

Transcript of Interview with Graham Farrar, CEO of Glass House Farms

Interview by Aaron Edelheit

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*Lightly edited for readability

Aaron: Ok, Graham, thank you so much. It's great to talk again!

Graham: Yes, happy to be here. Thanks a lot for having me and setting aside the time.

Aaron: So, I'm going to go right at you with the biggest concerns. Biggest problems!

Graham: Bring it! We've got big ideas that can mean big, big concerns. Let's check them off the list.

Aaron: Ok, so Aurora Cannabis, one of the largest Canadian cannabis companies, just shuttered a massive greenhouse that was supposed to produce half a million pounds of cannabis. The rest of the Canadian sector is selling off Canadian greenhouses left and right for half or a quarter or, you know, cents on the dollar of what it costs to build them. Why in the world would I be excited or as an investor would I want to pay attention to a US company that appears to be doing the same thing in buying a big greenhouse and going big. How does this not end in tears like it ended for the Canadian cannabis companies?

Graham: Sure, so, I mean, I think there's a few reasons for that. All of them very fundamental reasons. One is what we're doing here. California is not Canada. That's a big one. I hope I don't offend anybody when I say that the Canadian thesis never made particular sense to me. Always loved the fact that our neighbor to the north legalized on a national level. I think that's a huge benefit. I think the world is a better place with cannabis in it. I think we need more science and unlocking the doors, not treating the plant like a criminal. Allowing medical schools and universities to do research is off and on. But at the end of the day, when you look in Canada as a market, right, like you're talking about a country with less people than the state of California. You're talking about high latitude growing where you don't have the climate of Southern California. You're talking about an appellation that, again, no offense, nobody in the rest of the market cares about. Right. So, and then you've got a set of operators who, frankly, tried to go from playing tee-ball to the World Series in one step. Right? Every single one of those things is fundamentally different about what we're going to do down here. A: Glass House Farms might

not be super well known outside of California, we're a California centric brand and haven't really worked to make ourselves well known outside of California. But over half a decade of experience of large-scale commercial cannabis cultivation in greenhouses, the largest or certainly one of the largest greenhouse growers in the state of California, the state of California, the fifth largest economy in the world. The largest cannabis market by more than double, the second largest, almost as big as the next three combined, certainly as a percentage of the United States, it's probably twenty-five plus. Right? If California was an MSO, it would be a thirteen state MSO in the state of California. We are the largest greenhouse grower in that state. Have been for a long time. We are not trying to go from tee-ball to the World Series. We've done tee-ball and the minor leagues and the majors and the playoffs. So, when we get to the World Series, we can win, right? It's not that we don't make mistakes and we know everything. It's frankly, most of the time we don't know what *to* do, but we know a lot of things *not* to do. We learned those things by making the same mistakes that I think it was Aurora, right, when they planted 25 acres of cannabis and didn't realize that eight weeks later they were going to need five hundred people to harvest that crop. And so, the crop just died in the greenhouse. That will not happen to us. Right. Like we may have done that, but we did it at five thousand square feet and then fifty and we've worked our way up. So, when we get the five million, we may not have the answer to everything, but we know the questions that we need to ask and that is a huge benefit. So, you take a year round the beautiful climate of Southern California, which is about as good as it gets for cannabis. You've got a team of people who are the certainly the best in the state, quite possibly in the country with Glass House Farms, who have been doing this for six years at large scale in a very competitive market. And you're in an appellation which is where everyone wants their cannabis from. Right. So, champagne comes from France, tequila comes from Mexico, cannabis comes from California. You put all those things together. And it is a very different story than Canada and the rest of what's going on over there.

Aaron: So, part of that bear thesis is another quote that I've heard, which is related to the oversupply. I heard a quote where someone said, the last thing that California needs is more cannabis cultivation. And so, I think related to this idea is that maybe there's too much cannabis and that you and others, maybe with this mass plant, you're just going to flood California with cannabis, and we'll repeat what happened in Canada. How do you respond to that?

Graham: Yeah, so definitely not. So, I think a couple of things. One is when you when you think about cultivation in California, I would not say the last thing that California needs is more cannabis. Last year we saw greenhouse cannabis trading at over two thousand dollars a pound.

That is the best market that cannabis has had in the last five years. This year, we're up six to nine percent year over year on the market, already.

Aaron: In pricing?

Graham: In pricing, right.

Aaron: So, you saw prices go up last year. You're seeing pricing up this year. If I take off my bear hat, that's kind of like a narrative violation, that there's too much cannabis in California and in everything that I hear is the illegal market so big and that, you know, that California has too much weed, it's too competitive. You're now saying that we're now in the second year of price appreciation.

