Ep.2.33 - Arabinda AB Ghosh

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SPEAKERS

Announcer, Ed Clemente, AB Ghosh



Announcer 00:01

Welcome to The Michigan Opportunity, an economic development podcast featuring candid conversations with business leaders across Michigan. You'll hear firsthand accounts from Michigan business leaders and innovators about how the state is driving job growth and business investment, supporting a thriving entrepreneurial ecosystem, building vibrant communities and helping to attract and retain one of the most diverse and significant workforces in the nation.



Ed Clemente 00:29

Hello, I'm your host today Ed Clemente and welcome to the show. We're very fortunate to have a very good Michigan company I should mention. AB Ghosh, he's the Chairman and CEO of Hemlock Semiconductor. Welcome to the show AB.



AB Ghosh 00:44

Good afternoon, Ed. How are you doing this afternoon?



Ed Clemente 00:47

And I'm allowed to call, I'm doing fine, but I'm allowed to call you AB. I just want to make sure the audience knows. And so you have not been too long in this role yet, but you've been there. How long have you worked at Hemlock now?



AB Ghosh 01:00

I worked in Hemlock 11 months, but I've been a CEO since January of this year, 2022.

Ed Clemente 01:08

And but you come with it, like, I'm familiar with Hemlock. But this sounds like a pretty nontraditional question, but if you go to a party and no one knows what you do, or what Hemlock is, what do you kind of tell people you guys do?

AB Ghosh 01:24

So you want to the short version is that we make poly silicon. So what is poly silicon? Poly silicon is refined silicon, silicon is the most abundant metal on the Earth's crust. So we take 98.5% purity level of silicon metal, and we refine it and refine it to make 99.99% which is called hyper-pure poly silicon. But it's a fundamental building block for your semiconductor chip and for the solar panels. So you may ask, okay, well, the chip is basically everything and powers of transformation age. So everything that started in the 50s, from Silicon Valley, basiclly is powered by the chip. You can't power a chip unless you got the poly silicon. So we like to call it it's a semiconductor in the semiconductor chip, right? That's it's and so it powers, we power 1/3 of all electronic devices that exist in the world today. And we've been doing it since 1961. We hope to continue to do that for next sixty years. And the other critical industry where poly silicon goes into is making the solar panels that you see in all the solar farms, you may see up and down United States. The building block and making that the pound first foremost starts with the poly silicon. And so when I say that to two people at a party, they quickly get it.

Ed Clemente 03:00

Yeah. You know, in fact, that's how I was involved. I mentioned to you in the pre call a little bit that I was a state Rep under Governor Granholm at that time to do a lot of the initial work and that was with solar panel. And we used to kind of say it's the squiggly line you sort of see in the panel, the silver, you see, and that's how I would tell people what it was. And I think that's still true.

A

AB Ghosh 03:23

That is still true. Correct.



Ed Clemente 03:24

Okay, technology moves fast so I never know. You come here, by the way, with a really good pedigree of a lot of mergers, acquisitions, transfers different, you've been all around the world, you've got a really exciting background. Let's kind of start out where you started out. I know you've mainly grew up in England, I think, right? But you were born in India originally or no?



AB Ghosh 03:48

Yeah, I was born in India. I did my teenage years in Thailand schooling there, my dad was in the



UN there, and then I finished out my schooling in England, correct and southern England. And I'm a finance guy by background, a chartered accountant, which is an equivalent to a CPA in United States.



Ed Clemente 04:08

Yeah, that's a great, go ahead, sorry.



AB Ghosh 04:11

And then I joined basically, one of my clients. And then from then on, moved to a chemical industry, a chemical company, and pretty much stayed with that chemical company along this different ownership structure the next 30 years and worked both in England, lived in England, I lived in Netherlands and I've lived a big chunk of my life in United States, different parts of US.



Ed Clemente 04:36

Yeah, I couldn't really place your accent in any one country because it sounds almost like Texan to me sometimes. It's like it could be from anywhere.



AB Ghosh 04:46

It's a it's a blend, it's a mid-Atlantic right, it's middle of the ocean, basically.



Ed Clemente 04:51

Yeah, right, it's the cross path. You know, I'm not gonna blow, let you go blow by, your dad worked for the UN?



AB Ghosh 04:58

He did, he did, the last six years of his, he was an Indian civil servant worked in the Indian government for years. And then the last six years of his career, he worked for the United Nations.



Ed Clemente 05:09

Yeah. So you got to go with him to Thailand. And that's where you lived?



AB Ghosh 05:12

I did, we lived there, and traveled around. So yeah, I used to I used to speak Thai. I don't don't

speak any Thai anymore today, but I did in my teenage years.

