Scaling Low-Carbon Building Data for Real Impact with Jack Rusk | 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. Green Building Matters.

00:33
Speaker 2
Hey, everybody.

00:34
Speaker 3
Welcome to the next episode of the Green Building Matters podcast. You know, I've got the easy job. I get to interview amazing people all over the world about not just green buildings, but sometimes technology. For those that have been paying attention. That's where I've shifted my career and is technology in the built environment. And that's my guest today. I've got Jack with us. He's the co founder at seascale. He's up in New York. How you doing, Jack?

00:56
Speaker 4
Charlie, it's. We had our first snow here on Saturday night. New York was beautiful for three days. It's slushy again today, but I'll take it. It's nice to be. It's nice to be in a winter remix.

01:08
Speaker 3
Hopefully you get the photos and then it's like, okay, now it's back to that in between. Well, New York, actually, a couple weeks ago, my wife went for some meetings and she loves Broadway, so went to a musical. And of course it's festive this time of year. It's one of my favorite cities, if not my favorite city. So take us back though, for our listeners to kind of get that kind of base about you. Where'd you grow up and go to school?

01:32
Speaker 4
Yeah, I mean, like everybody in New York. Not everybody, I would say, but like many people in New York are not from here. I grew up in California, in the Bay Area. Both my parents are school teachers. I think that does a certain thing to a person, we'll say, in terms of a kind of diligence and work ethic from that. I did my undergrad education at University of California, Santa Cruz, which is not a school with an architecture program in any sense. And there were two things that really set me on this path. One was the academic work I was doing with Karen Hull, who's a really, I think, well respected restoration ecologist. She was working across California grassland sites to understand the way that land use patterns were shaping, you know, the ecosystem today.

02:19
Speaker 4
Simultaneously that I was working in the scene Shop at the, you know, for theater, the campus theater. A lot of like hands on building, middle work, woodwork. And really was loving this kind of combination right early in life between the sciences, structured inquiry, using data and hands on work. Okay, like that's my undergrad. I move right into the recession, oops, 2008, 2009, find sort of stable work, really on the design build side of that dichotomy.

02:51
Speaker 4
I had a successful wood shop in the Bay Area and in Los Angeles, did a lot of cool work for exciting clients, a lot of artists, a lot of a list people in the movie industry, got kind of sick of it, honestly, because it's a dusty job, it's a hard job, cash flow is really uncertain and you find out that a lot of the work you're doing is super disposable. So with this sort of like history between the sciences, design build, doing a lot of work for architects. I did what many people at that time of their life do. I sold everything and went to graduate school. And there I was really lucky to be in this program at Yale, between the Yale School of Architecture and the Yale School of the Environment.

03:29
Speaker 4
And it's really nice, I think it's actually a nice sort of summary of my career really since then, is in spanning these worlds. It's really not about finding some perfect synergy. It's about being able to approach each discipline, the science of sustainability and the practice of design on their own terms and really being a bridge between these two disciplines. So I worked there with Karen Seto, who has been one of the lead authors of the IPCC report on cities. And anytime

people are citing statistics that urban area the size of New York will be built every few months between now and 2050, that all comes back to her work and working with her, you really understand very viscerally and in a really quantitative way what urbanization means in the 21st century. And she really set me on this path in so many ways.

04:20
Speaker 4
Using data to answer questions, you know, using structured inquiry to ask more interesting questions. And really like then using the professional world, right. As a point of intervention to take what is very much the urban century, the 21st century, more people living in cities than ever before, more cities being built than ever before. And try to take this problem and take things like data around carbon emissions and buildings to ensure that this urbanization is part of the solution to climate change instead of just something that accelerates its worst outcomes.

04:53
Speaker 3
Well, what I heard in there is, I mean, I love you've said data a couple Times but then there's that storytelling and then there's that hands on work and just the constructing too. It's, that's great. And yeah, and you got over to Yale and really doubled down it sounds like. And all that had some great, I would say, mentors that you landed there with and it sounds like it just validated what you might want to do with your career. So because that's kind of what's. What I ask next is, you know, was there an aha? It's like, okay, I'm going to spend the rest of my career in around sustainability and green buildings. And have you had any mentors? So anything else to say on?

05:28
Speaker 3
Did you have any more of an aha moment and you know, give a shout out to anyone that might have influenced you so far in your career?

05:34
Speaker 4
I mean so many people. And I'll say, like to answer that meeting for Charlie, in so many ways these are the same thing because really the thing I love about, you know, the green building movement is the people you get to be around. Like people who are exceptional, who are talented, who are highly technical and who like give a dang. And this is like this like gets me going every day. It was, you know, when I was closer to practice and honored to participate in this work in this peer group. Now that we're very much in the data and software space, a

little further removed from the grit of how projects happen, it like keeps me going and keeps me voted to know that our work supports these professionals across the industry.

