

## **Value of UK Net Zero tech companies has nearly doubled in one year, skyrocketing from \$24.4bn to \$47.6bn**

*Tech Nation launches Net Zero 2021 Report to reveal the opportunities - and challenges - facing high-growth UK Net Zero companies*

- As COP26 begins, Tech Nation has today published its Net Zero 2021 Report to explore the opportunities and challenges facing the UK's Net Zero (climate tech) companies
- UK Net Zero tech companies have nearly doubled in value over the last year - from \$24.4bn to \$47.6bn, a rise being driven by more climate tech companies reaching 'unicorn' (\$1bn+) status, as public demand for action on climate change grows
- The UK is a global hub for sustainable tech; 7.8% of global Net Zero tech 'unicorns' – and 5% of global Net Zero tech 'futurecorns' - are headquartered in the UK
- The UK is fourth in the world for investment into Net Zero tech - and Bristol comes in second as a hub for energy tech, after London
- UK Net Zero companies are creating a growing number of jobs in the UK with Net Zero employment growing by 33% between 2020 and 2021
- Yet, the rate of investment in UK climate tech is slowing; between 2020 and 2021, investment grew from \$1.54bn to \$1.57bn (a \$30mn - 2% - increase), while between 2019 and 2020, UK climate tech investment saw a much larger increase of \$470mn - and Sweden radically outperforms the UK in terms of pounds invested per tonne of CO2 emitted
- Funding and talent outlined as the top challenges for Net Zero tech firms to scale
- Tech Nation calls on investors and policymakers to prioritise supporting and investing in UK Net Zero scaleups - setting a target of \$15bn invested by 2025 - building on last month's announcement of the UK's [Green Gilt](#); the government's first green sovereign bond

**29th October 2021:** Tech Nation, the UK's leading growth platform for tech scaleups, has today launched its Net Zero Report; a data-led report exploring the state of scaling Net Zero (climate tech) companies in the UK.

Drawing on Tech Nation's proprietary data, network and both qualitative and quantitative insights, the report explores the opportunities and challenges being faced by UK high-growth tech firms in this burgeoning sector. This latest report has been created in partnership with a range of key stakeholders, including scaling Net Zero tech firms, sponsors [BNP Paribas](#) and [Sage](#), the UK government, and UK venture capital firms.

### **Valuations of UK Net Zero tech companies have sky-rocketed since last year**

After rising steadily from 2010-2020, UK Net Zero tech companies have nearly doubled in value over the last year - rising from \$24.4bn to \$47.6bn. This reflects a surge in public demand for climate action in the lead up to COP26, as well as an increased reliance on technology to offset the UK's carbon emissions. While 10 new UK Net Zero companies have entered the market, these skyrocketing valuations have been primarily driven by existing climate tech companies reaching unicorn (\$1bn+) status. These include companies [Arrival](#) (whose valuation increased to \$16.2bn after their IPO in March 2021), [Octopus Energy](#) (whose valuation grew to \$4.9bn after a growth equity VC

round in September 2021) and [ITM Power](#) (valued at \$2.9bn in June 2021). Mega valuation hikes like these are the biggest driving force when looking at why the Net Zero valuations have increased.

### The UK is a prominent global leader in Net Zero tech

UK Net Zero tech scaleups make up 12% of the global net zero ecosystem. Eight (7.8%) of the 103 global Net Zero tech ‘unicorns’ (companies valued at \$1bn+) are headquartered in the UK, such as [OVO Energy](#), [Octopus Energy](#) and [Arrival](#), along with eleven (5%) of the 237 global Net Zero tech ‘futurecorns’, such as [OLIO](#), [Bulb](#) and [Cervest](#).

Of the UK’s unicorns, climate tech company [Arrival](#) is the UK’s first Net Zero ‘decacorn’ (company valued at \$10bn+), with a valuation of \$16.2bn.

	NAME	HQ CITY	SDGS	INDUSTRIES	YEAR COMPANY BECAME UNICORN
2067	OVO Energy	Bristol	affordable and clean energy (#7)	energy	2019.0
44	Octopus Energy	London	affordable and clean energy (#7)	energy	2020.0
713	Arrival	London	sustainable cities and communities (#11);affor...	transportation	2020.0
1059	ITM Power	Sheffield	climate action (#13)	energy	2020.0
2691	Ceres Power Holdings	Horsham	affordable and clean energy (#7);climate actio...	energy	2020.0
24	Britishvolt	NaN	affordable and clean energy (#7)	energy;transportation	2021.0
394	Vertical Aerospace	Bristol	climate action (#13)	transportation	2021.0
423	Depop	London	responsible consumption and production (#12)	fashion	2021.0

