

Stanford eCorner

Opportunities in Climate Tech [Entire Talk]

17-05-2023

URL: https://ecorner.stanford.edu/videos/opportunities-in-climate-tech-entire-talk/

Julia Collins is the founder and CEO of Planet FWD, which is empowering the next generation of sustainable consumer companies with its climate management platform. Planet FWD is focused on decarbonizing global supply chains with the belief that all organizations can achieve Net Zero. The platform is inspired by Planet FWD's own snack brand, Moonshot, which launched in 2020 as the first climatefriendly snack brand. In this conversation with Mo-Yun Lei Fong, executive director of STVP, the Stanford Engineering Entrepreneurship Center, Collins explains the growing climate tech market especially the areas of decarbonization and climate accounting — and shares advice for founders based on her experience as a serial entrepreneur.



Transcript

Narrator Who you are defines how you build. 00:00:10,020 - Hi, I am Mo Fong and I'm the Executive Director for STVP, 00:00:12,870 the Stanford Engineering Entrepreneurship Center. And I'm here to welcome you to the Entrepreneurial Thought Leader Series and it's wonderful to see you. This series is sponsored by STVP and BASES, which is the Business Association of Stanford Entrepreneurial Students. Today, I am delighted to be joined by Julia Collins for ETL and I have a wonderful bio for her. She is amazing. Julia is the Founder and CEO of Planet FWD. The leading climate management platform for consumer companies. Empowering the next generation of sustainable brands through its proprietary data and software. Planet FWD reduces the cost and complexity of creating sustainable products.

The platform provides consumer companies with the tools to understand and reduce their carbon footprint to align with The Paris Agreement. The platform is inspired by Planet FWD's own snack brand, Moonshot, which launched in 2020 as the first climate-friendly snack brand. Moonshot was recently acquired by Patagonia Provisions, a first for Patagonia in more than 20 years. A serial entrepreneur, Julia, previously co-founded Zume Pizza where she became the first Black woman unicorn when she created a venture-backed tech company, valued at over \$1 billion. Prior to becoming an entrepreneur, she served as Vice President and Chief Operating Officer at Harlem Jazz Enterprises, which holds The Cecil, an Afro/Asian Brasserie, and Minton's, a historic jazz supper club. While there, The Cecil won Best New Restaurant of the Year. Earlier in her career, she built industry-leading food companies in New York City. Serving as a leader, she grew brands such as Union Square Hospitality Group, Mexicue, and Murray's Cheese. In addition to leading Planet FWD, Julius sits on the Climate Collaborative Board, the Food for Climate League Board and the Advisory Council for Launch with GS. She is also an active angel investor focused on funding female entrepreneurs and BIPOC founders.

Julia is also an ambassador for the Smithsonian National Museum of African American History and Culture, and Julia holds a BA in biomedical engineering from Harvard and an MBA from Stanford. So, we're welcoming back and she resides in San Francisco with her two sons and partner. So, everyone please join me in welcoming Julia to ETL. (audience applauding) We're gonna set the stage a little bit. So, as I was reading your bio, definitely there's a food theme throughout and there was a wonderful Forbes article, if you haven't seen. It basically says, "How one woman with a box of crackers aims to save the planet." So, can you tell us a little bit more, what did you think when you saw that title? And then also, how did you get the idea for Planet FWD? - Yeah, I mean it, when I think I, 00:03:10,440 when I saw the title, my initial reaction was, no pressure.

Just trying to save the planet with a box of crackers. But I'm not unique in my passion and connection to food. I think most people, I'd like maybe 97% of the humans who I interact with have some love of food and the 3% who don't, I just don't have any interest in them. (Julia laughing) I guess there's some people that survive on soy, but very few.

And for me it really came from my grandparents. They moved to the Bay Area during the Great Migration, which as many of you know was a time in US history when millions of Black people were migrating from the south to the north mostly to take advantage of new economic opportunities. But this was also a time when northern cities were heavily segregated. And so, my grandparents who were trained as dentists, actually, moved to Bay Area to start a dental practice where all people were welcome. Everyone from every race and walk of life. And this idea of serving people and this idea of equality really was the through line in that practice and in their lives. And so, you could imagine when you're really focused on service and equality, one of the best ways to express that you're serving people, that you're serving all people, is through food. And so, we just had this life growing up where we didn't lock our door, everyone was welcome. There was always something cooking. And so, I suppose I grew up always believing that sort of the best moments in my life or the times when I felt the most human and the most connected to others, was when I was sharing food with them.

