

## **Path to Zero Emissions and Propane's Role with Tucker Perkins Transcript**

Introduction ([00:01](#)):

Welcome to Green Building Matters, 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 a green building professional from around the globe to share their war stories, career advice, and unique insight into how sustainability is shaping the built environment. So, settle in, grab a fresh cup of coffee, and get ready to find out why green building matters,

Charlie ([00:34](#)):

Everybody. Welcome to the next episode of the Green Building Matters podcast. I got a lucky job here when I put on the podcast hat. I get to interview really awesome green building professionals from all over the world. Today I've got Tucker Perkins with us. He's the president and CEO of PERC. And we're gonna talk about propane. We're gonna talk about just fuel mixes, and as we just overall do work towards greener buildings, decarbonization, what role can propane really play there. So we interviewed one of your colleagues earlier, Tucker, so I'm excited to continue the conversation from your perspective. So welcome to the podcast today.

Charlie ([01:10](#)):

Thanks for having me. This is a topic that's really maybe the most important topic in our industry, so thanks for allowing us to have a conversation.

Charlie ([01:19](#)):

I'm glad you're here. And it's just all about conversations, relationships, dialogue. I like to ask all my podcast guests to take us back though. Where did you grow up, go to school and even early in your career?

Tucker ([01:32](#)):

I'm talking to you today from my home in Richmond, Virginia. I have almost spent my entire life somewhere near Richmond, Virginia. Slipped away for college, slipped away to work a lot, but seemed to always return back to the Mid-Atlantic. I went on to college at Virginia Tech as an engineering undergrad. I'm a civil engineer, but I spent about half my time in the halls of the mechanical engineering building because I was drawn to fluid flow, oddly enough. Came outta college, was a consulting engineer for a while developing subdivisions and really gave me a great appreciation that I didn't have at the time. But now, in later life, as we think about urban planning and walkable cities and the impact of climate on people, it was a great experience to think about urban planning from that perspective and how cities evolve and how rural communities evolve.

Tucker ([02:30](#)):

Managed my way to get a master's degree in business at the University of Richmond, the most beautiful campus here. Spent a good part of my life in the natural gas industry, building pipelines, designing pipelines, operating pipelines operating a bunch of facilities like liquified natural gas facilities. So things that are very much in the conversation. And then the last, I don't know, 25 years, I've either owned propane companies or operated propane companies. And now I have this nice job with the Propane Education and Research Council, where we really think about what is the future of propane. I would say, Charlie, we think about it probably differently than most people. We don't think about it trying to preserve our business, trying to preserve the fuel. We really think about what do builders, architects, engineers, hospital owners, fleet operators, what, what, what do they need for in their quest for a fuel of the future?

Tucker ([03:27](#)):

And do we, do we fit there? And if we do, then we really work to make sure that we have the right offering. If we think we don't fit there, then we uncheck that box and move on. So it's really different propane is such a different fuel, I think, than natural gas or electricity in that we've always been a supporting role. We've not seen the story. It is really forcing us to

rethink propane in the net zero environment, propane in the world that really sees a need for renewable electricity. And fortunately, we have the tools at our disposal sometimes to really work hard and get in front of some of this to create, yeah, truly net zero homes. And I know Brian talked with you about renewable propane, which is a term that's crazy, but we'll talk later about not only zero carbon propane, but we'll talk to you about negative carbon propane.

Charlie ([04:25](#)):

Okay. I want to come back to that. I love your background. I went to Georgia Tech, so we started ACC together. I'll never forget a good fraternity pledge role to Virginia Tech. Had some nice times there on that campus, and it sounds like you even went the UVA route too. I love it. And I love that you've been an operator, an entrepreneur, and now you're really helping your industry. For all of our listeners, whatever your industry you're in, most of you're in the green building or built environment. You gotta get involved with your trade organizations too. And so that might be one of my questions, what is the role of PERC in the Propane Education and Research Council? What is your role in, in your industry?

