

See all Tech 

Fuel cell start-up Bramble Energy secures £5m

It comes just weeks after the EU said such technology would be key to the world's decarbonisation

By Hannah Boland
3 August 2020 · 6:00am

     2

Hydrogen fuel cell start-up Bramble Energy has raised £5m, just weeks after the EU said [such technology](#) would be key to the world's decarbonisation.

Bramble has secured the latest tranche of funding from investors including BGF, IP Group, Parkwalk Advisors and the UCL Tech Fund.

It said the cash would be used to accelerate deployment of its hydrogen fuel cells, which, unlike other models, can be made using existing global manufacturing resources and so require significantly less time and investment.

Hydrogen fuel cells use hydrogen gas to develop electricity rather than fossil fuels. Among other things, they [can be used to help](#) cars run without producing greenhouse gas emissions.

They are seen as a key technology in cutting greenhouse gas emissions to zero, and the European Union last month said hydrogen would be vital in its plans to shift towards greener energy sources.

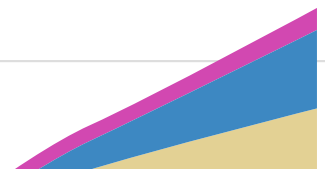
Hydrogen emerges as a material energy carrier after 2040, primarily for industry and transport

◆ Heavy industry ◆ Light industry ◆ Road transport ◆ Air transport ◆ Ship transport

EJ per year

80

Note: By 2100, hydrogen supplies a quarter of all transport energy



It said it was pushing for hydrogen to be used specifically in sectors which struggled to decarbonise, and forecast that investments in renewable hydrogen in the bloc could hit between €180bn (£162bn) and €470bn by 2050.

The UK, meanwhile, [last year signed into law a pledge](#) to reach net-zero emissions by 2050. This would require emissions from transport, industry and households to be completely stopped or offset by other measures such as tree planting.

This week, the National Grid said Britain would need hydrogen to meet its goal, although warned "immediate action across all key technologies and policy areas" was needed.

Tom Mason, co-founder and chief executive of Bramble, said it was a "hugely exciting time for Bramble Energy, with many eyes focused on the UK's leadership role in the transition to a greener economy".

George Mills, from BGF which led the latest round, said the company had "created a world-first in the production of hydrogen fuel cells, with the potential to transform a global and growing market".

Technology Intelligence newsletter

Your essential guide to technology today, from London and Silicon Valley.



Sign up

Big opportunity for British start-ups as investors switch on to clean technology



Green energy has hit the mainstream. Natasha Bernal looks at the new firms ready to meet the challenge

The Daily Telegraph 19 Oct 2018 [+1 more](#)

Cables, are taking note. “They can see very large-scale change very likely to happen and they want to begin to understand the world of innovation rather than the world of energy generation and distribution,” says Sheehan. “I suspect the objective now is to learn and make more strategic decisions.”

British start-up Upside Energy is one benefiting from this boost in investment. The relatively unknown company, founded in 2013, could soon go mainstream after clinching a deal earlier this week with EDF Energy to provide services to customers.



Bill Gates, the Microsoft founder, launches the Breakthrough Energy Europe investment fund at the EU headquarters in Brussels on Wednesday

Upside Energy uses algorithms and artificial intelligence to create a virtual power plant which can help meet the peak demands on the grid by aggregating unused energy from solar panels, electric vehicles and back-up power supplies. The technology allows homes, factories and small businesses to earn money by reducing their energy consumption during times of

‘Energy giants can see very large-scale change and they want to understand the world of innovation’

Peak demand. While Upside Energy plans to sell power back to the grid, another start-up plans to create a marketplace for energy companies to take control of buying and selling it.

Origami Energy, a London-based tech start-up, has raised £35.8m

in funding and counts Cambridge Innovation Capital among its investors. It wants to create a marketplace to generate new revenue streams for energy companies. It could allow them to share power more easily in real time.

These companies could help to incorporate clean energy into the mainstream supply in a riposte to naysayers who have criticised the intermittent and unreliable supply from renewables like wind and solar. They are also a perfect takeover target for legacy suppliers.

One example is Bulb. The UK’s fastest-growing energy company uses bespoke back-office software to eliminate the billing issues which have cost larger players hundreds of thousands of customers. From its East London offices the company supplies 100pc renewable power sourced from in-

Related Stories

Clean car, what about the battery?
The New Zealand Herald 19 Oct 2018

UPERCHARGE
Oman Daily Observer 18 Oct 2018

dependent generators across the UK.

