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Mitigating climate change with venture capital: A conversation with Wavemaker Impact's Steve Melhuish

The founding partner of a Southeast Asian venture capital fund explains his company's global ambitions to create economic opportunity, promote sustainability, and reduce carbon emissions.

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Human activity began altering the climate in the mid-19th century, when the industrial revolution began unleashing unprecedented amounts of carbon into the atmosphere. But an innovative new venture capital (VC) climate tech venture builder is trying to mitigate some of the ensuing catastrophic climate change with a laudable and lofty goal: reducing 10 percent of global carbon emissions by 2035. Wavemaker Impact plans to reach this goal by funding what it calls 100x100 companies, sustainability start-ups able to mitigate 100 megatons of emissions in ten years while generating $100 million in revenue. In this episode of *The Venture*, Wavemaker Impact founding partner Steve Melhuish sat down with McKinsey's Tomas Laboutka to discuss the genesis of the venture, why it chose Southeast Asia as the first of 15 global hubs, and why business model innovation is sometimes more important than technological innovation.

An edited transcript of the podcast follows.

Podcast transcript

Andrew Roth: From Leap by McKinsey, our business-building practice, I'm Andrew Roth, and welcome to *The Venture*, a series featuring conversations with legendary venture builders about how to design, launch, and scale new businesses. In each episode, we cut through the noise to bring practical advice on how leaders can build successful businesses from scratch.

In this episode of *The Venture*, we share a conversation with Steve Melhuish. Steve is an entrepreneur who has built companies in Europe and Asia and is cofounder of PropertyGuru, a property technology unicorn listed on the New York Stock Exchange. Over the past four years, Steve has focused on climate and social impact, investing in and helping over 25 green-tech start-ups. He also cofounded Wavemaker Impact, a climate tech venture build fund, which is cofounding and building a portfolio of 100x100 companies, each with the potential to generate $100 million in revenue and abate 100 megatons of greenhouse gas emissions over a ten-year period.

Tomas Laboutka: Steve, great to have you on the show.

Steve Melhuish: Great to be on the show, Tomas. Thanks for having me.

Tomas Laboutka: Let me jump in straight away. Why does climate sustainability matter from an investor's perspective, and when do you expect we'll move past all the greenwashing and see a fundamental shift to differentiation and real value capture?

Steve Melhuish: I think we're already seeing it. Clearly, there are some elements of the industry where greenwashing is still rife. But the businesses I see investing in the region are fast-growing, delivering not only sustainable outcomes but also profitable economic outcomes. We're seeing VC players moving into that space, as well as established climate and sustainability investors.

It feels like in the past 12 months or so, the economy has finally woken up to this green transition and the investment that's going to be required to support it. In Southeast Asia alone, it will require a $2.7 trillion investment, so I'm seeing a move in the right direction.

Tomas Laboutka: That's really encouraging, and congratulations for the portfolio being able to raise funds in this climate.

Steve Melhuish: Everyone talks about the so-called funding winter, but we haven't seen evidence of that yet. Investors seem to be increasingly focused on the sustainability space, which is encouraging.

Tomas Laboutka: What does that look like in this region? There's a disproportionate correlation between the impact of the climate crisis and how much money we've historically seen going into Southeast Asia. We both know how many cities are predicted to be under water by 2030 or 2050, and yet, the percentage of the capital allocation is not matching the requirements. How are the tides shifting in Southeast Asia?

Steve Melhuish: The region where we operate here in Southeast Asia is home to about 600 million people. You've got population growth, you've got urbanization taking place, and you've got lots of people getting electricity, air conditioning, and two-, three-, or four-wheeled motorized vehicles for the first time.

You also see a large increase in emissions per head, particularly in emerging markets, moving from about two tons per head to a more developed-economy level of ten tons per head. That all adds up to this double whammy taking place in a region that's home to about a third of global carbon sinks, like rainforests, which are being rapidly depleted.

So we have an urgent need to reduce emissions. In Europe, you have this very strong regulatory pressure from the top down, and a very strong consumer pressure from the bottom up. In the United States, you have a very strong capital movement into this space, but in Southeast Asia, we're still at day one. What you do in that case is focus less on talking about climate change and sustainability to investors and more about the value of delivering from an economic point of view.

The businesses we and others are investing in are delivering material economic impact to their customers. It's the inverse of the green premium. This is a green discount. This is delivering economic value while either increasing revenue or reducing cost, improving the bottom line, or sometimes both. And without achieving that material economic benefit, we're not going to get adoption.

The challenge, and therefore the opportunity, for investors and companies in this space is, if you're addressing and delivering a strong economic benefit to your customers—which just happens to result in lower emissions—then you're going to get faster adoption. And that's how companies in the region are predominantly approaching the problem.

Tomas Laboutka: This is a very interesting approach. You're getting ahead of the policies and consumer adoption and driving with value first. You're building real businesses that are delivering clear value to the target customers or, in the case of B2B, their partners. And for the cherry on top, they also are solving a real problem with the climate crisis and any other sustainability issue.