Tucker ([05:05](#)):

Three roles. And first, let me tip my hat to you as a Georgia Tech engineer in my consulting career. And then really later being a real engineer. I never worked with a bad engineer from Georgia Tech. They were always great engineers. And, I don't say that about every college, so I always tip my hat to the Georgia Tech engineers. But you know, the role of the propane education and Research council, we'll call it PERC from here out, is really to think about three things. Are we using propane safely and do everything we can do to see that architects know how to deal with it consultants specified correctly, and that homeowners use it correctly, that our industry installs it correctly, that it's used safely, and that we really work tirelessly to help train architects and builders and engineers and homeowners, and the people that fill your 20 pound cylinder at your local refill facility, that they know how to deal with it safely.

Tucker ([06:03](#)):

And so that's number one. Number two, we do talk about marketing and make people aware of how propane works beyond natural gas. Make sure builders might think about it in a world maybe where they're thinking about net zero homes, how can I use propane? So a big effort is made around marketing and communications, but maybe the most important role sometimes for us is to see where we think the gaps are and to begin to fill in those gaps. Now, a classic example 10 years ago, we really never thought about power generation. That was something you left to the electric utility. And today because of maybe the complexity of how the grid is changing, the electric grid is certainly more fragile. Many places are more expensive, many places just don't have enough electricity to do what industry or even in some cases regular builders want appliances and using power produced by propane. I'm just fresh off a call where we're working on micro CHP, and this is one of the few podcasts where anybody even knows what those letters mean. But to generate four or five kilowatts of power, adequate hot water, adequate heat, probably wasn't something that was even a pipe dream a decade ago. And today, here we are bringing out three or four different products into that space.

Charlie ([07:30](#)):

I'm excited about that. That's innovative. That's what I'm hearing from you so far, Tucker is part of your role is to help innovate within your industry. There's still an important, maybe newfound need for some of the energy sources you have. A little bit more about you, and then let's talk about some of those innovations. Just, Hey, did you have any mentors along the way? Anyone that maybe opened some doors for you, you looked up to?

Tucker ([07:53](#)):

Certainly. And I kind of hope most people would say their father. I think my father was a brilliant engineer, actually trained at Tulane. And was just as great an engineer as me. He was a better mechanical engineer than I'll ever be. But it just kind of opened up my eyes sometimes to the power of engineering and maybe critical thought. Fortunately for me, he had a

brother that was not a college trained engineer, but was probably one of the smartest engineer types, and had that mechanical mind. And so those, I loved to work between my uncle and my father because I could kind of see the technical complexities of being an engineer, but then the practical applications of being more of a mechanic, if you would, and those working between those two guys just showed me that endless possibilities of innovation and tech technical abilities. That's exciting. Really probably imprinted me, certainly along the way. I had a couple great professors that really impressed you. I remember I was just talking with one of my college friends a couple weeks ago talking about the importance of conservation. And that's sad for me that's 30 some years ago. We're talking about, you know what now? I think conserving water, conserving energy, using the resources available to us wisely really made an impression on me then, and probably is even more relevant now than it was then.

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

That must have been a fun family to be hanging out with, talking about what's possible and best practices in trade and engineering. One more look back, just what are some of your proudest accomplishments so far?

Tucker ([09:34](#)):

I actually have loved being an entrepreneur and starting businesses and hiring people and training them. And I love that. I loved working in the natural gas business. I would remark to my wife some days that I had the best business in the world because I got paid to do something that was just fun. I think I would've done it for free. I did love seeing just the vastness of what natural gas can do and thinking about that labyrinth of pipelines that ran basically from Texas to my gas stove in Richmond, Virginia, and all that it meant in terms of warmth and comfort and affordable price. And that was at a time when we didn't talk too much about natural gas as being harmful to the environment. A conversation that's really been front and center.

Tucker ([10:22](#)):

And so really for the last 10 years, one has been laboring to really understand where these low carbon fossil fuels fit in this store. And it kind

of starts with the belief that I don't think all fossil fuels are equal. I don't, certainly coal and oil and wood, I'd argue they're all fossil fuels. They're not nearly the same as natural gas and propane. I think those are low carbon fossil fuels and with this great combustion property. I think the last, particularly five years now have been really engaging in this conversation about what are the fuels of the future and what is good for the environment, what's good for our health, and frankly, what can we afford at the same time brings us warmth, hot food, hot showers bringing, bringing that whole conversation together. And I'd say the last five years have probably been the most rewarding, also probably challenging time of my career.

Charlie ([11:19](#)):

I know you've got a podcast path to zero and you've had to put a lot of attention into this and how to innovate. Let's demystify for our listeners here, if you would first high level the difference between natural gas and propane. Can you just real quick layman's terms?

