

Tech Nation welcomes 34 transformative climate tech companies to its third Net Zero programme, as UK climate tech reaches new heights

2022 is set to be a record year for UK climate tech investment, with \$2.1bn already raised in 2022 so far

- 34 climate tech companies from across the UK have been accepted into the third iteration of Tech Nation's Net Zero programme - Europe's first programme dedicated to supporting the UK's most promising climate tech companies.
- The UK is leading the way for climate tech investment in Europe, with 249 climate tech rounds raising \$2.6bn in total in 2021 - a 63% increase on the \$1.6bn raised in 2020.
- 2022 looks set to be a record year for climate tech investment. With \$2.1bn raised so far, compared to \$2.6bn for the whole of 2021, the UK climate tech sector's growth is showing no signs of being affected by the economic downturn.
- The companies joining Net Zero 3.0 are revolutionising the UK's approach to combating climate change across industries - including agriculture, transport, energy and construction.
- Algae engineering is an emerging theme this year, with 3 of this year's companies utilising the plant to create biofuel, bioplastics and carbon sequestration.
- Exactly half (17) of the Net Zero 3.0 companies are working in the energy sector, helping to tackle the UK's current energy and cost of living crisis.
- Half (17) of the Net Zero 3.0 cohort are headquartered outside of London, with companies innovating across regions and countries, including Wales, Northern Ireland and Scotland.

21st September 2022: [Tech Nation](#), the UK's leading growth platform for tech scaleups, today announces the 34 climate tech companies who have been accepted into Net Zero 3.0 - the third iteration of the Net Zero growth programme.

Net Zero 3.0 is the first government-backed programme designed to support the most promising climate tech companies to accelerate the UK's path to net zero. This year's successful companies were assessed by over 50 judges across key industries, including climate specialists, investors and senior representatives from companies such as [Google for Startups](#), [Sage](#) and [BNP Paribas](#).

Companies were judged based on their scalability and potential to help the UK reach its high-priority net zero goal. The chosen companies are actively decarbonising key sectors, from energy and transport to construction and agriculture.

This year's Net Zero cohort demonstrates that tackling climate change is a priority across all parts of the UK, as 51% of the cohort are headquartered outside of London, with companies based in Wales, Northern Ireland, Scotland, the North and the East of England.

The UK leads the way in Europe for its number of climate tech companies and investment

New data from Tech Nation and Net Zero Insights has revealed there are over 4,400 climate tech startups and scaleups in the UK; 60% more than the number in France (2,793) and 43% more than in Germany (3,100).

The UK is also leading the way for climate tech investment in Europe, with 249 climate tech rounds raising \$2.6bn in total in 2021 - a 63% increase on the \$1.6bn raised in 2020. This year looks set to be a record year for climate tech investment, with \$2.1bn raised in 2022 so far, compared to \$2.6bn for the whole of 2021. The UK climate tech sector's growth is showing no signs of being affected by the economic downturn.

With its first two iterations of the Net Zero programme, Tech Nation has previously supported the growth of 62 of the UK's leading climate tech companies. Together with the Net Zero 3.0 cohort, these companies have collectively raised over £500mn in VC investment.

The majority of Net Zero 3.0 companies are working in the energy sector

As the UK finds itself in the midst of an energy crisis, exactly half (17) of the companies joining Net Zero 3.0 are working to make UK energy consumption both cleaner and more affordable for customers.

Joining this year's Net Zero 3.0 cohort, [Filia](#) brings solar power to urban homes by integrating solar technology into the fabric of blackout/security blinds and garage doors, while [Electric Miles](#) has developed algorithms that profile, aggregate and shift energy demand from electric vehicles in real time to balance supply and demand for grid stability, sustainability and energy security, and [Equiwatt](#) are focussed on reducing energy bills while supporting the transition to renewables.

Engineering algae to reach net zero

With scientists recently determining algae to be a 'climate superpower', due to the fact that [microalgae grows 10 times faster](#) than plants on land, and can [absorb 10-50 times more CO2](#), UK climate tech companies are increasingly looking at how they can use algae to help the UK reach its net zero goals.

For the first time, Tech Nation's Net Zero programme is welcoming 3 algae engineering companies into the Net Zero 3.0 cohort, which demonstrate the versatility of the plant through the different ways they are using it to drive sustainability.

[Kelpi](#) is using algae to create bioplastics that will reinvent packaging by making it fully biodegradable, [Phycobloom](#) are engineering algae to create sustainable biofuels, and [Phycoworks](#) are utilising synthetic biology and machine learning to produce algae at scale which will significantly increase levels of carbon sequestration.

Net Zero 3.0's mission

Empowering all of these climate tech scaleups is at the core of Tech Nation's mission to support UK tech companies who are shaping our world for the better. With 40% of emissions reductions reliant on technologies not yet at mass-market scale¹, it is imperative to support the growth of these companies, and the Net Zero programme aims to help realise their potential to drastically reduce

¹ IEA July 2020: <https://www.iea.org/reports/clean-energy-innovation>

global emissions. Over the last two programmes, companies part of the net zero programme have grown almost three times as much as the rest of the climate tech ecosystem, outlining the value the programme provides.

