



The Insiders

Episode 7

Brett

I think in all the clean sectors, how do you promote that to happen? Right, when it's not just the traditional spreadsheet, that it makes sense or it doesn't

Jeanette

When you need to start looking at things in a different way and new technology and innovation, you know, is your culture comfortable with a bit of change?

Brett

We all have to be part of this change.

Narrator

Welcome to the Insiders, a podcast on the latest advancements, challenges, and successes in innovation and technology. With industry leaders sharing their personal stories, we humanize the world of innovation and inspire listeners to push their boundaries and celebrate real humans shaping our collective future.

Marc

Hello, and welcome to the KPMG Insiders. My name is Marc Low. I'm the head of KPMG Ignition here in Vancouver and the host of the Insiders. Very special episode for us today, a cleantech episode with two fantastic guests, Brett Henkel, to my immediate left co-founder and senior vice president of business development at Svante. And Jeanette Jackson, CEO of Foresight. Welcome to you both.

Jeanette

Thank you.

Brett

Glad to be here.

Marc

Right. One of the things that we talk about at Ignition is this idea of innovation and technology as fundamental forces for good. And I think that's an important part of the conversation, is you have to believe that you have agency in the discussion. But I'm curious for both of you, my assumption looking at the work that you do is that there would have to be a fair amount of optimism in terms of the work that you do, just to get out of bed and do what you do on a day-today basis. But does that ring true for both of you?

Brett

Oh, I think it absolutely does. I wouldn't say I am an expert at history, but I like reading about really big events in the last few hundred years and some of the things that collectively humans have done have changed very, very quickly in the world wars. Even COVID is a good example of how fast the world changed and it touched everyone in the world and everyone changed something in their lives to cope with this and acted and did something. But at the same time, there was a reason for that, is that there was always something that was front and center that someone could understand why they had to change. And I think that that understanding is not quite there for climate change to get everybody to act collectively and very quickly. So I think it's very possible for us to do this. Technology is a part of it, but it's also our own behavior is a part of it in deciding to do that. I think if we all decide to, we can do it, but we haven't all decided to. That's clear. And that we have to get to that point where collectively all of us decide to tackle it.

Jeanette

Well, the funny thing about entrepreneurs is that they are eternally optimistic. And if you can imagine being a cleantech entrepreneur and having been one myself and

supported many in different capacities, it's almost like double the optimism required. That takes a lot of energy and commitment. As an organization, the organization I lead, it's quite an interesting position to be in because we are really here for the greater good. And what I mean by that is we see government, industry, academia, investors and other critical stakeholders, indigenous communities, all trying to move the needle. And what we're saying is, "Look, how do we get on the same page? How do we work together and sing from the same songbook so that we can pull resources and move faster?" So I'm hopeful, but organizations like that do tend to struggle because you're not selling a widget and making some margin. You're saying, look, government, we need you to step in and these are the mechanisms that we think not only that have worked domestically in other sectors or that are working globally. Let's share best practices so that we can again, continue to see real impact and opportunity to reach those goals. And I'm not sure we've quite done that yet, but there's certainly some clear paths forward. It's just how willing are people to commit and just move forward and acknowledge that that way of doing things is done? And I know I might have to sacrifice a bit of margin or revenue or net income on the one side, but within a couple of years, you'll be the most globally competitive sustainable business in that sector or in that space. So it's an interesting space to be in, but that's our lens.

Marc

Let's jump in there because there's a bunch of interesting things that are coming out of that answer, which I loved and Jeanette, you just mentioned this idea of you're trying to bring different stakeholders together, trying to get everyone to acknowledge we actually share a common goal. What needs to change? Canadian Technology Accelerator of New York Vancouver's Hyper Growth program. Picatic, now Gunkii, all kinds of amazing stories, so very, very excited to have you here today.

Jeanette

I mean, it's really interesting. So again, working with so many different stakeholder groups and pretty strong purview of the domestic landscape, but every organization in the institution seems to be at a different level or they have a different level of resources. They don't have the capacity. So they've been mandated to do something around ESG or they've been mandated to look at this business unit, but the actual capacity, it seems still

to be off the side of the desk. Another factor is in a lot of the organizations that have the opportunity for change, those organizations themselves, through industrialization, have grown over the last 20, 30 years. A lot of the team members have come within their own business, which is awesome if you're trying to save pennies on every operating unit. But when you need to start looking at things in a different way and new technology and innovation, is your culture comfortable with a bit of change?