Tucker ([11:37](#)):

I do think propane and natural gas are often inseparable in the United States. Virtually all of the propane comes from cleaning up natural gas. Propane is one of the heavier things in a natural gas. It's one carbon, four hydrogen. So as we really talk about a hydrogen obsessed economy, we come back eventually to talk about propane because propane is an excellent carrier of hydrogen. But propane is found where we find natural gas, and it's one of the heavier things in a natural gas well that needs to be cleaned up and removed. Also, in a world that drills a lot of oil, when I first started in this industry, 75% of the propane came from cleaning up oil wells. Today, virtually all of the propane comes from cleaning up natural gas wells, and we ship 70% of this US propane around the world which is easily shipped, easily transported. And so we're the provider of energy to all of central America, most of South America, lots of Asia, Japan uses a heck of a lot of us propane, and then we ship quite a bit into Europe.

Charlie ([12:48](#)):

You paid special attention to the fluid dynamics class. I heard you say that earlier so that paid off here. So let's talk about efficiency. I'm a green building guy with a construction engineering background, and when we look at the energy needed for our buildings in our homes. Some are more over efficient than others. So I think that's one thing people don't realize. That it's actually a very efficient burn. Can you speak to that a little bit? And, and then how does that into any, any kind of carbon impact after that efficiency.

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

I guess that's one of the ways we have pivoted. We now have two PhDs on our staff that pretty much do nothing but model emissions from anything we're talking about. So tomorrow we could be talking about on-road engines. We could be talking to farmers the next day about irrigation uses or agricultural uses today. Love talking about this space. And by the way, we sell about 10 billion gallons of propane in the US a year. 70% or 7 billion gallons goes into residential and commercial space. It is by far the most important space. The way architects, engineers, and builders view propane is very important to us. So, let's talk about that because I think that has been our strength. We think often about how much energy went into a device and how much did we get out of it?

Tucker ([14:20](#)):

And by the way, at the conclusion what was left over. And that's been the beauty of a furnace, a water heater, even a cooktop, that direct use. And we don't really get behind any appliances that wouldn't be 90% efficient. In fact, water heating today, 97, 90, 8% efficient a furnace, a modern furnace is 95, 90 6% efficient. And we're now starting to bring out some of our first hybrid applications, which would be those. Think of a traditional heat pump, it does everything a traditional heat pump does when it's 40, 50, 60 degrees. Very efficient. But when it goes below 40 degrees, and you were talking about those cold Georgia mountains every once in a while, today you don't need anything but an electric heat pump. But here in another two months or so, you'll be looking at zero degrees there. We have the best

features of a gas furnace so gas backup, electric heat pump, some of the classic technologies we're bringing, and those efficiencies are gonna be in the high nineties.

Tucker ([15:29](#)):

And that's where we look because At the end of the day, you and I, we'll, we'll talk about climate and we'll really think about carbon emissions. I wanna talk about how much carbon is emitted into the air. I'm seeing enough conversation now that supports something I believe for five years or more, which is that there are a lot of emissions besides carbon emissions that can be very harmful. Health, our health is almost equal to the planet's health. And so we think about particulate matter, we think about nitrogen oxide, we think about sulfur oxide, our whole host of emissions that maybe people outside of the E P A don't like to think about, unless unfortunately you have C O P D or your children have asthma, bronchitis. So we think about that full emission cycle, and that is an area that's very different for us as we think about those low carbon fuels like propane or natural gas.

Tucker ([16:23](#)):

That direct use is often even in states that have a fairly high degree of renewable power, the use of propane is cleaner, in fact, today, cleaner in about 40 states than using electricity, because the electric grid is not what any of us envisioned as an optimum solution. The electric grid today, give or take 60% produced by coal in natural gas. We tend to think about appliances, we wanna measure them today against is it cleaner than, or dirtier than the electric grid today. And what we find is directly used in a highly efficient appliance, most often it's cleaner.

