Meet Seafields, the aquaculture business working to remove carbon emissions from the atmosphere

As part of our new quickfire questions series - or QFQs - we spoke to Seafields Executive John Auckland about the company's mission to remove carbon emissions from the atmosphere.

Temps de lecture : minute

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Tell me about Seafields - what it is, why did you launch and what problem are you trying to solve?

Seafields is an industrial scale carbon removal aquaculture business, which will grow the brown seaweed, Sargassum, in hyperscale farms in the middle of the South Atlantic. The majority of the seaweed we grow will be harvested, processed, baled and then sunk to over 4,000m of depth, where it and its embodied carbon will remain for thousands of years. Even our most ambitious carbon emissions reductions plans will still leave us with over 1,500 Gigatonnes (billion metric tonnes) of carbon that we need to remove from the atmosphere. Seafields will aim to remove at least 1 Gigatonne every year.

How has the business evolved since its

launch?

We had a very clear vision for Seafields, and that hasn't changed at all. The roadmap for achieving 1Gt changes regularly as we discover more of the science behind our methods and make progress in designing and engineering our farm technology. However, the climate emergency is urgent, so it's out of the question that we miss our deadlines - so we won't allow our timescales to change.

What is your favourite thing about being a founder?

I love the challenges you face when doing things no one else has done before. The most important traits of a founder are resourcefulness, adaptability and having an innate ability to innovate in ways others can't. Seafields is developing a technology that is designed to upwell nutrient-rich water from around 300m of depth. In this way we can grow our farms in the barren areas of the ocean and minimise our impact on local marine life. The solution involves developing upwelling pipes that use the natural salinity differences in the ocean to upwell water without needing a power source. This technology is theoretical, and if we can't make it work our solution might be dead in the water. We'll need over 7 million of these pipes, and the costs will potentially be prohibitive if we need to include a power source. Working with theoretical technologies that may not work would put most people off. But these are the kind of challenges that excite me and give me a sense of purpose.

Which founders or businesses do you see as being the most inspirational?

Without being too cliche, Richard Branson has always been a role model to me. The way he consistently succeeds in tackling some of the biggest

challenges is inspirational, and the fact that he builds purpose into almost everything he does. One of the most inspirational business leaders I know is Cemal Ezel from Change Please. They tackle homelessness by training homeless people to become baristas, and provide them with the funds to get started. It's such a simple but powerful concept and it's taught me that your idea needs to be easy to understand and the impact you create should be instantly recognisable.

What has been your biggest business fail?

My biggest failure was working in an environment I wasn't happy with. It was 2008 and I was working in a financial services firm in the City. I sold a product that I didn't believe added value, which also happened to make a lot of money. I was too honest and so didn't sell very much. It showed me that success will only come if you believe in what you are doing and if your passion aligns with your purpose.

What’s in store for the future?

Seafields is still two years away from selling carbon credits, our main source of revenue. We have a lot of hard work, R&D and testing to do before we can get there. But I'm excited for the challenge ahead. We stated that we would aim to take 1Gt of carbon dioxide out of the atmosphere before Elon Musk announced his X-Prize of $100m to anyone who could achieve Gigatonne scale of CO2 removal. Before Seafields I didn't see anyone else with anything close to this ambition. Now I expect we'll have dozens of viable projects that could reach a Gigatonne per annum - we'll need 20 or so companies at that level if we're to truly fix the planet. Seafields has given me hope again for the future, and I very much believe it will give others reassurance as well.