06:18
Speaker 4
Like the people are so dang great specific mentors that I can really call out as I was able to take classes for a few years and then be a teaching assistant also in graduate school for Peter Yost who used to lead research at Building Green. And he's able to do this really fantastic work to understand broad brush sustainability efforts and bring it all the way down to the details, the systems, the layering of elements within an envelope that makes it come true. And I learned so much from his way of thinking and approaching those problems. And I was really lucky during graduate school to start working at EHDD. Coming in just as Scott Shell, who's now at ClimateWorks leading philanthropic efforts related to industrial decarbonization. He was at EHD and he was leading a lot of work on electrification initiatives across the Bay Area.

07:14
Speaker 4
And just to be able to sort of rub against him a bit was amazing. Like one of these people that at every stage of his career has done transformative work. So I mean Charlie, it's All people out there and I'm like that buildings happen.

07:28
Speaker 3
No, it is. And just you know, we could debate, okay, AI is here. I don't want to get ahead of ourselves. But at the end of the day you're still gonna.

07:36
Speaker 4
Yeah, yeah.

07:37
Speaker 3
Transfers the human to human just side of things and getting things done. I don't even mean just selling. It's just like hey, we've gotta more than ever still have that connection and you know, people buy from people they like and trust and get to know and I think everybody's gotta be a much better storyteller. So. So lots to get to there but okay, ehdd, so tell us about that because that's where you met your co founder for C Scale and just kind of what kind of projects were you working on there? I, I know it looks like your latest title before you moved on

and did your startup was Director of Climate Strategy. What, what did that mean going back to the Bay Area at that time?

08:12
Speaker 4
Yeah, you know a lot of like I think the we'll say origin story of cscale has so much to do with the work happening at UHD at that time where for a long time, you know, early net zero projects led by Scott and co founder Brad Jacobson, others at EHCD really focus on low energy buildings and realizing to others that hey, sometimes this misses the mark of the largest impact. A focus or a shifting focus from just energy use to carbon emissions more holistically. The place that really the first test of the models that became C Scale was work on the AIA national headquarters industries. We'll say been through the conference circuit already, so I'll tell it I think efficiently. But the AIA put forward a really ambitious RFP for a low energy building. Amazing.

09:06
Speaker 4
They want to use their standing industry to deliver on goals like the 2030 commitment. But the fact of the matter is it's like a brutalist building. You look at that wall section and there's not much in there except concrete. The glazing goes right to the concrete. How are you going to improve that envelope? The sighting isn't exactly we'll say like you know, optimized for passive design. And the insight that we had at EHGD was a very low energy building here is going to be hard. What if we sort of expand, you know, to solve a problem, make it larger?

09:42
Speaker 3
Right.

09:43
Speaker 4
Like let's think not just about energy but about all the carbon emissions related to this retrofit project. And that allowed us to craft a strategy using early versions of C Scale. They give the path, not a path, you know, not a path to net zero energy, but a path to net zero carbon. By combining the best, like the most efficiency you can squeeze out with all electric, you know, systems design together with clean power, procurement on site PV and then a low embodied carbon approach to the interiors. And really by being able to layer together these design boost thoughtfully and support them. With data on day zero of the project during the proposal phase, were able to make and pitch and really get that story told.

10:27
Speaker 4
And the AIA saw it as a clear path forward to advancing this mission to decarbonize buildings within the constraints of this historic brutalist building. So that really was, I think, a core project at UHD where I was really happy to play a role together with many others, Brad, Rebecca, Jennifer, Duncan and moving it forward, it was also the first test that getting better data earlier in the process, which has really been our focus at cscale, does help you set better goals and achieve better outcomes. That project today, the opening gala was a few weeks ago and it's been awesome to watch that project progress from whenever it was 2020 to 2025 and be able to meet all these ambitious goals set in early design.

11:15
Speaker 3
I mean, all of this has prepared you, I know for what you're working on now. But before we go there, just what's on the highlight reel, Jack, what are some of your proudest accomplishments so far?

11:26
Speaker 4
Yeah, I mean not to just continue beating the same drum, but being now in the world of the tech startup space, you meet folks sometimes I think especially we'll say more generalist people in software where there's entrepreneurs out there looking for a problem to sink their teeth into. You meet the young founders and they're really searching for the right, we'll say like the right problem to approach with their solution set. I don't know exactly, but I've never had that problem like Charlie from like this project. Cscale as existence now really has its origin, you know, like five, eight years ago when all this work was happening in my graduate education. And I'm super like just proud of the team of Brad and of what we've all been able to do together to just, you know, we'll say like commit to the bit, right.