Graham: Right. I believe certainly on the legal side that demand is increasing faster in California than supply. I think there's a number of theses on California that people get fundamentally wrong, like the idea that California has an unlimited license state. Heard that before? Probably on a state level. Yes. But what they miss is that state level licensing is predicated on municipal level licensing. Counties and cities. Sixty two percent of counties and cities do not allow any cannabis. So, yes, the state of California has an unlimited license, but the friction to bring on commercial cannabis is very high, right? You can you live here in Santa Barbara, progressive town. Pretty forward thinking. We opened our first adult use dispensary 14 months ago. Right. Like we have three stores and five hundred thousand people. Right. There are other places that are much further behind. Cultivation is even harder. Right. So, the thing that's happening faster is retail coming online. We currently have a thousand dispensaries in California. We have eleven thousand liquor stores. Colorado, Oregon, Washington, all have a dispensary per five thousand people. In California we have a dispensary for forty-five thousand people. Clearly those are not the right numbers. They're also not true. What we have as one *licensed* dispensary for every forty-five thousand people, there's probably four unlicensed dispensaries. But that's going to be converted. Right. And as that converts, you have demand growing faster than supply.

There is new cultivation coming online in California, but almost exclusively, it's on the outdoor side. That is not what we're chasing. We are not chasing outdoor cannabis. We're not chasing machine trimmed, low-cost cannabis.

Aaron: Why not? Why wouldn't you pursue that?

Graham: Because I think the real bar right. So, what we're chasing is indoor. My goal is to grow indoor quality cannabis at outdoor prices. Which go to the second part. Which is, the question is not is their room for five million square feet. There's about thirty-eight million square feet of licensed canopy in California today. Our plan to turn on five million more square feet is over four years. So, five million square feet, six million square feet, headline number. Turn that into canopy, call it four and a half million square feet for thirty-eight million. Let's call it four million square feet. So right now, that would represent about 10 percent of the market. But that's today, right. We're going to turn those on over the next three to four years. By then, it's probably six, seven percent of the market. It's not an inappropriate number. And that really still misses the point, which is the question is not is there room for another six million square feet? The answer is yes. The question is at the highest quality and the lowest cost, who else is there room for? Right. So, if you think about what we're doing, we're setting ourselves up in an environment where our total cogs will be less than the cogs that someone needs to pay their rent if they have the leased greenhouse. Right. If you look at those thirty-eight million square feet, 80 percent of those are 20 thousand square feet or less. So, you kind of have to decide at some level, do you think that the fifth largest economy in the world, the largest cannabis market in the world, twenty seven percent of the United States, do you think that that market is going to continue to be run by less than half acre farmers? Right. I do not think that that is the reality. I do not think that that's where the future is going. So, assuming that you believe that there will be consolidation, that things will flip over on its head. That 80 percent of the market ends up getting controlled by 20 percent of the producers, that agriculture in general is what we will see with agriculture in cannabis. It will not be farmers market style grows supply in the state. That means that the consolidation, there's plenty here in California, right, that we're going to consolidate down if we have the most high-tech facility with the best team, the most love for the plant, the most technology, the most experience, we will be able to create and we'll be able to grow cannabis at a cost efficiency and quality that others cannot compete with.

Aaron: That's great. If I were to take what you said and think about that, one of the most interesting things you said was how under penetrated the retail side was. If you could go out three or four years, how many how many retail stores fronts do you think there'll be? Because one answer to that bigger question would be, well, if retail dispensaries go from a thousand to like, I don't know, two thousand, or that may handle all the growth just right there. Is that another answer to the fact that maybe one of the reasons the illegal market is so strong is you just don't have legal options or convenient legal options to buy cannabis?

Graham: Yeah, I mean, I think that the illicit market represents an opportunity, is my view. Right. So, call California a six billion dollar legal opportunity? I think we probably have, it's probably half to two thirds of that is still illicit right? Now, I think there's a couple of dynamics there. A: that demand is real. Whether or not they're walking into an unlicensed or not. That's real California demand. I think you see less and less product leaving the state as more and more states have their own supply chains. So, unless it started in California and still California demand. I think there's not very much political will to shut down an illegal dispensary until there's a legal option. The voters of California, all of us here, voted for Prop 60 for more access, not less. That was the right. So, if you have places that have illegal dispensary and that's the only dispensary, the idea that you go in and totally harass that operator doesn't make a ton of sense. Now, once you create a legal pathway and once, you're in a scenario we have, here's the operator following the rules and paying the taxes. Here's an operator ignoring the rules, not paying the taxes. Then that political will starts to develop. The other thing that starts to happen mechanically is that legal operator paying taxes? Typically, one of the first things that happens from new cannabis tax revenue is funding enforcement teams. So now you have the situation where you've got a legal guy playing by the rules. You've got illegal guy not playing by the rules, not paying taxes, and you have a municipality with enforcement budget. You can see an example of it down in San Diego. I forget the exact city. San Diego area. They decided they were done with the illegal stores, shut them all down over the course of about a week. The legal operators over that same period of time, the revenue quadrupled. The demand is there. The people are going to shop for cannabis. They're now just shopping within the legal chain. Legal dispensary can expect legal products and expect legal growers like us. So, as you go from six to eight billion and you cannibalize away that illegal market, that's market growth without another consumer walking in the door, which, of course, is not going to happen. I do think the California market will grow at double digit percentages in addition to what I'm talking about, but taking the illegal market. So those two things will happen together.