### The UK’s 8 Net Zero ‘unicorns’ (Source: Tech Nation, Dealroom, 2021)

	NAME	HQ CITY	SDGS	INDUSTRIES	YEAR COMPANY BECAME FUTURE UNICORN
2891	Green Biologics Ltd	Abingdon	affordable and clean energy (#7);climate actio...	energy	2015.0
1037	Zenobe Energy	London	sustainable cities and communities (#11);affor...	energy;transportation	2017.0
2255	Bulb	London	affordable and clean energy (#7);climate actio...	energy	2018.0
2273	AgriProtein	Guildford	responsible consumption and production (#12);l...	food	2018.0
1011	BBOX	London	affordable and clean energy (#7);climate actio...	energy	2019.0
1889	Oxford Photovoltaics	Yarnton	affordable and clean energy (#7);climate actio...	energy	2019.0
143	Highview Power	London	affordable and clean energy (#7);climate actio...	energy	2020.0
1619	Tokamak Energy	Abingdon	affordable and clean energy (#7);climate actio...	energy	2020.0
127	OLIO	London	sustainable cities and communities (#11);respo...	food;energy	2021.0
141	Newcleo	London	affordable and clean energy (#7)	energy	2021.0
248	ONTO	Royal Leamington Spa	sustainable cities and communities (#11);respo...	transportation	2021.0

### The UK’s 11 Net Zero ‘futurecorns’ (Source: Tech Nation, Dealroom, 2021)

When breaking down Net Zero tech into the six key industries (energy, industry, buildings & cities, transport, forests & land use, and agriculture & food), the majority of companies operate in the energy industry. Even if you combine the number of Net Zero companies operating in the next four largest UK industries (food, transportation, fashion & environmental intelligence software), there are still more companies operating in energy.

The UK is fourth globally for Net Zero tech investment – at \$1.57bn (8% of VC investment raised in the UK in the first half of 2021) - behind the US, China and Sweden - and is second only to Sweden in terms of European investment into climate change catalysts.

### **Growth is coming from all corners of the UK**

While London accounts for 72% of all VC investment made into Net Zero firms in 2021 so far, Bristol comes in second after seeing a spike in activity in 2019 with investment in climate tech ‘unicorn’ OVO energy, who raised \$200mn of growth equity, one of the largest rounds of investment in a UK Net Zero company.

This growth is having a positive impact on the UK economy through attracting foreign investment and creating employment opportunities. UK Net Zero companies currently employ over 23,200 people - and are well-positioned to continue creating more job opportunities in future, as Net Zero employment is on a strong growth trajectory. The number of people employed by climate tech companies grew by 36% between 2019 and 2020, and 33% between 2020 and 2021.

### **We are still not seeing investment in Net Zero tech accelerate at the pace required**

While the UK is fourth in the world for investment for Net Zero tech, the rate of investment in UK climate tech is slowing; between 2020 and 2021, investment grew from \$1.54bn to \$1.57bn (a \$30mn increase), while between 2019 and 2020, UK climate tech investment saw a much larger increase of \$470mn.

Sweden radically outperforms the UK in terms of pounds invested per tonne of CO2 emitted, investing over 10x the amount in Net Zero tech per tonne of CO2 emitted than any other nation. The UK is second, third is the US and China is 8<sup>th</sup>. Tech Nation’s Net Zero Report suggests we should be working together to aspire to what Sweden has achieved.

The government has put in place a [ten point plan for a green industrial revolution](#), which promises more investment into the UK’s Net Zero tech companies. Tech Nation celebrates this plan, and calls for investment levels in Net Zero companies to be increased tenfold by 2025. This would equate to an additional \$15bn invested by 2025 - 15% of the \$100bn climate finance yearly target (a COP26 goal). Tech Nation believes half of this \$15bn should come from VCs accelerating the growth of promising Net Zero scaleups and technologies, and the rest from other PE firms.

### **Scaling Net Zero companies face significant challenges on their scaling journeys**

There is some way to go if these critical technologies are to save our planet. Net Zero tech firms tend to face unique challenges in scaling (many shared with deep tech companies), due to the R&D intensive nature of development of their products and services, an adverse investment infrastructure favouring rapid returns rather than longer term horizons, and difficulty in hiring top Net Zero talent (on both tech, and non-tech sides of the business).

Among Tech Nation's [Net Zero 2.0](#) applicants (137 climate tech companies), nearly half (45.9%) of companies identified 'team', 'talent' or 'hiring' as one of their top 3 scaling challenges, and almost a quarter (21.9%) highlighted 'funding'.

### **Net Zero tech is critical to achieving our climate goals**

Covering industries from energy and transport to forestry and agriculture, these technologies offer the solutions we need to reduce carbon emissions, either directly or indirectly, and secure a more sustainable future.

The UK's Net Zero companies are contributing significantly to the UN's '[Climate Action](#)' goal to 'take urgent action to combat climate change and its impacts' (part of the UN's [17 Sustainable Development Goals](#)), with this being a high priority in helping the UK achieve its goal of reaching net zero by 2050.

To realise that goal within the next three decades, the report makes clear, we must support the UK's Net Zero scaleups - which are driving us towards net zero - through higher levels of investment (at least \$5bn per year) into net zero tech scaleups, and accelerator programmes.

### **Quotes:**

**Sammy Fry, Net Zero Lead at Tech Nation, said:** "Scaling climate tech must become a global priority. If we are to achieve net zero, it is vital that all state and non-state actors invest and support the growth of climate tech. With the value of climate tech companies almost doubling, the growth of the sector is promising, but we need to do more. We urge global leaders to put their support behind the sector to accelerate the net zero transition and ensure the world realigns itself with a 1.5C trajectory, in order to safe-guard the future of the planet."