The start-up has raised £60m and last year increased its customer base sixfold. It plans to launch a flexible tariff that would allow customers to opt for cheaper payments if they avoid peak energy hours between 4pm and 7pm.

Beyond the energy supply market, clean tech is aiming to clean up generation too. A prime example is C-Capture, which plans to re-

move CO2 from gas streams at power stations using a process called carbon capture and disposal. It would remove carbon dioxide from power plants – but more interestingly, it could also be used to capture carbon emissions already in the atmosphere, with potential to mitigate climate change.

C-Capture, which started out as a project in the chemistry department at the University of Leeds in 2009, is putting its tech to the

test, signing an agreement with Drax with the hope of making the North Yorkshire power station carbon-negative.

The start-up is backed by IP Group, which is also placing bets on another university spin-off, this time from UCL and Imperial College London, which plans to capitalise on the demand for high-powered, low-consumption batteries. Bramble Energy is the first company to design and manufacture hybrid fibre coaxial batteries made out of printed circuit boards. This means that any manufacturing company could produce their own highpowered batteries for lighting, cameras or even cars.



MENU

THE TIMES
WEDNESDAY JANUARY 20 2021

Sir Richard Branson

Sir Richard Branson and friends reveal most promising start-ups for 2021

Entrepreneurs tell Liam Kelly the start-ups they see thriving in the new Britain of 2021

Liam Kelly

Sunday December 27 2020, 12.01am GMT, The Sunday Times

Share



Save



Sir Richard Branson, founder of Virgin Group

Business is at its best when it is a force for good, creating a positive impact in the communities where it operates. Nearly every business has had to pivot in the face of the pandemic, but I have been impressed to hear how Ayesha Pakravan turned **The Plattery**, her gourmet catering business, into a free meal delivery service called Vital Meals for people who were isolating and vulnerable.

When the service began in March, Ayesha was delivering about 10 meals a day. It is brilliant to see how the project has evolved. The team has now delivered more than 15,000 free, nutritious meals to people in need — including the elderly, the high-risk, the homeless, NHS staff and single parents.

The business is part-funded by Virgin StartUp, our not-for-profit entrepreneurial organisation. It fills me with hope to see social and not-for-profit enterprises scaling up and succeeding — and helping to create healthy societies.



Reshma Sohoni, co-founder and managing partner, Seedcamp

2020 is the year our lives went online. Before barriers to travel and in-person interactions went up, **Hopin** was building a platform to transform the world of events. We were hugely impressed by the founder, Johnny Boufarhat, and his vision to create more engaging online events to connect the millions of people who can't travel easily.

Little did we know when we first invested last year that Hopin's platform would become one of the most sought-after services, adopted alike by global agencies such as the United Nations and small businesses. It is valued at \$2.1bn (£1.5bn).

While we all hope for a speedy return to in-person events, I have no doubt that we will move towards a hybrid model in future. Hopin will be at the forefront of making that happen.



Ophelia Brown, founder of Blossom Capital

The best entrepreneurs find opportunity in times of crisis — and that has been the case with our portfolio company **Duffel**. The travel start-up allows airlines to sell tickets in a flexible, easy and cheap way. While market volumes have tanked, Duffel's bookings have grown each month and will continue to ramp up significantly next year.

I am also excited about the launch of **Dija** in January. As

customers struggled to get slots with Ocado during the pandemic, two former Deliveroo employees, Alberto Menolascina and Yusuf Saban, realised that the way we do our weekly shop is fundamentally broken. Inflexible delivery slots, the pain of substitutes, rotten produce ... not with Dija, which will let you buy all your convenience and food items on demand.



Alliott Cole, chief executive, Octopus Ventures

Now the sponsor of two Premier League football teams, it's hard to avoid **Cazoo**, the latest business launched by entrepreneur Alex Chesterman, which aims to make buying a used car online a seamless experience. Cazoo's growth since it launched last year has been extraordinary, reaching annual revenues of £150m and becoming the fastest UK company to reach unicorn status (\$1bn valuation). We backed Alex with previous ventures LoveFilm and Zoopla. The ambition with Cazoo is greater.