E Ed

Ed Clemente 05:23

It must have been exciting growing up in Thailand. It's a beautiful country, just gorgeous. [It is gorgeous.] Yeah. And then, I'm not going to let you also get by, you went to University of Plymouth?

AB Ghosh 05:37

I did, correct yes, finance there. And then I went and worked for Deloitte to to get my Chartered Accountancy done, which is like the CPA in the United States. But I was I was very, I was very focused that I wanted to be in business world. So I, I made it I basically, the year after I qualified as a Chartered Accountant, I left them to, to join one of my clients, Rio Tinto, a big mining conglomerate. And then it happens to be with my boss from that company went to join an English company called Core Tools, and it's a very old English chemical company doesn't exist anymore today. And so it came in on, on his advice, came and joined them, and basically had a 30 40 year career with that company, and the companies that came afterwards, the whole kind of transition, you know. In the M&A world people buy people but basically stay the same company in many different roles for the next 30 odd years.

Ed Clemente 06:43

I know a lot of people, my cousin used to work for PriceWaterhouseCoopers, but a lot of the folks I know that worked in those places usually spun out in the private sector, because they consulted in one particular niche, and then they became attractive as like a CEO or senior level management or at times. So let's get back to the industry that we're in. Is Michigan in good state, I'm gonna ask one more thing about your background. But you also, how do you kind of balance out your sort of work life balance with all this travel? Because I mean, you have you experienced that as a kid, and I imagine your family's had to experience.

AB Ghosh 07:23

Yeah so, you know, you know, Tracy, and the two boys have been, you know, moved around with me, as Tracy would say, we've had eight different houses, in eight different locations. And if it wasn't with it, if it wasn't with the very great partner with Tracy, you know, it would be challenge. But you know, one of the models I've had all the years I've traveled pretty much the last 20 years, Tracy and I've been traveling 50 60% of my time, and a lot of traveling is continental intercontinental across. And one of the things that was you know, both the boys were very athletic when they were growing up in various sports with a soccer or a golf. I used to make it a point that I want to get back at least by Saturday morning. So where am I, catch a red eye, whether I was in Asia. Coming back to Europe, or whether I was in, in the United States flying back to Europe, I used to or the other way around. So you know, and, and that was my motto. And you know, I think I did an okay job, but I'm sure my family would say, No, I you know, I think you missed a lot. But I try to do the best I can. But yeah, it's a challenge.

Ed Clemente 08:35

Well, I think even people that live domestically, still have challenges trying to meet Saturday morning, early soccer games, and Little League football, all those things. It's a big challenge.

AB Ghosh 08:45

It's but it's fundamental, to me family starts with first and foremost, that's the most important thing for me. And it's always it has been, always will be. And I've tried to balance as best I could.



Announcer 08:58

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Ed Clemente 09:14

So let's talk a little bit about the landscape of Michigan. So you probably believe, I imagined Hemlock does, that Michigan is a good state for you to be in too. Is there anything you want to talk about that a little bit with the environment here?

AB Ghosh 09:26

Yeah, I mean, as you know, Hemlock Semiconductor has been around from 1961. We started off Dow Corning was the owner of ours back all those years ago, now we are 80% owned by Corning. But you know we came to Hemlock because we started the process of making poly silicon in Midland in Midland, Michigan. And unfortunately we find that the vibrations from the rail traffic there was making, was not being very suitable for all poly silicon production. So one of the scientists say, you know, I got I got a farm in a place called Hemlock. And we're trying to make some there, you know, was is very quiet. And that's what how we landed up and Hemlock, basically. You know, I have to say now that production process moved a long way, I don't think the vibration will be a big issue, and build us to make it. But that was reason why we started up. And then since then, I mean, we have built, you know, it's a very high-tech technology. And we've been very proud to get what was great in Michigan, we've had, you know, all engineers and skilled trades people we can find, we found it here. I mean, people don't know what Mid-Michigan has the highest, one of the highest concentration of PhDs around here, because we have other big chemical companies like Dow, like DuPont. So it's a great place to have, you get great place to get talent. We got Consumer partner, who's our energies provider, we got excellent energy source, because poly silicon uses up a lot of energy. We're the largest energy user in in Michigan. You know, and so having a partner like Consumer has been great and they gave us a surety of supply with it there. And then on top of that, I think our our state, whether the State Governor or the MEDC, state legislators, have been very helpful over many years. And as you probably know, you know, back in the old fives when we were



expanding Hemlock Semiconductor, at that time, Governor Granholm was very supportive in helping us expand, I think we're, not I think, we are in that phase now where we are going to be embarking on another expansion phase, I would say, you know, nothing finalized yet, but I feel pretty good that we, you know, this is a place to grow.