But I will say that when I first shared with my family that I wanted to go into food, it was a hard no, it wasn't even a conditional no. And so, I sort of went off to Harvard to study biomedical engineering and came to Stanford to study business. And I think part of what I was doing there was trying to hedge the risk, not so much for myself, but for my parents and grandparents who were in some way subsidizing this crazy idea that I had to be a food entrepreneur. So, it's something that is authentic to me to wanna work in the space of food and technology, but it really did take, Mo, some time for me to grow into my confidence that I could make a career in the area that I had this passion. - Yeah, I think a lot of students could resonate with that. 00:05:30,720 I studied chemical engineering and then went off to be a high school teacher. It's like, wait, what are you gonna do? So it's wonderful you studied biomedical engineering and then went off and did amazing things in the food industry. So, tell us how you got the idea for Planet FWD though. - Yeah, so the description of Planet FWD 00:05:49,590 has like a couple of terms that I think are worth unpacking. The first is this idea of climate management software.

Like what is that? I think probably the space that most people have familiarity is carbon accounting. This idea that we can use data and software to measure the greenhouse gas emissions intensity or impact of any thing, any organization, any physical product. And this was sort of like a sleepy area of accounting for many years until the most recent sort of wave of net zero commitments where massive consumer companies have pledged to reduce their carbon emissions to zero. And then in the next less than a decade. And so, all of a sudden this very sleepy industry of carbon accounting, which by the way was controlled mostly by consultants, has being disrupted and it's being disrupted by companies like Planet FWD that are leveraging big data and building really sort of intelligent software to be able to do the work of consultants more quickly and efficiently. So, that is sort of what Planet FWD does. The value proposition is carbon accounting that's faster and more efficient than previous methods. The reason why I'm working in this space is because I'm just incredibly passionate about being able to create a scalable solution to addressing the third like a 34% of global greenhouse gas emissions that come from food systems. Often when we think about the climate crisis we focus on transportation and energy and manufacturing is the sectors where we need to work on decarbonization and of course, we need to, I would not say that we shouldn't focus on decarbonizing transportation or energy. But with a third of global greenhouse gas emissions coming from land use and food systems, what I saw was that there was really a lack of investment in this area.

And although there were many companies that needed decarbonization solutions in food, there really weren't any tools to serve them. And so, that is why I decided to build Planet FWD and to build it not as a services business, but as a technology business. - Got it. 00:07:50,940 So, why start with measurement? Why not just go after the solution itself and decrease those carbon emissions? - Yeah, I mean in order to employ 00:08:00,960 a decarbonization strategy, which is essentially, what are the ways that we can remove greenhouse gas emissions from our farming, I'm talking about in the case of food, manufacturing, retailing, distributing, you have to first know where you are. You can't improve anything that you can't first measure. And the problem with the sort of incumbent solutions is that they created these measurements that had no granularity or transparency to them. So essentially, the way traditional carbon accounting works, if you really wanna know, is you take a look at the purchase data for a given organization. How much you spent on pencils and pens and whatever it may be. And you multiply those purchases times an emissions factor. So like a generic emissions factor for let's say asparagus all over the world.

But as you can probably sense no two asparagus are actually the same. It depends on where they were grown, how they were grown, what methods were used, did you use pesticides, did you use renewable energy? And so, the incumbent solutions that were relying on broad averages were really not well designed to be able to facilitate decarbonization, actually understanding how to change your packaging or change your energy usage or change your farming practices. And so, what we wanted to do at Planet FWD was to bring a lot more rigor and a lot more integrity to the practice of carbon accounting. And we had to start with measurement first. You can't improve what you don't first measure, but we needed to improve the way the measurement happened in order to create decarbonization strategies essentially. - That's perfect. 00:09:32,310 Well, we're in the school of engineering, so I think all of us love to nerd out a little bit on measurement and this notion of you got to know how to measure something in order to improve it, I think resonates across everyone's fields. It's interesting, it's just about a year ago you said that we have less than 100 months to reduce planet emissions by 40% in order to stave off the worst of what will happen, if our planet's temperature continues to rise. And that was about a year ago that we have 100

months left. - Fewer than 100 months.

