



GameChangers
Season 2: Episode 2
Cameron Knox

Seth Robinson:

Welcome to GameChangers, the show that's about playing by your own rules when it comes to your career. Join us as we speak with people who've taken the road less traveled and found their niche. I'm your host, Seth Robinson. This season, we're taking some time out to reconnect, exploring the ways our game changers are forming connections in the world by creating new communities, spaces, and technologies.

Cameron Knox:

That reality is really important for us to get to a zero-carbon future, because electricity is still a large part of the world's emissions, and solar is just this magic solution where you put a panel in the sun and it creates it, so we really want to allow that magic solution to be deployed globally as fast as possible.

Seth Robinson:

Today, we're joined by Cameron Knox, the engineer turned co-founder and CEO of Allume Energy, a company that has created a world-first system for rooftop solar in apartment blocks. Startups are really a labor of love, driven by an entrepreneur's desire to make a difference, but when it takes so long for a startup to become profitable, how do founders stay motivated and balanced on the personal and financial fronts?

Cameron Knox:

I think I was in a fortunate position where when we started, I didn't have any dependencies, so... And didn't have enormous mortgage or anything like that, I didn't have any children that I had to feed, so for me, what I had to focus on was just being able to pay rent, just being able to pay for my own food, and that is a cost base which was a little bit easier to satisfy than most people have, so I think starting a business early, although you're less experienced, in some ways, it's easier, because you have a better appetite and a better ability to take risk and take financial risk. So I really do admire the people who have a family of four and a mortgage, and are still willing to stick their neck out, quit their job, and start a startup, because that's a really, really big financial risk.

Cameron Knox:

Fortunately, I didn't have to take that, so I... Just meant that I was eating more baked beans than normal, and two-minute noodles, and that kept me going, so for the first couple of years, I didn't take a salary from Allume, which is very common in startup founders. I think the biggest misconception about startups is that it's a quick way to make money. It's not quick, and it's... You typically don't make money, so it's usually an eight to 10 year commitment, and highly likely that you won't make much money coming out of it, you really have to do it because you care about what you're trying to create and the problem that you're trying to solve.

Seth Robinson:

The other thing we hear about startups a lot is that idea of, "Fail fast, fail early," but this is your first startup and you've managed to make a go of it, is that weird?

Cameron Knox:

Within every startup, there's a lot of failures, so I think we certainly haven't had a straight line path to where we are now, and we won't from here to where we're going next. So I think although this startup has been successful to this point, that doesn't mean that we haven't had to adopt that mentality and had to fail, and fail as fast as we can, we still aim to do that. Obviously aim to succeed, and succeed as fast as we can, but ultimately the result is probabilistically more failures than successes, you just have to make the successes bigger than the failures, and I think that's really important part, is also try and fail small.

Cameron Knox:

Even when you're a big company, do your tests on small elements which don't cost a lot of money, learn as much with as little money as possible, even when you have a bit more to play with, and then scale it up when you've found a solution which works. We're always adopting that mentality of trying to be as lean as possible with our decision-making, and we certainly still do fail, but that collective nature of all these failures has led to a success ultimately.

Seth Robinson:

One of the things I've come across when speaking to other entrepreneurs and startup founders, the ones that seem to be really successful kind of zero-in on a problem they want to solve. I'm wondering, when you started Allume, was there a specific problem that you guys were trying to tackle?

Cameron Knox:

Yeah, certainly. When we started back in 2015, we were really a different company, but we were focused on exactly the same problem that we're focusing on now, and I think that's important in most startups, is that you really focus on that problem and continue to. For us, it was really a twofold problem. In Australia, we have a very financially compelling rooftop solar market, so we have high electricity prices, we have low cost of panels, and we've got pretty abundant sunshine, and it's meant that a lot of our homes have solar installed, which is great. Actually, over 22% of them now, which is a fantastic number of people reducing electricity bills and carbon footprint.

Cameron Knox:

But the problem that we saw was this opportunity to get access to cheaper, cleaner power was only available to homeowners and business owners in standalone, detached buildings, which was leaving the rest of us missing out, and that included myself, my co-founder, over two million other Australians living in low-rise, multi-tenanted buildings, so low-rise apartments essentially, which had the roof space for solar, but no affordable way to get access to it, so we were really founded to

change that, so to allow anyone who wanted to to get access to the cheaper and cleaner power of rooftop solar.

Speaker 3:

The SolShare allows all residents and businesses in a single building to share one rooftop solar installation, so whether you leave home in the morning and don't come back until the evening, or stay home to look after the kids, or you're busy running your business six days a week, you will receive solar when it will save you the most money, so you too can join the solar revolution.