Ed Clemente 11:59

So, I would imagine if you're like any corporation nowadays, obviously, after sort of coming out of COVID, the, the workforce situation will be, you know, you're probably looking to expand with employees. So, hopefully, if anybody's listened to the podcast, they should give you a call, right?

Α

AB Ghosh 12:17

Oh, absolutely. I mean, in fact, just on that point Ed, we have, we have expanded when I when I first came on board a year ago, we were like 800 employees, and now we're over 1300. Now, partly, some of that is what we did, we took a workforce that used to be on contract, but we made them, you know, we decide onboard them as Hemlock employees, because we want to have one team in this business. You know, we we supply a very high-tech product to our customers. Quality, super important and then we want to build that the Hemlock Semiconductor culture, which is, which is very family-orientated team atmosphere that we have, and having the one team was critical for us. But on top of that, we have been on a spree of hiring a lot of people. So our success, you know, hopefully 61 years we've been here, we have a lot of employees have been here for well over 10 years. And if you ask them why have you been here 10 years, they will they just say, you know, they get huge job satisfaction this place. Partly due to because we have very competitive salaries. But whilst we have a really team, team-based company culture, that provides great opportunities for their own personal development. You know, most importantly, you know, salary goes somewhat towards satisfying somebody, but what satisfy somebody in the jobs really the personal the opportunity to get for growing, you know, getting developing themselves. And then Hemlock Semiconductor, you can do that. I mean, we have jobs, right, from, you know, an operator position to very skilled trades to engineers, and in all facets, whether it's in finance, HR, government affairs, marketing, or in capital management. And so, yes, you're absolutely right today Ed, that's one of our biggest challenges, finding great talent. There's a war for talent and we feel, you know, we feel that we have a pretty good brand, and a value proposition that we can attract the talent to Mid Michigan.

Ed Clemente 14:22

And that's going to be kind of exciting for you, too, as an individual to sort of, obviously, with all the challenges today with semiconductors, you know, you've got an opportunity to sort of create your own ecosystem there too, right? Maybe that would be one of the questionsl was going to ask anyway, but how do you see some trends working for yourself or even the semiconductor industry in general?

AB Ghosh 14:47

So I think, in terms of the trends of the future, I mean, semiconductor, as we all know it, you know, with pandemic that came a couple of years ago, the whole transformatio, the digital transformation phase that the world was in, I think he just fast forwarded it a couple of years. So there's been a huge growth in everything to do with chips, right? And you cannot do in all the smart devices you have at your home, and everywhere else you trying to do artificial intelligent, everything else drives, everything's driven by chips. So you know, so the, the secular circular trend in that industry is very good for I think, for the next 20 years. Now, is it going to continue the growth rate has been the last two years of the pandemic? No, I don't, I don't think, I think it will steady, but it's it's the trend in the semiconductor side, it's will continue that way. In the solar space, which is the other big, big industry we're in, I think the whole transition to cleaner, renewable energy that the whole world is and now that we have, we as the United States, has signed on to the Paris Climate Accord, and then the the recent, the recent, you know, Inflation Reduction Act passed by Congress, those all signs to say that the creating a sole supply chain in United States is an imperative. And you know I think one thing, one thing we found in the pandemic, across a supply chain, that we were very globalized that we didn't have a lot of the the key supply chain sitting in the United States. And I think one of the outcome of the pandemic is that we want to reshore some of the supply chain. And so one of the trends we're gonna see, I believe, is that in the in the renewable space, you know, United States want to have more of the supply chain sitting in in United States. And so we know, we have a part to play with that, you know, we obviously, part of the solar manufacturing supply chain, and we want to help and we have been advocating to, to have the demand here and I think we can see that in the next next many years to come.

Ed Clemente 16:56

Yeah, even I would imagine with the electric vehicle sort of transformation that's, I shouldn't say slowly, but it is moving faster and faster. But I mean, a lot of the electric vehicles really are controlled by computers and chips. And it's going to put even more in than in the ICE engines now.

AB Ghosh 17:16

Yeah, absolutely, absolutely correct. I mean, that's going to even even even be, and the chips that's going in there, the more higher end, what I call, you know, semiconductor, you know? And this is the, this is what Governor Whitmer discusses to have some of those industries coming here, and they are coming, you know, to Michigan. And so, you know, Michigan was the manufacturing state for 100 years, right? I mean, you know, hell, Henry Ford started a revolution And yes, we've had some challenges, you know, 15-20 years ago, but it's coming back. And you see, EV and the whole automation industry is coming back, you know, in southern Michigan's and so, I think that's a big trend here to stay. The other big area where we're looking at, we're exploring and play is in the emerging battery storage industry. So I think, I think one of the, one of the drivers for growth of EV has to be the industry solving the battery storage issue, which is you and I want to drive you and I want to have a car, an electric car that can you know, charge quickly, and have huge, you know, much bigger storage in there, you know, mileage. And so we have a play in there in this market. And we're hoping that with our you know, decades long expertise and capability that we can commercialize a novel battery

technology. We're not the only ones trying to do this, but I think we think our technology will be, will meet the needs of the automotive industry, and we hope to be trialing those, those, those samples, probably in the next 90 days or 120 days.

