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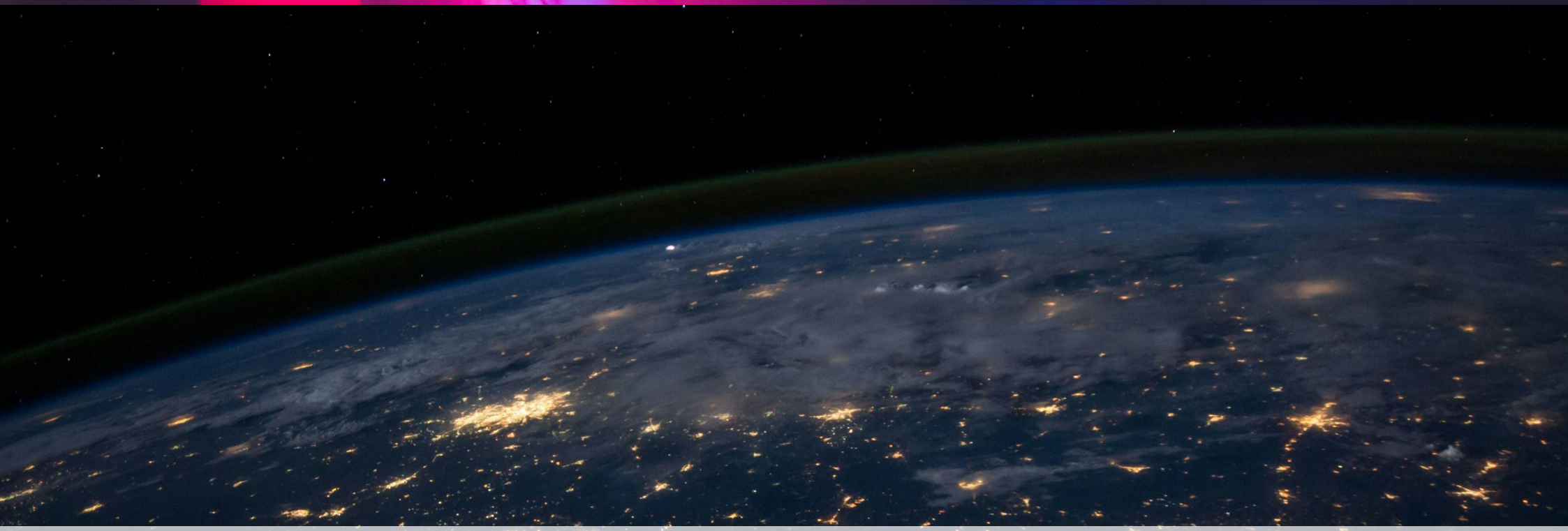

Policy spotlight: emerging regulatory markets

GK Strategy & Anchor Advisors

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Foreword

Welcome to GK's first policy spotlight report on emerging regulatory markets. The next decade and beyond will be defined by global challenges ranging from climate change and food security to geopolitical instability and competition for resources. Governments around the world will be forced to address these with urgency, but the solutions are likely to depend on technological advances and scientific discoveries that are only just emerging or are yet to be made.

The UK has a thriving research and innovation culture and is at the cutting edge of the development of some of the most transformative technologies of the century. Advancements in agri-tech mean food security can be strengthened and the environmental impact of farming can be reduced by growing more in vertical farms, breeding crops to be more resilient to a changing climate, or using drone technology to precision-spray pesticides to protect biodiversity. The development of quantum technology will allow for seismic improvements in healthcare scanning and diagnostics, meaning some diseases such as Alzheimer's will be detectable long before the first symptoms develop. Advancements in space technology will be used to create pharmaceutical labs in lower earth orbit that harness microgravity to revolutionise cancer treatments and grow human organs, or to capture the constant and unfiltered power of the sun in orbiting solar panels to beam down to earth to reach net zero targets.

There is no doubt that these are the industries of the future and emerging technologies will be responsible for driving economic growth across the world. Supporting businesses in these industries to innovate, scale and commercialise is a huge political priority for any government. Without them, economies risk being left with a diminishing industrial base and significant job displacement, the political and economic implications of which are severe for incumbents. The increasing pressure on public spending from declining economic growth, ageing populations and rising costs means that politicians will be more dependent than ever on the private sector to develop and finance emerging technology. To catalyse growth in the UK, the government is keen to work closely with businesses and investors to create a regulatory landscape that balances safety with the freedom to innovate, scale and commercialise. Without doing so, the UK risks nurturing research and innovation only to see commercial gains realised overseas. Those who engage with policymakers will be welcomed by a government in listening mode.

We also include as a counterpoint to our UK analysis updates on comparable developments in the US prepared by GK's American partner, Washington, DC-based Anchor Advisors. As in the UK, US policymakers see emerging regulatory markets as a means of demonstrating global leadership in innovative industries, while at the same time generating domestic jobs and economic activity. Development of these industries face more cross-currents in the US

than in the UK given the Trump Administration's focus on cutting spending across many science-focused federal agencies, while restricting grants and limiting activities among a number of US research universities, which have been key to America's leading global role in areas like quantum and agri-tech. However, these policy-driven headwinds create an opening for U.S.-focused private companies and investors, which have an opportunity to step in as the federal government and academic research institutions pull back from many cutting-edge sectors.

Curiosity has always been in GK's DNA and in 2025 we dedicated considerable time to understanding and engaging with the emerging industrial sectors of the future. Ranging from technological developments in already highly regulated sectors to the sectors that are just emerging as future economic powerhouses, we have put them under the microscope to unpick the political, policy and regulatory opportunities and challenges on the horizon. We have spoken to the policymakers in government who are thinking about how to regulate these new technologies and how to realise their full economic potential. And we have met with the talented innovators and entrepreneurs behind the development of new technologies to understand what regulatory hurdles they face and what needs to be overcome for them to achieve commercial success.