Charlie ([17:08](#)):

No, this is great. I wanted this to not be just some knowledge today, but some understanding. It's one thing just to get information, but hopefully those listening just realize we're gonna need an energy mix for the next several years to come as we all figure it out here in the us. I think about a case study recently. I think Germany got off of all of their nuclear energy immediately, and that really caused some problems. They had to buy



electricity at a premium from neighboring countries. And so we just wanna make sure we're all moving in one direction, but we're gonna have to have a certain energy mix. And, and that might be my next question as we move to some of the innovative propane initiatives, is, you know, let's take a look at infrastructure.

Charlie ([17:53](#)):

I, I grew up in a small town in the north Georgia Mountains. That's what you're talking about, Tucker. I'm in Atlanta now, but you know, they don't have piped natural gas to them like I have in Atlanta. So for that heating need especially, but maybe cooking and water heating there, there are 500 gallon thousand gallon propane tanks at pretty much all the homes across the North George Mountains where I grew up. That's the infrastructure that was needed there at the time. So can you talk a little bit about that? Is from an infrastructure standpoint, isn't that where propane is sometimes needed most? Let's just talk about that for a minute.

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

As we think about it, and from a builder's perspective, you're absolutely right. Propane has always been viewed as the fuel you use when you're beyond the natural gas main. If you have access to natural gas, you're gonna use it. That's how we all do it. We're thinking about propane generally in more rural applications agriculture and beyond the natural gas mains. We sell 7 billion gallons to, in 5 million homes, they rely on propane for their primary heat. Rural Georgia, particularly the mountains of rural Georgia. A perfect example. They need the energy density of a good heat they need and have energy storage. And as we now talk about, we think about energy storage in a different way, thinking about batteries. I always love to liken the fact that you just said you might have 500 gallons.

Tucker ([19:18](#)):

You might have a one year supply of propane as your energy storage, but I don't think it gives a builder or a homeowner H V A C technician a, a pass. You still have to have efficiency. It still has to be cost effective. And it's, I think it still needs to be good for the environment, if not perhaps the best

solution for the environment. So we see farmers love to use it for their needs because they're generally don't have adequate electricity, certainly well beyond natural gas mains, but all over this country and all through the developing and developed countries, people rely on propane. They don't call it propane all over the world. Some places call it L P G, but that is exactly what they're using. And it's versatile. You can use it for cooking, hot water, clothes, drying, all your outdoor living, which is so important now in parts of the country.

Tucker ([20:16](#)):

We see more appliances outside the home than we see inside the home. Yeah. You know, you think about outdoor grilling and patio heaters and pizza ovens really the things that kept so many people going during covid they just really have built on that. But for sure you know, used beyond the natural gas Maine. But I would say today, as we think about now, the evolution of the system, a couple things are happening. Natural gas companies may not be able to take on new customers like they did five to 10 years ago. So now we see a lot of activity in things that your listeners are interested in. Hospitals, nursing homes, gymnasiums, and relatively urban settings are relying on propane because they may not have available electric infrastructure, they may not have adequate natural gas infrastructure. And we can mimic that using propane, even electric microgrids for whole subdivisions now are beginning to see that something that we're seeing from time to time.

Charlie ([21:20](#)):

. That's why I wanted to bring you back on. I know we'd interviewed your colleague, Brian, and just a little more understanding about this and what's available. Let's talk about efficiency and decarbonization. Why electric companies don't want to build the next \$10 billion power plant, so they don't mind giving out incentives to just make sure we're overall a little more energy efficient in our homes and buildings. But, from your standpoint why push for some efficiency or some change when it comes to propane?

Tucker ([21:52](#)):

Well, I think again, maybe that's why some people, even in our own industry, would want more efficient devices. If you have a less efficient device, you use more fuel. That's exactly why we want a more efficient device. At the end of the day we're really looking for the recipe that is the most efficient initial cost, the most efficient operating cost. But at the end of the day, it's still about minimizing our environmental footprint. And I just think it's the responsibility of all energy providers to rethink that equation. All right. We've moved, we moved from wood to coal and coal to oil, and I would say oil to natural gas. And we're really moving from natural gas to renewable electricity, particularly in the built environment as fast as we can. And in what we see, you said it earlier, there isn't one solution. There's not one silver bullet. Renewable electricity is not the silver bullet because it'll take what, 40, 50 years probably to build it out. And if we're not careful, we won't be able to afford the solutions and nor will the solutions be either clean or reliable. So propane is a vital part of that. But I do think as a homeowner, we have a responsibility to minimize our emissions, but also as an energy provider, we have a responsibility to the homeowner to give them affordable solutions. Thank

Charlie ([23:15](#)):

Let's talk about the future. You mentioned a few innovative things that your team's doing a lot of research on. Maybe these products are already in place, but what's the future of propane look like from renewable propane? You mentioned some microgrids. What else do you suggest we be well read on?

