

Meet Naked Energy, creating tangible products to tackle climate change and decarbonise heat

As part of our quick fire questions series – or QFQs – we spoke to Christophe Williams, CEO and cofounder of Naked Energy about renewables, modular solar heat and power technologies and VCs changing relationship with cleantech.

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I was inspired to work in renewables from an early age because of the work of my grandfather. During the fuel crisis in the 70s, he was developing early prototypes of solar, wind and wave power alongside Professor Steve Salter (inventor of the eponymous Salter duck wave energy device). I was captivated by his models when I was young, and they had a profound impact on me.

When it came to founding *Naked Energy* 30 years later, I was inspired by his ideas and wanted to commercialise as many as possible, but it soon became clear (and I was reminded by investors) to just pick one!

Previously, I had a career in creative media and advertising. I loved every moment of it, but after a while I had a yearning for a new challenge in something purpose driven. It was that feeling, and my family legacy, that was the catalyst for me founding Naked Energy.

The issue of decarbonisation of heat has recently gained more prominence in the conversation about climate change, but for a long time

it's been the elephant in the room. Heating and cooling make up 51% of all the energy we consume on the planet. It was important to me to design a product that helps solve this issue, because until we address heat demand, we're never going to address climate change or reach our net zero targets.

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

At Naked Energy, we design, engineer, and manufacture solar heat and power technology. We've spent a decade testing and refining our two core products, Virtu^{PVT} and Virtu^{HOT} solar collectors, and we've engineered them to be world beating. Virtu^{PVT} is a unique hybrid product that generates both electricity and heat from a single collector. It produces three to four times more energy than traditional PV panels, and the modular design makes it the world's highest energy density solar technology. Virtu^{HOT} is a high efficiency solar thermal product and recently achieved the gold standard TÜV international certification.

Our products are ideal for anywhere that has limited roof space but high demand for heating and hot water - the likes of leisure centres and large residential buildings, for example. We have installations around the globe, from South Africa to the Netherlands, on the roofs of hotels, factories, and university buildings. The compact, modular design of Virtu gives us the flexibility to fit around pre-existing solar installations or cluttered roofs, whilst their energy efficiency keeps output high.



How has the business evolved since its launch? When was this?

Since founding Naked Energy in 2009, I've gone from personally being involved with the manufacturing process to heading up a team of twenty brilliant people.

At the beginning we spent a long time in ideation mode and making sure

that the IP was captured by the company. Getting the corporate structure right was also a key factor, as I had always envisioned the company as highly innovative and R&D-focused. The company has remained true to this mission with some brilliant scientists and engineers at its heart.

Investor support for climate tech has evolved dramatically since we launched a decade ago, and it continues to accelerate at pace. When the business started in 2009, cleantech was a bit of a dirty word. VCs had lost a lot of money from cleantech - they were expecting quick exits and massive valuations, but this wasn't the case. Additionally, investors were not interested in the environmental and social benefit our business offered, they were only fixated on the financial benefit. This made it extremely challenging to secure investment, but through persistence we found investors that understood our vision and aligned on expectations.

Nowadays there are more investors focused on impact investing, and the cleantech space has expanded dramatically alongside the increasing urgency to address climate change. It seems like the penny is finally dropping.

Capital needs to flow into cleantech so we can fund the energy transition in all its forms.

In tandem with the wider industry momentum, Naked Energy is now entering an exciting period of growth. We have a growing global network of partners and a broad investor base that has strategic input in various international markets, alongside a fantastic manufacturing group that allows us to address customers around the world.

How are you funded?

Like most startups, at the beginning we looked for early awards, grant funding and seed investment from friends and family. We were fortunate to win the Shell Springboard Award, and this was a catalyst for seed investment and a €1M grant from DECC (Department for Environment and Climate Change).

Since then, Naked Energy has gone through multiple investment rounds to develop the product, and we recently secured investment from Barclays, ELM Companies, and Big Sky Partners. The investment is enabling us to scale our operations and pursue an ambitious launch strategy in the US.

We also just announced the opening of our Series B round where we're targeting £10M to meet the increasing demand for green energy globally.

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

Getting our product to the world-leading quality and standard that it is today has been a challenging process - not least for the cost!

The TÜV certification for Virtu^{HOT} did not come easily, and it required many iterations of the product to finally get there. The Virtu tubes had to endure being hit by golf ball sized hailstones, withstand extended periods of time in -40°C and 240°C temperatures, and were even shocked by a simulated lightning bolt. It was a rigorous process, and each time we failed a test we had to go back and improve.

If it wasn't for the tenacity of our CTO Adrian Murrell, I'm not sure we would have made it through the testing process. He's a very calm

presence when faced with a technical challenge. It's all been worth it for the international reputation though. It's a good feeling when you can honestly say you have one of the best products on the market, and you have the proof to back it up.

How does Naked Energy answer an unmet need?

Investors tend to funnel money into software projects with quick turnarounds. Whilst they're doing great work, it's hardware we need, because at its core, climate change is a hardware issue.



Naked Energy is all about creating a tangible product that can help us to tackle climate change and decarbonise heat. Whilst software is amazing at monitoring emissions and helping us collect data, alone it's not enough to tackle the climate crisis.

Hardware is hard, and I think that's something investors need to realise. We need more patient capital that we can invest into hardware that may take years to develop. Without it, we'll never be able to reach net zero, let alone carbon zero.

What's in store for the future?

We just completed a bridge funding round led by Barclays, ELM Companies and Big Sky Partners. ELM Companies is also our distributor in the United States, and we plan to grow our foothold there. The US is an important market for us strategically, but we're also strengthening our presence in key European markets such as Germany and on island states like Malta.

As mentioned, we also just launched our Series B round to fund further global expansion. It's a fascinating time for the business and we are looking for investors who share our green vision and understand that investment in decarbonising heat on a global scale is needed urgently to address climate change.

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

If you run a business, you have to be prepared to make mistakes. It's inevitable that you're going to hit a few major snags along the way, and you have to resist throwing in the towel. There is a whole team behind you, and you have to keep pushing forward. There will be things that go wrong, which is extremely stressful, but equally exciting at the same time. My advice is simple really - never give up!

Christophe Williams is CEO and cofounder of *Naked Energy*.

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