Seth Robinson:

The energy space is one where it seems like there are lots of businesses kind of kicking off their own models. Do businesses really kind of have to lead the way here, is the regulation in the sector itself kind of lagging that you have to make these changes?

Cameron Knox:

I would definitely say so, yes. I mean, the speed at which the energy market is changing is too rapid for a regulator to really drive. You've seen the adoption of rooftop solar over the last 10 years in Australia as a great example of how rapidly things can change, and that's all been driven by purchasing decisions of individual and private companies really driving this change, and I think that'll continue to be the case, just because that is how things happen really quickly. Governments can catalyze that, you've seen that in Victoria particularly in the solar industry, with things like the solar rebate scheme. They can definitely catalyze this growth that private companies are really driving, but ultimately the speed is not conducive with regulatory timelines, and so they're typically behind and catching up, and that's going to continue to be the case, I expect.

Seth Robinson:

So when you think about some of the problems you're tackling, the first one that jumps to mind for me is climate change, that this is something that could really make a difference in that area, but this is a debate we're having a lot these days, is when it comes to tackling these kind of issues, I guess the question is who should the onus be on? Do you see businesses being leaders in this space, or do you think that it should be more up to government and regulatory bodies to kind of set that precedent?

Cameron Knox:

Well, I feel with climate change particularly, we have to pull every single lever we can. Because the problem is so urgent, we really need everyone to be driving it as hard as possible in order to achieve the goals we really need to meet, so I suppose my answer to that is both, but as I mentioned, I think what comes first is typically the private sector, and we're seeing that in Australia, and then governments do catch up and they support and continue to speed up, but it's really the private sector that drives that initial growth, which is really important for us, with the urgency that climate change has.

Seth Robinson:

So, we've just come out of 2020, which has been a weird year for everyone. We're doing this interview remotely, which is normally something we'd sit down and do together in a studio, so that's just one little hurdle we've all had to overcome. In thinking about those things, what does that mean for someone like you who works in the energy sector? Just thinking about me working from home for example now, I'm using a lot more energy than I did previously, has this really affected your model in your business?

Cameron Knox:

It has, yeah. I mean, a lot of the places in which we've used energy have shifted over the last year from being in the big cities during the middle of the day, and the industrial areas, to a lot more residential usage during the middle of the day, like you're using now. It does mean that rooftop solar is more compelling now than it ever has been, because you are using more energy during the day, and you can use, as a result, more solar during the day when the sun's shining and save more money from that, because ultimately with rooftop solar, it's better to use it than to let it to go out to the grid from a financial perspective, so that has changed our value proposition for us.

Cameron Knox:

Working with apartments, typically the question we would get is, "I'm not using energy during the day, how does this help me?" That question's a lot less frequent now, because there's so many people in their apartments during the middle of the day working from home, and I think that'll continue even as hopefully this pandemic starts to fall away throughout this year, who knows, but I think that work from home shift will stay, and as a result, that energy shift will stay too.

Cameron Knox:

What's more of a challenge for us is our product is entirely new, it's not a design that's ever been conceived or implemented before, and as a result, the regulations around product standards for something like the SolShare, which is the name of our product, don't exist, so we're really playing in a totally new playing field in that the regulators don't know how to interpret it, and that means that we have to do a lot of education of those regulators, a lot of getting them comfortable with what we're doing and how we're doing it, because we are the first, so we're really paving this path, and hopefully we can capitalize on the first-mover advantage we have, but that's been our largest challenge, is really getting the regulators and what we call the work providers, so the companies that own the poles and wires, comfortable with our product being connected to their network and being installed.

Seth Robinson:

We all have a vision of what it means to be a startup founder. Usually it involves Teslas and social networks, and launching your own space agency, but how close is this to the reality of the everyday entrepreneur? You're an engineer, you did your training at the University of Melbourne, you're an alum, but now you're a CEO of a company, and it sounds like maybe a big part of your role is potentially liaising with those regulators, it sounds like it's about those soft skills, and very much the management side of things. What's it like kind of transitioning from being an engineer to being in business and being a CEO?

Cameron Knox:

Well, it's been a slow transition, I would say. At the initial stages of building a startup, there was a lot of engineering effort and making sure that it was commercially feasible, but really after that and since we brought on people who are far better engineers and far more experienced than I am, as you say, my role has really shifted to be more commercially focused. It's really valuable to have as much support as possible, and I was very fortunate to surround myself with people who could support me, and were really happy to provide expertise and guidance when I needed them.