And how do you get comfortable with that in a short period? Even if it's incremental, sometimes it's difficult. Then we get into the capital structures. There's long-term capital requirements for some of this infrastructure something. I mean, now we've seen quite an influx of AI solutions and automation that are actually allowing us to get some handle on reducing emissions. But then there's also the big projects, large carbon capture projects or large hydrogen energy facilities, fusion, depending on what your preference is. So I think again, there's policy, there's a willingness to be open and take a bit of... I don't even like to use the term risk anymore because in my opinion, it's risky if you don't. But not everyone's come to that same conclusion yet. And so how do you get comfortable with something that's different in a business that you've been running and familiar with for so long that maybe already has tight margins? And then where do we find the capital to allow these groups that can have the biggest impact to invest? And so I mean, it's a big problem.

Marc

So Brett, you're in the middle of this. I mean, at a market level, is it a carrot and stick discussion? First of all, there's a premise in the question. Of course, something needs to change. Does something need to change in your view and in order for us to accelerate and get to these milestones?

Brett

Yes, I think it does need to change. If we stay in the same mindset that we have now, we're not going to make it. We're like jumping for the edge of a cliff and we're going to miss it, but it's a really tough question of what needs to change. I think quite a few things need to change, but what's in my ability to try to do is education. I think if people and companies and governments have the knowledge and understand that knowledge, I think generally we will come more to the same conclusion of

what we need to do and why we need to do it and that. But I think there's a pretty big gap in the understanding of climate change in general and what to do about it still out there. So I think that's an onus on us in the industry to help with that. And I'm certainly doing that and our company is going to try and touch the public much more on that front. And I think that's an on us on governments to do that.

And if we can get more on the same page, there will be more collaboration. And I think that then we can knock down those barriers much, much easier when there's an understanding. Because I think we have a lot of the path and the answers for a lot of this, not all of it, but we've made fantastic progress in even the last 10 years on technology. Look at renewables. If you wind back 20 years ago, no one would've thought we would get renewables to this stage where you might use renewables, or a lot of times you use renewables because they're better and cheaper. And just even if you don't think about CO2 emissions or think about the environmental aspect, they're better. That's amazing, and we've done that. And look what we've done on transportation sector.

In general, electric vehicles have made some fantastic progress and we know that's a path forward. And you get me on one of my most frustrating things that I hear is that, oh, well that windmill works and produces power, but it took all the fossil fuel energy to make it or same with all the other solutions we have. Well, of course everything is based on a fossil fuel system that we have right now. So you could say that about everything we do, but the thing is that we have to assume that all of those industrial sectors change. All of them. So yeah, now making that windmill takes a lot of fossil fuel energy to do that, but in the future, it will be made in a more environmentally way, and same with all of the other solutions. So you can't just not do something because it doesn't fix it. It has to be fixed on every front.

Marc

You raise this idea of systems thinking, and so that there's all these component pieces that go into whether you're building solutions in the space or you're helping advocate and coordinate ecosystems and so on. How do you think about the complexity of the system and how these pieces go together and maybe your role within that? It's a big question, I know.

Jeanette

It's too complex. It's overly complex if we're being honest. It's often so fascinating when you are an ecosystem builder and I mean, you're building your own ecosystem around your innovation and market, how many people aren't talking to each other. I make assumptions often that two people are working together only to find out when we bring them in a room that they've never met or shaken hands. So I mean, again, who's responsible for that? And even if you find... Or groups of organizations that have that ambition, how do you fund something like that? So I just chuckle because it's almost even within a sector, fascinating how five conversations between the right people could get so many more people on the right page and you really can't.

At this point, I think you need to have the right diversity of decision makers and stuff at the table. Otherwise, you're always starting from scratch. And that's hard on a venture. It's hard on a researcher, it's hard on service, everyone. Everyone because you feel like you're doing a lot of stop-starts. Start-stops, stop-start, I don't know, whatever it is.

And what worries me almost more than industry is consumer expectations because ultimately corporates make their decision based on their customers. And so we have a heavy task and have to figure out who's responsible for that.

Brett

Just to make a comment on the complexity. The complexity requires collaboration and because the climate change challenge touches everything we do. I brought up renewables and I brought up electric vehicles and fuel cell vehicles, but what I didn't bring up is more hard to abate and less well understood sources of CO2 emissions like we have in this room. Steel, we love steel. Steel we use for so many different things. Concrete. This building will be made with a lot of concrete. Plastic. Even though we would like to not use plastic, we have a hard time right now dealing with plastic straws and single use. What about your car and all the other things in this room that are made of plastic? We haven't even tackled that yet. Fertilizer. We feed 8 billion people in the world with fossil fuel-based fertilizer. Think about that one. That one's really connected to us, our survival. a certain point, you have to put that one on pause.

