

The future of UK climate technology: Here's what you need to know

As global investors doubled down on the UK's climate tech industry in 2022, 8 climate tech companies have already achieved "unicorn" status, while 19 more are on their way. Can this be sustained?

Temps de lecture : minute

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With over 5,200 startups and scale-ups leading the fight against climate change, the UK is on track to become one of the world's most dynamic hubs of climate tech innovation by 2030. Already second only to the USA in terms of active companies tackling the crisis, investments are expected to reach an astonishing \$20B annually - though it's not all good news. Without further government support for research and development (R&D) investment, a shortfall of £62B since 2014 has left the UK in a scary 11th place in OECD rankings for total R&D investment as a percentage of GDP. So have we done enough to make our Net Zero targets achievable?

A decade fuelled by Government Support: UK's digital dreamers empowering the tech revolution

Over the last decade, UK tech has seen incredible growth and success despite being initially met with scepticism. From senior policymakers in government to eager educational institutions and passionate innovators, many people got involved and made things happen across the country.

The drive and energy spread quickly, resulting in a network of digital excellence with ambitious startups and scaleups across every region of the UK. As a result, we now have 4th highest global tech investment, valued at just under \$1T, more tech 'unicorns' than any other country on the continent, and nearly 5 million employees across the UK employed by the tech sector.

One example of UK tech success is the AI startup DeepMind, founded a decade ago in London by Demis Hassabis and Shane Legg. Through their pioneering research and innovative technology, DeepMind has become a world leader in artificial intelligence and its applications. It has produced pioneering results in machine learning and demonstrated the power of AI to solve challenging tasks in health-care, science, gaming, security and safety. DeepMind's work provides robust evidence for the potential of UK tech to have a significant impact on the world and thankfully they are also turning their attention to *tackling climate change*.



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Why is everyone so excited about climatetech?

Climate tech investment doubles in 2022: UK's Government support and innovative tech sector lead the Way

Fuelled by Government Support and driven by passionate Innovators, the Climate tech revolution is Thriving. From senior policymakers in government to innovative educational institutions and entrepreneurs, the last decade has seen a drive for digital excellence that has resulted in 4th highest global tech investment of nearly \$1T, more tech 'unicorns' than any other country on the continent, 5 million employees across the tech sector, and recently a 2.7x growth in investment into Energy startups and scale-ups sustained in 2022 with a \$29.65B total value.

The most significant equity investment this year alone went to British Volt, becoming classed as a unicorn with its \$2.2B valuation after a \$47M investment into the company in January. With an estimated 66.5k climate tech companies globally by 2030 if the number of companies founded continues at its current rate, the future looks bright for climate tech startups and scaleups who are already outperforming stock markets such as Nasdaq - hopefully these early signs of decoupling from potential recessions will continue to benefit this increasingly crucial sector.

With R&D investment set to dwindle, How will the UK's tech ambitions fare?

The past decade of UK tech has seen explosive growth and unprecedented economic impact, but the sector faces stiff competition

from countries like India. As we progress, R&D funding must be protected for the UK to remain competitive and reach its 'Net Zero' ambitions.

Additionally, the socio-economic conditions around the tech industry must improve to ensure sustainable long-term growth. Investment alone is not enough: labour market conditions must improve, and public perception of tech needs to be positively shifted for the UK's tech sector to reach its full potential.

The UK's tech sector has experienced incredible growth over the last decade, with innovation driving unprecedented economic impact. However, amidst concerns that R&D could be cut, a report from IPPR suggests that the UK lags £62B behind in investment, falling by a fifth since 2014. India has overtaken the UK's third place in tech investment despite only raising \$40.8B from their tech companies - just a 130% increase from 2020.

Conclusion

These figures are encouraging for passionate innovators and entrepreneurs in the UK striving to make the world a better place. However, the unprecedented levels of investment into Climate tech is an opportunity for them to take advantage of and use the resources available to realise their goals. By understanding how the Climate tech sector has grown, what investments have been made, which companies are receiving funding, and identifying areas of technology where there is scope for further innovation, entrepreneurs can develop more robust strategies that will allow them to leverage this great wave of investment for both personal and professional growth.

While a decade of UK tech has given us a sense of what we should celebrate and what needs to be addressed to ensure future growth, whilst the UK has been a leader in terms of tech investment, it is now lagging

behind other countries in terms of total R&D spending as a percentage of GDP. The situation is only exacerbated by concerns that R&D could be cut in the face of rising costs.

A call for continued investment and protection for R&D funds is essential, as such support will prove crucial for driving innovation towards Net Zero. This need is further emphasised when looking at India, a country with 20 times the population of the UK that recently managed to overtake us in tech investment.

Adam Roper writes about sustainability in the digital world at adamdroper.com.

Article by Adam Roper