00:10:04,260 - Yeah so now, where are we 00:10:06,270 and what do you think about the urgency of this problem? - Yeah, I mean, the urgency grows 00:10:10,320 and I'll talk to you about the urgency, but I'll also talk to you about why I remain optimistic, 'cause I think it's always important to present both sides of that framework. I made that statement in May of 2022, and I think many of you who are following the space around climate change saw the most recent updates to the IPCC, which say that there's greater than a 50% chance that we will sail right by the 1.5 degree temperature rise that we're all predicting sometime before 2040. So, we are well on our way there. And so, the situation has gotten worse and not better. But at the same time, I sense and also experience a much higher level of interest in decarbonization than I did when I was starting this business five years ago. When I launched this idea very few people were interested frankly. Investors hadn't really built their thesis around what climate tech was. They were sort of feeling burned from the first wave of green tech where a lot of people lost a lot of money. And large global organizations were sort of trying to offset their way out of the climate crisis, essentially, purchasing carbon removal credits or carbon offsets to get to zero. Whereas now, five years later, we have large customers that are working with us.

We've had a huge interest from investors and there are trillions of dollars that are going into the space of climate tech and of other decarbonization strategies. So, I am seeing a massive acceleration, which makes me optimistic, but at the same time, we really do have to go faster. And so, if there's like one reason why I'm here, one wish that I would have, from being in this audience is that somehow my story might motivate more of you to go into the space of climate tech. I think it's a really exciting field to build within and there's so many opportunities available, particularly, for people who have that engineering background and mindset. - How many of you are interested 00:12:16,170 in climate tech entrepreneurship? Just to kind of get, wow, that's almost half the room. And so, we're gonna get into a set of questions about what is it like to be an entrepreneur in climate tech? And you mentioned that there's a lot of money going into climate tech right now. So, what was your experience raising capital for Planet FWD? And did you have any negotiables or non-negotiables as you were raising capital? - Yeah, so, this really isn't my first rodeo, Mo, 00:12:41,850 I think you mentioned in the introduction that I'm sort of the first Black woman to have co-founded a unicorn company, which in and of itself isn't tremendously interesting. I don't like value myself based on the valuation of any company that I've founded. But it does mean that I have had quite a lot of experience being a founder who's raising capital. So, I will tell you that back in the days of Mexicue, the food truck business that I had in New York City, I did not have any access to venture capital or even bank debt.

We completely bootstrapped that business. And I'm talking about like three founders not paying ourselves, crashing in an apartment, like using our credit cards to buy inventory and then selling through the inventory as fast as we could. But that business is now 12 years old and thriving. And I will say that, that venture capital really wasn't the right funding instrument for that kind of business. This is like a food truck to bricks and mortar. And had we taken on venture capital, we wouldn't have been able to achieve the kind of return that those venture investors would've expected. And so, maybe my hard nos or the places where I set a hard line is for a business that I'm building, understanding what is the right capital strategy for that business. We often talk about how can we raise money or how can we raise venture money, but I also do a lot of angel investing. I've done I think 26 deals in the last four years. And for many investors, many startups, who I don't wind up investing in it is not because they don't have a great idea, it's because the business that they're creating, while it may be highly valuable, is not well suited to create the kind of 4 to 10x returns that are expected on a four to seven-year venture horizon.

So my first thing is understand what's, don't ask yourself how can I raise money? Or how can I raise venture capital? Ask yourself what is the right capital strategy for my business? That could be a combination of grants and other awards. It could be some ability to build an early solution that generates revenue. I think 2 to 3% of all the businesses that you can build are actually appropriate for venture. It's a very small slice and it is I think also, I describe it as like a very narrow karma. To be a venture-backed founder means that you operate in a pretty narrow lane. Sometimes we think about founders just having like this, like these huge visions and these expansive ranges. But actually when you have hundreds of millions of dollars behind you that needs to be returned at 4 to 10x the investment in a very short horizon, you don't have a lot of amplitude. Whereas if you were to take on a scrappier approach to raising money, you might find yourself having a bit more flexibility. So, that isn't to say that I don't support venture capital as a catalytic instrument for building businesses. I just think there's some caveats that are really important to think about.

- Sounds like that degree of control 00:15:40,080 that you would like to have to make decisions is really highly dependent on who you're getting funding from too. - That's right, because essentially, 00:15:45,720 your investors become your board and then you as the CEO founder go and work for the board. So, maybe the other thing that I'd say, and this is me at 44 years old having had lots of chances at this, I've been up to bat lots of times. My hard nos are really around the people behind the money. And I have said no to investors who I didn't think I could align with from a values perspective. I remember at one point I was pregnant with my second son and I was like really pregnant. Not that you can be really pregnant or not really pregnant, but I was just saying, I was really showing and I could see that the investor was just highly uncomfortable. And he asked a lot of like risk mitigating questions around like how I was gonna handle being a founder and being a mom. Mind you, I've already done this once. And this was a very well-respected investor from a very big fund and he could have written a large check to lead.