So all of these things are less well understood and they're complex. Those really get into complex. Buying an electric vehicle, that's pretty well understood and fairly simple. You think, oh, where's the power coming from? And then you have the discussion, oh, well, is it coal power? But those concepts are a little bit more easier to figure out. Think about you build your house and you poured your foundation with concrete, much more complex conversation. And tackling that sector of emissions requires a lot of collaboration 'cause it touches so many different aspects of the industrial world that we live in.

Marc

So I'll ask you a question follow up there, which is this idea that a premise in that discussion is that technology is somehow going to alleviate the challenge in these areas. So you referenced concrete, steel, plastic, and that somehow technologies are going to allow us to live the same life that we do with a much smaller carbon footprint. Do you believe at the scale that we need to achieve those changes that we're going to have... It really comes down to a standard of living discussion. Are we going to be living as we live today or better in your view, in a zero carbon world or not?

Brett

Well, it depends on how you define standard of living. I actually think we can have the same standard of living, but will we be living in the same way? No, we do have to change the way we live, but we can continue to have a good standard of living, but we do need to make decisions. And our decisions can't be based completely on the bottom line anymore. It has to be based on whether it's good and sustainable for our survival on this planet for long term. So yes and no is the answer to that.

Jeanette

It depends. That's the typical economic answer.

Marc

Right. Yeah.

But then the question or the discussion is very nuanced. To me that strikes me as the challenge, is that Jeanette, you've mentioned it. You have all these different, and both of you touched on it, but this idea that you've got all these different stakeholders with, at the end of the day, I'm a relatively new father and one of the things that's been interesting about that experience for me has been that you realize as you meet other parents that you all

share whatever you might think of the other people that you're interacting with. You have a shared sense of I want a better world for my kids than what I had. And so that creates a commonality. And the climate change debate, it strikes me is you have a similar dynamic, which is that we all would like to live in a world that's not on fire, where you don't have atmospheric rivers flooding your valley, et cetera, et cetera, et cetera. And yet-

Jeanette

I wonder if COVID has done a bit of justice on that front end and what I mean by that is what is quality of life? How big of a house does one need? How many gadgets and cars and things like that? And I've heard from a lot of people that they don't want to live to work anymore. They want to work to live, and that means that they need to make adjustments on their consumption. They're more thoughtful and on a budget and lower power, every dollar matters if you have that perspective. That's not broad base. I mean, we have a lot of economies right now that are striving to emulate the Western culture and way of life, and that actually almost makes me a little more nervous. I'd rather more quickly transition, more efficient housing, automatic heat bumps and all new bills, there's just some standards that can be easily set that are on par that can move the needle quite significantly. But I think quality of life can be better, but it's just what does quality of life mean to you?

And if you are caught in a bit of the marketing hype of keeping up with the Joneses, that's always going to be there, but I think there's a collective of early adopters on a more balanced lifestyle where sustainability, physical health, all these things are embedded and hopefully that can start to get the mass following. We can cross the chasm and be on our way.

Marc

Well, let's hope we're approaching that positive tipping point in that way with the behavior change. As you both look back, so Foresight was an organization founded in the 2010s and Svante in the mid 2000s, I'm curious for both of your perspectives on as you have watched this space evolve and change and mature, what has changed, number one? And number two, maybe more interestingly is what hasn't changed? What has remained consistent through that period as you've watched this space evolve?

Brett

Well, in the climate change space, mainstream funding

started happening about three years ago in a big way. Changed from being very niche funding organizations being involved in very strategic funding, to being okay, we can put our money here and make money. That thought process. So I think from a financing perspective, it's much better now and we're going to benefit from that I would say in the next five or 10 years. There's going to be so many more technologies available. Part of the reason why there's less path forward right now, commercial path forward right now and technology is

Jeanette

To build on that, assuming the finance piece is in place, I think business models around how solutions providers, whether you're a technology, a service, these business models for solutions to be adopted have become much more familiar with what the operational needs are for the adoption side of the equation. And so we're starting to see that really, really move the needle. And more collaboration, I mean, we are seeing groups collaborate like never before within sectors. I think industry associations are showing some really strong leadership there and even organizations like ours collaborating across the country and globally and sharing best practices.

Brett

One thing that I think has stayed consistent is a hesitancy to adopt new technology and a new way of doing things. That was there 20 years ago when we started, and I would say it's still there. It might be improving somewhat, but it's still very difficult to convince companies and people that have done something in one way for a long time to do something different or to go in a different direction.