Aaron: That's great. Another quote I heard, and this is, I guess, a much longer-term issue, and I've heard this in a variety of different formats, but the specific comment I heard or question is why would you want to invest in the wheat in wheat thins? And I heard this a number of different ways of whether it's different company strategies or different investors saying, hey, I want to invest in the brands. I don't want to invest in the weed, the weed as just a commodity. Over time, won't this just be commoditized like every other agriculture? Like why would I want that? And you could see in the reaction, the initial reaction when you announced, that there is

this kind of confusion beyond just like, hey, who is Glass House, which we'll get to next, but why would I want to invest in this asset heavy, what looks like producing eventually what will be a commodity product? Like, why would I want to do this?

Graham: Yeah, sure. So, I think the first and foremost, this is a brand story. Right. And what we are doing, we spend a lot of time talking about the mechanics in cannabis in general, I think, because not many people have figured them out. Right. So, we talk about cultivation. We talk about retail. I think we're one of the groups that has figured that out. This is the tip of the spear. The point of all this is brand creation, right? Brand heavy asset light is the standard in CPG. That is where cannabis eventually will get you. Right? That brand heavy asset light assumes a mature supply chain. Cannabis in California is the definition of an immature supply chain. If this was a commodity, you wouldn't see brands without supply chains struggling. You wouldn't see quality bouncing all over the place. You wouldn't see price appreciation. Right. The reason why we are a cannabis product company that owns that supply chain, is because we need to. Because if you don't have control of quality, consistency and cost and your biomass, you don't have a brand. Right. If you went to Starbucks and sometimes the coffee was great and sometimes it was horrible, you wouldn't go back again. The Starbucks, McDonald's pick your thing promises it's consistent. You can depend on it. If you if you accept the Starbucks quality, it will be Starbucks quality every single time you walk in there. Cannabis is not like that right now. Right. You've got good brands, brands like Cookies. I think they source from twenty different growers. Not because they want to, but because there is nobody out there who they can depend on to be a sole supplier. There is nobody who makes the "wheat" that is always a standard, consistent quality that you can build a brand on. So the reason we're doing this is A, because we're good at it. And B, I think the idea that we could start to enable brand heavy asset light, somebody needs to do that and there is nobody out there who is doing that today.

Aaron: Do you see yourself doing it? Do you see you partnering with others? Both? Well, you so you're controlling the kind of the supply chain so you can kind of get that consistent quality. How do you then, how am I making as an investor, how am I making the logical lead to, oh, well, now they're going to create brands?

Graham: Right. So, we actually are doing that already. Our brand, Glass House Farms finished last year number two in the flower category. Flower category is the biggest, most competitive category in California, which is the biggest and most competitive market. So that is already happening. Our whole company is built on the philosophy of quality, consistency and cost.

Right. I mean, that's always how we've driven. We're very focused on first you've got to do it great. Then you got to do it great every time. And then you got to do a great every time efficiently, which means for a reasonable cost. So, we've for over half a decade been doing that, owned our craft, got good. At the beginning of last year, we weren't even on the charts for the brands. We flipped the switch, decided to start putting our products into our brands, and we went from like sixty-three to number two in the course of nine months because we hit the quality cost matrix. So, we're just going to keep. I mean, one of the fundamental things that I really like about everything we're doing here is there is nothing that we're talking about doing that we haven't already done successfully. We're just going to do it bigger. Right. So, if you think about doing something for the first time at scale, that's low odds. Doing something you're good at and scaling up, that's much better odds. So, we're going to take what we're doing. We have multiple brands, multiple categories. We probably touch 80 percent of the categories with our products now. We've got our two farms, half a million square feet. We've got four stores running retail, way above average. The Farmacy here in Santa Barbara voted "best of", our dispensary down in San Diego.

Aaron: I just drove by it and I looked at the line!

Graham: Yeah, on a Monday!

Aaron: Yeah, on Monday at three p.m.! And for the first time, it was one of the most gratifying, because as I wrote about, I had an opportunity to invest when you were private and passed on the opportunity. It was the first time I actually felt good driving by, seeing a line! For disclosure I'm an investor in your company, for this interview. But it was the first time.

Graham: Yeah, no. So, the point being, we're doing all these things. We just want to do it bigger. We want to leverage the bookends of large scale, high quality, low-cost cultivation together with quality retail, where we can help control the shelves and shape the message in the here and collect data. I mean, the retail is tremendously valuable to us for the data collection side of things. Analytics and cannabis are great if you have them and very hard to get if you don't. And we learn lots of stuff, right? I mean, we heard we developed a sleep and pain relief tinctures because so many people were coming in looking for those two things. So, in that example, I'm a software guy. So, I think I think in software terms. Like we found product market fit, we found a gap in the market, cultivated this strain called Jellyfish, which is high CBD, low THC. We made a tincture with it, one for pain relief, another that we added CBN to for sleep, called Mama Sue