And although I felt like I successfully got him over his nervousness about me being a pregnant founder, I nonetheless remained really concerned about my ability to work with somebody who couldn't understand that we all have a big life and you're more than just a founder. You can be a founder who's a parent or a founder who did these other things. And so, that's an example of me saying no to an investor, because I didn't think the values were aligned. I will tell you that when I was out raising 14 years ago, I probably didn't have that same confidence. Frankly, I probably would've said yes to that investor. And so, that's just one of the things that I've learned over time is it's not just the size of the check or the fund that's writing it. It's really the person who's behind the investment and whether or not you feel like you wanna work with them. - It's interesting, how did you figure out 00:17:31,260 what your values were and how to be able to articulate and then test whether the people you're gonna be working with share the same values. - Oh, my personal values or the values of my organization? 00:17:40,733 - Both. 00:17:42,000 - Oh, that's such a good question.

00:17:45,900 Well, I suppose the values that I have as a person come from my family and my parents, and I think our traditions. And so, there's a value around service and there's a value around integrity. There's also a value around joy. Yeah, and being able to do work that lights you up and that lights other people up. And so, those are my personal values, and those are important. Those are my guide. But I believe as a founder, you also need to make sure that your organization has values. And those values may overlap with some of the things that you hold internally, but organizational values meet a different need. Organizational values, in my opinion, are really in place to ensure that the company has an aligned point of view on how you do your work. Not just what you do, not just why you do it, but how you do it.

So, at Planet FWD, for example, we have a value around grace, which means that we operate in a way that reflects that other people are valuable and that we ourselves are valuable. We have a value around clarity, which means that we have a bias for documentation and we have a real process orientation. We articulate things very clearly. And so, having those values as an organization I think is tremendously important to being able to hire the right people and bring the right investors on board. And in the absence of being able to articulate your values, no one can actually understand what you stand for. And that's problematic. - Yeah, for sure. 00:19:11,610 But it sounds like you've already codified them and it's helping you make decisions. And we've talked so far about how do you make decisions in funding, hiring? Wanted to ask you a question about product decisions. Because you could have taken this product in many different ways.

And measuring emissions, there's different levels that you can measure. And so, I've been learning about scope one, two, and three. So, maybe you can talk about what is scope 1, 2, 3 emissions and measurements, and then how do you decide when you take your product ideas and make them narrow and pursue that or widen it, so to capture more customers per se? - Oh, that's a good question. 00:19:48,420 - How do figure that out? 00:19:50,700 - Yeah, so forgive me for the folks in the room 00:19:51,600 who already know this, but when you think about measuring the greenhouse gas emissions related to an organization, first you have to set a system boundary. What is the organization, how do you define it? And then you divide the scopes into three. So, the first is your scope one emissions, which are your direct emissions. those are the emissions that are related to you directly procuring your services. So, if you had a trucking company, those are the emissions related to you driving the trucks that you own on the road. And then the scope two was your indirect emissions. This is energy that you're purchasing from the grid, heat, gas, so on and so forth.

But the third category of emissions is called scope three. And this is becoming like the hot topic. I think everyone is interested in scope three decarbonization, because scope three is everything else. Everything that is not direct or indirect. What might that be? That is your supply chain. So, of all the things in scope three, the hardest one for people to get their arms around from a measurement and decarbonization perspective, is the supply chain. - Well, so making this real like your box of crackers? 00:20:53,160 If you look at the list of ingredients, you're gonna have to measure where the carbon emissions are coming from for each of those ingredients. The box itself, like that's a lot to measure. - It's a lot to measure. 00:21:03,570 And if you are any consumer company, whether you're making crackers or you're making sneakers, you're making watches, 90% or more of your emissions, typically, come from scope three.

So, if you've set a net zero goal, meaning that you want your organization to be at net zero by 2030 and 90% of that needs to come from your scope three, then you really need a tool that helps you to do that. And so, the reason the product decision that we made at Planet FWD was to build a set of tools that was on top of a very rich dataset that I acquired. And we can talk a bit about the role of M&A in startups that allowed me to be able to measure scope three with much more rigor than incumbent solution. So that was like a product decision. There was also a go-to-market decision involved in that. So, do we play vertically, meaning we're obsessed with consumer businesses, which is by the way, massive markets, food, fashion, beauty, or do we go horizontal and work with data companies and banks and consulting companies? And we made a very aggressive decision to take a vertical approach, because of the product market fit. So, the product that we designed is very good at decarbonizing scope three. So supply chains, and that's doesn't really matter, if you are a data company, you don't have a big supply chain, but it matters a lot if you are PepsiCo or Unilever. And so, the product decision and the go-to-market decision were hand in hand. - Is there any frameworks you can share with us 00:22:39,750 in terms of how you make decisions around the types of products that you would wanna design for or is it, yeah.