12:16
Speaker 4
And take these ideas forward, prove value, shift and pivot as we need to. But we've had a very clear North Star through this whole and you know, we talked a little bit before the call about you do this like founding experience, you work through operating the company and then what's next, like in so many ways, like zscale's it like the entire sort of tip of my professional life and the professional life of others has led us here. And like hell or high water, Charlie, we're doing it. You know what I mean?

12:44
Speaker 3
Like we are conviction, especially as you're recruiting team members for mission driven companies, especially if you need to raise money from investors. It's. You gotta have that conviction. Hey, here's where the industry is going no matter what, even if we do nothing about it. But you know what, look at the head start we've got and here's what we think we're gonna fit in and compliment. So okay, so yeah, let's talk today. Let's talk about cscale. You're the CEO and co founder there. So tell us more about your company, where you're at, where you're going.

13:15
Speaker 4
So C scale, I'll say of like the simplest description is we help architects understand the carbon emissions from their projects. And I think if you just say that there's all sorts of other companies that do the same thing, right, that help with the measurement, that help, we'll say, you know, do the reporting. But what I really want to highlight that I think we really focus on C scale is supporting better decisions, getting the right data at the right time to make the right decisions. We're actually relatively less concerned with reporting and compliance, which are important. They help verify and validate that what you said you did actually happened. But what designers need is not better reporting compliance tools, they need better design integrated tools that help them make better decisions earlier in the process.

14:05
Speaker 4
When the decision space is more open but data is relatively less scarce. Relatively more scarce. There's like in the BIM world, we all know the McLean curve that sort of helps us understand why better earlier decisions are important, popularized through conversations on BIM over time. And we really take this to heart and try to equip people with the most data possible as earlier in the process as possible so that people can, when they're in the planning phase of the project, make better decisions. Okay, that's great. And then as you set these early goals, then you need to like do the thing, design the project, make the decisions, select the materials. And this is the process.

14:47
Speaker 4
This has really been our sprint in the last year is to get deeper into the design process, which we can say that thesis in simple terms like as the project increases in resolution, the data should as well, right? Like you have your

massing model, you have your preliminary analysis that helps you make big Decisions. You have your detailed wall assembler. Okay, now we're really dialing in the product specific EPDs or performance criteria there. That's all well and good, but like Charlie, there's no perfect flow of data between the beginning, like it's so gappy. The levels of resolution do not nest neatly.

15:22
Speaker 4
So this really is like where we sweat it, you know, is trying to like provide continuity between early and later phase design process to establish a red thread of data like you're able to do with AIA that starts at the very beginning, day zero during the proposal and is relevant all the way to the end. And this is for us, like the vision we're working towards is better data continuity throughout the design life cycle related to materials, material procurement and the use of energy in a building.

15:52
Speaker 3
Yeah, you know, with data, I think a lot of architects and really developers forget one place they have a lot of data. I would argue it sounds like you've built thesis around this is all their past sustainability projects. And I don't even mean they did 100 LEAP projects. I just mean maybe they have reported to AIA 2030, maybe they've had to do compliance checks, they've had to do some sort of energy modeling. Right. There's, there's a lot of data, not just the materials they may or may not have specified. And is that manufacturer still in business or not? But I would argue most projects that have been designed, built and operated of course have some layers of sustainability data. And, and now what do you do with that? You know, so yeah. So who's your kind of ideal customer now?

16:34
Speaker 3
And then you and I have something in common. We realize that we need to serve architects, make them the hero again. But it's okay for the owners and developers to even have access and use our tools. Right. And who knows down the road suppliers, how can they tap into some of this and because they're going to influence it right at the end of the day. And not just the structural components and concrete and steel and maybe clt, but all of those components. So I don't know where you're at in that journey and how do we really make sure that more than one of the silos and how we design, build and operate can actually maybe even use the same piece of software.

17:09

Speaker 4
I think you're really onto something here that I mean folks like yourself and our team recognize coming out of the building industry that people coming in from the outside don't always see as quickly is that, you know, delivering buildings is a team sport. There's the Central triad of the oac, the owner, the architect and the contractor. But there's so many parties involved in every part of this process. Right before this call, I was on with an envelope consultant. Right, okay. How do we support the work of an envelope consultant who's engaging on these projects, trying to trace the contractual structures and who makes which decision? And this really is essential. Why for us, the architect is our ICP is that in so many ways they are the hub, the nexus, the meeting point and the coordinator across all these disciplines.

18:01
Speaker 4
But when you talk about what it means to do things like procure lower car materials, you know, the will of the architect is not sufficient. The architect might be the one making the initial specification or selection. There is the owner that needs to buy into those ideas, especially if there's a price premium, and the contractor who needs to coordinate the subs, pass data through to the subs to get those things procured. This process. Like, I was actually talking to a group in France that does like sort of similar work to us viscap, like great company. And they were saying that in France the developer and the contractor are often the same person. And I shed a tear for US Construction in that moment because it's so fractured here. It was like there's a designer and then someone delivers the project.