Sleep. We did it with a with an awesome lady, Sue Taylor, who's a partner, seventy-year-old African American woman has a long background in cannabis advocacy. Then we took it to our stores. We saw the reaction. We did a little bit of tuning. We released version 1.1, we saw the people loved it and then we took it to our distributor, HERBL, to go to the rest of the state. Right. So, it's like we collected the data, we tuned it, we beta tested it, and then we launched it. Like we're going to put all those pieces together. So, you get that synergy. And we see in our stores, our stores sell fifteen times as much of our brands as an average store. Our brands do great number two brand in all the stores. Then afterwards, it's fifteen times as much. You start thinking about the twenty-one licenses that we have in here that will be built out in the next year. Then you think about fifteen times and you think about that's at twenty eight percent of the shelf. We're heading for fifty percent of the shelf. You start doing that math, you can see that we are creating an opportunity for our brands that starts to rival the entire opportunity to the state. Right. And then you connect it all the way back down right from seed to ashtray. Right. You start putting that together in the appellation where people want their cannabis from. We've talked about that know a little bit before that we have this large pre-focus group called the illicit market tells you what people want before they can have it. But it tells us they want California cannabis. You go to New York; you open the bodega's top shelf up. They're not following any rules. They can have any cannabis they want. It's not stocked with Colorado or Florida or Oregon or Utah, it's stocked with California, because that's what people want. So, build the brands in California. California is hard. It's competitive, but that's actually an asset. You need to know that, because if you're trying to build brands that succeed in the free market, you can't be in a monopoly state. If you're in a monopoly, you had a great accomplishment to get your license. Thorough accomplishment. But then, you're in this scenario where people just buy the few choices they have. California is different, right? California accomplishment is not getting a license an accomplishment is making a product that people will buy over and over and over again. For that, you need the market, you need competition. You need the feedback to tell you when you're right, they tell you when you're wrong. So, we build brands here that are successful in the most competitive market out there, the free market in California. Then when people can get what they want, which is California cannabis across the country, we know that we have products that can win against anybody else and that not built into our models or anything, but that is the true free upside call on this, which is take the biggest market dominate it. Have the bookends and have the supply chain. And then if and when the walls come down, have what everybody in the rest of the world wants already built.

Aaron: So you would expect in over the next 12 to twenty four months, you're just going to keep iterating and experimenting and learning, as you discussed with the Mama Sue product of different kinds of brands, different kinds of products, experimenting in your own store, expanding out and because you control the whole thing, if I'm just reiterating what you said or summarizing, you'll be able to experiment in a low cost way and see what works, what doesn't, and then go to scale with what works. Is that accurate?

Graham: Yup, that's exactly that's exactly the strategy. So, I mean, it's kind of, we will have the assets in the team that will allow us to do this at a higher quality and lower cost than anybody else on the planet. And we're talking about the second largest greenhouse in the United States, the largest one that's licensed for cannabis. It's in California. And again, the appellation matters. With all the technology to aim for that highest bar of indoor quality flower and outdoor optics. Right. So indoor quality outdoor costs. Putting something in the jar that is the final product, that's the hardest piece. From there are lots of things fall off, right? You got to trim for extracts and edibles. You've got things that you can use for fresh, frozen and extracts. You've got small ones. You've got prerolls. But if you can aim at that top quality product that goes in the jar, we are an apple farmer who will be able to make all different kinds of apple pies and apple sauces and things like that. If you compare to the other folks out there who are maybe growing outdoor like they're trying to make apples, that applesauce, we're making applesauce out of apples, that's a lot easier to do. So, if you think about that mentality at scale, at a price that's similar to outdoor but with a controlled environment, agriculture that makes the plant feel like it's in the perfect climate all the time. It's going to be very, very hard to compete with what we're putting together.

Aaron: What would you say to people who are hearing your company's name and does a Google search of Glass House, I look on Instagram and I say, who are these people? I mean, wow, I had no idea they are cultivating this much. But how do you respond to investors or people trying to discover more about your company and they're just kind of scratching their head? How come I've never heard of this company before?

Graham: Yeah, so, I mean, we're not an MSO, so we're kind of the opposite of that. We're very California focused. So, I think not many people within California have not heard of us. So mostly it's the other places where honestly, we have not made a concentrated effort to get the word out because we don't sell products there yet. So that hasn't been at the top of our priority list. I think within California, with the Google search, you can tell we have been around for a long time. We got a real love for the plant. We have a very dedicated team who cares a lot. I'm a

technology guy. I'm kind of a tech guy by experience and the cannabis lover by passion. So I've been growing for twenty five years through closets and garages and houses and we've got strains in our greenhouses now that I've been growing since the beginning. Our Super Silver Haze is an example, as one that's probably close to a quarter of a century of cultivation in my hands now. We care a lot about the community. We care a lot about; I think cannabis comes from compassion. We work hard to use technology to amplify our love for the plant, not pollute it. I think the world's a better place. I think that shines through with how we treat our employees and the neighborhoods that we live in. On the product side, I think all the stores have a respect for what we're doing. We've got a handful of great brands. And you just if you're not from California, take a quick peek and you'll see us on BDS, you'll see us in the stores, you'll see lots of news articles about the things that we do to focus on sustainability and lots of environmental stuff as well. So, I think we rank pretty high up on the ESG side of things from an investment point of view. And hopefully we are who we are. So hopefully you like what you find.