Over the next 6 months, every company in Net Zero 3.0 will be given unparalleled access to long-term investment opportunities, education, talent, exposure and a platform with which to influence green policies and create the optimum conditions for growth.

Tech Nation is proud to be a founding member of [Tech Zero](#) (an official partner to the UN Race to Zero), the organisation for tech companies of all sizes and stages committed to climate action, whose Tech Zero Pledge has recently surpassed 345 signatories. Tech Nation has also committed to reducing, measuring and publishing their own carbon emissions in an annual Sustainability Report.

Tech Nation is also delighted to announce that this year's Net Zero programme will again be supported by headline partner [BNP Paribas](#) and programme partner [Sage](#). These organisations will provide invaluable support, expertise and insights to the Net Zero 3.0 cohort.

Quotes:

Sammy Fry, Net Zero Programme Lead at Tech Nation, said: "In order to shift the trajectory of global emissions, climate innovations are required across every key industry, and we are proud to have companies disrupting each critical area on our net zero programme. We are also delighted to see climate tech continuing to reach new heights, in spite of the challenging economic context, outlining the resilience and faith in the sector. Through our net zero programme, now in its third year, we are looking forward to continuing to safeguard the growth of climate tech and to provide the support needed to help these companies scale and drive down global emissions.

Pippa Gawley, Founding Partner at Zero Carbon Capital and Net Zero 3.0 Judge, said: "The Tech Nation Net Zero programme gives valuable support to UK climate tech companies looking for constructive advice, strings-free mentorship and a safe space to share with fellow founders as they face the challenges of growing their companies. I'm excited to work with this year's awesome line up."

Mayank Girdhar, Co-Founder of UpSpark and Net Zero 3.0 Judge, said: "The Net Zero 3.0 programme this year has brought together the best of the UK's climate tech talent. These 34 startups are truly expanding the global frontiers of business and technology innovation on the path to net zero. I am excited to see their tremendous potential being unleashed and accelerated through the fantastic resources and invaluable network of peers, partners, advisors and investors curated by Tech Nation. It is an honour to be part of the Tech Nation community supporting such important work and such incredible founders on their journeys to help solve the climate challenge."

Natasha Jones, Investor at Octopus Ventures and Net Zero 3.0 Judge, said: , **said:** "Tech Nation's Net Zero 3.0 programme is at the heart of the UK's Climate Tech community. It brings together founders in multiple verticals, united by one central mission of fighting climate change. It's an exciting and

inspiring programme to be part of and I can't wait to see these businesses grow from strength to strength over the course of the next six months."

Jon Coker, General Partner and Founder at Eka Ventures and Net Zero 3.0 Judge, said: "This is my third year of being involved in the Net Zero programme and it is fantastic to see the continued quality of the amazing entrepreneurs in each cohort, who are building inspiring technology companies that are focussed on tackling one of the biggest challenges facing society today."

Shân Millie, Founder of Bright Blue Hare and Net Zero 3.0 Judge, said: "Why does Tech Nation's Net Zero programme matter? It's not just the practical mechanics of the growth programme - it's the visibility all applicant firms get with a diverse group of advisors but importantly from being part of a nationally and internationally-known initiative. The individual firms benefit, but the whole climate tech sector - and society - does too."

Jamie Rowles, Co-Founder & Managing Partner at Planet Fund and Net Zero 3.0 Judge, said: "I was extremely impressed by the calibre of climate tech startups developing new science and technology to go after the once-in-a-generation opportunity to re-tool across every industry towards Net Zero. It's exciting to have a front row seat to watch this next cohort of companies building!"

Cansu Deniz Bayrak, Senior Partner at Bethnal Green Ventures and Net Zero 3.0 Judge, said: "I've been a Net Zero programme judge since the very beginning. It is very encouraging to see the scope of applicants widen year on year, which to me signals the growing entrepreneurial appetite to contribute to Net Zero and hopefully help move to Net Positive as a society. The climate crisis is a complex issue that requires collaboration from all sorts of sectors, not just the usual suspects like energy."

Jeffrey Krogh, Managing Director at BNP Paribas (Tech Nation's headline partner for Net Zero 3.0) and Net Zero 3.0 Judge, said: "Startups play a crucial role in accelerating change and fostering innovation towards net zero. I have been extremely impressed by the quality of this year's candidates, their impact, and potential to scale. Prior cohort companies rate the programme highly, and we are delighted to support the common goal of making this upcoming Tech Nation Net Zero 3.0 initiative a success."

Mathias Karady, VP Product Strategy at Sage and Net Zero 3.0 Judge, said: "Sage is committed to taking action to address our environmental impact and support SMBs to break down barriers to a more sustainable future. We have stepped in to support the Net Zero 3.0 programme once again as the next generation of fast-paced and innovative companies are key to ensuring the UK takes a lead in tackling the climate crisis. It was a real privilege to be a Tech Nation Net Zero judge and I am really excited to be able to continue to support them throughout the programme."