This report is an introduction of that thinking to you. It is not exhaustive of the emerging regulatory markets we have identified and is instead intended to signpost some of the sectors our emerging regulatory markets practice will be focusing on in 2026. We know our investment community is keen to understand the risks and opportunities in these spaces to stay ahead of competitors in origination strategies, and most importantly, to invest for the future. We are here to support you with just that. With the decades of combined experience that informs our counsel, GK has some of the most talented and creative consultants in the industry and through our embedded European and US partnerships, we are uniquely positioned to offer a truly global perspective. Using that expertise to support businesses and investors to understand and grow the future sectors of our economy is what gives us energy.

We hope you enjoy reading our analysis and if there is any element of the report or our emerging regulatory markets practice you would like to discuss further, we would be happy to do so.

With best wishes,

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Emerging technologies in highly regulated sectors

Agri-tech

Food and agriculture set to dominate the domestic and geopolitical landscape of the coming decades

What we eat and how we produce it have become increasingly politically salient over the last decade and will become one of the world's defining geopolitical issues in the next decades. Once confined to the Department for Environment, Food and Rural Affairs, they are now cross-government issues. Policymakers in the Department of Health and Social Care, the Department for Education, the Department for Science, Innovation and Technology, and the Department for Business and Trade all now play an important role in the future of our food systems. Global challenges such as geopolitical instability and climate change pose significant risks to the UK's future food security so the production of food and its associated sectors such as agri-tech are set to become more important than ever.

The Labour Party has historically had a strained relationship with the agricultural sector. Unfortunately for this Labour government, that is a sentiment that endured during its first year in office. The Chancellor's decision to reform agricultural property tax relief, the communication around plans for future environmental land management schemes, and agricultural concessions in trade deals have soured the government's relationship with the sector. However, many Labour MPs in this parliament represent rural constituencies with slim majorities meaning there is a political urgency to repair this relationship. At the heart of these challenges are mistakes with communication and perception. Our conversations with policymakers suggest a real ambition for the sector and a recognition of its importance in the future political stability and health of the nation.

In December 2025, the government published Baroness Batters' highly anticipated Farming Profitability Review which made 57 recommendations to strengthen the sustainability of the agricultural system. One of the overarching themes of her recommendations is increasing productivity and resilience by improving access to and adoption of the latest technology. Highlighting agri-tech as a frontier industry in the government's flagship industrial strategy sends a strong signal that policymakers see innovation in agriculture driving economic growth. This will be followed by support for businesses to innovate and scale-up in the UK.

Industrial Strategy primes sector for growth but antiquated regulatory frameworks could threaten the pace of commercialisation

The government's 10-year multibillion-pound industrial strategy identified agri-tech as one of the six priorities in its advanced manufacturing sector plan. The UK agri-food chain contributed £147 billion in Gross Value Added (GVA) to the economy and the number of

UK agri-tech startups has increased 40-fold in the last decade.[1] The agri-tech market is set for rapid expansion, driven by rising global demand for technologies that bolster agricultural resilience and sustainability. Ministers want the UK to be at the forefront of innovation as the agri-tech sector is vital to improving agricultural productivity and environmental sustainability.

The government's ambitions for the sector include:

- Reducing dependency on public investment by securing at least £50 million in private investment by 2029
- Leading a strong cohort of profitable businesses
- Increasing the application of automation in priority farming sectors, such as horticulture, to reduce the UK's dependence on seasonal labour
- Achieving an agri-tech sector turnover of at least £20 billion by 2035

The inclusion of agri-tech in the industrial strategy and sector plan for advanced manufacturing sends a strong signal that ministers see it as central to driving economic growth. The government's Agricultural Productivity Group has been established to support with industry engagement and to accelerate agri-tech adoption. There is no doubt that with cutting-edge research, innovative startups and strong government support, policymakers are positioning the UK as a world leader on the agri-tech frontier.

While the UK punches above its weight in both innovation and investment, attempts to shoehorn new technologies into existing regulatory frameworks threaten the pace of commercialisation and therefore the adoption of agri-tech. UK regulators are grappling with advancements in autonomous machinery, laser weeding, agri-drones and precision breeding and delays threaten the UK's competitiveness. To avoid stifling innovation with red-tape and to match the government's ambition for the sector, the regulatory environment needs to become more agile and efficient.

This is a clear invitation for businesses to engage with government to shape regulatory reform. Businesses that use the sector plan and industrial strategy to frame their messaging to ministers and officials will find a receptive audience in Whitehall. Being an effective partner in delivering the UK's agri-tech ambitions will mean aligning business propositions with government priorities, demonstrating commercial viability and showcasing how technology can raise productivity to reduce environmental impact.

[1] Department for Business and Trade, Advanced Manufacturing Sector Plan, 23.06.2025

Investing in start-up capital and agri-tech for small food and farming businesses is one of the most effective ways to drive inclusive growth in the UK. Small and medium food enterprises generate significantly greater local economic value than large retailers—every £10 spent in a local food outlet returns almost £25 to the local economy—demonstrating their power to retain wealth and create jobs in communities. Yet these enterprises face major barriers: high equipment costs, limited access to processing infrastructure, and constrained routes to market. Targeted start-up funding and accessible agri-tech—such as robotics, precision tools, and shared machinery libraries—can remove these barriers, enabling SMEs to boost productivity while maintaining environmentally responsible practices.

Agri-tech investment designed for small producers also supports resilience and food security for the UK. Tools like robotic weeders, sensors, and AI-guided systems improve efficiency, allowing businesses to adapt to climate and market shocks while reducing input costs. Combined with public funds for critical infrastructure—markets, hubs, local processing—this strengthens regional supply chains and expands access to healthy, affordable food.