Aaron: So, I want to dive into that specific question and be, kind of pretend to be an evil capitalist for a second. Why the personal focus on sustainability and climate change? Why as a shareholder should I care? Doesn't this make your expenses higher by focusing on all this ESG stuff? Like why is that important to you and why ultimately as a shareholder, should I care? If I'm just caring about dollars and cents.

Graham: Right. Well, I think a couple of things. One is we need to remind ourselves that everything we do comes from this plant and this plant comes from Mother Nature. And if we didn't have it, we wouldn't be here. Right. So, at some level, the idea that you would take something from Mother Nature, build the whole business on it and then stomp your foot in your face is hypocritical in a way that I can't tolerate. That said, it is not a purely altruistic thing. I think sustainability, particularly when it comes to agriculture, is actually aligned and synergistic, not at odds with each other. Right. I mean, if you think about what we're doing. Right. We're trying to be as efficient and precise with our cultivation of this plant as we can. That means you don't give it more than it needs because you're wasting something, and you also never give it less than it needs because you're missing out on something that you could have had. So, in that sense, sustainability goes beyond the ESG maybe definition of it into a broader sense of running a good business. I like to call it the triple bottom line, things that are good for the planet, good for our business and good for our customers. Are you take something like our irrigation strategies, right? So, when we irrigate, we capture and sterilize and recycle the water. That is good for the planet because we're not wasting water and because we're not polluting the groundwater table with

nitrate. It's good for our business because those are valuable commodities. And so, by not wasting them, we keep our costs low. It's good for the customer A: because we're able to deliver a product at lower cost because we didn't throw things that were valuable away, and hopefully because they also appreciate the fact that they want to support businesses that care about the planet that we all live on. You can take that a step further and say we have light meters tied to our irrigation. On a sunny day we give slightly more water than on a cloudy day. But these are things that historical cultivation we could never do. Right? You had a guy with a wand. And he tried to water and sometimes it was too much and sometimes it wasn't enough and want to go on vacation. This is the computer that does, you get together a bunch of smart cannabis cultivators and agronomists and you program the thing to be perfect and then you give it influences, and then twenty-four hours a day, seven days a week, it always does it right. Like adjusting for light levels, don't under irrigate on a sunny day because the plant could have done more. Don't over irrigate on a cloudy day because you actually leave the plant worse off because you're suffocating the roots. Right. So, if you can hone that in, you can do quality, consistency and cost all at the same time. And I think that is the definition of sustainable agricultural practices. I'm an environmentalist and so I like that. That's also the definition of a sustainable business. And I'm a business guy and I like that. And if you can make a business that's sustainable and being sustainable, that's actually the maximum good. If you can persist and doing good, that's how you build the biggest pile of good. If you gave it all away, right, you cut to the bone and your out of business three months later, well, you did some good for three months, but then you're done right. What you really need is thirty years of doing good all along the way.

Aaron: And it strikes me, as what you're talking about is maybe I'm not fully appreciating how much technology and this touches into your background of how much technology is involved. And I saw that video of the greenhouse. And I'm just kind of wondering to myself, like, how do you manage all of that? I have to guess there's a pretty substantial investment in technology and a pretty sizable technology component to everything that what you're doing based on what you're describing.

Graham: Yeah, yeah. I mean, I think precision agriculture is high tech almost by definition. And I think precision agriculture is some of the most sustainable agriculture. If you want to get efficient and maintain consistent efficiency, it's hard, that's what computers are good at. Right. It's a little bit metaphysical or whatever, but so every business has at least one biological system. It's the people in the business. Cannabis happens, or agriculture happens to have two biological systems. You have the people, and you got the plants. I'm a systems kind of thinker, so when I

think the plants are almost like a little computer, if you figure out what you want out of them, you can figure out the inputs to give them to get that. They're not random. Like if you give it seventy-two degrees and twelve hours of light and this EC and this amount of water, it'll give you the same thing every time. So, once you decode that computer system, you figure out what inputs do I need to get the results and how do I give it those inputs. Every time I do, I give it those inputs every time efficiently. That is what a computer is really good at. Come up with the program, repeat the program, do it efficiently. So, we have a lot of technology from climate control, computers, cogen systems. I mean, these super high tech natural gas generators that are amazingly efficient. It's really, I talk too much, I apologize, but they're really cool. So, you take natural gas, and you burn it and you make electricity. OK, normal. In this case, since it's cogen, and it's on site. They call it combined heat and power. So first we burn the natural gas, we get the electricity. A byproduct of that is heat. We take the heat, and we use it to warm the greenhouses. A byproduct of the combustion is CO₂. We take the CO₂, we put it in the greenhouses. So now you have this natural gas that you used, and you literally used every single piece of it. Used the power, used the heat, used the CO₂ to make the entire thing more efficient. You start driving that with some smart computers in the middle to decide when and where and how to allocate that. And that's when you start to get the efficiencies that really blow the roof off.