18:51
Speaker 4
That sounds nice in comparison, but it's like all of these workflow tools that we're building for better data management have to reckon with a super fractured workflow. To your comment earlier about the role of people and what the role of AI might be, I really see Charlie there being a durable place for human relationships within aec because so much of like, the risk that's implicit in these projects is mitigated through trust. And that trust exists between people because the contract never covers every case. So when we think about the way that data and workload tools should support processes, it's about giving people data that they can enter into better, you know, we'll say relationships between the people on their project, better presentations, better defense for their decisions, et cetera. So that really is our core. I think you mentioned suppliers.

19:40
Speaker 4

This is another really exciting group that we're working with more and more because, hey, there can be the most significant ambition goals set by project teams. But the fact of the matter is that unless you're able to put those materials in the ground, all you have is a number. And numbers don't change the world like action does. So being able to trace through these complex relationships better connect supply and demand, better prove out the idea that lifecycle Assessment helps people preferentially procure better materials and provide consistent deal flow to people doing better. There's a lot of value there for the building industry and that really is like, you know, I think our goal isn't really to be a marketplace per se because there's a certain set of dynamics, but we really see sustainability as a market maker and our users see the same.

20:34
Speaker 4
So like our goal is to make and defend a market for low carbon buildings and bring together the people that can deliver those best. Like that's the win, win.

20:43
Speaker 3
And we need to hang out more because I'm preaching the same thing internally and externally at Schema Building on my years of green building experience. I just want to validate everything you said and to our listeners, you know, but team sport, let's get back to that one. So maybe I would argue it's a team sport, but it's probably like, you know, when like the NBA puts out the Dream Team for the Olympics, man, that's a tough team to coach, right? You got a bunch of all stars with some egos. And, and those egos in construction might be the contracts and the CYA and the finger pointing and you know, if McKinsey says the construction industry, second largest part of our GDP, is one of the only industries that's gotten less efficient in 25 years, what are we doing about this?

21:23
Speaker 3
So, so I think you're right. It's a team sport. But you know, we've got to have that single source of truth and start sharing some data. You know, it's not going to hold it against it. It's going to help everybody. So man, there's a lot in there. Okay, so yeah, Can I make.

21:38
Speaker 4
A comment in response to the Dream Team thing? Like, you know that there's a tension that comes up sometime in our work, like with the users we love to work with. So many of the firms we work with differentiate themselves on their ability to deliver sustainability consistently right to their clients. You know, like,

I'm not shy about the fact that C Scale's mission is to make that level of sophistication available to everybody at as low a cost as possible. And I hope like we get different reactions for that. I think the people who are will say like dedicated, motivated care. But also like when you're trying to move up the floor of an industry, people are going to get left behind, right. Like if they're not able to continue to innovate.

22:21
Speaker 4
So when we're thinking about like all these big egos and personalities on The Stream team, I think there it's like, all right, like we're gonna, can't think of a basketball metaphor unfortunately. But you know, we need to raise the floor of the industry and you guys have to find new ways of innovating because the fact of the matter is like the goal is not to have a few better projects. The goal is to change the way buildings are delivered, like as an industry. So, you know, people who are doing just a little bit better today, we want to encourage them to do a lot better because we're going to take everybody else and help them catch up, you know, to the best.

22:55
Speaker 3
You're right. I think, I mean, just human nature, but especially just in business, I wouldn't even say just buildings is. We all look for that incremental improvement. Let's make a little bit more profit margin instead of saying, no, no, what's the ultimate prize? It's a living building. It's. And instead of saying, hey, let's not just incrementally improve a. You know, I've got experience doing waste and recycling on this. Instead of going from 30% in New York City with some clients to 50%, how about we say, how do you go to zero waste? You know, it's like, so I think sometimes we don't think of, okay, what's the ultimate goal? And now break it down. So, so let's transition to talk a little bit about the future, but before we totally predict data, machine learning, AI.

23:36
Speaker 3
So, so do you see anywhere where in our industry people are more willing to share data and what's their reluctancy to do so? I mean, are we worry we're going to train some large language model and it's going to put us out of business? I don't know, what are you seeing out there?

23:50
Speaker 4
It's funny, I mean this is a conversation that comes up so often these days and obviously there's a squeeze on people's time across from many different

directions. But I think we can also look to other sort of billable hour based professions like legal services that have done a really fantastic job leveraging like, you know, next generation tools to improve efficiency. The risk here is that, you know, are there like, well, we'll say like, are there risks of trying to accelerate work through these mechanisms? Yes. Is there a larger risk in being left behind? Definitely. You know, so it's sort of like we don't. Do we know exactly where we're going? No, but like get in the car, right?