Crucially, targeted start-up investment expands the pipeline of high-value, growth-oriented food enterprises. When capital and agri-tech are accessible to a broader range of SMEs—including minority-owned and early-stage ventures—the sector gains a more competitive and innovative business base. This widens market participation, strengthens local supply chain capacity, and supports job creation in both rural and urban economies. In this way, start-up capital and SME-appropriate agri-tech act as catalysts for sustainable economic growth, driving a more resilient and diversified UK food economy.

***Honor May Eldridge**, food system expert and author of forthcoming 'The Future of Food: Issues and Innovations in the 21st Century and Beyond'*

Innovating in agriculture isn't for the impatient

For over a decade the UK government has demonstrated commitment to supporting agri-tech, with a range of interventions and most recently, including it in the Advanced Manufacturing Sector Plan, as part of the Modern Industrial Strategy. This recognises the strategic significance of agri-tech in economic growth, as well as unlocking new investment and partnerships.

There's no sugar coating the fact that global investment into agri-foodtech has declined since 2021 – and the pattern in the UK mirrors that of the rest of the world. Yet the UK punches well above its weight, being 4th in the global ranking of private investment into the sector.

Regulations around agri-tech innovations can be seen to limit the pace of commercialisation. Autonomous machinery, laser weeding, drones, and even advanced breeding technologies have led to steep learning curves for regulators to ensure they are creating the enabling environment for agri-tech innovation to thrive.

***Dr Belinda Clarke OBE**, Director of Agri-TechE, Europe's largest commercial membership network connecting farmers and growers with researchers, technologists, entrepreneurs and investors.*

Technology in EU agriculture

Agriculture's Digital Transition: Risks and Strategic Outlook
By Christopher Cardona, Euros Agency, in partnership with GK Strategy

The European agricultural sector is currently navigating a mandatory 'digital-green' transition. Under the current Common Agricultural Policy (CAP) Strategic Plans, nearly 25% of direct payments are tied to eco-schemes requiring farmers to use IoT and satellite data to prove reduced chemical use.[2] This shift, combined with the 2026 Pesticide Digital Mandate[3], has transformed data from an optional efficiency tool into a strict regulatory requirement for subsidy eligibility.

Growth in the sector is concentrated in high-compliance niches. For example, soil-as-a-service firms using AI-driven verification are vital for the EU's Carbon Removal Framework, while specialised ag-robotics are tackling Western Europe's acute labour shortages. Furthermore, the move toward "fertilizer autonomy" is opening significant markets for technologies that optimise bio-based inputs and nutrient recycling.[4]

The main hurdle remains a deep-seated trust gap, where 39% of farmers avoid electronic sharing due to privacy and ownership fears. Businesses must overcome this by adopting Privacy-by-Design and leveraging the Common Agricultural Data Space (CADS) to ensure farmers retain data sovereignty. Additionally, the high capital costs of robotics threaten to exclude smaller holdings. Transitioning to robot-as-a-service (RaaS) models can mitigate this by converting steep upfront investments into manageable seasonal expenses.

In this era of algorithmic accountability, businesses should prioritise farmer-centric co-design to bridge the digital skills gap. Success in 2026 depends on positioning technology not just as a yield booster, but as a tool for administrative relief and ecological stewardship.

Frontrunner European regions to look out for:

1. Netherlands: Known for strong resource efficiency, greenhouse tech and innovations in vertical farming.
2. Germany: A strong focus on precision farming and biotech.
3. Italy: Expertly blending traditional machinery with digital innovation.

US Agri-tech sector hopes to power through industry downturn

By Erin Caddell, Anchor Advisors, in partnership with GK Strategy - February 2026

Scan recent headlines from the U.S. agriculture sector, and one sees an industry where technological innovation and the Next Big Thing seem low on the agenda. "Former Farming Leaders Warn US Agriculture Could Face 'Widespread Collapse'" reads one headline[5] from early February. The industry's largest trade association warns "America's farmers and

[2] EU CAP Network, Assessing digitalisation under the CAP Strategic Plans, accessed 12.01.2026
[3] EU Commission, The 2026 Pesticide Digital Mandate, accessed 12.01.2026
[4] EU CAP Network, Optimising bio-based fertilisers in agriculture, 2019-2024
[5] New York Times, Former Farming Leaders Warn US Agriculture Could Face 'Widespread Collapse', February 2026

ranchers are facing an economic breaking point."[6] Industry newsletters bemoan high input costs[7], low commodity prices[8] and the impacts of President Trump's tariffs.[9] The cumulative effect has been rising farm bankruptcies[10]; a rush to deliver a $12 billion one-time bailout for farmers announced by the Trump Administration in December 2025, and calls for even more government subsidies for the sector among industry participants and in Congress.

Lost in this heated debate, however, is the fact that agri-tech investments over many years, coordinated among the US government, private sector and academic institutions, have played a big role in making the US farm sector the behemoth it is today. Despite its current challenges, the US is the world's largest exporter of agricultural products, sending US$176 billion in goods to 189 countries across the world in 2024, 20% more than any other nation, according to the U.S. Department of Agriculture (USDA) (the European Union collectively exported more at $250 billion). US agricultural exports increased at a compound annual growth rate (CAGR) of 4.9% from 1999 to 2024, according to USDA, well above the 2.8% average growth of US GDP during that period (World Bank).