Savitri Tan, Investment Associate at Isomer Capital and Net Zero 3.0 Judge, said: "I was impressed by the calibre of candidates applying to join the Future Fifty and delighted to see that the new cohort members are working towards transforming the world as we know it; from bringing leading science researchers into industry, to influencing drug discovery and changing to how we shop for our daily essentials. I am sure that being part of Future Fifty will help them achieve these aims even faster."

End

Notes to the editor:

Full list of Net Zero 2.0 companies:

[Agreed Earth](#) - East of England

Agreed Earth is the decision support tool for synthetic nitrogen fertiliser (N) reliance reduction. N's environmental impact is huge - it takes 2% of the world's energy to create from fossil fuels, it releases Nitrous Oxide (N₂O) - 300x more potent than CO₂ - when applied to soil, and it is a major source of air and water pollution. Yet currently most conventional farming systems rely on its use for yield. Agreed Earth's satellite data models will help farmers: measure and monitor the carbon footprint and pollution coming from their N use; maximise the efficiency of the N they do use; make regenerative practice decisions that will reduce the need for N whilst maintaining or maximising yield; and quantify or verify reductions in N use remotely and cheaply to enable rewards via avoided emissions carbon credits. By doing this, Agreed Earth helps farmers lower their carbon footprint and increase profitability whilst accelerating their soil carbon sequestration by rehabilitating its natural fertility.

[AgriSound](#) - Yorkshire and The Humber

AgriSound is an agritech company that harnesses low-cost IoT sensors to monitor insect activity and biodiversity within a local environment. Pollination is one of the most important natural biological processes on our planet and an integral part of crop production. Pollinators are declining globally due to a combination of agricultural intensification, climate change and disease pressure and in turn, threatening the ~£375B of economic services they provide to the global economy. Sub-optimal pollination has a significant cost - both economically and environmentally, as pollination is closely linked to crop longevity and shelf life. AgriSound has developed bioacoustic algorithms for analysing complex sound data and delivering new insights into insect biodiversity and abundance for precision pollination.

[Artus Air](#) - London

Artus Air's product reduces an air-conditioning unit's fan energy consumption by 89% compared to traditional fan coils. Compared to chilled beams/mats - the next best operational energy saving HVAC solution - Artus Air reduces embodied carbon by c. 60%. Artus Air's product is more cost-effective, smaller and therefore easier to fit into all sorts of ceiling designs. It can make the difference between having to knock a building down and rebuild rather than refurbish.

[Atamate](#) - Wales

Atamate reduces capital cost, energy use, management and maintenance costs in buildings while improving wellbeing and comfort. Its platform, the Atamate Building Operating System (atBOS), gives clients the sophistication of control that building management systems offer, with the ease of use and installation that a smart home system provides. atBOS reduces CO₂ emissions while reducing capital and running costs. Improving environmental performances of buildings has previously only been achieved by making fabric improvements. To continue to improve performance of buildings and

meet zero carbon targets, precise automated control of mechanical and electrical systems is essential. In both new and existing buildings, atBOS collects data and controls services to both reduce emissions and develop the optimum strategies to achieve zero carbon.

[Carnot Engines](#) - London

Carnot Engines is developing the world's most efficient, zero emission, fuel agnostic, powertrains to decarbonise long-haul and heavy power needs. Utilising advanced technical ceramics and innovative design, it has achieved a revolutionary 70% thermal efficiency, double that of a normal engine. Its fuel agnostic technology rapidly accelerates net zero, saving gigatons of emissions in transition alone. It can immediately half emissions using diesel, then transition to e-fuels, bio-fuels and then provide long term net zero operation using hydrogen, ammonia or fuel blends.

[Cercula](#) - London

Cercula exists to solve the lack of carbon data problem. It is a software that labels construction materials with environmental data. It aims to make it as easy as possible to see the impacts of the building design and take the pain out of ESG compliance and reporting. Cercula's technology takes in construction material data (in the form of a bill of materials, an invoice, a BIM file, or an API request) and returns carbon impact data in tonnes of CO2 equivalent in seconds.

[Electric Miles](#) - East of England

Electric Miles (EM) is a provider of SMART EV charging software; its mission is to deliver the lowest cost of charge to EV drivers and to the environment. It works closely with charger manufacturers, installers, and network operators using its data-driven SaaS Energy Management platform, to develop algorithms that profile, aggregate and shift energy demand from EVs and other domestic and business energy assets in real time and location to balance supply and demand for grid stability and energy security, cultivating net zero consumer and business behaviours.

[Equiwatt](#) - North East

Equiwatt is a virtual power plant (VPP) built by enabling collective energy-saving behaviour in homes during peak time demand surges to reduce the cost and carbon footprint of domestic energy use.