- Yeah. Well, the decision-making framework itself 00:22:50,580 that we use at Planet FWD is pretty light, but it is important within teams to be able to signal where you are in that continuum of making a decision to something that we say is, you know, is this an idea? Is this a proposal or is this a decision? And that creates a lot of clarity within the team, especially,

when you're brainstorming or you're working very quickly across multiple projects. It's important to be able to sign post and signal, oh Mo, this is just an idea, I just wanna get this out. Versus this is a proposal I'd like for us to be able to price this and scope it. Or in some cases like this has been decided and I'm communicating it as a decision. In general, I think we are very inspired by design thinking when we think about the way to bring products to market, in particular, human-centered design. So before we had any perspective on Moonshot as a cracker product or Planet FWD as a data and software platform, we just did a lot of listening and by we, I mean the early teams, so myself, one other MBA who I hired. Really just did a very like methodical customer discovery sprint. We talked to 50 chief sustainability officers working in companies to understand what their needs were, what their motivations were, what their incumbent solutions were. And we used that customer discovery to create sort of an initial perspective on what we could build.

And then we did some really rough prototyping to be able to test it with real users. And so, we used Figma and some other tools to be able to sort of create a sample product and then got that in front of users and had them tinkering with it. And then from that we developed a sort of a quick application. So, it was actual software, but again, we sprinted like maybe six weeks developing it and then we figured out would people pay anything for it? Would people pay even \$1,000 for this solution? And so, it was just really this, we've heard this framework a lot of times to test, to rapid prototyping, testing and iterating. And we very much did that. And I think that is the right way to build products. - Absolutely, and now a lot of people 00:24:55,500 are paying for your product and so, we can talk about scaling. So, how do you scale? And you touched upon M&A. So most of the time people think, oh, if I wanna scale, I get more money, I hire more people and then I build more products, more features, and then you scale in that way and get more customers. But this notion of M&A is not just an exit strategy.

It's actually, potentially a way to scale too. So, how did you decide to use M&A in your scaling strategy? - Yeah, I mean, so the question 00:25:26,190 that we were asking ourselves was, for the set of data that we needed. So essentially, our dream was to have a set of data that was essentially the carbon footprint for absolutely anything in the global supply chain. Like everything, buttons and zippers and asparagus, literally everything. That's kind of a crazy set of data to imagine existing except for we found a team that had been building toward that over 15 years. And when we encountered that team and we had a peak under the hood, we asked ourselves the question, not should we buy this company? But now that we have evidence that such a set of data kind of does exist in the world in some fashion, should we build it ourselves, should we buy it or should we partner with the solution? So, it was really not a M&A or not question, it was a build, buy or partner question. I talked to you a bit about those early customer discovery sprints that we did, but in one of them we tested using sort of partner data versus internal data that we had developed. Not for all of the global supply chain, but for a very small set. And we just tested the differences, the differences in the outcomes, the difference in the customer experience. And then we took a look at how long it would take us and how much capital it would take for us to build the data on our own.

Then we took a look at the market dynamics and how quickly the space was heating up. And we estimated that by purchasing this company and their data, we accelerated our product development by about 24 months, which is material when you think about fundraising cycles and this speed with which this carbon accounting market is moving. But there's so many other, and those are easy things to quantify or relatively easy, easy knowable. And there are some other things that are very hard to quantify. Like is there values alignment between your organization and the organization that you're buying? Is there incentive alignment? What are the risks? And so, in addition to being able to figure out should we buy this, what's the right price? We also had to figure out for the party on the other side, is this a win for that person? In the end it was the person who founded the company came over to be our CTO on an interim basis until we integrated all the data into our solution. But I guess I wouldn't wanna say that it'll work every time. I think the initial way that you talked about sort of building and raising does work a lot. And there's some special cases where acquiring another company may work. We acquired based on wanting data. In other cases, some people will do acqui-hires or acquire a company to get a very special team.

And that again is an elegant solution, but I'll say probably not the most common way to build a team. - And are there any thoughts or tips about 00:28:14,640 scaling companies that you'd like to share? - Yeah, I mean, I guess the caveat 00:28:18,840 that I'd wanna raise here is that I am sort of like the 0 to 100 founder in terms of revenue. And so, the perspective that I can give really is in those early stages, sort of pre-seed maybe to series C or D. I don't have the perspective of having an IPO. And in some cases I have had an acquisition such as the case of Moonshot. You have to be able to build the proper structure within the company, not just the product in order to scale it. Because as you scale, you scale everything that exists, including mistakes and misalignments and gaps in your processes. And so, before you can scale, you have to first grow a little bit. You have to dial in your people processes. And I think sometimes earlier in my career I underestimated the importance of really good people management, you know, talent management, culture, all of that stuff.