Many factors contributed to the US ag sector's expansion in this century and the last – globalization of course among them – but agri-tech advancement has unquestionably been key. A USDA study[11] found that US agricultural productivity tripled from 1948 to 2017 even as land and labor devoted to farming fell, driven by "innovations in animal and crop genetics, chemicals, equipment and farm organization, including "improved seed varieties, genetic enhancement in livestock, advanced machinery that comes equipped with global positioning systems, and robotics." While America loves to celebrate the image of the entrepreneurial farmer tilling his land, government investment has been key to the industry's transformation. By one measure – funding directed to US state universities with large agricultural research centres – the federal government's contribution rose to 43% of the total in 2018 from 28% in 1975, during which time total funding more than doubled, according to the Kansas City Fed[12]. Federally sponsored research and partnerships with universities have contributed to numerous US agricultural innovations, from robotic harvesting to gene editing of crops, to regenerative farming, to precision agriculture (using technology like drones and AI to provide more detailed analysis of farmlands).

Yet as we see throughout this report, nations, like companies, cannot rest on the laurels of past innovation and hope to remain competitive in the global race. As US budget deficits have grown and some policymakers have grown more concerned about the cozy relationship between the federal government and Big Ag, the US has lost its lead in terms of public agriculture R&D spending. China nudged ahead of the US in 2013, while the margin over #3 player India has narrowed (see below). Private US

[6] Farm Bureau, Action Center, February 2026
[7] Successful Farming, Former U.S. Agriculture Officials, Top Republican Senator Warn of Farm Country Trouble, 04.02.26
[8] AG Daily, Falling crop prices and rising costs put U.S. farms at risk, 04.02.26
[9] Investigate MidWest, Trump's tariffs are hurting U.S. agriculture. Some farmers still support them., 24.06.25
[10] Farm Bureau Arkansas, Farm Bankruptcies on the Rise: What It Means for Young Farmers and the Future of Southern Agriculture, September 2025
[11] USDA, A Look at Agricultural Productivity Growth in the United States, 1948-2017, 05.03.20
[12] Kansas City Fed, The Drivers of U.S. Agricultural Productivity Growth, unknown

agri-tech funding has also declined in recent years, surely not helped by the broader woes in the sector, but also as interest waned after hype for agri-tech drew rapid investment growth from 2012-20 that has not yet yielded commensurate returns.[13]

With the Trump Administration continuing its attacks on many leading American universities as well as cutting funding and staffing at federal research labs, the US appears unlikely to return to the lead in public agri-tech spending anytime soon. Even if a Democrat wins the White House in 2028, he or she will have to confront a federal deficit that stands at more than 5% of US GDP, limiting the government's options. Nevertheless, the innovative spirit and vast agricultural infrastructure that made the US the "breadbasket of the world" remains. Many of the same industry journals wringing hands over the industry's current downturn contain exciting predictions about digital agriculture (using AI big-data analysis for even more nuanced crop management), smart machinery and soil management. With industry sentiment weak, the opportunity set wide and many research universities looking to private partnerships to replace their federal grants, now may be the time for opportunistic investors to consider US agri-tech and reap the benefits (pun intended) when the clouds over the US agriculture sector eventually lift.

> 'The global transition to net zero calls for huge investment in wind, nuclear fission and fusion, hydrogen, carbon capture, heat pumps, networks and other critical technologies… These are the industries of the future. Industries that the UK is perfectly placed to specialise in'
>
> ***Ed Miliband**, Secretary of State for Energy Security and Net Zero*

Energy

Hydrogen is set to play an important role in the UK's clean energy and net zero transition, as well as securing the UK's energy independence

Governments, executives and academics around the world are looking to accelerate the ongoing energy transition to reach carbon neutrality. In the context of increasing geopolitical tension and unpredictability, the political salience of energy independence will also rise and the UK government will look to alternative clean energy options that can grow and scale at pace. Clean hydrogen is now clearly recognised as a potential breakthrough technology to overcome the limits of electrification and provide the UK energy sector with a credible alternative to fossil fuels. Hydrogen is versatile, meaning it can be used directly via fuel cells or for electricity generation, as well as a feedstock to produce more sustainable derivatives to specific industrial and transport applications, such as sustainable aviation fuel.

The future global hydrogen market size is set to exceed $1 trillion by 2050.[14] Demand is expected to build on the decarbonisation of existing industrial uses of hydrogen, such as fertilizer production, before the net-zero transition underpins rapid demand for growth. By 2050, Deloitte predicts that industry (iron and steel, chemicals, cement, high-temperature heating) and transport (aviation, shipping, heavy road

[13] McKinsey & Company, Seizing opportunities amid the agtech capital drought, 19.03.24

[14] Deloitte, Green hydrogen: energizing the path to net zero, 19.06.2023

transport) will account for 42% and 36% of clean hydrogen demand respectively.[15]

The UK is well positioned in both hydrogen deployment and supply chains given the shared skills and infrastructure from the oil and gas sector, existing innovation and a supportive policy and regulatory environment. For example, the UK is internationally recognised for its capability in electrolysis technology and boasts significant capacity for hydrogen storage.[16] The government is keen to secure critical global investment across the whole hydrogen value chain and has taken several steps to support private investment in the UK hydrogen sector. In June 2025, it published the Clean Energy Industries Sector Plan and recognised that hydrogen is an emerging sector with high upfront costs and uncertainty. The plan seeks to provide certainty, reduce costs and maximise growth opportunities for businesses and investors in the UK.

The sector plan included several policy announcements, including further investment certainty via the Hydrogen Allocation Rounds. A new hydrogen strategy is expected to be published in early 2026, which will be a key mechanism for delivering commitments as well as catalysing job creation in the UK hydrogen economy. The UK's first regional hydrogen network will be established in 2031, supported by over £500m of government funding for hydrogen infrastructure. This is intended to support the production, storage and transportation of low-carbon hydrogen for use in key local sectors such as glass, refining and ceramics.