[Farad.ai](#) - London

Farad.ai's mission is to guide the energy industry through its net zero transition with its AI-powered digital twin for the energy system to drastically mitigate the effects of climate change. Farad.ai has developed one of the most comprehensive AI-based platforms in the market with 600 million data points over 60 independent data sets across 10 core fields. Its ambition is to use energy analytics to decarbonise the whole economy. Initially it is optimising energy clients' site prospecting, planning viability, and return on investment.

[Foodsteps](#) - London

Foodsteps enables food companies to track, reduce and communicate their environmental impacts from farm to fork. Its B2B software platform is being used to: accurately calculate the carbon footprint, land use and water use of meals, menus and food products; use carbon or eco-labelling on food items and communicate sustainability with their customer base; reduce impacts through changing menus, reformulating products and changing food supply chains. The company has invested

heavily in its data, methodology and technology. It brings together a world-leading environmental impact database and methodology for food with a streamlined, user-friendly software product that enables food companies to get ahead of the curve on their single biggest environmental contributor: the food itself.

[Guru Systems](#) - London

Guru Systems provides market-leading hardware and data analytics platforms for heat networks, gas boilers and heat pumps. Its technology improves the performance of these systems for residential developers, heat suppliers, customers and our planet.

[HV Systems](#) - Scotland

HVS aims to support deep decarbonisation of the UK and European heavy goods market with the early introduction of hydrogen fuel cell HGVs. To disrupt the market, HVS is taking a system integration approach. HVS has selected the best available sub-systems and by designing around the powertrain sub-systems it will be providing a unique offering: a new technology zero emissions vehicle designed around the powertrain. This ground-up approach enables the introduction of many innovative features which taken together will provide a best in class performing vehicle.

[Infyos](#) - London

Infyos is on a mission to build a future where every battery supply chain is sustainable. The clean energy transition means battery demand is about to explode, but car makers and regulators are now demanding supply chain sustainability in order for battery players to make sales. Infyos is a supply chain sustainability platform that lets battery supply chain players - such as car makers, battery makers and energy storage companies - measure, manage and improve sustainability.

[IONATE](#) - Scotland

IONATE transforms power systems through deep tech R&D. Its hardware-software innovation revolutionises data-based power flow control and unlocks a robust technology path for the low-carbon energy transition. Its hardware, the Hybrid Intelligent Transformer (HIT) is a drop-in replacement for a traditional transformer at a similar cost. Yet, this game-changing device also delivers urgently needed functions - sensing and monitoring, dynamic voltage and power factor control, and harmonics removal - making transformers and layers of expensive add-on control electronics redundant. At each point of use – should that be in distribution networks, renewables, or storage assets – the HIT reduces asset costs and complexity, improves efficiency and capacity, while diminishing failure rates through improved power quality. But once multiple HITs are in the network, the coordinated control through IONATE's software enables the systemic flexibility needed for a truly decarbonised grid.

[Jumptech](#) - East of England

Jumptech is a specialized SaaS workflow and job management system which streamlines the process of facilitating the process from sale to installation of low carbon technology such as EV charge points and in-home batteries. Its platform is used by installers, contract managers, OEM's and hardware manufacturers. It has three core modules: Relay - the ability to send a self-survey via a mobile optimized web form to customers to capture info, pictures and documents; Pathway - back-office workflow management, customer comms, scheduling and quoting etc; Atom - engineers app for

completing installations. On top of this, there is Connect, which allows jobs to be seamlessly delegated to other parties with real-time updates and access to photos and information. The software enables retailers to better manage customer journeys and therefore customer reviews, and enables installers to simplify admin tasks to increase installation efficiency.

[Kelpi](#) - South West

Kelpi is at the forefront of pioneering smart bioplastics to reinvent packaging for a sustainable world. It has developed unique (patent-pending) biopolymers to replace fossil fuel plastics with a biomaterial derived from seaweed. All its packaging is compostable and marine-safe; biodegrading fully and leaving no toxins behind. Kelpi works collaboratively with its clients - global brands in food, personal care & cosmetics and clothing sectors - to deploy and in some cases adapt its core technology to meet specific requirements. Starting with a carbon-negative feedstock (seaweed soaks up huge amounts of carbon dioxide as it grows) and minimising carbon emissions throughout production will ensure a low-carbon packaging product that supports clients to meet net zero targets and avoids the huge carbon emissions of fossil fuel-derived plastics like polyethylene.

[Kita](#) - South East

Kita's vision is to be the world's first carbon insurer. Carbon removal solutions are essential to fight climate change but they lack tailored insurance for their key asset - carbon units, thus limiting their ability to scale at speed. Carbon removal solutions generate revenue from forward sale of carbon units. Inconsistent standards and opaque transactions in the voluntary carbon markets lead to significant risk: will carbon purchases be delivered as promised? Kita's insurance guarantees quality and delivery of carbon units, increasing access to capital for high-integrity carbon removal projects. Kita is currently building our insurance products and partnerships, with the aim of achieving regulation to sell insurance in early 2023.