Steve Melhuish: Absolutely. If you think about it, a lot of the climate tech investing is going into moonshots and big science and engineering projects that will require large-scale infrastructure, whether it's carbon-capture technologies, hydrogen, or new nuclear science. It will take decades to roll out and scale some of these brand-new transformational technologies.

What do you do in the meantime? You have all the technology you need to reduce emissions by 50 percent already. The challenge is figuring out why some of these technologies are not being adopted. And that boils down to the business model and understanding the pain points of customers. If you've got a cleaner and cheaper alternative, then adoption should happen.

We spend a lot of time trying to validate opportunities where we can deliver these economic benefits using existing technology. It's more about business model innovation. If you approach a farmer who's earning $100 and say, "We can deliver something that is not only cleaner for you but will also deliver 30 to 50 percent extra income," that accelerates adoption.

Tomas Laboutka: Quite fascinating—business model innovation instead of tech innovation. You have invested in over 25 angel rounds for sustainability and climate-combating companies. Then you said, "I want to scale this. I want to pursue this vision to drive business model innovation with a clear purpose." Can you share a bit more about the philosophy behind that?

Steve Melhuish: We started Wavemaker Impact, which is a venture build fund, about 15 months ago. The ambition for Wavemaker Impact is to mitigate 10 percent of global greenhouse gas emissions by 2035. It's a very ambitious goal. To put things in perspective, Singapore alone is going to be peaking at around 50 to 60 megatons, so the goal is about a hundred times a Singapore, which is not a trivial amount.

We're starting in Southeast Asia and focusing on building what we call 100x100 companies. A 100x100 company is a company or venture we believe can mitigate 100 megatons of emissions, typically over a ten-year period, and generate $100 million in revenue. If we can build 50 of these companies, we will achieve the goal of five gigatons.

We plan to do this across 15 different hubs, the first of which is Southeast Asia. The reason we started in Southeast Asia is it's one of the fastest-growing regions in terms of climate change. It's also massively underserved and only attracts about 2 percent of the total climate tech funding today. So there's a huge underserved opportunity to build some of these companies and get them rolled out and scaling across the region rapidly.

Within the first 15 months, we're now on to our sixth venture. Not surprisingly, given the emissions map of Southeast Asia—where 50 percent of the emissions come from food, agriculture, and land use—five of the six ventures are in that space, while one is in the renewable energy space. The plan is to get to 16 or 17 before we move on to the next region, and eventually build out to 15 hubs and ultimately get to 50 of these companies delivering 100x100 at scale.

Tomas Laboutka: Wow, you're talking about moonshots in a different and very pragmatic way. This is actually a fairly ambitious but also a very clear plan on how you're trying to tackle various operational targets by 2035. What's quite interesting is that you're ultimately doing venture building at scale, which quite a lot of our audience is very curious about. In terms of tapping into this new business model innovation, you have a bunch of ideas you're investing in that will hopefully reach product–market fit. How do you go beyond scaling and actively help the portfolio move beyond that?

Steve Melhuish: That's a really good question. The approach we take is to first go where the emissions are, and if we want to have a big impact, we need to be going after a large amount of carbon. When we think about an addressable market, we think about it from a two-lens perspective—the usual economic opportunity perspective and the carbon impact perspective.

We identified about 50 areas just in Southeast Asia where we believe we could build 100x100 companies. One example is methane from rice production, which generates about 700 megatons of CO_2 equivalent, making it the third-largest generator of methane in Southeast Asia. We've identified it as a potential carbon opportunity, but we obviously have to determine whether we can build an economic and highly scalable business. That's the process we're going through now, running some experiments and seeing what works in different markets such as Indonesia, Vietnam, or India. We spend a lot of time thinking about validation.

We typically identify experienced entrepreneurs who have already built one, two, or three companies. They've got the battle scars, know how to scale companies, and know how to do fundraising. They also know how to build organizations from one to a few hundred people, and how to grow from one market to multiple markets. What they don't know, and what they want help with, is identifying the biggest and best sustainability or climate opportunity to focus their efforts on.

We then assign a team of three people and work with the entrepreneur for five to six months, testing and validating the area and opportunity and speaking with 100 to 200 customers to see whether this could become a 100x100 company. By the end of that process, we've got a minimum viable product (MVP) and letters of intent (LOIs) or memorandums of understanding (MOUs) from customers willing to spend money on this solution when it becomes commercially available. Only at that point do we actually put money in.

So we try to accelerate and derisk the opportunity by spending five to six months just validating. And once we've decided to invest, we'll typically put in $650,000 as pre-seed money. Then we work intensively for the next 18 months to help scale that company, working very closely with the founders. The founders own a large percentage of the business, typically 70 percent or more of the company, so they're highly motivated to build.