[15] Ibid.
[16] Department for Business and Trade, Clean Energy Industries Sector Plan, 23.06.2025

Hopes pinned on upcoming hydrogen strategy

The industry hopes that the new hydrogen strategy will provide policy clarity, facilitate cross-sector collaboration, and provide tailored regulation and infrastructure to overcome challenges facing the widespread adoption of hydrogen in the UK. A report published last year by the Manchester Fuel Cell Innovation Centre[17], in partnership with Addleshaw Goddard, highlighted six key challenges which currently constrain innovators and investors in the hydrogen transition. These include:

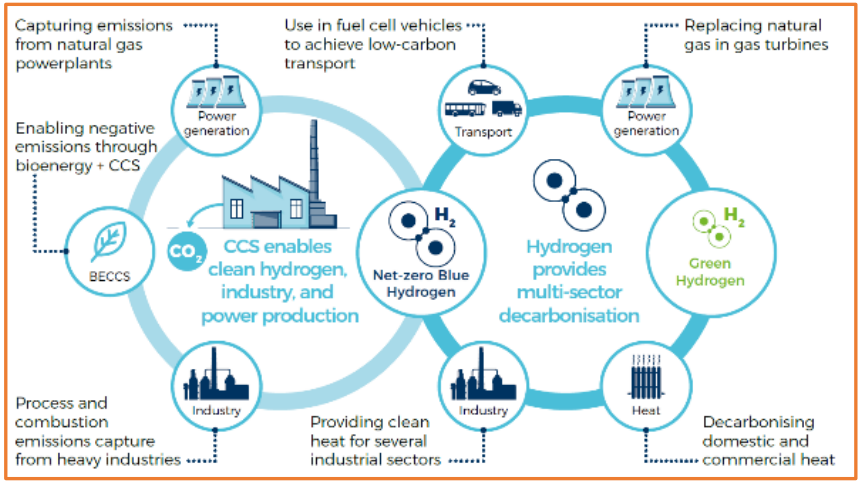
1. **Policy uncertainty** – gaps and delays in policy decisions leave investors and innovators unclear on government priorities and focus.
2. **Regulatory development** – many nascent hydrogen projects have been shoehorned into existing gas legislation or industry frameworks, and innovators have found themselves negotiating with regulators on a case-by-case basis. This is not a viable long-term solution for the wider roll-out of hydrogen.
3. **Funding complexity** – government funding mechanisms have so far been slow to implement and with complex conditions. This is expected to improve under new allocation rounds.
4. **Infrastructure supply and transport** – this is critical to the national adoption of hydrogen energy. The widespread adaptation of existing and new pipelines could take several decades so immediate uses are likely to be more localised while longer term hydrogen infrastructure is developed.

[17] Manchester Metropolitan University, Harnessing Hydrogen, May 2025

5. **Industry co-ordination** – the creation of the National Energy System Operator is crucial but strategic planning for hydrogen must happen at pace.
6. **Public confidence** – receiving public support for hydrogen projects will assist in planning applications and reduce the risk of the cancellation of crucial trials and increase the viability of applications that interact directly with consumers.

For businesses and investors, the inclusion of hydrogen as a frontier industry in the industrial strategy and the Clean Energy Industries Sector Plan offers a clear roadmap for how the government wants the UK sector to develop in the next decade. The UK has all the right ingredients to create a strong hydrogen economy including the necessary skills, infrastructure and technological capabilities. The priority for the government will be to leverage this into a coherent system that allows businesses to develop the technological innovation and to grow, scale and thrive at pace.

Figure 1.1 Uses of hydrogen[18]



Drones

Drones technologies have wide ranging applications for businesses, with significant opportunities for growth

The UK drones sector has moved rapidly from early experimentation to a technology on the cusp of mass commercial adoption. Businesses across logistics, the creative industries, law enforcement, energy, defence, construction, oil and mining, agri-tech, and more are beginning to integrate drones into their operations. Commercial applications already span infrastructure inspection, agricultural spraying and seeding,

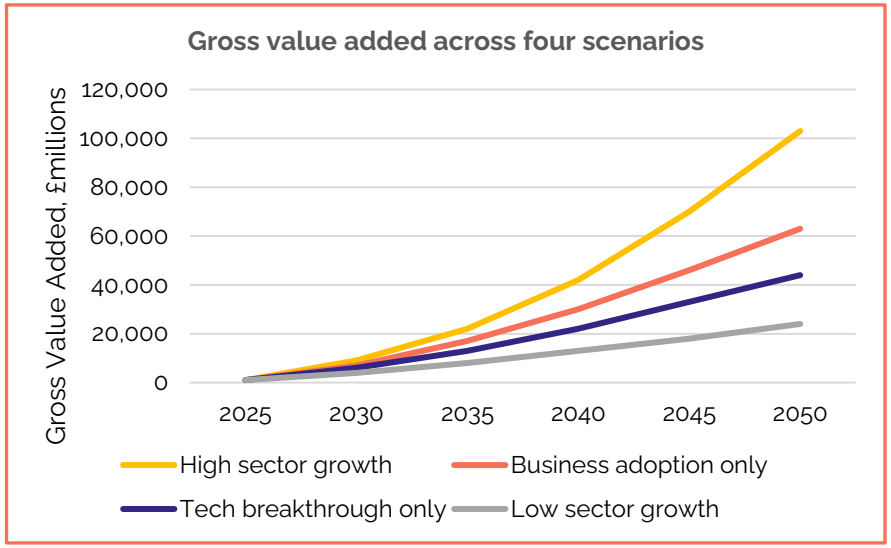
[18] CATCHUK.org, New Studies show the role of hydrogen and CCS in reaching net-zero targets, accessed 08.12.2025

search and rescue, and construction surveying. For example, the HS2 project has used drones to survey protected habitats and species to deliver 'faster and more effective' results without disruption to those habitats.[19] Using drones can reduce costs, increase productivity and complete otherwise impossible tasks, demonstrating the high potential for growth in the sector.