[MOF Technologies](#) - Northern Ireland

Whilst the exact route to net zero is still up for debate, it's widely accepted that point source carbon capture has a critical role to play in any credible plan. While the tech has been around for decades, its roll out has been hindered by the cost and energy penalties. Now, MOF Technologies has harnessed the power of MOFs (Metal Organic Frameworks) and developed Nuada – an ultra-efficient carbon capture system - that will help turbo-charge the path to net zero. By slashing the energy requirements of capture by up to 80% versus the current state-of-the-art solutions by up to 80%, Nuada is paving the way for the mass adoption of carbon capture in hard to abate industries such as cement production. Thanks to Nuada, hard to abate industries like cement manufacturing now have a commercially viable solution to realise their net zero targets.

[Muddy Machines](#) - London

Muddy Machines have built a robot platform that sustainably automates the selective field vegetable harvest to fix growers' urgent labour shortage needs. It uses advanced computer vision, machine learning and mechanical engineering to position a proprietary gripper tool, which is mounted on an electrically powered, autonomous field robot, accurately in the field in order to perform precise and efficient cuts to selectively harvested crops. The design approach is sustainable and avoids soil compaction because it uses swarm robotics instead of building large and heavy machines. The data it collects while harvesting crops will contribute to key yield gains.

[Oceanways](#) - London

Oceanways' mission is to restore our ocean and decarbonise shipping by pioneering the new market of regenerative underwater transport systems. Radically rethinking existing transport systems, it is building the world's first zero-emission autonomous and unmanned cargo submarine fleet running on green hydrogen. The zero-emission Oceanways Coastal Hyway will be delivered by weather-independent and low-cost submarines which are 21m in length, modular, agile and can deliver cargo at 8knts, diving at 50m with 300nm range. With every mile of operation, they will filter microplastics, remove 280g of CO₂e and collect vital ocean acidification data for future action. Compared to ferries, the subs are weather independent, can go inland, are cheaper, quieter, secure, cleaner and have zero fumes or other pollutants.

[Odqa Renewable Energy Technologies](#) - London

Odqa designs, manufactures and maintains solar thermal air receivers, concentrating sunlight to produce carbon-free hot air streams. Odqa's solution will provide much needed tools to decarbonise high-temperature heat processes. Odqa pioneers solar heat use in high-temperature processes at scale by partnering with industry incumbents. Solar heat has a vast number of applications ranging from drying processed materials to hydrogen production.

[Ooooby](#) - South West

Ooooby (Out Of Our Own Backyards) is an online platform that facilitates real food sales and logistics from gate-to-plate. It is a three-sided online marketplace providing; food producers with direct short supply chain routes to new and profitable markets; food hubs and retailers with a sales, transaction and logistics system that increases profits and attracts new suppliers and customers; and consumers with easy access to doorstep deliveries of super fresh ecologically sound food from a range of local and independent producers.

[Phycobloom](#) - London

Phycobloom is engineering algae for truly sustainable biofuels. Its goal is to make sustainable fuel from microalgae competitive in production cost through synthetic biology. In the long term, it has the potential to be not only the direct replacement of crude oil, but can be used as a tool for carbon storage as well.

[Phycoworks](#) - London

PhycoWorks believes that industry should integrate with the environment rather than degrade it. Its mission is to accelerate humanity's transition to a sustainable bioeconomy. It is building a platform that uses AI and synthetic biology to develop algae strains that can transform CO₂ into valuable products and are purpose-built for industrial application.

[Power Roll](#) - North East

Power Roll is a green technology innovator with patented IP it calls "Microgrooves" which are used to create two-terminal electrical products in plastic film (PET). The most exciting application of microgrooves is for its unique solar film. Solar film is a solar PV product which will be a game-changer with its disruptively low cost to manufacture. Power Roll creates solar film using readily available

input materials (PET, metals, perovskite ink) and common roll-to-roll manufacturing equipment. Solar film can be competitively manufactured anywhere in the world.

[PuriFire Labs](#) - East of England

PuriFire Labs is addressing the climate crisis through innovation at the intersection of science, engineering and sustainability. Its mission is to prevent millions of tons of anthropogenic emissions from entering the atmosphere through our proprietary portfolio of patented climate technologies. PuriFire is scaling a point source carbon capture solution that liquefies CO₂ from a stream of exhaust flue gases without amines or solvents to make biogas plants and factories 'green'. Its technology does not use any solvents, catalysts or amines, resulting in a cheaper, more efficient and easier to scale solution.

[Recycleye](#) - London

Recycleye uses advanced machine learning, computer vision and robotics to bring transparency, traceability and efficiency to the global waste management industry. Recycleye developed a low-cost, AI-powered system replicating the power of human vision. Recycleye Vision uses advanced machine-learning algorithms to provide automatic, image-based detection of individual items in co-mingled waste streams in MRFs. Recycleye leverages a cutting-edge synthetic data generation pipeline, and a proprietary visual database of labelled waste items, WasteNet, containing 3 million+ images across 28 material classes – it is the largest database of its kind. It can be combined with Recycleye Robotics to perform the physical tasks of separating waste materials in a MRF, a low-cost automated replacement for manual sorting (~60% of a MRF OPEX) which drastically improves the economic case to separate materials and divert resources from landfill or incineration.