24:35
Speaker 4
Like we're going somewhere for us, so much of the way that we leverage ML and AI, really more ML like statistical models is to fill in better data earlier in the process to inform decisions. And that really has been, I think, one of our differentiators over time. And it's a really fun part of what we're able to do. The conversation around the use of firms data to do it though has changed a lot in the last few years. A lot of the data we've collected to build our foundation models, you know, has come from all sorts of sources. Like friendly firms across the industry have helped us build those data sets 2020 to 2023.

25:15
Speaker 4
And then as the people's understanding of the value in their data has changed and we'll say we've seen, you know, whatever, like actors with various intentions, like using firm data towards, you know, different ends. I'll leave that there. Expectations have adjusted accordingly. So really when we look at our long term data architecture here, it will be about okay, maybe we do some model training. But user data stays on the user side of the fence and it's great to see the improvements in things like these models and our own pipelines because it helps us provide better results to the users while keeping the data protected in their core. And for our sort of like enterprise clients that include some of the largest companies in the world, this is exceptionally important that their data is their own. So it really is like a pipeline design problem.

26:05
Speaker 4
A lot of that stuff is not deployed or like commonly available applications. But people are sensitive about their data right now and I think some of that is reasonable, some of it's important and some of it might hold people back if they can't draw that line in an appropriate way.

26:20
Speaker 3
Yeah, well, I like how you said, and we do that too at Schema is just protect that

customer data. But there's some that we can pull in if needed. You know, it's not like we're just going to go to ChatGPT and say render this hotel and John Portman architect and one day do we have to pay John Portman's estate a royalty? We don't know. And if we ran that 10 times, it'll be 10 different ones. But if we can use your best practice data, your tribal knowledge when you're logging into C scale, when you're logging into Schema, like that's the differentiator, right? Is when you can really build on your data and you have it more than you think you do. So okay, so let's talk about the future. Jack, I love to ask my podcast guests, hey, what's next?

27:02
Speaker 3
What are you kind of excited about? What are you reading up on what's next in the green Dueling Movement?

27:06
Speaker 4
You know, there's a. You talk about what's next. I want to talk about the last year. And the last year has been a time of change in the US and in the world. Priorities are shifting at the federal level, at state levels, people are adjusting to geopolitical uncertainty, trade uncertainty related to tariffs, changing priorities at every level. Some of that's pretty ugly stuff. And at the end of the day, it's the world we live in. I think in many ways, when we look at these patterns and unfolding at various levels, it's really a chance to get back the fundamentals and say, okay, we have this very nice mission and this very nice goal, this hill we're ready to die on. But to defend that hill, we need a wider set of tools.

27:56
Speaker 4
And so much of just like what it means to run a business in AEC or in any domain is ensuring that the work you're doing provides core business value to the people you're working with. Saves time, saves energy, builds out meaningful programs across large firms, lowers the burden or friction of doing analyses that the client requires, and helps with all the data management tasks that, like, people burn time, fee and friendships, like dealing with. So what I see, like, that's been our journey. Adjustments this year is like, all right, kind of a back to basics.

28:34
Speaker 4
And our goal in the next year, looking forward is really to understand the way that all of this work we do for architects, again creates real value, not just for the architects, but for the owners and managing data and suppliers and managing

their, you know, their deal pipelines for low carbon materials. And that I think is needs to be the future of sustainability in the US at least for this period. Like, we can't forget that building is an industry and that our success will be dependent on how well we can leverage flows of capital in the industry towards more sustainable outcomes. You know, because they're better, not because it helps you. We'll say, like, you know, feel better about yourself.

29:22
Speaker 3
I agree with that. So, yeah, shifting time. So let me know if you agree with this. So my dad has passed away now. He'd always ask me when I was running my green building companies and say, charlie, does it matter who's in office? How does that affect your business? And I'd say, well, for Republicans in office, it helps pro business, right? It helps as a small but growing business. But, you know, of course, Democrat in Office more progressive. And I said, but you know what, Set aside the federal and agenda, state, city, and don't forget corporate mandates. You know, really still keep a lot of what we're doing front and center. And at the end of the day, that's really who's going to drive it. Right.

29:53
Speaker 3
So, so state, I mean, Georgia, it seems like you go back and forth between San Francisco and New York. Right. You know, those are some places where there's state, but of course, city. You know, New York City law 97, arguably the first kind of quote cap and trade for a building and that's making major change. Right. You're going to find hundreds of thousands of dollars. And then you might get to the corporates though, right? When the US Gets off the Paris climate accord, big corporates say, oh, well, that doesn't matter, we're going to do it our way. So how much of that do you agree there's still some mandates Even when federal governments ebb and flow. Is there still enough demand or do you think this time around it took a deeper cut than maybe four or eight years ago?