Another start-up to keep an eye on is **Altitude Angel**. Drones have long been talked of as useful solutions but we have lacked a system to manage them at scale. Altitude Angel's technology creates drone corridors, allowing autonomous drones to be safely integrated within a nation's airspace.



Stephen Welton, founder and executive chairman of BGF

To achieve the UK's target of net zero greenhouse-gas emissions by 2050 will require revolutionary changes in energy use, and that can't be done without innovative start-ups.

Bramble Energy makes hydrogen fuel cells, which generate power from an electrochemical reaction rather than combustion. The technology can use existing manufacturing facilities, cutting the time and investment needed to bring the products to market.

Aceleron has designed batteries that can be repaired, reused and upgraded, rather than replaced. Electric vehicles alone are expected to create 11 million tonnes of battery waste each year; Aceleron will be crucial in establishing a sustainable green economy.

Emma Jones, founder at Enterprise Nation



Emma Jones

Having been made redundant by British Airways, Sophia Procter decided to launch her business, **Munchy Play**, during lockdown. Sophia had the idea for a kids' plate with a play track around it for toys and trains, to help at toddler mealtimes. Redundancy motivated her to turn the idea into a business.

With her customers online, Sophia has taken to low-cost social media channels to reach her market and offer a smooth buying experience for her British-designed and manufactured product.

Hussein Kanji, partner at Hoxton Ventures



Hussein Kanji

Skin Analytics has built a medical-grade dermatology artificial intelligence (AI) engine that can detect skin cancers and lesions. Its aim is not to replace dermatologists but to help them deal with a huge volume of diagnoses, so that patients are tested

early and to give them more time to treat any illness. This year, it rolled out a programme with Bupa to allow patients to do testing at home during the pandemic; it is also screening high-risk patients for University Hospital Birmingham. Skin Analytics has a chance to do well commercially and to also do well for society, as AI begins to improve medical care.

This year we also backed **XYZ Reality**, which is building a next-generation hard hat for the construction industry. XYZ has integrated its own optics into a safety-compliant helmet and visor that lets workers view a precise 3D model of a site. It could transform how the construction industry uses technology to reduce errors and get builds right first time.

Danny Rimer, partner at Index Ventures



Danny Rimer

Beauty Pie, founded by Marcia Kilgore, is a new type of beauty and health company, built around quality, transparency and a no-nonsense attitude. Rather than competing on packaging, celebrity endorsements and marketing, it offers the best quality for the best possible price. It wants to maintain a relationship with its customers and convey a sense of respect for their individuality and lifestyle.

WhiteHat, co-founded by Sophie Adelman and Euan Blair (son of the former prime minister), aims to create a diverse group of future leaders. It offers apprenticeships to kick-start careers with sought-after employers such as BP, Google and Warner Bros. Even as firms reduced hiring this year, WhiteHat tripled the number of tech and management apprentices going through its programme, achieved by a focus on rethinking education and the best ways to learn, helped by expert coaches and skills embedded through application in the workplace.

Eileen Burbidge, partner at Passion Capital



Eileen Burbidge

In an extraordinary year, it is harder than usual to single out companies. Any start-up that has weathered 2020 has proven its mettle, its value, and the resilience and tenacity of its team. Every one of them has earned the right to a special mention.

[^ BACK TO TOP](#)

THE  TIMES
THE SUNDAY TIMES
GET IN TOUCH

[About us](#)

[Contact us](#)

[Help](#)

[The Times Editorial Complaints](#)

[The Sunday Times Editorial Complaints](#)

[Place an announcement](#)

[Classified advertising](#)

[Display advertising](#)

[The Times corrections](#)

[The Sunday Times corrections](#)

[Careers](#)

MORE FROM THE TIMES AND THE SUNDAY TIMES

[The Times e-paper](#)

[Times Currency Services](#)

[Times Print Gallery](#)

[Times Crossword Club](#)

[Times+](#)

[Times Expert Traveller](#)

[Schools Guide](#)

[Best Places to Live](#)

[Sportswomen of the Year Awards](#)

[Podcasts](#)

© Times Newspapers Limited 2021.
Registered in England No. 894646.
Registered office: 1 London Bridge Street, SE1 9GF.

[Privacy & cookie policy](#)

[Licensing](#)

[Cookie settings](#)

[Site map](#)

[Topics](#)

[Commissioning terms](#)

[Terms and conditions](#)