[Signal.io](#) - London

Signal is a software product which brings behavioural science to operational end-users, creating commercial, environmental, and social value, at speed. Its software is a communication and feedback platform that continually optimises individual operational efficiency, using a combination of data analytics and behavioural science. It connects individual performance to operational data, and motivates end-users to improve their performance in small ways, leading to a compound reduction in fuel use and emissions.

[Filia](#) - London

Filia brings solar power where it's needed most, the urban environment. Filia brings solar energy to every home by integrating solar technology into the fabric of blackout/security blinds and garage doors.

[Space Intelligence](#) - Scotland

Space Intelligence's mission is to make an impact on climate change by leveraging its scientific expertise to provide accurate, trusted and consistent information for the Nature Based Solutions (NBS) and ESG reporting. It is dedicated to supporting nature-based solutions projects to fight climate change. It provides full transparency and truly accurate data insights for clients' projects to guide decision-making.

[Treeconomy](#) - London

Treeconomy is a nature-based carbon removal business building software technology to massively enhance project level carbon accounting and monitoring of carbon stocks. It operates upstream, working directly with landowners to co-create carbon removal projects. It scans these projects and tracks the volume of CO2 stored in the aboveground biomass. It then sells these credits at premium prices, generating more revenue for the landowner partners. It operates actively upstream, which means it uses the technology to unlock new project types such as rewilding and landscape-scale regeneration.

[Tribosonics](#) - Yorkshire and the Humber

Tribosonics designs, manufactures and supplies full-stack sensing systems that combine innovative hard-tech with cloud based data capture and advanced analytics to non-invasively measure and monitor industrial processes and equipment to improve energy efficiencies and reduce waste. Tribosonics embeds ultrasonic sensors within the moving parts of machinery such as those found in wind turbines and propellers to monitor factors such as friction, pressure and temperature. The data is processed and analysed by Tribosonics' proprietary software tools as part of a hardware/software package or licensed separately. It works in manufacturing (e.g. polymers and plastics), transport (e.g. automotive and marine) and energy (e.g. nuclear and renewables).

[Zeti](#) - London

Zeti is helping forward-thinking vehicle fleet operators to convert to zero and ultra-low emission vehicles by making it as simple, easy and transparent as paying for any other utility with its patent-pending pay-per-mile financial technology and real-time sustainability reporting. Zeti's technology platform, ZERO, acts as a financial engine and marketplace to match organisations seeking flexible financing in order to adopt clean transport, with institutional capital seeking demonstrable ESG investment. It only supports the financing of sustainable transport solutions. Organisations that receive pay-per-mile financing benefit from: cash flow optimisation; transparency of costs (not an APR which is easily manipulated); and pooled usage of vehicles to simplify their operations. Financial institutions benefit from attractive risk adjusted returns for capital deployed; and outsourced automated asset management to reduce internal costs. Everyone benefits from reduced carbon and NOx.

[Zoa Rental](#) - North East

Zoa is a rental-as-a-service platform. It provides white-label technology, operations and management allowing retailers and fashion brands to rent their stock out under their own-brand. It removes barriers to such retailers and fashion brands being able to adopt a truly circular model.

Founder quotes:

Kelly Price, CEO of Agreed Earth, said: "I can't wait to learn with and from other climate entrepreneurs as we build and scale our tool to accelerate regenerative agriculture. Pre-Seed is a crucial time for a startup, and I'm thrilled to have the strong support of Tech Nation Net Zero 3.0 at this important stage in our development."

Casey Woodward, CEO and Founder of AgriSound, said: “I'm delighted for AgriSound to have received a spot on Tech Nation's Net Zero programme and to be part of a cohort of likeminded businesses set on improving nature for all of us.”

Duncan Macrae, Chief Financial Officer of Artus Air, said: “We are looking forward to meeting other companies with similar aspirations. Learning from their experiences and passing on our own. Together, benefitting the planet while creating a successful business.”

Joe Miles, Founder of Atamate, said: “This is a great opportunity for us as a small business within the construction sector to engage a wider audience and challenge the status quo. The huge issue of how we in our industry can work towards net zero is something we can help to solve by offering data driven technology that can give an affordable route to zero carbon for both new and existing buildings.”

Francis Lempp, Co-Founder of Carnot Engines, said: “At Carnot, our core objective is to deliver gigaton emission reduction technologies. The Net Zero programme is the perfect way to help accelerate our journey and deliver these solutions to market quicker.”

Isabelle Gough, CEO of Cercula, said: “We're excited to be selected for the Net Zero 3.0 programme. The programme and the Tech Nation community will provide strong support for Cercula and will help us drive forward our mission to equip the construction industry with the tools it needs to decarbonise the built environment.”