30:35
Speaker 4
I think the thing we really saw, the biggest difference this year or the biggest loss, I'll say is like, yeah, no, I agree with your assessment. There's like in terms of a regulatory and like a mandate landscape moving these things forward. Check, check. The other thing at the end of the day, especially when we talk about architects, is like, they care, they want better buildings. Every time a building is designed, the architect makes thousands of decisions, okay, four end up in the press release. The rest is just good design. If you can help people, just do good design, people will do it. And if we can prove that makes a market right

for low carbon materials, that's scalable, heck yeah. Right. Like that's, you know, that's meaningful. That provides real value.

31:19
Speaker 4
The thing that I think we did like that, you know, I like that is the biggest changes here is less that there's, I mean there are headwinds everywhere for sure, but really there were really important tailwinds that we lost the IRA funding that was cut. I was talking to a manufacturer last night who does sort of novel cement replacements with like, you know, through weight, better waste. Processing of municipal waste is able to make these cement replacements. Had funding for a plant, two plants in the American Southeast. Funding for both was cut. These are going to be projects that reduce the waste and hauling burden in cities. Provided revenue right. To these municipalities and also provided like local source. We'll say like supplementary cementitious Materials that provided better strength for those local like concrete ready mix suppliers. The fact that's not happening is like.

32:21
Speaker 4
And okay, instead there's clients trying to meet these typicals and they're shipping SCMs in from other countries. You know, what the heck. So the fact of the matter is those things hurt. We lost a lot of cool projects that were going to come on board. But because I think that company specifically the fundamentals are so strong because of the value they provide to that whole ecosystem, they're going to find a way. And I think that's the grit that I see right now is like, we're going to find a way, Charlie. Not so easy to stop us.

32:51
Speaker 3
Well, I'm somehow just the progress. A little progress. Every day a little progress and then some bigger doors will be open. So thanks there for that assessment. But anyone listening that's an architect, here's Jack and here's Charlie trying to make you the hero again. But anyone that's an owner, just know you're going to benefit from it all. While suppliers, we've got data for you too. So. All right, so let's shift over kind of the rapid fire part of our interview. Chuck, what would you say is your specialty or gift?

33:20
Speaker 4
I think the thing that has really helped me along is being a good listener. And through that a pretty quick learner. Like there's so much I don't know. Okay. Like such big blind spots. And it really is, you know, you're listening to clients,

you're listening to your counterparties, you're listening to users, you're listening to the software engineers asking the right questions and using that to synthesize a path forward in domains where you are not an expert and testing that. And that really is like, you know, I don't know so much that comes down to like trying to be a good listener. And that's something that I've really like focused on here, being humble, making adjustments where I need to.

34:00
Speaker 4
And I think like that really is something that I feel like I've been able to put into practice and by just like taking a step back, able to take a lot more agency in the way that all these complex systems need to come together. So I would say that's been my gift.

34:13
Speaker 3
Good stuff, man. Any tips on how to be a good listener? Did you always have that? Did you have to sharpen the saw there to figure it out? Is it just really, I don't know any tips there? And what I think is on the max side of that is you admit I Admit we don't have it all figured out. There's lots to learn and that makes us coachable. Right. And always been. But I don't know how do you be a good listener? Any tips there?

34:36
Speaker 4
I'll talk to about some specific. Like we do At C scale 360 feedback twice a year, everybody in the company reviews everybody else's performance. Lightweight form, doesn't take much time. But you know, like, everybody's going to review the most junior person. Everybody's going to review me. And this is really helpful. Totally anonymous. And each of us like reviews it, we reflect on it and we try to find paths forward. And that's been really helpful as a company, especially as like a, you know, like not the biggest team, like less than 20 most days. You know, seven core and then contractors like really helping us keep everybody in a growth mindset about how we work together. So that's like a specific company mechanism that we've really been able to make the most of.

35:20
Speaker 4
I think like interpersonally it's really just about not just showing interest, but being interested in other people. My success, C scale success is dependent on any particular person. Like having a good day at work most days. You know, like, how you doing? What's up? Like, what are your blockers? Like, what hurts? Any conversations recently that you thought sucked? Let's talk about it,

let's try to solve it. And then listening is half of it. Then being accountable to those people is always the other half. So how do we as a company try to act on the insights we take from each other? That if I hear from, say, a developer that, man, this particular part of the stack is bothering them. Great. Let's allocate resources to fix that part of the stack so that you can have a better day tomorrow.

36:07
Speaker 3
Right. And that's some great leadership there. Thank you for. I'm glad went there. That's really cool stuff. Sounds like a great place to work, Jack. Okay, do you have any good habits or routines that help you stay on point?

36:19
Speaker 4
Yeah, for all the listening. Also spend time ignoring everybody. Charlie, I don't know you schedule your day. But like I need a couple hours each day just to like, you know, grind things out. And just having, we'll say like time every day to ignore the world helps that happen. Not always possible, obviously. But like, if I have kind of like work to do, it's not just coordinating. Like I need to block my calendar, apologize to everybody in advance and just like get in my hole and like.