Tucker ([23:32](#)):

It's funny, we could spend the next three hours talking about some of the technology we're working on because it's so exciting. But let's break it down into two buckets. One, we work hard every day on having the most efficient appliances. And you know, one of the things we're talking about is how the burner works on your gas stove. The most efficient burner, simple, mundane things like that. We're already at 97, 90-8% efficiency in water heating. So we don't have much room to go there. We're not gonna ever be

more than a hundred percent efficient in furnaces. We've gotten to 95, 90, 6%, but now we're beginning to work on hybrid applications. Because what our research has shown with all of our partners is that if we combine the best of electricity with the best of fuel burning appliances, then we can turn those features on when they are best suited.

Tucker ([24:21](#)):

And at the end of the day, that's the best operating cost for the consumer, the best impact to the environment. It's the perfect solution. But to boil that, so one, we're working on these appliances and I think we are probably most excited right now about combined heat and power or micro combined heat and power or micro cooling combined heat and power. Ultimately let's just say a small device that sits out there replaces your furnace, your water heater, your electric meter. You have everything you need right there. And even if the initial cost is competitive with that furnace and water heater combination, you have the ability to be islanded. You don't have to be connected to your power company, the power company. You can be connected and then there you can use power when you need it, but you can make your own when you don't have it. Micro C C H P is really what we're investing almost all of our effort into. It's already there for a hospital size solution or a high school education really almost there for even fast food size things. The last nut to crack is how do we get there for residential homes, a 3000 square foot home, a 2,500 square foot home? We need to be cost competitive, but we're almost, we're closing that gap fast. And part of that gap helps us as electricity continues to be more and more expensive, less and less reliable. It kind of makes the economic drivers there. And I would say in the next couple of years, you'll see multiple brands into the marketplace. I'll take a breath, but once we get past the most efficient appliances we can have, we know we still have to work on the fuel.

Tucker ([26:07](#)):

I guess I spend too much time in California, but we have all these great solutions that are cleaner than diesel cleaner than the existing solutions. But still, the powers there say, but tell me about your fuel. Can you get to

zero carbon? What's your path to zero? That's how we get to my podcast path to zero. And 10 years ago, it was just an idea. Five years ago, we were homing in on one way to do it the same way we make renewable diesel or sustainable aviation fuel by taking used cooking oil or waste oils and converting them to propane. I'm really happy to say that today we got 13 pathways. Two of them are actually in commercial use today. Today we make about 30 million gallons of renewable propane. I think we're fairly comfortable that we're gonna make up a billion gallons a year over the next 10 years and do it in some crazy innovative ways. So that's the future for me. What's exciting is not one of those, but the combination of those changing the fuel and changing the appliances.

Charlie ([27:15](#)):

Thank you for that. Just wanted to give you the megaphone here to share. I need to go read up on some of the C H P there that you've all been working on. I think that's exciting. I see that on some, like you mentioned, very large commercial projects, but it's great to know that can scale down, maybe propane in the mix and, and I love it. We do need a mix and just all of our listeners hey, we're putting out some very green buildings, maybe net zero, net positive just think about all the energy sources you really need. And then that kind of gets us even to the word resiliency. And I'm sure that's a place where you may need some propane, not just for backup there too. I get it. And I wanna be a realist here as we make this journey together for decarbonization. So let's just a few rapid fire questions here, Tucker, to get to know you as a successful executive and entrepreneur. Just hey, what would you say is your specialty or gift?

Tucker ([28:11](#)):

Well, for a guy who talks as much as I do, I'd still like to thank my specialty is that I'm a good listener. That I'm, I'm kinda listening to what the needs are, listening to the conversation and then chipping back in. So but communicate and to be a good communicator, you probably gotta be a good listener and then be able to use the right words to get back to it.

Charlie ([28:32](#)): I can tell that. And like I said, I've listened to some of your podcasts recently . Do you have any good habits or routines that keep you on point?