As drone technology is adopted for commercial use, evidence is emerging that suggests that drones are much safer than many existing practices. Evidence from specialist aviation insurers shows that commercial drones are "extremely low" risk to people, with 22 million drones flights in the US in 2024 leading to zero fatalities.[20] In fact, drone usage removes more risk than it creates, often replacing hazardous tasks performed by humans, such as working at height. The wide-ranging applications of drone capabilities means there are widespread and significant commercial opportunities in the drones sector that are ready to be harnessed.

Analysis from PwC estimates the economic impact of the drone sector, finding that the sector could contribute £45 billion to the UK economy and support 650,000 jobs by 2030.[21] Further analysis conducted by Frazer-Nash for the government suggests that with public support, and a shared strategy and ambition between government and industry, the sector could contribute £103 billion by 2050.[22]

Figure 1.2 the Gross value added of the drones sector[23]



Given its objective to have the highest economic growth in the G7, the government recognises the contribution that drones can play in achieving this and has started to prioritise the sector. In its industrial strategy, the government classified the sector as a frontier industry and drones were identified as an important technology in the Defence Industrial Strategy.[24] This indicates that the sector is receiving close political attention, with policymakers keen to leverage the technology for economic growth. Investors and businesses who align themselves

[19] HS2, HS2 demonstrates commitment to preserving natural environment by using hi-tech thermal drone to monitor Skylarks, 24.07.20
[20] PwC, UK drones regulations and net risk,12.09.25
[21] PwC, Skies Without Limits v2.0, 22.07.2022
[22] Department for Transport, Future of Flight Scenarios, 25.09.25
[23] Ibid.
[24] Department for Business and Trade, The UK's Modern Industrial Strategy, 23.05.25; Ministry of Defence, Defence Industrial Strategy: Making Defence an Engine for Growth, 08.09.25

with the government's ambitions will be best placed to capitalise on the commercial opportunities that stem from a positive political and regulatory environment.

The drones sector faces regulatory barriers that the government is beginning to address

Despite increased political attention, regulatory hurdles threaten to constrain the growth of the sector. By far the most significant of these are the existing restrictions on where and how far drones can be flown, which arise largely from attempts to shoehorn drone regulation into existing regulatory frameworks. For example, the process for obtaining approval for drone flight beyond the visual line of sight (BVLOS) of the operator is extremely complex. Most drones (that weigh more than 250g) are prohibited from flight within a 50m radius of people or within a 150m radius of residential, recreational, commercial and industrial areas. Underpinning these regulations is the UK's 'zero risk' approach to drone safety, which aims to eliminate aviation risk from drones entirely. These barriers constrain the applications of drones, as many of the most commercially beneficial use cases require BVLOS operation and close contact with people and buildings.

The government is listening to these concerns and responding. The Regulatory Innovation Office (RIO) is leading a series of pro-innovation reforms for the drones sector, including the introduction of a single, standard risk assessment process which has cut approval times for complex drone operations by more than 60%. They are working with the Civil Aviation Authority (CAA) to enable BVLOS flights in low-traffic airspace which will allow companies to more easily perform certain

Why the UK is a compelling destination for drone industry investment

The drone industry is not only technologically dynamic but also strategically supported by the UK government. The Department for Transport, the aviation minister, and the Department for Science, Innovation and Technology (DSIT) have clearly identified drones as a driver of national competitiveness and skilled job creation. This recognition translates into sustained policy focus, public funding initiatives and long-term commitment. The regulatory environment is evolving as the Civil Aviation Authority has adopted the international risk-based regulatory framework called SORA, enabling advanced operations. This convergence with international markets reduces regulatory uncertainty for investors and support export-led growth.

The UK hosts a thriving and collaborative drone ecosystem. From manufacturers, software developers, and systems integrators to operators, test sites, and specialist consultancies, the sector benefits from strong industry coordination and knowledge sharing. ARPAS-UK sits at the centre of this community, fostering engagement between industry, regulators, and policymakers.

For investors, the UK drone industry combines regulatory credibility and a maturing innovation ecosystem—an environment well positioned for sustainable growth and global leadership.

Anne-Lise Scaillierez, *Director & Volunteer CEO of ARPAS UK, the UK's non-profit trade association representing the commercial drone industry.*

functions such as inspecting powerlines.[25] HM Treasury, the Department for Business and Trade, the Department for Transport and the RIO have also collaborated to encourage the CAA to publish an investor-focused commercial road map for launching regular BVLOS operations across a range of uses.[26]

There is clear appetite within government to minimise the barriers to growth faced by the sector. It will be crucial for businesses and investors to engage with government to help address outstanding challenges and ensure the regulatory framework balances risk management with protecting the commercial opportunity. Those who do so will be well positioned to shape the future regulatory environment of the drones sector and build a policy landscape that supports innovation, scalability and cements the UK's position in drone technology.

US works to reduce dependence on China-made drones as rivalry intensifies

By Erin Caddell, Anchor Advisors, in partnership with GK Strategy

Quick: What percentage of drones in use in the United States are made in the US? What percentage of US drones in use today – in the era of MAGA, reshoring, revitalizing domestic manufacturing, and questioning America's global alliances – are made domestically?

We've given a hint, but the number is still surprising. Some 70% to 90% of drones currently deployed for consumer or commercial use in the US are made in China, according to the Special Competitive Studies Project[27], a US-based think tank (a figure confirmed by multiple other sources). Furthermore, the large majority of this production is generated by just one Chinese firm, Shenzhen-based DJI. One 2025 report indicated that DJI holds some 85% share of the US consumer drone market.

This is not new news. China, and DJI in particular, have built a wide competitive advantage over the US over many years through a lower cost structure (in part due to subsidies provided by the Chinese government), a faster cycle for new-product development and better access to key parts like batteries. But in recent years, the US government has accelerated its efforts to spur domestic drone manufacturing and deployment to reduce dependence on Chinese firms. And therein lies a big opportunity for U.S. and Western operators and investors involved in both military and commercial drone operations.