36:51
Speaker 3
Dig, you know, trying to schedule More time even, just to think, as crazy as that sounds, it's actually me and one of my business partners did have an hour and a half the other day just trying to predict the future. And it's like, man, that was fun. It gives you energy. So you're right. I, I, I put all my personal and business on the same calendar. Luckily, I have a rockstar executive assistant who really helps a lot with just, you know, how we, you know, meet on a Monday, meet on a Friday, plan ahead and you know, for me, it's tough to get everything done that maybe needed to be done that week, but, you know, by a Friday afternoon when we have this work session together, it's like, okay, like, you good? I'm good.

37:29
Speaker 3
You know, we got as much as we could done and we'll just.

37:32
Speaker 4
We'Re back up after a little rest.

37:35
Speaker 3
But you're right, I mean, there's a lot of people that want access to you, want you to validate things. And it's one thing to delegate, it's another thing to empower them. So they really only bring you the biggest of problems. Right. A problem needs to rise to a level it can be solved. And, you know, sometimes it can get a little lonely at the top. At the CEO level. Right. That's where you need maybe it is a board of directors, maybe need mentors, maybe need peers and business mastermind. So I could unpack that with you for another hour, but I feel for you and I'm right there. But it sounds like just time management. No, just value your time. That's what I'm hearing. Hey, you know, you got to give it to your team, your internal customer, so to speak.

38:15
Speaker 3
Make sure just a positive attitude is going to win, you know, so. Well, hey, I'm a fan of the bucket list. Not everybody has a bucket list. Some, some may already have written some things out. For some, it's travel or adventure. Maybe write a book. I don't know. What are a couple things on your bucket list?

38:31
Speaker 4
Okay. The thing that's been like pushed off for a long time that excited to announce here. I wonder if this will have happened by the time the episode is released. But I'm getting married next year, Charlie.

38:40
Speaker 3
Amazing.

38:40
Speaker 4
And I'm really excited about it. Thank you. It's like we're so busy, you know, and it was one of these things like, nope, we're just going to set a date on the calendar and that's happening, you know, like, and at this point, there's a Venue, there's catering. Both me and my partner, like her parents and mine, are one of seven. So it's going to be not small, but, like, is. Are all the deals work out? No. Is it like, it has its own momentum right now? So that's really like a nice kind of bucket list item. She had a great architecture kind of travel fellowship for the last year and a half, and through that, I got to do a ton of traveling, see super cool parts of the world that she worked on her fellowship.

39:20
Speaker 4
So I feel like actually my travel bucket list is kind of checked off for the point for now. And the thing I really want to develop over the course of 2026 is I need to get out more and move my body more. Charlie. I spend so much time in front of my screen that's like, you know, finding regular routines or we'll say, you know, physical exercise is going to be, I think, an important part for just, like, maintaining our current velocity. So that's my. That's my goal, moving into 2026. Yeah.

39:48
Speaker 3
You've still got some of those design roots, so it sounds like you traveled some there with Beyonce, but is there, like, one? Even if it's not in the next couple years, just down the road you gotta go to or go back to. Give me one destination.

40:03
Speaker 4
You know, I. I didn't travel much in my early 20s, and now after doing all this, like, travel with her, I feel like I'm totally this person who would have annoyed me, or I'm like, oh, that time we had in Rome, like, it was so lovely, and I would do back in a heartbeat to spend it. Like, were there for six weeks. I was working strange hours, but it was such a dream. The food was good, the climate was good. The history was, like, all around you. If I had a chance to spend another month there, I. I would. I would say yes immediately. She's got to get another fellowship. You know, that I could take that, pushing that, right?

40:38
Speaker 3
That's so cool, man. I love that. And I've been married 19 years. We and three boys. 17, 14. Do you have any questions as you journey?

40:49
Speaker 4
Yes, for sure.

40:51
Speaker 3
Let me know. And it's, you know, I hope this, as you plan this wedding, it's your creative outlet. I think as entrepreneurs, we need a creative outlet. Mines. I collect and share rare bourbon and rye whiskey. That's a whole nother story, but

just, you need a creative outlet. Have fun. And, man, congrats. I love to ask my podcast guests about books, if not a book, maybe documentary or podcast. But is there. Is there a book you'd recommend? It doesn't have to be about buildings.

41:19
Speaker 4
The book that I read, this author just had another book come out recently, and a lot of people read this guy, Botlav Smeal. He writes a lot about energy across human history. And Energy and Civilization is sort of a tome, but it's such a great overview of the way energy systems inform the way human life happens and the way human life shapes new energy systems. I think when we think about, you know, we'll say, like the 21st century and the way we're moving through it. He helps. He helped me in a big way understand the relationships, right, between the techniques of energy and the way that things like buildings, et cetera, come together. So that's an important book for me, you know, this year, honestly, like, I've tried to read more novels in a little bit of time.