Cameron Knox:

But ultimately, I felt like where I really learnt was just by doing it myself and making mistakes, and I suppose that's the case in any industry, but especially in business, when you actually do it, you really go up the learning curve pretty quickly when it becomes a necessity in order to keep the wheels

rolling in the business. So yeah, it's been a rollercoaster of learning, a certainly steep curve, but one that, yeah, I love doing, and I think my engineering background still provides me with benefit even through a business lens in the way that engineers are really told how to solve problems, and given confidence in they can solve problems, even if it's not necessarily their specific area of expertise. Asking the right questions and then just going through the right process of problem-solving is something that engineers are taught, and really helps you across all areas, and I found that valuable, and still do, even in the business sphere.

Seth Robinson:

And I suppose the fact you're still here five years later is a huge testament to that. Isn't it something like 90% of startups don't make it past their first year or so?

Cameron Knox:

Yeah, don't know the exact statistics, but we were, I suppose, almost one of them after our first year, from what I can remember, looking back there, we've been very lucky. We've also been very resilient and adapted a lot, but definitely been very fortunate to get where we are, so we now have 18 people on the team, we have people in three continents, and hopefully we'll, by the end of this year, have a large number of deployments across those three continents currently, and six out of the eight states here in Australia. So it's been a great period of growth, and really satisfying to see all the work start to take shape and really the rubber to hit the road on that.

Seth Robinson:

You mentioned the community was a big part of it, the people you surround yourself with, which is another one of those things I've heard from a few startup founders. I know that you initially started through the Melbourne Accelerator Program, which I guess was kind of a kickstart to that and developing your idea over the last five years. Can you tell me a little bit about that experience, and maybe kind of what it's like getting from there to here?

Cameron Knox:

Yeah, I think we were very lucky to be a part of that Melbourne Accelerator Program. When we came into that, we really didn't know what we were doing at all, so it was extremely valuable for us to have that background and to have people, not just everyday people, but people who really had strong expertise in this space, who had done it before many times. We had those people to lean on, and that allowed us to get through that first year, which you mentioned is such a troublesome year typically in startups, and allowed us to really refine focus on something that could actually scale, could be commercially valuable, as well as providing social and environmental impact.

Cameron Knox:

And so yeah, I think that program for us was particularly valuable because we were so early stage, because we were so young, because we didn't have a background in... Particularly myself didn't have the background in the commercial side of things that a lot of startup founders do, so I'd... That program was really invaluable to provide that support, and I'd recommend any startup that's at the beginning of their journey and really, really keen to go after it, but perhaps is uncomfortable in a few areas of doing that, I think those style programs are really valuable to get you through that first little stage, provide the network of support which can harbor you for many years in the future. We're still in touch regularly with a lot of those mentors from MAP, and some of them have become investors, so it's been a very valuable community to be a part of.

Seth Robinson:

You mentioned, back a little ways, where you're kind of going in the future. You mentioned being on three continents, which is an incredible achievement itself, that's more continents than a lot of people travel to in their lives, that's pretty exciting.

Cameron Knox:

Well, a lot more than last year, yeah.

Seth Robinson:

Absolutely, which kind of hits where we're going now, which is where do you think you're going to be in the future? Obviously that's a hard thing to predict these days, but I guess I'm curious what you think the next five years kind of might look like?

Cameron Knox:

So for us, our vision is really to get as much global growth as possible. We want to be in the U.S., the U.K. and Europe all in the next 18 to 24 months, so that's a ambitious goal, but we're confident we can get there with the partners that we do have. But ultimately, we don't see a world where rooftop solar is not a given on all new builds, whether they be standalone homes or apartment buildings that have roof space, and we want to be a part of that, essentially.

Cameron Knox:

We want to not just be a part of it though, we want to help drive that and accelerate that, make that reality happen quicker, because as soon as you get rooftop solar on almost every building, you obviously will need other energy management systems to ensure that that solar is operating in the way which works best for everyone, so you'll need batteries and things like this, but that reality is really important for us to get to a zero-carbon future, because electricity is still a large part of the world's emissions, and solar is just this magic solution where you put a panel in the sun and it creates it, so we really want to allow that magic solution to be deployed globally as fast as possible, and so we want to be a part of driving that.

Seth Robinson:

We've talked a lot about the challenges that we're kind of facing, and that this is potentially a solution to things like climate change. Do you think there are other issues that we need to be aware of that maybe aren't kind of across our mainstream intelligence?

Cameron Knox:

I think a lot of focus has been on these big issues, as you say. I do think for us, we think a lot about the social equity side of solving these problems. It is easy to focus on solving climate change, but ultimately if you solve it in a way which the rich people pay less and then the poor people pay more, then you're just going to have other social issues, and you're still going to have the consequences that climate change would cause anyway.