Unsurprisingly, diversifying the military drone manufacturing base away from China is a high priority for the US Department of Defense (DoD). In June 2025, President Trump issued an executive order[28] directing DoD to prioritize domestic drone production by speeding approvals for new domestic drone models; easing regulation for the estimated 1.6 million consumer-operated and 1 million commercial drones currently operating in US[29] skies; and more tightly scrutinizing foreign-owned drone manufacturers in the US. In February 2026, DoD launched phase one of its Drone Dominance Program, the goal of which is to provide some 300,000 weaponized low-cost drones for the U.S. military by 2027.

[25] Regulatory Innovation Office, Regulatory Innovation Office: One Year On, 21.10.25
[26] UK Civil Aviation Authority, Future of Flight: BVLOS Roadmap, 20.10.25
[27] Special Competitive Studies Project, Commercial Drones: 2025 Analysis, 2025
[28] The White House, UNLEASHING AMERICAN DRONE DOMINANCE, 06.06.25
[29] Federal Aviation Administration, Emerging Aviation Entrants: Unmanned Aircraft System and Advanced Air Mobility, 01.10.25

DoD has invited 25 companies to a trial of their drone capabilities in mid-February. Nearly all of the firms invited to participate are U.S.-based, but two are based in Ukraine, where military drone technology is developing in real time as that nation wages its war against Russia (one other EU-based company has also been invited to the trial). DoD plans to allocate some US$150 million for up to 12 firms to produce 30,000 drones at an average price of $5,000 each following the initial trial, the first awards of a total $1.1 billion budget for the program.

Among the U.S. military branches, the Navy has placed particular emphasis on drones as well as unmanned underwater vehicles. At a recent industry conference, senior Navy officials said that the service's total fleet of unmanned surface vehicles, or drone boats, had increased from four to 400 in just the past year[30], and that the Navy is planning to invest US$7.0 billion in unmanned technologies, with US$3.7 billion to be spent by the end of 2027. Longer-term, the Navy's strategic plan calls for nearly 30% of the Navy's fleet to be comprised of unmanned surface and underwater ships by 2045.[31]

On the civilian side, U.S.-based drone manufacturers are similarly likely to be presented with opportunities as the U.S. government restricts the activities of foreign drone providers. Following years of scrutiny of DJI's alleged ties to China's People's Liberation Army, DoD in January 2025 identified the firm as a "Chinese Military Company" under U.S. law[32], along with several other Chinese-based drone makers. This action began a process for new sales of the company's products to be banned in the US – a move supported by the Federal Aviation Administration (FAA), which controls US airspace – though DJI's existing products owned by U.S. users have been allowed to continue to operate for now.

The DJI ban has led to an uneasy détente. DJI has vocally denied the allegations of Chinese military ties and protested the ban. DJI agreed to submit to a security audit provided for under US statute before the official ban went into place in December 2025. But U.S. officials declined to conduct the inspection. Meanwhile, a number of U.S. consumers have protested the ban[33], arguing that US-made alternatives are lower-quality and more expensive, and that the prohibition threatens jobs in areas from agriculture to emergency services to filmmaking that depend on the foreign-made equipment. Further, the ban on existing versus new foreign drone products is fuzzy. DJI products shipped to the US but not yet sold appear not to be covered; a quick Amazon search reveals hundreds of DJI products for sale to US consumers.

Whatever DJI's fate, the controversy provides an opening for US-based drone manufacturers. Perhaps because of DJI's pre-eminence, no US player dominates the drone market on either the military or commercial side. Freed from the winner-take-all hegemony that prevails in many other tech-driven sectors, the US drone industry is populated by a wide range of startups and emerging public companies (see below) competing alongside firms backed by Big Tech (Wing, for example, is a drone-delivery company owned by Google) and defence conglomerates.

[30] Defense Scoop, Navy ramping up sea drone arsenal as officials aim for half of the surface fleet to be unmanned by 2045, 15.01.26
[31] USNI News, Navy's Force Design 2045 Plans for 373 Ship Fleet, 150 Unmanned Vessels, 26.07.22
[32] US Department of Defense, Entities Identified as Chinese Military Companies Operating in the United States in Accordance with Section 1260H of the William M. ("Mac") Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283), January 2025
[33] Times Square Investment Journal, Come Christmas, Chinese-Made Drones Face a Ban — and American Rivals Stand to Gain, 08.12.25

Figure 1.3 Fastest-Growing U.S.-Based Drone Companies[34]

Company	Ownership Status	Focus
Anduril	Private	Defense
Zipline	Private	Medical supply delivery
AeroVironment	Public (ticker: AVAV)	Defense
Skydio	Private	Defense
Kratos	Public (ticker: KTOS)	Defense
Red Cat Holdings	Public (ticker: RCAT)	Defense

The skies are not all clear for U.S. drone makers. China may well retaliate against the US ban placed on its drone manufacturers, as it has done before. In 2024, for instance, US-based Skydio was sanctioned by China for selling its products in Taiwan[35], causing the company to limit temporarily battery sales for some its products. And a valid question could be asked of how the U.S. government's new industrial strategy squares with its long-held commitment to open global commercial markets. But American protectionism appears set to stay for a while given sentiment on both sides of the aisle in the US. The domestic drone industry is poised to take flight as a result.

[34] LandBase, 10 Fastest Growing Drone Tech Companies and Startups, 03.02.26

Emerging regulation for deep tech

Regulation for innovation: can the UK nurture its home grown talent and avoid a quantum brain drain?