42:10
Speaker 4
I have to read, like, I love the Russians. I think that there's so much subtlety in the way that they talk through human characters that I consider myself a perceptive person. But I learned so much about human behavior reading their really detailed descriptions of these social interactions. So that gets me going. It's a little bit of a pleasure thing. But I do think people. It's all about understanding people.

42:36
Speaker 3
It's all about people. So we'll put some links there. I love to do that for anyone that put out a pro tip or a book. Last couple of things, Jack, as we start to wrap up. As you look back on your career, is there anything you wish you'd have learned earlier?

42:49
Speaker 4
I was really focused early in my career on technical proficiency. And while I don't regret that, I do wish I understood earlier in my career how much relationships matter in this space. And I'm lucky, like in graduate school, to have a strong phone, a friend network when I have a question about water forest management, like waste circularity. But I think it took me actually, like, it dawned on me later the power of those things. And I had this early understanding that, like, well, if you can, like, do the math, then you must be good at the thing and really trying to understand that those technical skills live

in a social context, right? And actually, the best way to learn those technical skills is to engage in communities of practice where other people are asking the same questions.

43:39
Speaker 4
So to translate this into advice for somebody who might be starting their career is, like, get involved in communities where, like, people are asking these questions. Maybe if you're an architect, it's code. Maybe it's ULI greenprint. If You're a developer. Maybe it's, you know, something like the commitment programs for contractors, if that's your jam. But like, talk to other people, they're thinking about the same problems and you're going to learn a lot from those conversations that you'll never learn from just like reciting the methodologies or the certifications.

44:11
Speaker 3
Yeah, I totally endorse that. I mean, my world in my career was even Beauma Building Owners and Management association in my construction days. Agc, Associated General Contractors and. And they just have these young professional programs eventually. And the one I think people forget is volunteer on a committee, right?

44:29
Speaker 4
Yes.

44:31
Speaker 3
You know, you're not there to sell what you're doing or your services. Just you're going to be out on some folks that if you're hanging out a lot and they get to say you got a good attitude and they learn about what you do is you're top of mind. And they're quote Roland X as their green person maybe, and just got to put yourself out there. I think, you know, the pandemic, you know, forced us to. I mean, I work a lot from a home office. I go on. We have co working space here in Atlanta or part of Georgia Tech's accelerator. But it's, you know, you got to go to people. Yeah, exactly. He's got to get back out, you know, that human connection. So. All right, last thing as we wrap up.

45:05
Speaker 3
Someone listening right now, I'm sure is getting prompt about your story and

any words of encouragement to someone that's just now jumping into this decarbonization movement.

45:16
Speaker 4
The water is warm. Jump on in. I'll say that there's a lot of. Maybe to say my last point, but a little differently. There's complexity here, for sure. There is all these certification systems, reporting schemes. You'll end up in these, like, super exhausting conversations about the way that this body handles this thing. The, like, advice I would give, I guess is like, keep your eyes on the prize. At the end of the day, there is another world that we want to see, another way of building that we think should happen. Yeah, there's a lot of mess we need to deal with in the meantime. Yeah. We need to think about things like the way that this credit system versus this credit system rewards which behavior. But, like, that's not the goal. Okay. Like, those are mechanisms for understanding our behavior.

46:07
Speaker 4
Think backwards from the outcomes you want to see. Find the people around you who feel the same way. And if you see a gap, fill it. You know, like there's. If you can find a way to be useful to others. You'll, you'll have a long career. So that's my smattering truism for professionals.

46:25
Speaker 3
We need your help. Come on in. And there's a lot of like minded people here and but just know that even if you're grading up one building this, if you were to even calculate how many say homes that might now power, just sometimes you think it's am I doing enough? But the short answer is especially on the commercial building scale, right. That, that we're working on, it's like, yeah, I mean that's pretty big impact. So it's all about impact, decarbonization and gas. Jack, just best of luck as you grow C scale. Everybody listening? Connect with Jack on LinkedIn. Let them know what you thought of the podcast. Man, thanks for being on the podcast today.

46:58
Speaker 4
Thank you, Charlie. I wish we got like, I got to interview you in turn because I'm super excited about everything happening at Schema and that you're working on these days. So best of luck to yourself.

47:06
Speaker 3

I need more content. I might have you back. Let's do it. No thanks, man. This is awesome.

47:10
Speaker 4
Flip the script. Have a good day.

47:14
Speaker 2
Thank you for listening to this episode of the Green Building matters podcast@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 you can actually 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 really enjoyed it, leave a positive review on itunes. Thank you so much. And we'll see you on next week's episode.