

Meet DRIFT, delivering climate-critical green hydrogen around the globe

As part of our quick fire questions series – or QFQs – we spoke to Ben Medland, CEO of Drift about the broken climate, using yachts to create a pathway to net zero and how they are delivering a new class of renewable energy for the next decade and beyond.

The inspiration for DRIFT came from my 8-year-old son. One still summer's evening we were out for a walk, and we got talking about what he is excited about etc. When he stopped in his tracks and said, "Daddy, why is the climate broken?" Promptly followed up another stunning question, "and why can't you fix it?"

While gathering some form of an answer we both looked out across the horizon towards a wind farm which stood motionless – there was no wind. And so in that moment I resolved myself to take on that challenge. To face into the biggest challenge of our time and lean into the energy transition directly. And to do so with a renewable that doesn't stand still and wait like all other classes of renewable energy. And focus on adding another class... a mobile class of renewable energy that follows with weather and climate. That is how DRIFT was born.

DRIFT unlocks the huge energy potential that exists in the 70% of the globe traditional renewables can't reach – the oceans.

Tell me about the business – what it is, what it aims to achieve, who you work with, how you reach customers and so on?

DRIFT is the world's first mobile class of renewable energy. Our technology is simple, millennia old and demonstrated. The equation is to take a sailboat. Add a turbine. Then multiply that by the power of modern A.I. routing to generate green energy in the deep ocean. DRIFT's Energy Yachts are designed to sail the world's oceans, towing turbines through the water to generate energy, that is in turn stored onboard as green hydrogen in a process called electrolysis. The resulting climate-critical green hydrogen is then delivered to any port around the globe.

Sailing vessels that harvest energy for their own use are nothing new; however, our Energy Yachts take things to the next level. We are talking grid levels of power production in what is a renaissance of sailboat design. All powered by our patent pending A.I. routing algorithm which hunts 'goldilocks' weather conditions; positioning flotillas in real-time to deliver optimal volumes of green hydrogen at stable prices.

The important difference with DRIFT is that we are uniquely mobile. That means we can reach customers and communities the world over. Delivering renewable energy to remote locations and mega-ports alike, but importantly at no additional cost. This is a distinct advantage over traditional renewable solutions. But we are not here to compete with other renewables. After all it's called an energy mix for a reason. We prefer to talk about DRIFT as an 'AND' company. Adding another way. Another pathway to net zero and a just energy transition.

How are you funded?

We are funded by a Pre-seed round of investment from a selection of high-profile angels and family offices. Currently, we are raising our Seed round – please contact invest@drift.energy for more details.

What has been your biggest challenge so far and how have you overcome this?

6 months after founding the company, we made an application to the NetZero Technology Centre. Despite gathering huge support from those in the industry, our application was rejected. The critique was that this is all good in theory, but where is your demonstrator? We had underestimated the shipping world's desire to see 'in real life' progress. To keep up the momentum, we decided to make it real and prove the concept – fast!

So, we bought a boat – well actually two!

Then in 12 weeks we engineered a world first – making green hydrogen from a foiling yacht. A story that gave us exposure in the Sunday Times and many marine and hydrogen outlets.

We then replicated that with the second vessel. And 3 weeks later, transported them to Plymouth and demonstrated them in front of thousands of people at the Sail GP event. Our vessels produced the first ever green hydrogen on Plymouth Sound whilst sailing amongst legends of the sailing community. It was an amazing opportunity to engage with the public, academics and the marine community of Plymouth. We fostered a great deal of goodwill towards our programme. One commented, 'Finally a renewable that doesn't stand still and wait'.

How does Drift Energy answer an unmet need?

At DRIFT, we see the pressures of accelerating climate driven disasters, the sluggish energy transition, fuel inflation and unstable geo-politics. And it is with collective regret that we agree the energy transition is underperforming. Simply put the world needs more energy. Needs it to be green. And needs it fast!

Hence, we need alternatives. Like green hydrogen. A £300B – £1.4T market opportunity in 2030. And even that might be a severe underestimation, with Goldman Sachs predicting a €10T market by 2050.

The problem with the current green hydrogen market is one of overwhelming demand imbalanced with extremely constrained and slow supply. Global electrolysis needs to grow at 110% CAGR to meet Net Zero targets. A huge feat that we are already behind on. Scaling and speeding up requires AND logic. Time to add another way.

This is where DRIFT sails in. Our ocean based green hydrogen production can scale quickly to supply upwards of 5-10% of this market. And with >30% of H2 predicted to be traded cross-border, this plays directly into our sweet spot. Mobility.

Our strategy is to create and dominate a net new class of renewable energy for the next decade and beyond. We believe DRIFT is this decade's technological leap. Being #1 in a new market and hyper-scaling creates the opportunity for a defensible, IP protected and high-barrier to entry market. And we are winning. After just 12 months, DRIFT is undeniably in pole position.

As a new entrant to the blue ocean economy, we have already proven ourselves capable of generating highly skilled jobs, technology partnerships, supply chains, grant funding, government and media backing.

DRIFT is an entirely new energy system. One that is 'true green'. Ultra-scalable. Fast. And unlocks #OceansOfEnergy

What's in store for the future?

Having proven our technology at the SailGP race last summer in Plymouth, our priority is to expand our designs into what we call our 'Ocean Class'. So that means we are busy with researching, designing, partnering and team building to bring that vision of Ocean Class to life. We are working to form strong partnerships with shipyards, OEM suppliers, sail manufacturers, etc to progress towards the laying of the first keel in 2023. This means a focus also on the development of our operations and securing partnerships with ports, councils, and commercial organisations for offtake of our hydrogen payloads.

This milestone of first vessel is obviously the priority, but we continue also with solving the next problem down the line. That of producing many yachts, quickly and smartly. One yacht will be good, but flotillas of 1000's of ships harvesting energy across all earth's oceans will make the difference our planet needs. And means DRIFT can achieve our target of abating a gigatonne of CO2 by 2050.

What one piece of advice would you give other founders or future founders?

Critique your network first!

It continually stuns me how our network has activated behind the mission of DRIFT. People lean in. It is the most important external asset you possess when you start a business. So before starting DRIFT I asked myself a simple question, “Does my current network have enough meaningful connections to launch this business?” I think this is a truly important exercise that every founder must really challenge themselves on. Be very critical of your connections. Will they help? What can they help with? What can they manifest for you? Don’t start till you have confidence in it – and a plan to activate it.

And finally, a more personal question! What’s your daily routine and the rules you’re living by at the moment?

Are routine and startup not an oxymoron? In our household (with two children under 8) it is more a case of what do we all want to achieve this week – and then having the discipline to force that in.

Ben Medland, CEO of Drift

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