Tucker ([28:39](#)):

I try to get up every morning and start with a little bit of exercise, get my head cleared, get ready for the day in front of me, but start every day hopefully with 30 or 40 minutes of nice. Something to kinda open up my, my head a little bit,

Charlie ([28:52](#)):

Get that blood flowing. I love it. Just a couple more here. I'm a fan of bucket lists. Are there one or two things maybe on your bucket list, travel adventure, write a book? I don't know what's on the bucket list.

Tucker ([29:04](#)):

Isn't that funny? I really, I hadn't really thought, I really don't keep a bucket list. I tend to live in the day. Sure. I would say if I had a lifelong goal it is to make sure that my kids are my friends and the people that I'm around me are kinda all moving in the right direction and have a kinda balanced life. But yeah, I'm, it's funny, I'm very much alive for today and try not to take tomorrow for granted. I lived with my father. I said it was very important to me, but he was that guy that was gonna work all day every day, six days a week. 'cause He was always gonna do it when he retired. And at 57 years old, a doctor said, you might not live to 58. And the good news is the doctor was wrong. But I see a change in a man. Who had always said, I'll do that tomorrow. And I guess it was a good lesson for me to maybe live every day, like it might be your last.

Charlie ([29:59](#)):

Well, that's some good wisdom there. Absolutely. Well, I love that you're enjoying every day, maxing it out every day. Is there a book you'd recommend? It doesn't have to be about buildings, about propane, a book that you like to tell people about?

Tucker ([30:12](#)):

Yeah, it's funny. I think the book that really impressed me the most was a book called Undaunted Courage. Okay. the story of Lewis and Clark. Yeah. Kind of exploring the Pacific Northwest kind of starting in St. Louis basically. And thinking that, oh, in a couple three days they're gonna crest one mountain and maybe see the Pacific. And of course, now we know this country has not only one mountain range, but lots of mountain ranges and just, they kinda read about their perseverance and their ability and to do the task. But in the face of what I would say is insurmountable odds that that book just still to this day, kind of reminds you to sometimes persevere, but be well aware that you don't know many things that you don't know.

Charlie ([31:03](#)):

Oh, well that's great. Well, I'm gonna put a link to that book so our listeners can check it out. Thank you. Last two things. If you look back on your career, is there any career advice you wish you'd have known a little earlier?

Tucker ([31:19](#)):

It's funny, and people don't ask me these questions much, so I think when you're a young engineer or you're the young person in the room I would tend to listen to the older people and kind of keep my mouth shut. And I think I always encourage younger people to speak up. They have life experiences and they have viewpoints that really matter. I wish now probably I had spoken a little bit more when I was young to share my viewpoints. I really do think it's important that young people just entering the workforce realize their views are important and share those views.

Charlie ([32:01](#)):

Yeah, no better than them to speak up at that moment. Alright, last question. Let's say someone's listening. You've taught me a lot, you've taught them a lot about the role propane has in the built environment. Maybe they're just now getting into a career in green buildings or renewables or energy. Any words of encouragement for those that are either making a career pivot or maybe they are a young professional jumping into this movement now, decarbonization green energy? Any words of encouragement as we wrap up?

Tucker ([32:30](#)):

I've got the guy who started a couple businesses myself. I love that entrepreneurial nature. I actually have been involved in home building most of my career as well as civil engineer, it's something you do. I would say the most important thing is love what you do and do what you love. But if you, you've gotta find passion in what you're doing. If you find passion, you'll continually make an effort to get better and better. Even if you start off good at it, you're gonna make yourself want to be successful today, you have to be good at what you do in order to be good at what you do. At least for me, you gotta believe in what you're doing and you gotta seek continuous improvement not only in yourself, but the people around you and the people working together with you. So my, my easy advice is take a risk, but make sure you love what you do and do what you love.

Charlie ([33:26](#)):

I love that. One of my mentors said, you can't fake passion. So you when you actually have it. And so thank you for sharing wisdom with us today. Hey everybody, check out the great work Tucker and PERC's doing. Keep an eye on some of these new initiatives that I learned a lot today and just understand, hey, we need an energy mix as we fight the good fight here and do a little better. So Tucker, thanks for being on the podcast today. I really appreciate it. Loved

Tucker ([33:52](#)): Our time together. Charlie, thank you so much.

Speaker 5 ([33:55](#)):

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