Jeanette

Especially those margins are so small. In some sectors it's variable to the markets, but in the agritech or agriculture space, I mean, some of those farms are at two to 3% margin. Where are they going to have the resources and the funding to look at the systems that can improve water efficiencies, have off-grid technology for power, waste management with manure? There's so many factors there even in that one site, but when that sector is starved of margins and then you have the ripple effect of climate, which is destroying 20% of their crops, I mean, it's a real struggle.

Marc

Absolutely.

Jeanette

Who steps in where? And I don't believe government can do everything by the way, but I do think there's opportunity for really strong leadership with the right buttons that will trigger the other folks to follow along the private sector and the general populace.

Brett

That's where the stick and carrot comes in. You mentioned that earlier, right? And I think it's both. I think there has to be incentives policy. People respond well to incentives. I mean, it's natural. You know yourself and you're leading people it's much easier with incentives.

Marc

Is part of that story, and this is talking specifically to the end consumer, is it part of that story though that we're not yet fully incorporating the true cost of goods? So in other words, where the end consumer gets a product at a certain price, but it's not fully accounting for all the stuff that sits upstream. Does that resonate for you?

Brett

I think we actually don't know a lot of those answers yet. What is the true cost of CO2 emissions? I mean, insurance companies are tackling that.

But I would say yes, we don't don't know that and certainly the public doesn't know the true costs. When you buy something, for one thing, you don't know the difference in impact on climate change that those two have in comparison. It's not front and center there. There's not a number that you can look at, oh, that one's better. And even if you did, how much value would you put on that? You don't know that either. So that's what I mean, there's a whole bunch of education, there's a whole bunch of knowledge that we have to come up with collectively to understand this because that's when people will make, I think, behavior changes with more understanding.

Marc

I think an interesting thing for me was to observe so you book a flight and you have a CO2 measurement

associated with that flight, right? You mentioned reducing your travel as you think more about what your impact is. And so part of that story is at least being aware of it, step one. Step two is what am I going to do about that? And part of that discussion surely is going to be, well, trying to understand what does that actually mean? So I actually don't know.

Yes. Let's shift gears a little bit. The conversation's fantastic. Just talk a little bit if you would, about the realities of operating in Canada. Just what are some of the opportunities for companies that are started here? And then what that feels like to grow out of here and what does Canada need to do to either make it more attractive or to grow these sectors?

Brett

I think the ecosystem for growing companies here is great. I really do. I think it's world-class. The government programs that are set in place, the organizations like Foresight, there's so much support in starting and growing a company in early. I think we have to do a better job in Canada on supporting those companies getting to become larger commercial entities successful, and staying in Canada. Providing anchors for other companies to start for training people and all sorts of just an example, I think we need more of that. I think if you look at just south of here in Washington and versus British Columbia, you can identify a lot more large well-known companies down there than you can up here and that's part of that. So I don't have the answers on how to do that, but I see that big, big difference and I experienced it firsthand with Svante, is that the pressure and the reasons to move to the United States are always there. It's a much, much bigger market.

There's more financial investment happening down there and that's never going to change. So we have to find ways of making sure people stay here. One of the reasons, and I would say probably one of the key reasons I think is the talent here in Canada is fantastic. We have great universities. We know when someone came out of a university in Canada that they're going to have a level of education that's high and I think that's what we have to leverage. Now, early on, we have to nurture the ability for everyone to use the friends and family method of starting companies and people being excited about new

companies and investing in new companies. I think we have a real advantage in having that system in place and we have to get away. From my experience in the last few years, my friends and family and just contacts mostly talk about investing in real estate. I was mentioning this and okay, great, but we can't just do that. We have to continue to be excited about investing in new companies.

Jeanette

And if you're not an accredited investor, that's actually also hard to do, right? You have to have certain personal financial milestones met to be able to invest. So my perspective, it certainly echoes your perspective. We do a great job at the early research ideation and launch phase of a business. I think we're getting better at that commercialization phase, but we still have quite an exodus of companies at that stage even because they either go closer to the market or closer to the money. And then of course on that scale up stage, I mean, we know we see a couple of recent acquisitions where some strong sector dominance or statements would've been made if we were able to keep some of these larger companies here but there's certainly reasons. So things that we can do, domestic adoption. Government has a strong procurement portfolio and to thoughtfully consolidate some of that into some areas where Canada has some strong expertise and excellence is good. And there are tactics for attracting private capital and talent to the country as well through strategic partnerships and things with different countries where we can share.