Ed Clemente 18:53

Well, even I would imagine, too, with the whole circularity of manufacturing, you know, being a bigger and bigger cost issue, that people don't want a lot of waste anymore. And that's what's advantages of your solar panels too, is that there's way more opportunities historically of how to repurpose things after they've gone through one lifecycle, right? [Right.] So it's a good era for, you know, but I think we have to go into this area, it's not even like it should be a choice. I think the compass heading is there already. So beyond those few things, I wanted to also make sure that, you know, you're sort of new to the state, we're near the end here, but you've been here a year and a half, you said almost, right? So what do you like about the state? I know you've already mentioned the advantage of sort of PhDs nearby but what do you what do you like to do for fun?

AB Ghosh 19:51

You know, yeah, I'm glad you brought that up. So I've never lived in a such a cold wintertime. So, you know, and so when I remember say my wife getting, we're gonna relocate to Michigan. She said are you sure? I said, look, what I've seen of it, it's excellent. So what I liked about his great question, it's, you know, we're a Mid Michigan, it's very green, is very vibrant. I mean, it's, it's, we got the four seasons, which is great. It's got the four seasons, you know, you get three months of winter, that's fine. But the summers are gorgeous. We just been through a whole whole summer, it's phenomenal. I mean, frankly, I'd rather take three months of summer, I'll put up with three months of snow. And really, it's, it's not that. And then on top of that, besides the weather you got you got all the water around us, you know, if you're into boating and those kinds of things, which is phenomenal. And then the people. People like what I call, they're pretty chill. I mean, they really are. You know, it's Midwest, Midwest America, you know, it's like, okay, you don't get too stressed about things, and so it's great. And especially Mid Michigan, it's a great place, now our kids are grown up a little bit, but it's a great place to raise a family. It's really safe, there's a lot to do. And and as far as my myself yeah, I try to play a lot of tennis and golf. So it's a nice place to be. I mean, to me, it's it's beautiful and you go up to up north, to the U.P., it's phenominal. [So it's like a different country.] Yeah, it really is, you know, it's so, this place is it's brimming with the opportunities and I think Michigan has got a great future. I mean, yeah, I think we can get back to the manufacturing capital of the United States. And, and, you know, have all the high tech jobs, there's quite a few here. And I think, you know, both MEDC and the Governor is doing great job and trying to attract industry into this place. So I'm excited.

Ed Clemente 21:51

You know, in w that your kids are a little older, but would you what advice would you give yourself at 17 to go into a field because you've been in so many industries, and now you're actually, you know, running a really interesting growth segment, you know, manufacturing, what would you tell your 17 year old self to do?

AB Ghosh 22:11

You know, it's pretty much what I tell my two boys to do. 25 and 21, I say, you know, pursue something first and foremost, that you're going to be passionate about. Passionate about means you're going to care about and you want to succeed in it. And then, you know, make sure you're good at it as well, right? You got to be good at it, you can be passionate on something if you're not good at it, you know, so being passionate about something and being good at it is a to me is a recipe recipe for success.

Ed Clemente 22:41

That's it's good. You know, I know that, I think I hope they like it here or they're probably in university, it sounds like.

AB Ghosh 22:47

They are, they do come up here, they do come up and but you know, that philosophy that I have just shared with you Ed, is really what I'm what I do. You know, I came here, because I think I'm pretty good at running a business. And also, HSC is a business that is connected to renewable sustainability, which I'm passionate about. And so I've been passionate about for the last 20 years and so it's a good fit for me. And so anyway, just let you know, it's the time for us. And I just want to thank you very much again, our guest again was AB Ghosh, he's Chairman and CEO of Hemlock Semiconductor. And we're very fortunate to have you in our state, and we're so glad you're here. And we really want you guys to grow and be successful. We all we're all behind you. So keep up the good work. Thanks for doing the show today. Thank you Ed, apreciate it.

Ed Clemente 23:40

Joining us next week, where our guest is going to be Jen Nelson here at the Michigan Economic Development Corporation. She's our Chief Operating Officer.

Announcer 23:50

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