That's a little bit different from how a corporate venture would work, but these should be venture-backable companies that normal VCs or climate tech investors will invest in during that first 18 months of scaling. For all intents and purposes, they will look like normal venture companies. For example, the first one we invested in and started building is approaching 2,000 farmers, is already on track for about $4 million in revenue, and is looking at $10 million in revenue next year. That's not bad for a two-year-old business. We continue to refine and polish our model, but that's the approach we're taking.

Unlike a more traditional VC who looks at deal flow from an investment point of view, we look at deal flow through a number of lenses. First, can we identify these 100x100 company opportunities? We also look at deal flow in terms of founders and spend a lot of time talking to founders and building relationships with them. In many cases, they're exiting their companies on an earn-out or thinking about what's next. So we continue those conversations until they're ready to dive in.

This year, we'll do six ventures, and probably another six ventures next year. It's not high-volume "spray and pray." It's very much a deliberate approach, with one entrepreneur and three venture builders working together intensely for those first six months.

Tomas Laboutka: That is a lot to unpack, and you shared some incredible nuggets. Let me try to summarize what I heard. One, you do quite a bit of legwork, so this is not a VC with a passive funnel. You're actually creating the opportunities with heavy research, derisking the investment, and working with the founders. If they're getting across the line, they get support from you for the next 18 months, and off they go to scale. These companies have to be fundable, and you give sufficient incentives to the founders. So you're derisking and incentivizing experienced entrepreneurs to participate with a significant upside—very interesting from a venture-building perspective.

I want to go deeper into this funnel you touched on. You're looking for serial entrepreneurs who know what they're doing but may not be clear on what to do in the climate space. Can you summarize some of the lessons learned in attracting this distinctly unique talent?

Steve Melhuish: It was my single biggest concern when we started this 15 months ago. We had a supposition that there are enough opportunities to build these 100x100 companies, which we verified. We also assumed investors would be interested, because it's quite a new space. It's climate tech, it's Southeast Asia, it's venture building, and it's effectively a first-time fund. But we're now double over our initial target and are going to close ahead of that. So investor appetite has been very strong.

But are there sufficient experienced founders in the region who have built and exited companies? When you look at the data, there are roughly 150 exits a year in Southeast Asia. Of course, not all are successful. But there are an increasing number of founders who have relocated or built their businesses in Southeast Asia, maybe from Europe or the United States or farther afield. On our first call for entrepreneurs, we had about 200 founders apply, and we chose one. The second time, we had around 160, and again, we chose one.

We've been leveraging not only our networks but also the portfolios' networks for suggestions. We've been holding events in Indonesia, Vietnam, the Philippines, and other markets as well, just to raise the flag and share a little bit more about Wavemaker Impact. So it's not been an area we've struggled with, and we have met some super-talented people.

Sometimes the timing doesn't work, because they're in the process of exiting, or there's an earn-out, or they want to take a little bit of time off before diving straight back in again. It's not like you're hiring someone for a job right now. We might be speaking to somebody today who we're keeping warm for the end of next year, because they may just not be ready or they may just want to take some time off.

We are increasingly widening the net in terms of both geography and encouraging more women founders in this space, because that's been one area of surprise. When I first started looking at sustainability four or five years ago, I was surprised to see there were so many women leaders, like chief sustainability officers or sustainability managers. But when it came to tech and start-ups, it was still very heavily male-dominated. So we're doing work around how to encourage more women to move into this space, holding events and collaborating with other organizations.

Tomas Laboutka: This is very commendable, and again, so many nuggets to unpack. It almost sounds like you're building product–talent fit within your own venture, tapping into multiple ways to find talent. You have events, you're looking into your own portfolio, and you're trying to increase the pie by attempting to bring in more female founders. Then you're thinking about the long run by creating what I imagine is basically a backlog of founders. You're trying to hit that product talent fit, so to speak, and it sounds like you're getting there.

Steve Melhuish: Hopefully, yes. I think we're constantly learning and building that pipeline. The team is now 15 people, and many of those have joined us from other venture builders or management consultancies or are founders in their own right. But in many, if not the majority of, cases, they've joined us with a bit of a salary cut and are highly mission-aligned, because they want to make a difference in this space. I'm optimistic, given the response we're seeing. I feel like we're on the cusp of this green transition and people wanting to play a role in making the world a better place.

Tomas Laboutka: Congratulations, Steve. It's been tremendously insightful and inspiring to hear all the lessons you've learned building this new venture, from the aspiration, the ROI, and moving from greenwashing to value capture right away. Then there's the focus on Southeast Asia, where you can carve out a unique position, all the creative opportunities, the specific and practical tips on building a large pipeline of ideas to invest in, and how you're finding the right entrepreneurial talent. It's been a real pleasure to have you on the show.

Steve Melhuish is founding partner of Wavemaker Impact. **Tomas Laboutka** is an associate partner in McKinsey's Singapore office.

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