Arun Anand, Founder and CEO of Electric Miles, said: “We are super excited to be selected to be part of this prestigious cohort of great companies trying to help the UK achieve Net Zero through our innovative solutions. We are excited to work with fellow companies to network and learn and make great friends while in this exciting journey.”

Johnson Fernandes, Founder and CEO of Equiwatt, said: “Excited to showcase the role of residential demand flexibility in the transition to net zero emissions. The benefits of balancing household demand can be passed on to all electricity consumers, potentially saving billions in costs alongside reducing carbon emissions. We are seeking help in tackling barriers to growth and scaling up our proven technology from thousands of households to millions.”

Ali Safari, Founder and CEO of Farad.ai, said: “Excited to join the programme and to give our contribution to big and necessary changes!”

Anya Doherty, Founder and CEO of Foodsteps, said: “Foodsteps is incredibly excited about joining Tech Nation's Net Zero 3.0 programme. We can't wait to start learning from experts and peers as we look to rapidly scale our platform helping food businesses to reduce their environmental impacts.”

Casey Cole, CEO of Guru Systems, said: “We're very excited to be part of the Net Zero 3.0 programme. Guru is a climate-focused technology company, scaling up fast. We're looking forward to working with the Tech Nation team to help us maximise our growth and impact.”

Jawad Khursheed, CEO of HV Systems, said: “At HVS we've heard a lot about Tech Nation supporting scaleups. That's why we're excited about the opportunity to work together, for a cleaner, greener

future. Our leadership team looks forward to networking events and gaining media exposure that spotlights HVS as a forward thinking company at the forefront of driving innovation further.”

Tony To, Co-Founder & CTO of Infyos, said: “Infyos is on a mission to make supply chains more sustainable. It's a huge undertaking, for a market that needs disruption to bring it inline with Net Zero ambitions. We're excited to 10x our progress with the immense knowledge, partner and investor pool available at Tech Nation.”

Matthew Williams, Founder & CEO of IONATE, said: “At IONATE, we’re building the technology base for reliable, affordable, decarbonised power systems. Joining forces with the ecosystem at Net Zero 3.0 is a strategic opportunity to accelerate our growth and maximise our impact. But it is also a great honour to be recognised by Tech Nation as belonging in this list of outstanding companies, the trailblazers of climate tech.”

Phill Nunn, Founder & CEO of Jumptech, said: “Global adoption of EVs and low carbon tech drives our ambition to be the leading global software platform in the green tech space, so we are delighted to have been selected to join the programme. The Net Zero ecosystem is scaling rapidly which presents both a huge challenge and opportunity. We can’t wait to work with the Tech Nation team and businesses to help realise our aligned missions.”

Neil Morris, Founder & CEO of Kelpi, said: “Addressing climate change has to be an overriding imperative for business. Kelpi’s low-carbon bioplastics are a vital part of eliminating fossil fuel-plastic packaging and ensuring the oil stays where it belongs - in the ground. Kelpi is thrilled to join Net Zero 3.0 to work with other brilliant innovators in delivering the UK’s goal of driving down emissions.”

Natalia Dorfman, CEO of Kita, said: “Kita is delighted to be part of Net Zero 3.0, to help accelerate our vision of becoming the world's first carbon insurer and enable faster scaling of carbon removal solutions to fight the climate crisis.”

Dr. Conor Hamill, COO at MOF Technologies, said: “Climate technology like Nuada will provide a greener, more sustainable economy for the UK and a better quality of life for its citizens. MOF Technologies is excited to be a part of the Tech Nations Net Zero 3.0 programme which will help accelerate our scale-up ambitions, grow our network of key decision makers and gain valuable insights from experienced industry leaders.”

Florian Richter, Co-Founder & CEO of Muddy Machines, said: “Achieving Net Zero is easier said than done and particularly challenging for startups already busy getting their business off the ground. We are incredibly grateful for the opportunity to receive support in achieving this goal.”

Dhruv Boruah, Founder & CEO of Oceanways, said: “At Oceanways, we are building the world's first zero-emission cargo submarine fleet to decarbonise maritime transport. We are thrilled to be a part of Tech Nation’s NetZero 3.0 cohort and we can not wait to work with other founders to share our experiences & challenges and learn from the vibrant ecosystem of Tech Nation as we work together towards Net Zero.”

Gediz Karaca, CEO of Odqa Renewable Energy Technologies, said: “We are looking forward to changing the world together!”

Pete Russell, Founder & CEO of Ooooby, said: “Thrilled to be part of the Net Zero programme! Looking forward to meeting great people and learning how to build a world changing enterprise.”

Ian Hu, Co-Founder & CTO of Phycobloom, said: “We can't wait to meet the other cohort members with similar missions but different skill sets and methods to address the climate issue!”