Aaron: That's a great explanation. When I look at your projections, they seem really aggressive. I look at your company right now as Glass House as it is, and I understand you've explained the opportunity, you are cash flow positive right now. But I look at these projections and they look really aggressive to me. And if there's one thing I've learned from SPACS or other cannabis companies is to be very, very cautious when I see, hey, we're at this low level, but we're going to do that. How do you respond just to that concern that like why would I even believe your near-term projections? Not that you may not get to it in like five years or something, but what would give me comfort here?

Graham: So, to start with Glass House last year, 2020 on a pro forma basis did about sixty three million in revenue. Depending on what you're looking at, the gap accounting on that is about fifty-three million. But that's because we had two dispensaries that we didn't finalize closing on until January 1st of 2021. So, the revenue for them is missing. A much better look at our business with sixty-three million in revenue and about six point three million in EBITDA. We've had three positive EBITDA quarters finalized. We just finished the fourth one. Of that sixty-three million in 2020 and the six point three million positive EBITDA in Q4, five of that.

Aaron: Quarterly, that's a quarter EBITDA, right?

Graham: Right. Six point three million on the year. Five million of that was in Q4. So, you can see the start of the hockey stick. Right. We have a second farm that we opened up in October of last year. So, we only got the full operation maybe 30 days, right, by the time you harvest the plants on it. Now, we're heading into the spring and summer with light is two point four times as much as it is in the winter. We're partnered with Mother Nature. So, more light means more yield. If you look at Q4 of 2020, our base business for 2021 is almost just a roll forward of that. That, plus a little bit of seasonality is all the base business for 2021. So, when we get to one hundred and ten million and 20 million EBITDA that's really just Q4 times four and some seasonality. So not a big stretch. You don't see a ton of the expansion in the new stores or the new farm in 2021 because they're all just getting built out and turned on and licensed and stuff like that. It really starts to take hold in '22 and '23. And if you look the fundamentals of that, they don't really assume that we're that much better tomorrow than we are today. We have the benefit of six years of actuals here. So, when we do our forecasting, you can't just say oh and then imagine a miracle happens, right, magic pixie dust, you're twice as good as you were before. You got to look and say, well, OK, well, what did you do? You've done this for this many years. How does this go if you've got to justify everything? So, we didn't really have things go up much. Mostly what we did is we said, hey, here's what we can do with a square foot, so to speak, and here's how many square feet we will have. If you almost linearly extrapolate that this is where you end up right. And conversant with the retail. Here's the four stores we have. We're going to add 17 stores. We model them all under what our current stores look like. We don't hit parity with our existing stores for like three years on these new stores. There's nothing aggressive in here. Everything we've done, the things that we've done successfully, we're just doing it bigger. And the bigger is based off of what we've already accomplished. Are we as good tomorrow as we were yesterday? I sure hope so, right? We've been going around the racetrack in a BMW. Awesome farms. Now we're getting in a Ferrari. If we go the same speed around that racetrack, we did something wrong, right? So, the expectation is we will actually go faster. The the modeling that we did assumes that we're going to go about the same speed.

Aaron: Gotcha. If I look out, you're fully built out, you've converted the whole greenhouse, you've invested it, I'm not even going to say what year it is. Let's just assume year X, it's all cannabis. You're growing. You've gotten the efficiencies you think you could. Have you modeled out like how much cannabis could you produce with the facilities that you will own once these transactions close, not assuming any other future production or add ons?

Graham: Yes, yes, we have.

Aaron: Are you able to share that? I just curious, like per square, I can do the math myself, but I'm just curious, like per square foot, how much are you doing now? How much do you think you can do in the future? Are you able to share any of those numbers?

Graham: I mean, you know, so I tend to think and those kinds of questions, I think in terms of biomass, which doesn't mean like roots and stuff, you throw in the compost, but it also means you think about your A buds, you think about your small, think about your trim. Right. So you bring those things together. Our current cogs on a blended basis, about one hundred and fifty bucks a pound. I believe that we'll get that to about one hundred dollars a pound. Again, as I mentioned, for reference, you can find other folks and earnings calls and stuff that will tell you that the average greenhouse growers, \$450 to \$500 a pound indoors, probably \$700 to \$1,000 a pound. Our numbers are good. And I think they're going to get amazing. If you have a lease, our total cogs will probably be less than your lease. Only cogs are for production. That said, I think of the biomass will probably be about 1.6 to 1.7 million pounds of biomass a year that would come out. Again, a flower that's in jars, smalls and pre-rolls and stuff. And then trims that gets extracted as edibles, topicals, vape pens, all that kind of stuff. And I really don't think that that's it's not a tremendously big number, even in the context, because think about this. Like you said, you know, this year X, this is four years down the road. Even in the context of California, I'm comfortable with that number. You bring the walls down and the question is going to be, where is all the supply going to come from? Nor is there too much of it. Right. So even here in California, I think we got a great business. It's plenty exciting the way it is now. We have our new greenhouse set up in a way that it's basically free, idle capacity. Anything that's not in cannabis is leased to a tomato farmer, covers all of our costs. There's no burn at all to us. We have great terms and the very limited time we can kick the tomatoes out convert it to cannabis. Right now, we're building it because we have the demand. This is not a field of dreams, right? Like this is I could sell twice as much CPG and I can sell twice as much wholesalers as right now today.