As you begin to scale, it becomes harder and harder to wrap your arms around an entire organization. So, you really do have to build that connective tissue early on, particularly, because after a certain point you can't hold everything as the founder or as the entrepreneur. You have to have a team that can hold just as much as you're holding, otherwise it just becomes burdensome. So yeah, so I guess the framework there is to make sure that you grow a little bit before you scale and that you really do try to shore up any blind spots or any gaps in your organization before you decide to pour more fuel onto that fire and let it grow. - Yeah, that's great advice. 00:29:57,870 Thank you so much, Julia. I think it's interesting about accelerating. Like pouring more gas is like the accelerant that you need to grow that company. But in terms of other ways of accelerating, you have to take into context of the environment, like climate change is accelerating fast, climate tech is

accelerating, the regulations in this area is accelerating and changing very quickly. So, how do you keep up with all of this? Change and the speed of change, and how does that factor in to how you're running the company and making product decisions? - I feel this tension a lot actually.

00:30:39,330 There's often so much more that I'm interested in than I can actually do. And I think I often feel that I'm pulled in different directions, even within my organization, new features, new markets. But focus really is the most important thing for me in terms of being able to speed up and go faster. And so, cultivating a practice of being able to identify when to say no. Both in terms of what you sign up for to do personally, but also, what you decide to do as a company. For example, at Planet FWD, our technology, we can measure anything. So, I talked to you a little bit about the decision to go deep instead of going wide, but even with that deep vertical orientation of consumer, we can do food and beverage, we can do fashion, we can do beauty. Actually the technology's agnostic, we can measure anything. But we had to make a focus go to market decision in order to be able to move quickly in the direction of our market. So, we decided to focus in on food and beverage, 'cause we thought we had a bit of an unfair advantage there.

My background, our investors, but within food and beverage there are like 50 different subcategories, food service, quick serv, I mean quick service, fast casual, CPG, meal delivery kits. I mean it can blow your mind, but if we serve too many stakeholders or attempt to, it really slows us down. We don't get the learnings as quickly, we don't fine tune our messaging and marketing as well. And so, we are frankly still at Planet FWD cultivating a discipline around focus so that we can speed up. But without that you sort of find yourself making slow progress across multiple areas as opposed to really being able to tackle them in quick sequence. - Focus, that's really key. 00:32:29,250 How do you think about regulations and how do you work with regulators so that you can be more focused and not go so fast that you start breaking things? Do you see the regulations as being the guardrails or do you see it as being the barriers to innovation. - In our space, there are some places where we are very, 00:32:50,130 well, I'll say from my perspective, I'm very keen to see some increasing regulation. I think an example is the SEC climate rule, which we've seen just a first glimpse at and everyone is sort of watching the space very intently, like popping popcorn and just like waiting to see what's gonna happen. Many people expect that there'll be some news in July.

The reason why this is a big deal is that it would essentially, impose a framework for demanding that companies over a certain size report out on their scope one, their scope two and their scope three. And you might ask like why is this a hotly debated piece of regulation? And it is because many people feel that the scope three piece poses an undue burden on organizations. And so, there's a massive amount of energy around limiting the SEC climate rule to just scopes one and two. But of course, y'all probably know where I stand. I want everyone to have to measure their scope three, not just because it creates more business for me, but because 90% of impact for these companies is often living in their scope three. And so, if we're not requiring any measurement then we're probably not facilitating any decarbonization. That is an example of where policy could be a massive accelerator to my business. Do I have time to like lobby in Washington for this? No, but I do strategically make sure to place myself in rooms where I have the ability to demonstrate how our technology could make it possible. So, I'm not there saying, you should do this or you should not do this. I'm there saying were you to require that scope three must be measured, here are some of the technology solutions that could get you there.