Ludovico Mitchener, Co-Founder & CTO of Phycoworks, said: “The Net Zero programme will be an exceptional networking opportunity to engage with other like-minded startups and corporates alike trying to solve the world's most pressing issues.”

Don Scott, Chief Commercial Officer of Power Roll, said: “The team at Power Roll look forward to the collaboration, networking, and mentorship opportunities available through the Net Zero programme.”

Neel Shah, Co-Founder of PuriFire Lab, said: “PuriFire Labs is excited to be part of a community of like-minded individuals and organisations that will accelerate the transition to Net-Zero. We are keen to work with the Net Zero 3.0 team, mentors and advisors to scale applications and commercialise our portfolio of climate technologies.”

Victor Dewulf, CEO of Recycleye, said: “We are delighted to be part of the Tech Nation Net Zero 3.0 cohort. The programme will support us in our journey to accelerate our growth, scale our solutions and to continue on our mission to turn the world's waste into resources.”

Natasha Gedge, COO of Signal, said: “Over the years, we've been participating in a few first-class strategic programmes that fit well with our early stage. TechNation's NetZero 3 programme appears naturally in our scale up picture. Slashing carbon is urgent, and we're ready to work with shipping and aviation decision makers to achieve their targets.”

David Wharton, CEO & Founder of Filia, said: “Honoured to be selected to be part of the Net Zero programme. Can't wait for them to help Filia bring our product to any building.”

Prof Ed Mitchard, Co-Founder & Chief Scientist at Space Intelligence, said: “We're thrilled to be selected as part of Tech Nation's Net Zero 3.0 programme. We've grown organically from 1 employee in 2020, to over 20 today, driven by massive interest and need for our maps of landscapes and the carbon they contain. This programme will help us to strengthen the skills and knowledge of our team, enabling us to sustain that growth, and use technology to fight the climate crisis!”

Harry Grocott, CEO & Co-Founder of Treeconomy, said: “Treeconomy's mission is to remove more than 1Gt CO2e from the atmosphere; scaling the business to be able to achieve this is a big challenge and we're very grateful to be part of the Net Zero programme and the support this will bring.”

Glenn Fletcher, CEO of Tribosonics, said: “We are a fast growing Cleantech company and have made significant progress in innovation and commercialisation; but we also have a strong belief in building collaborative ecosystems where we all learn and progress from collective experiences and expertise. The Net Zero programme with its workshops, meet-ups, expert input, and exposure to influencers and stakeholders really excites us.”

Dan Saunders, Founder & CEO of Zeti, said: “We are looking forward to learning from and building a network with like-minded climatetech innovators.”

Isabella West, CEO & Founder of Zoa Rental, said: “The fashion industry is one of the biggest polluters in the world. Our technology allows retailers to easily embrace circular business models like rental. We are excited to work alongside the other businesses on the Net Zero programme to drive positive, lasting change.”

Net Zero new cohort - key stats:

No. of companies	34
Total no. of employees	1,087
Avg no. of employees	54
Avg total funding	£19,344,630.45
Total funding	£386,892,609.00

Tech subsectors	No. of Net Zero 3.0 companies	% of Net Zero 3.0 companies
Energy	17	48.57%
Agriculture	8	22.86%
Automotive	6	17.14%
Internet of Things	5	14.29%
Logistics	3	8.57%
Life Sciences	3	8.57%
Construction	2	5.71%
Retail	2	5.71%
Built Environment	2	5.71%
Manufacturing	2	5.71%
Finance	2	5.71%
Insurance	1	2.86%

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](#).

Net Zero programme eligibility criteria:

To be eligible for the programme, your company must:

- Be headquartered in the UK
- Have the potential and ambition to make an impact at scale
- Have evidence that the product or service is beyond the MVP (minimum viable product) phase
- Have proven evidence of some market traction
- Have received grant funding or investment from Seed to pre-Series A (under £10mn) OR have revenues below £1.5mn

About [BNP Paribas](#):

BNP Paribas is one of the world's pre-eminent banking groups, and Tech Nation is lucky enough to have them as our headline partner for the Net Zero programme. Headquartered in Europe, they are active globally and have a major presence in the UK and are a world leader in sustainable finance.

About [Sage](#):

Sage is the market leader for integrated accounting, payroll, and payment systems, supporting the ambition of the world's entrepreneurs. Sage helps drive today's business builders with a new generation of solutions to manage everything from money to people.

About Tech Nation:

Tech Nation is the leading growth platform for UK tech companies. Tech Nation fuels the growth of game-changing founders, leaders, and scaling companies so they can positively transform societies and economies. We provide them with the coaching, content, and community they need for their journey in designing the future - through our growth programmes and digital [Growth Platform](#). Tech Nation has years of experience facilitating and helping UK tech companies scale, both at home and abroad. Over 40 cohorts and 1000+ companies have successfully graduated from Tech Nation's growth programmes. Alumni include Skyscanner, Darktrace, and Monzo, as well as 3 of the UK's 'decacorns'; Revolut, Wise, and Farfetch.