Aaron: So right now. Right now, just assuming that I waved a magic wand and I said whatever capacity you could sell twice as much cannabis like flower or product

Graham: Twice as much CPG and twice as much also for four times even. That would be nice. That's what you're doing now. That's what we're building. That's what we're going to add. Right. We're going to add one point three million square feet, a little bit less than four times what we have now. A result will be four X what we have now. So, we're making we're building for what we need now with an idle no-cost carry to set up more. So, when we satisfy that demand, all I got to be able to do is like about six months in the future and say I need more. Maida's out. Retrofit plant it, harvest it six months later. There's another 20 acres of greenhouse supply like we're talking 20 acres of lights in this greenhouse, indoor quality, full on supplemental light, perfect climate, great environment outside and inside, highly efficient, CO2 supplementation, everything you would get in a warehouse and you're partnered with Mother Nature and not throwing away anything that she gives you. Just policy. There's no better way to do this.

Aaron: Graham, you're making me think. You know, if I'm taking off my bear hat now, I'm just going to put on my Super Bowl hat. You're making me think you don't have enough capacity. Is that the right way? If I look out far enough, is it possible that you won't have enough production capacity, especially if the walls come down to produce and satisfy the demand of what you need? Is that a crazy thought?

Graham: I'm confident that we will grow and sell everything that we have, and we will need more than that.

Aaron: That's well, that's I guess you'll cross that bridge when you get there. OK, I'm going to put back on my bear hat. So, what could go wrong? What could go wrong and I specifically, one thing that I heard is, well, hey if all this, going to your point about the bodega in New York, if all this legal cannabis is coming from California, going all over the country because everybody wants it. I'm now seeing New York legalized. I'm seeing New Jersey legalize, I'm seeing all these places legalize. Is it possible that all this legal cannabis? Oh, man, there just isn't the demand and the rest of the country, we've got to stay in California and California gets flooded. That's just one risk that I heard. But in your mind, what could go wrong? What keeps you up at night?

Graham: Yeah. So, I don't think the scenario that you described is super likely. Again, I like to look outside of cannabis to figure out what I think is going to happen inside of cannabis. Right. 80 percent of the fruits and veggies in our country come from California because it's a good place to grow, right?

Aaron: It's perfect weather!

Graham: It could come from anywhere and if you think about your favorite New York wine, you might not have one. They don't grow wine there, right. You're favorite Napa Wines, your favorite Santa Anita Hill's in Santa Barbara County wines. Sure. Right. You think about the strawberries they eat in the restaurants in New York. Probably from Driscoll's, probably from Ventura, probably next door to our new greenhouse, because that's where it makes sense to grow agricultural products. I would focus on legalization, the retail, the stores are what are the important part, even MSOs. I look at all the MSOs as our eventual partners. I think they will end up writing down large pieces of their cultivation once you no longer have to have a silo. Right. It's possible that cannabis will be the one product in our entire country in all of history that has not traveled interstate. That's possible. I don't think that the dormant Commerce Clause of the Constitution supports that. I think we see the precedent for that already being set in striking down the residency rules for Maine and Michigan. And Michigan, interesting, the order was stayed by a federal judge. So, the question of do the feds think this is all schedule one want to skip the commerce clause? Because the answer is no. The Commerce Clause says that everybody in the United States has a fair, open market. If you want to ban cannabis in your state, that's fine, you've got to ban it for everybody. If you're going to allow it, though, you have to allow for your residents just as much as the farmers in the state next door. Right. And that's my opinion, the way that it's going to be. I think Congress will do it. But if not, I think the courts will do it.

Aaron: So, you're bringing up the bull case. I'm going to interrupt. I want to know what keeps you up at night. Thank you for answering that question. You answered that question. But I want to, I'm going to press you, I want to know what keeps Graham up at night. And I know that you probably have gummies that can help you sleep. Besides that, tell me what keeps you up at night? What can go wrong that I haven't touched upon.

Graham: It's timing, right? I am very confident that we will execute on what we're setting out to do. I'm confident because, for example, we've converted two greenhouses from other crops to cannabis before successfully. We have tripled in size twice before successfully. This next phase in Ventura is just doing that again, converting a greenhouse and tripling in size. So, I'm very confident that we'll do it. It's cannabis. Cannabis throws curveballs at you. So, for me, the question is always timing. Right? So, I think we've gotten better because we have the experience

of living through that. So hopefully our estimates are more accurate than they would have been for somebody who just got here.

Aaron: Do you mean timing as like regulatory getting the green light, signatures. That's what you mean. You don't mean timing. Like, oh, can my team ramp up?