Holland for example, great work in the egg space. We have quite an evolving egg tech sector, not only here in BC, across the country and so those types of relationships allow us to build, collaborate, and compete globally together as opposed to doing it on our own. The family and friends money, yes, I do have some concerns about our angel network. I know there's a lot of work being done, but when ventures leave and those entrepreneurs that are willing to take bets on those type of companies are no longer in Canada, that's what happens. And I see an opportunity from BC across Canada for us to do that. That's sort of part of the vision of Foresight's activities. So capital at all stages.

Marc

Are there other countries or regions that are doing that particular thing better than-

Jeanette

Well, everyone's protecting their own space now. They want their own companies to scale and they want to drive domestic adoption. And in some cases there may be some good reason for that, but the EU is now this hub and mecca of information and knowledge sharing across many countries, and I'd like to see us more freely be able to have collaboration. We have some ventures that need a widget or something from another country and it becomes cost if some of the trade regulations and stuff make it cost prohibitive or are too slow and we just don't have time.

Marc

I'm just curious for maybe your perspective as we start to wind down the conversation is in this cleantech space, just your perspectives or thoughts around just operating in this space. Is there anything that's especially unique to the cleantech space? Whether it's a personality thing for a founder or an entrepreneur that's different in that space, or are the challenges consistent?

Jeanette

So we've supported over 1,000 Canadian cleantech companies, and I'd like to compliment what Brett said here. Things have evolved quite significantly in the past three to five years, and so what we still have is large capital projects or technologies that are more bullish on tackling a larger part of a supply chain or a value chain. They take time, and so you need things like patient capital and patient stakeholders. That being said, we're seeing some solutions that mimic or emulate more of a short-term business scale up strategy around software and AI. So I think there's some great things happening, but there's still some of those big game changers require time, patient capital, and long-term commitment support from government. But I think a few strong political statements would drive adoption, it would drive investment, and it would cut through the long-term pain of transition and just get us right to it.

Brett

I think working in the cleantech space is a lot of fun because such a challenge. Cleantech, I mean, just the name, it's clean technology so automatically you're putting a value on the fact that it's clean. What is that value? And that's where I think we're all trying to figure

out, and we've touched on that with quite a few of the topics today, is what is that value? It's not just a spreadsheet that at the end you either have a net present value that you want to execute on or you don't. Now you have this notion of that it's clean and why are you going to do that then? And I think in all the cleantech sector it's a challenge every day, trying to figure that out.

Marc

And arguably the most important sector. So certainly my hats off to both of you for the work that you do in this space. We're at time, so first of all thank you both for spending time with us, but any final thoughts on either anything that we've spoken about today or just your thoughts in terms of where to from here?

Jeanette

Well, I always have an ask of anyone that I have the opportunity to share with. My ask is twofold. One, on the personal front, if you are passionate about this space please talk to two or more of your friends that are less familiar and just get them aware of some of the actions they can take to help reduce their carbon footprint or stress on the environment. The other is on the business front, if you are an administrator, if you're a CEO, if you are a student looking to get into work, if you can take one initiative in your organization to make it more sustainable, please be that catalyst for a conversation and change within the organization. We need more champions that make that priority both personally and professionally.

Brett

Yeah, I echo that. We all can contribute to this and it's not someone else's problem.

Marc

Right.

Brett

So if you think that way, that's not the way to be thinking, right? It's all of our challenge because I think collectively we have the same goals in the way we want to live within reason. We want fresh water, we want good food, we want shelter. Collectively I think that's very similar, and therefore we all have to be part of this change.

Jeanette

On Mother's Day of this year, my daughter said something really interesting to me, and I mean, I'm living and breathing this space 24/7 and she says, "You know mom, we're not killing the planet. We're killing ourselves." And I was like, she's smarter than me thank God, but that's really the reflection I think we have to have, right? We can come up with all the solutions and do all these things. The planet will survive without us. So you can leave this part in or not, but that Mother's Day aha moment was just even more impactful for me. So thank you for having me.

Marc

Let's leave it there. That's a great note to end on, something for us all to be thinking about. My guests today have been Brett Henkel, who's the co-founder and senior vice president of business development at Svante, and

Jeanette Jackson, CEO of Foresight. Thank you both for spending time with us today.

Jeanette

Thank you.

Brett

Thank you.

Marc

My name is Marc Low from KPMG Insiders. Thanks for watching and listing. We'll see you next time.

Jeanette

Cheers.