Cameron Knox:

So for us, we really think it's important to create a transition which does keep social equity at the forefront, so meaning that the people who need the savings the most, the people who need the benefits the most are being focused on, solutions are being developed with them in mind. We think that's really important, and often is overlooked because it's typically easier to scale solutions in markets where there is more money around, and hence in the more premium markets, and in some examples, it is better to do that, where you start in the premium market, you can get a lot of traction there, you can use that to get more funding, and then ultimately broaden it to everyone.

Cameron Knox:

But what usually happens in that approach is it doesn't get all the way down, it doesn't get to the people who need the savings the most, and it still sits up in the premium solution area. So we really want to flip that, we want to focus on people who need the savings the most, start with them, deploy it with them, and then we can deploy it with the rest in parallel or subsequently. But if you don't focus on that social equity piece, then I think there's a risk as we scale these solutions at the speed that we need to, then people get left behind, and ultimately end up in a worse situation than they're in now.

Seth Robinson:

So with all that in mind, and I mean, that's a great gem right there, what kind of advice would you offer to a recent grad or someone who's entering the workforce in this crazy world of ours?

Cameron Knox:

My advice would be to find purpose, so really focus on the problems that you want to solve in your life, and figure out how to do that. Startups is one of them, but I think startups is not for everyone, to be honest. A lot of people aren't really geared towards the sort of chaotic nature of them. I do thrive on that chaos, so it suits me well, but a lot of people are the opposite, and so I'd encourage people to choose their own path, but just focus on making sure that they're actually solving a problem which matters to them, because whichever way your career goes, I think if you have purpose in it, then you'll be motivated, you'll be ultimately happy with going to work every morning, because you'll feel like you're really making a difference. So I would just encourage people to maintain focus on that, and if they don't feel like they have purpose, then maybe make a change.

Seth Robinson:

This is something we hear a bit of debate around these days, is that idea of working for the weekend, or you work for your paycheck and then maybe find that purpose or joy in other parts of your life, whether that's a passion for fly fishing or rollerskating or writing, or whatever, but it sounds like you very much think that needs to be invested in your career as well?

Cameron Knox:

Oh, absolutely, yeah. I mean, you spend so much time at work, it's such a waste if you really don't... I mean, you don't have to enjoy it at every moment. I mean, I don't think there's anyone who realistically skips to work every day and is absolutely loving every task they do at work, there are slogs in whatever industry that you work in, there are times where it's very hard work and it's very difficult and painful, but that is all absorbable and worth it if the ultimate reward is that you have purpose and you're creating impact in a space that you want to, so that's a really important underlying driver that you need to have, and that creates happiness at work, and creates long-term satisfaction as well.

Seth Robinson:

So, last question, and this is one that we ask all of our guests, but I'm curious, Cameron, what's one thing that's helped you get to where you are today that's not something on your resume?

Cameron Knox:

I think for me, I mean, I was... Had a childhood where I moved around a lot. I went to six schools before I was 15, and around different parts of the world, and I think that background in sort of uprooting your life and then going and starting another one, albeit with my family surrounding me,

was really valuable for me in teaching me how to be adaptable, and teaching me to be comfortable outside my comfort zone.

Cameron Knox:

I actually, through that process, I remember... I mean, the last couple of times we moved, I didn't really think about it as a negative thing at all, I was actually just kind of excited about it, despite the fact that I was leaving a lot of friends behind, I knew I could, at some stage, catch up with them in the future, despite it being before the days of Facebook and things, but I thrived and I began to enjoy that change and that process of getting outside your comfort zone again, and restarting.

Cameron Knox:

And I think that really helped me in startups. It's helped me be adaptable, it's helped me in that kind of "Be comfortable in chaos" mentality that you have to have, and so I would say that's one of the elements which has made me relatively good at what I'm doing now, I think that... And I've still got a lot of improvement to go certainly, but I think that's been a grounding that's really helped me get to this point.

Seth Robinson:

That is awesome. Cameron Knox, CEO and co-founder of Allume Energy, thank you so much for joining us today.

Cameron Knox:

No worries at all, thanks for having me.

Seth Robinson:

If we've learned anything from the last year, it's that uncertain times lie ahead. Issues like COVID-19 and climate change aren't going anywhere, but there is hope in new technologies, business solutions, and government action. If there's anything we can learn from Allume Energy, it's that one idea can make a difference, and when it comes to tackling these challenges, every little bit counts. Subscribe to GameChangers for new episodes, or catch up at fbe.unimelb.edu.au/gamechangers. GameChangers is recorded on Wurundjeri land. The podcast is produced by me, Seth Robinson, and edited by Michelle Macklem, with support from the University of Melbourne.