Graham: No, I mean, just like the stuff, cannabis always has drag and friction that you don't it's really hard to always forecast. You can get better and better and you can be conservative just for the point of being conservative. But like, you know, think about the things you, here a random example, because it just happened. We're bringing in a consultant and there a big ag consultant. Their focus is process, optimization and efficiency. Right. So, they go and study what we're doing. And I love this stuff because it doesn't take anything from the quality. Right. Like, it just gets higher quality for a lower cost, right? They're studying, hey, when you get ready to harvest, where are your scissors? OK, well, why are they all the way over there? That takes you forty-five seconds to walk there, put them here and it takes you five seconds. Like the quality of the cannabis didn't go down, we just delivered it for a better price. Right. So here it is. These guys have come in, they come and do all kinds of ag, they come from another country. They got stopped and turned around the border because the guy Googled the name of our company and said, this is cannabis. You've got to go back. Project delayed by three weeks while we go figure.

Aaron: Oh, my gosh, that's crazy.

Graham: Is there any way to forecast that? I don't know. Do you try and be conservative on everything? Yes, right.

Aaron: To the point that there's hurdles that cannabis has to endure, that other industries don't have to endure.

Graham: I mean, we have banking now for all of our entities, which is great. When we started this, we didn't. We had to do payroll with the W-2, but in an envelope with twenty's and nickels and quarters. And it took two people a full day to do it for 250 people because then they had to count their money and sign that they got it, that kind of stuff. Like it adds up. Now, we're happy to have banking, right. But we had a party when we got banking. No other business has a party when they get a bank account. Right. That's the cannabis world. There's legal, there's regulatory. So I'm confident.

Aaron: That's what keeps you up, that's the main issue. Got it

Graham: Being on schedule.

Aaron: I want to switch from the bear questions. And I want to end with something that I've been impressed with beyond just dollars and cents. I just think it's great practice. And I want to hear from you. I want to end on kind of like a high note. I just saw a news story that you basically just provided, I think yesterday and this weekend or maybe it was last week about vaccines. You had a vaccine clinic and you paid everyone; everyone earned their same payroll just to get vaccinated. But I want you to just talk to me about how you feel, the impact and the community, why it's important to you. You know, I would also like you to talk about just why you gave employees every employee stock options or some form of stock. Could you just talk to me about that? Because it's one of the things that I hope people realize, I mean, especially from this interview, you're one of the good guys. I just want to you can you talk to that?

Graham: Yeah, well, I think fundamentally, philosophically, cannabis is an industry of compassion. Right. And so, there's a lot of people who have done a lot and sacrificed to help blaze the trail that we are on now. And I think it's imperative on us in many ways, social justice, the way you treat people, the way you treat the planet, that we connect the flywheel of our hopeful success to making things better. Right. And I think we're all part of a community. And I think a lot of that comes down to treating others, like the intention and how you do things and why you do them matters. Right. So, for stock and stock options, we gave everybody in the organization all the way down to the folks who work in the greenhouses or sell things in our stores. This is not just an executive thing. Everybody had it. We did it as stock appreciation rights makes it a little easier for them to manage but gives them the same benefit of a stock option, basically. And that's because we think everybody's working hard. And if we create something of value, that everybody should share in that. Right. And I think the way that we treat the folks who work for us is important because we asked them to put a lot of love into what they do and there should be a reward to them for doing that well. So, a lot of times in agriculture, people kind of get treated like tools in the shed. And I just I don't think that that's the right way to do it. It should not be "we've got strawberries to harvest, come break your back for two weeks. The field's gone. Now we don't know your name or how you're paying your rent or buying your groceries". Right. We would much rather create a team. And it's not purely philanthropic. I think it's a strategic advantage. We have a team of people who care about us and our company and

look at it like family, and I think they work harder because they care about what they're doing, and I think that makes a win-win for everybody. I mean, if I say it, if I can keep from tearing up as I do, is one of my favorite things was we gave a tour to the superintendents and principals in Carpinteria where our greenhouses are and one of the things they said was that they really appreciated us because we took better care of our workers and their workers took better care of their kids, and the kids showed up better, more ready to learn in school like.

Aaron: That's awesome. Yeah, no, that's really awesome, if

Graham: You can make a business while doing that at the same time, then I think that's a win.

Aaron: Graham, this has been awesome. I really appreciate this. And I've learned a lot. I thought I understood, and I gained some nuance. So, thank you so much for your time and congratulations on this whole deal to basically become public. And I hope this interview serves as an opportunity for people to get to know you better and know Glass House.

Graham: Thank you for having me. I appreciate you taking an hour of yours to ask the hard questions. I think that's, the easy questions are easy, so these are the questions that are tougher, the ones that are more valuable. So, I appreciate you going right in and asking them and anybody that wants the Glass House Farms on Instagram or grahamfarrar on Twitter, if you've got questions. I love this is what puts my feet on the ground every morning. So, I'm happy to chat more if there's anything I can do to share knowledge or answer questions or concerns anybody has and you know where to find me!

Aaron: Thank you so much, Graham.

Graham: Thanks for having me.