**Dr George Windsor, Head of Insights at Tech Nation, said:** "As our latest Net Zero Report makes clear, the UK's Net Zero scaleups are boosting job creation (with 23,200 employed in the sector) and making a tangible difference in the fight against climate change - across all regions of the UK. However, as the report outlines, if these Net Zero companies are to fulfil their potential to save our planet, they need more help, support and funding from investors, UK pension funds and policymakers worldwide. This report aims to highlight the challenges - as well as the opportunities - facing scaling climate tech companies, and sets an aspirational target of boosting 2021 Net Zero investment by 10x by 2025."

**End**

### **Notes to the editor:**

A link to The Net Zero 2021 Report can be found [here](#).

A link to The Net Zero 2021 Report video can be found [here](#).

### **The Net Zero 2021 Report - Methodology:**

#### Dealroom:

Dealroom data deals with venture capital investment and excludes debt, lending capital, grants, ICOs and other non-equity. Secondary rounds, buyouts, M&A and IPOs are also excluded. The data excludes biotech. Including biotech, the UK and European investment data would make it much higher. Dealroom's proprietary database and software aggregate data from multiple sources, including news flow aggregation and processing, web scraping and manual research. Data is verified and curated with an extensive manual process, augmented by data processing. To capture the data collected we filtered companies which were tagged under the UN's Sustainable Development Goals related to Net Zero: climate action (#13); affordable and clean energy (#7); and responsible consumption and production (#12).

#### Tech Nation Proprietary Data:

Tech Nation proprietary data looks at the application forms completed to join our growth programmes. The data is provided by the applicant applying to our Net Zero programme, of which we received 137 applications.

#### Pitchbook:

Pitchbook data was used to analyse international Net Zero companies. Pitchbook is a data and financial software company. They collect data using over 650,000 web crawlers capturing relevant information from news articles, regulatory findings, press releases, websites and other sources. They use natural language processing to filter out all irrelevant data while having a Quality Assurance team manually review the data and a research team, which validates the data with the source to capture all the companies within the Net Zero sector.

#### **How Tech Nation defines Net Zero companies**

The Net Zero companies explored in the report are climate tech businesses who are creating technologies that are explicitly focused on reducing greenhouse gas emissions or addressing the impacts of global warming. Many of these firms are creating scalable, transferable solutions to some of the world's most pressing challenges, not just climate action.

#### **How Tech Nation is helping the UK reach net zero by 2050**

Tech Nation is a founding member of [Tech Zero](#); a group of fast-growing UK tech companies, working together to tackle the climate crisis and make the UK the number one destination for green investment. Our [Tech Zero Pledge](#) asks tech companies to commit to measuring their scope 1-3 emissions and set an ambitious net zero target by the end of 2021. We are already at nearly 200 signatories.

As part of Tech Zero, we have created the [Tech Zero Toolkit](#), which we created to demystify climate jargon and make it easier for companies to measure their emissions and create a robust net zero plan. At Tech Nation, we have already publicly committed to a Net Zero target of 2030 or sooner. In June, we launched our first public [Sustainability Report](#), which marked the beginning of an exciting journey in showing real climate leadership and becoming a net zero organisation well before 2030.

Our next steps will be to set rigorous science based targets, to ensure we are setting targets which are in line with best practice science and to continue measuring and reducing our emissions across our operations. Tech Zero ensures that our commitments - as well as those of other companies - are genuine, science-based and ambitious.

We are also creating [the Tech Zero internship](#), a world-first opportunity for young people to learn skills that will help them in a green tech career. Interns will spend time at the UK's most exciting tech companies, working on net zero and sustainability projects, and helping us tackle the most pressing challenge of our time.

In addition, we announced in September the [32 companies who will be joining our second Net Zero programme](#); the first government-backed programme designed to support the most promising climate tech companies to accelerate the UK's path to net zero.

#### **About Tech Nation's Net Zero growth programme:**

Net Zero is a six-month, free growth programme for early-stage tech scaleups that are creating a more sustainable future. We run masterclasses, insight sessions and peer to peer networking events for our fast-growth, sustainable cohorts. Find out more [here](#).

#### **About Tech Zero:**

Tech Zero is the climate action group for tech companies of all sizes committed to fighting the climate crisis. We believe that by joining forces, we can make faster progress to net zero. Companies can sign up by visiting [techzero.technation.io](https://techzero.technation.io).

#### **About Tech Nation:**

Tech Nation is the leading growth platform for UK tech scaleups. Tech Nation fuels the growth of game-changing founders, leaders, and scaling companies so they can positively transform societies and economies, providing them with the coaching, content, and community they need for their journey in designing the future. Tech Nation has years of experience facilitating and helping UK tech companies scale, both at home and abroad. Over 30 cohorts and 900 companies have successfully graduated from Tech Nation's growth programmes. Alumni include Skyscanner, Darktrace, and Monzo, as well as 3 of the UK's 7 new 'decacorns'; Revolut, Wise, and Farfetch.