And I'm not just there with myself, I'm there with my competitors, all of us saying like, listen, here's a whole industry that can actually serve this need so that I can eliminate that as one of the barriers. So, that's an example of the way that you as an entrepreneur need to be aware of regulation in your space and participating in the regulation conversation even if you don't have the resources to go lobby on Washington. - Absolutely, awesome. 00:34:47,100 Well, we are going, I'm gonna ask you one more question then we are gonna open it up for questions from the audience and also on YouTube livestream. So get your questions ready. My question here is you saw like half the room is interested in climate tech entrepreneurship, which is awesome. And then for the other half, if you were gonna encourage 'em to check this out or even just entrepreneurship in general, because they're maybe kind of hesitant or a little risk adverse, what would you say to students who don't know where to start? - What would I say to students 00:35:18,420 who don't know where to start? - But are passionate about starting somewhere here. 00:35:21,810 - Okay, okay, because that's the first thing 00:35:22,643 that I was gonna say, which is like always a little bit controversial, but I think sometimes we glorify entrepreneurship and we like hold it above like everything else that you could do in your career. And the fact is like there are so many other amazing things you can do in your career and being an entrepreneur is one of them, but being an intrepreneur within an organization and creating change within organizations is equally exciting. But for those who've already said, "This is my thing, I'm gonna do it." I think you just gotta do it.

Like you have to get it out of your head and get it into something that's tangible. Michael Seibel from Y Combinator gave me the best advice a few years ago, 'cause I kept coming to him talking about my ideas and my ideas and he's a pretty frank guy and he's like, "You know what Julia? You realize your ideas don't really matter, right?" And I was like, "Yes." But what he explained as we continued the conversation was like, it's great to have a good idea, but it's really your ability to execute on that idea and to refine it and to continue to refine it over time. That is the thing that's special. It isn't just having a great idea. Nonetheless, I think for those of us that spend a lot of time in our heads as I do, it is important to have a process for getting your ideas out. So I keep a journal, if you saw my bag that's in the back. I keep a journal just where I'm constantly getting ideas out, whether they're company ideas or product ideas or whatever it is. So, having a practice where you can funnel those ideas into something that lives outside of your brain is really important even if it's just a piece of paper. I think also, building

around you a group of friends who are similarly interested in entrepreneurship is important, because at a certain point you're just gonna look crazy to a lot of people. There comes a point in your entrepreneurial journey where you are either like the smartest person in the room or people think you're absolutely crazy and your idea's nuts.

And so, you need people around you that can kinda keep you balanced in that way And then, just never underestimate the power of building something that people can actually hold in their hands and react to. Because absent of being able to see those interactions, you're just biased by your own ideas of what the thing could be. And then maybe the final thing that I'd say is sometimes I talk to people who are like, there's so many things that, I have so many ideas. And I think many of them are viable. You have to find the thing that you're just so in love with the problem, 'cause the solution is gonna change a zillion times. Planet FWD was first a regenerative ingredient marketplace and then it was a cracker company and then it became a... The solution has changed over time as we're just getting smarter about what we're doing, but the passion is solving climate change like that has not changed. And I'm so in love with this problem that I can almost be agnostic and open as to the solution and just use data and sensing to be able to get there. If you're too married to what the product is gonna be before you're in love with what the problem it's trying to solve, then you might find yourself in a situation where you're building something that nobody really needs or cares about. - I love that.

00:38:33,780 So, find a problem that you love to solve. If you have a lot of ideas, get it out and then just do it. I think that's great advice. So, we're gonna take some questions from the room. If you have a question, go ahead and raise your hand, we'll get a microphone to you. - [Audience Member 1] My question is, 00:38:49,050 on the basis of carbon points. We've seen companies buying carbon points and they continue to produce carbon and some companies being carbon negative and supplying points. Is there a way around it or then just a policy decision? What's your take on that? - Hmm. 00:39:03,990 I tend to be pretty skeptical about the power of either carbon offsets or carbon removal credits as a true climate strategy. I think there are not enough high quality carbon offset projects on the planet for us to just offset our way out of the climate crisis.

We can't just buy things and make it go away. And I feel pretty passionately about this. Nonetheless, I'd say about a quarter of my customers are interested in achieving carbon neutrality either for like a product or for their organization. And where they are, what's really important is for them to focus on reducing emissions first. So, like everything that you can do to decarbonize within your organization and then for those unavoidable emissions, 'cause we still live within the law of thermodynamics, they're always gonna be unavoidable emissions to leverage carbon offsets like a laser. To really just shave off that little bit of unavoidable emissions at the end. And where they do, it's really important to vet those carbon offset projects, not just by the provider, but all the way down to the project. Is this additional, is this permanent, is this transparent, are there buffer pools for leakage? So, I'm not saying that there's no place for carbon offsets or carbon removal credits within a climate strategy, but I am saying that they have to be used sparingly and with a high degree of caution. - [Audience Member 2] One of my questions is, you talked, 00:40:28,920 I mean, about the decision to go into M&A to expand your business and I was wondering about the company culture and what you did towards like bringing those people together in terms of the, I mean, the power and the importance of really integrating not only the companies, but the people that come from each of these companies. - Yeah, so in the case of the acquisition 00:40:44,940 that we made at Planet FWD, it was a very small team that came over and so, it was probably a lighter lift, but at the same time the key person that we brought over is no longer with the organization sort of by design.

