget about, because they weren't going after any of those credits. But we were in an area where, and this was the other thing, they were using data from 20 years ago. Storm data from 20 years ago is useless, like we've almost seen storm events like you have a 200 year storm event every year. Now it's like it's like no, no guys throwing your own files. I'd say that's probably not general, but just so to speak out, it's okay to speak up and also just like don't. That's my best piece of advice is there's lots of different solutions like the sort of value to at the beginning. Engineers always want there to be an engineering solution and honestly, sometimes it's a maintenance solution. It's an operational solution to a problem. Don't let your biases overcome good solutions to sustainable building problems.

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Charlie: Really good advice. I like that. Thanks and let's talk a little bit about good habits, routines, rituals that you can share?

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Michael: I go to bed really early. I get up early. It's one of those, so one of one of our, one of the people I work with. Quite a bit is all about longevity and they say that like the number one thing you can do is just get good

sleep right. It's also good for your brain and also just like to work out in the morning. I've got a bad back from all my years in construction and maintenance. I'll get up at like 530. Exercise also just wakes up the brain too. That's probably my best advice. Like getting enough sleep and taking the morning to get exercise, because if you don't do it in the morning you're never going to get to it in the rest of the day.

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Charlie: Work out, sleep. Can you give any sleep tips? They say they make sure you black out and cover up any light, get away from blue light on our phone devices, but since you're really pretty good, any sleep tips you can give to our audience?

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Michael: I think most people intuitively know this. But you want to have good CO₂ levels when you're sleeping. It's sort of like camping. You sleep super well when you're tired, but also it's like the two-level that our brains evolved. First, sixty-seven eight, whatever, 100000 years. If you can have a window cracked or fan none whatever, and can keep your cot below 900, you'll get the most restful sleep because really high you have very fitful sleep. The other one is: humidity is also hard, like when you're breathing, like if your nasal passages are too dry or too and you're not comfortable. Sometimes it means adding a humidifier, sometimes it means you know, whatever the case may be. Those are the two that focus on moisture and humidity. Those are great tips and kind of really.

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Charlie: I'm a fan of. A bucket list so you could give us a peak. What are one or two things on your bucket list? Any travel? Do you want to write a book? What are one or two days on your bucket list?

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Michael: That's a really good question. I don't think much about a bucket list because I've got kids. I think about getting them to and fro. I've been

everywhere, lived in Japan for multiple years. I've been all over the world. I like starting these things, but my bucket list is to help someone else start something. I haven't done it. I've never had time with a mentor, I've never done it. My bucket list is to help mentor someone through a start-up I would say definitely be on my bucket list in terms of travel. I'd like to take the kids back to some of the places that I have been to say that would be another bucket list thing so they can experience. We were about to do this and then the pandemic hit. I'd like to experience a staffed Tower and I'd like to see Barcelona like I did, and then the condemnation.

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Charlie: Two final questions. Michael you have maybe been doing this for a long time. Some are newer. Some of what you've said has been validating to them. They may be thinking about it, but they heard it from you on this. Some are kind of jumping in now. Maybe they're switching careers or maybe they're young. Is there any career advice you wish you had known earlier?

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Michael: Very good question because given my very early stage of getting into this, I didn't get career advice. My parents didn't even know what I did. You're not an engineer. I don't know what you do. The world is very finite, especially for people my parents' and my grandparents' age. My grandmother is so cute. She's like are you still doing the green roof thing? which is very acute because they can understand, they can't wrap your head. But now that's totally you wouldn't have to give someone that advice. They get that like there's new jobs all the time. One thing that I would recommend to young people coming out of school is: listen, no one cares about your grades. No one cares about your grades. Don't focus on your grades like that is probably the thing. The one thing I did right was going to it. I skip class all the time to go to green building events because they were there right, like it was the first time that I took my education from the US and at the time, and they actually didn't exist at the time. Cascadia, take

your education, we can get it broadcast, wherever, wherever you can get it, it's actually most of your best education is going to be free or you're going to get paid to do it right. You goin get paid to do it at a job and you're going to learn it on your own because academia is too slow, way too slow. They're teaching you stuff five from 20 years ago because that's when they got their funding to teach that stuff. So don't worry about your grade, finish school, don't worry about your grades. You know your learning is everywhere else.

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Charlie: Great advice. Finishing there, but what do you put your attention to? Can scale. That's really good. Actually it's time finite right this 30-45 minutes. The thing we put our attention to: they can really scale, so attention scaled. The last question, let's say, someone is listening to this cast. They're really enjoying it, but they're jumping into the green building movement! Any words of encouragement for them?

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Michael: If you can't find your ideal job, just keep doing it. It doesn't matter if you end up in finance. If you think of accounting. I've said to people: LEED is environmental accounting. You'll get all the skills you need to track our band, to do all these. Don't worry where you end up. People are transitioning jobs all the time. Think of the skills that you're getting and how they're going to help. I had a job in the paint department while I was putting myself through school. The best sheet training on sheet in the world, a ton of painting jobs at Home depot, was a great stepping stone to LEED . Honestly, it was the greatest advice ever.

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Charlie: Contact Michael on LinkedIn. Michael Driedger, coming to us from Vancouver. I really enjoyed our chat today. Thanks for your time. I just want to say thank you to our loyal listeners. We actually are celebrating over a year here on the Green Building Matters Podcast. Me and the entire team were stoked and just so glad you continue to listen every Wednesday

morning to a new interview with a Green Building professional here in the industry. We want to make sure that you are getting protips straight from us, straight to you. Thank you for listening to this episode of the Green building Matters Podcast at 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 for any notes and links that we mentioned in today's episode and see the other episodes that have already been recorded with our amazing guests. Please tell your friends about this podcast, tell your colleagues and, if you've really enjoyed it, leave a positive review. Thank you so much and we'll see you in the next episode.