We knew that ultimately, they were looking for something in the longer term that was different than what the role of like a CTO of a venture-backed startup was gonna be. A certain level of ease and a certain level of intensity just we're never gonna be able to share the same space. And so, I think just being upfront and honest about not only where people are right now, but where they'll be in 12 months or 24 months is really important, 'cause the reality is that most of the people that are in the organization that you acquire are not gonna be with the acquiring organization forever. Then I have the other perspective of having been acquired. So, Patagonia bought Moonshot. And in the case of that my whole team went over and are happy there and are doing really well and that was a condition of us wanting to work together. So, in the case where a condition of you wanting to work with the other company is that the people are gonna continue to work together, then it is so important to take the time to get to know each other. Your relationship is necessary, as two parties who have never interacted before, is like, of course, underdeveloped at the point that you decide to merge the organizations. And so, you have to find hacks and shortcuts to create that relationship, which means spending time, having conversations, asking questions, doing references. And so, sometimes I think what you have to do is slow the process down a bit.

We think so much about like what's the purchase price, what are the terms, what's the timing? But sometimes you have to be willing to slow down the M&A process to allow time for the teams to just really get to know each other. And it doesn't mean that you ultimately, wouldn't do the deal, but it does mean that you're able to address some of the things pretransaction that are easier to address before you've made the acquisition. - [Audience Member 3] My co-founder and I 00:42:48,570 are doing something somewhat similar to Planet FWD, but for scope two emissions. And one thing I was really interested about what you were saying about revolutionizing this sleepy sort of consultant-dominated industry is we are finding even though we might be able to build a tech solution a lot of institutions, specifically in the public sector, still want that personal consultant relationship and I'm really interested on how you might have gone about convincing them that a purely tech solution is the way to go for them. - I don't. Yeah, at Planet FWD right now 00:43:22,110 we have a balance of software and services. So, the urgency of speed with which we need to take action on climate means that we can't be gated behind consultants. It's just too slow. But at the same time, there's a lot of context that comes into play when you're doing this

work within real companies, not just on spreadsheets. And so, people have questions and so we have a balance.

We're probably 75% of our solution is delivered through our software product, but 25% of our solution is delivered by our team. Half of my organization are climate scientists and they spend a lot of time working through questions with customers. Ultimately, I absolutely hope I can make that mix from 75/25 something closer to 90/10. But I don't believe that there'll ever be a near future state where I'm 100% automated. I just don't think it'll happen. - [Audience Member 3] Sure, thanks. 00:44:12,961 - Yeah. 00:44:13,794 - [Audience Member 4] Hi Julia, 00:44:14,640 thank you so much for the talk. So, we actually work in the carbon market and we work in climate tech as well. And I completely agree with the points you made about quality and credibility regarding carbon credits.

And I was curious to understand, at Planet FWD, I know you guys use offset, so how do you actually select the carbon projects that you guys engage with and what are the kind of quality checks that you put in place? - Yeah, so we first look at the organization 00:44:41,280 that wants to purchase the offsets and we understand what they're doing and what their supply chain looks like. And wherever possible, we try to screen for projects that are close to the supply chain. So, if there's a supply chain that's primarily focused in North America, we're gonna look for offset projects that are in that geography and try to keep that proximity. The second thing is we're not just screening at the provider level, we're actually screening the individual projects and we're using the same frameworks that you're probably familiar with. We're looking for additionality, we're looking for transparency, we're looking for permanence. Where we believe leakage is an issue such as for many tree planting schemes, we're looking to make sure that the appropriate buffer pool's in place. And so, it isn't that we're doing anything that's incredibly revolutionary as it relates to vetting offsets. I think the thing that's different is we're doing it on behalf of a customer as a third party and so, we can be a bit more objective. And then the final piece of advice that we give is we ask people to buy portfolios of projects, because there's a good risk mitigation strategy in just diversifying your risk. You don't wanna be at the whim of any one project or one provider.

It's often a good idea to diversify it across a few. So, always buying a portfolio, always screening at the project level not just the provider level, and really using that framework to evaluate. - [Audience Member 4] Great. 00:46:05,340 and ask Julia questions afterwards. She's gonna hang out for a little bit longer. It has been so awesome and such a privilege to spend time with you, Julia, so. - Thank you. 00:46:14,298 (audience applauding) (upbeat music)..