Advancements in quantum technologies promise seismic benefits for the UK economy and society

> 'Quantum technologies are changing the world – from ultra-sensitive sensors to help diagnose diseases through to the potential of a new type of computer that can do things in seconds that would take today's computers decades to compute. The UK already has considerable strengths and lots of exciting new companies have sprung up in the UK'
>
> ***Lord Vallance**, Science Minister in the Department for Science, Innovation and Technology*

Quantum computing represents a significant leap forward from classical computing. While traditional computers use 'bits' as the smallest unit of data, represented as either 0 or 1, quantum computers use quantum bits. These exist in a state of superposition, meaning they can be both 0 and 1 simultaneously. This allows quantum computers to process a vast amount of data at once and makes them

[35] Skydio, China's Sanctions on Skydio, 30.10.24

exponentially more powerful than even the most powerful supercomputer. Another theory of quantum mechanics known as entanglement enables quantum bits to be interconnected so that the state of one can influence the state of another.

These principles have the potential to solve some of the most complex problems currently beyond the realms of traditional computing. For example, quantum sensing could be used for next-generation medical devices, geofencing, navigation and mineral discovery. A quantum navigation system could overcome current vulnerabilities in GPS navigation such as technical outages, cyber-attacks, and atmospheric disruptions, meaning it could locate and navigate with a much higher level of accuracy than GPS. Quantum communications will enable the secure transfer of information, resulting in improved network security and internet connectivity across the world. Quantum imaging is being developed to scan brain health, including for pre-symptomatic signs of dementia. The technology has the potential to make huge leaps forward in the diagnosis and treatment of illnesses. Although there are still several technical hurdles to overcome, Tom Grinyer, chief executive of the Institute of Physics, has said quantum technologies will be 'as much of a game-changer for humanity as artificial intelligence or the internet.'[36]

The quantum race is on

The UK is already a global leader in the innovation of quantum technologies, and our quantum footprint was ranked second worldwide in 2023. We host the third best quantum research base globally, the second highest level of venture capital investment, and are home to the second highest number of pure-play quantum companies globally.[37] The sector continues to attract significant private investment and has benefited from consistent government investment over the last decade. Estimates suggest the global quantum market could reach £137 billion by 2040 and the UK is well-positioned to capture a significant proportion of this growth. Quantum computing alone will contribute £2.3 billion to the UK's GDP and support almost 27,000 jobs by 2034, rising to £11 billion and 126,000 jobs by 2045.[38]

But the UK cannot be complacent. It is critical that the mistakes made in the rollout of artificial intelligence are not repeated with quantum technology if the UK wants to maintain this competitive advantage. Global investment in quantum technology is increasing significantly and it is not only the UK government ramping up efforts to drive innovation and commercialise the technology. Germany plans to invest more than $3 billion by 2026. France is investing $2 billion. The US has funded its National Quantum Initiative Act with $1.2 billion. China is thought to be investing in the region of $15 billion.[39]

Regulators are also thinking about how to bring some oversight to the sector. The UK regulator – the Information Commissioner's Office – is currently working to understand how and how much to regulate. The Regulatory Horizons Council, sponsored by the Regulatory Innovation Office, positioned the UK as the first country in the world to set out a pro-

[36] Financial Times, UK government to invest more than £500mn in quantum computing, 23.05.2025
[37] Quantum Insider, Building a UK Quantum Strategy: The UK must win the race for the next critical technology, 24.11.2025
[38] Oxford Economics, Ensuring that the UK can capture the benefits of quantum computing, 06.02.2025
[39] KPMG, Making the UK quantum competitive, link

innovation regulatory framework for quantum technologies and established the Quantum Regulator's Forum to coordinate regulatory engagement.[40] The British Standards Institution is working with the Joint Technical Committee to prioritise efforts in this area. Effective regulation is key to ensuring the UK has safe, reliable and equal access to new technology, and standardisation in the sector enables new technology to be more accessible, efficient and usable.

The government must go further than simply nurturing innovation to retain the commercial value of the quantum sector in the UK

The UK does not have the best track record of industrialising emerging technologies. While we excel at nurturing research and innovation, we are far less successful in supporting businesses to scale up and commercialise a sector. Although this creates a thriving research base and attracts considerable talent to the UK, it means many businesses leave to scale and grow. This is what unfolded in the development of artificial intelligence and the same pattern risks emerging in the UK's quantum sector unless the government intervenes. In June 2025, Oxford Ionics, one of the UK's most advanced quantum computing businesses, was bought by US company IonQ in a billion-dollar deal. Others are set to follow suit, with Universal Quantum opening in Hamburg thanks to a £70m German government contract, and Bristol spinout PsiQuantum now scaling in the US.

The government's emphasis on quantum policy must shift from research to commercialisation to support businesses to grow in the UK sector. There are several ways this can be achieved but the Tony Blair Institute for Global Change has recommended four key interventions it believes are critical for the sector. These include funding for applied engineering research to bridge academia and industry; mobilising scale-up capital through pension investments; offering large scale procurement contracts to build quantum systems as other governments have done; and investing in the UK's quantum infrastructure such as testing facilities and cryogenics infrastructure.[41]

The government's ability to support businesses to commercialise emerging technologies will be critical to creating strong industrial sectors in our future economy. Otherwise, the UK risks being left with declining industries and significant job displacement. There is a clear role for businesses and investors to play in engaging with policymakers to co-create a regulatory environment that catalyses innovation and supports commercialisation, even if businesses are nascent and the technology is still being developed. As leaders in the political and policy landscapes of emerging regulatory markets, GK is uniquely positioned to support government engagement and navigate the policy opportunities and risks. With the right conditions in place, the UK is well positioned to maintain its competitive advantage in quantum technology and remain at the epicentre of the sector's growth.

[40] Regulatory Innovation Office, Regulatory Innovation Office: One Year On, 21.10.2025

[41] Tony Blair Institute for Global Change, A New National Purpose: A UK Quantum Strategy for Sovereignty and Scale, 03.11.2025

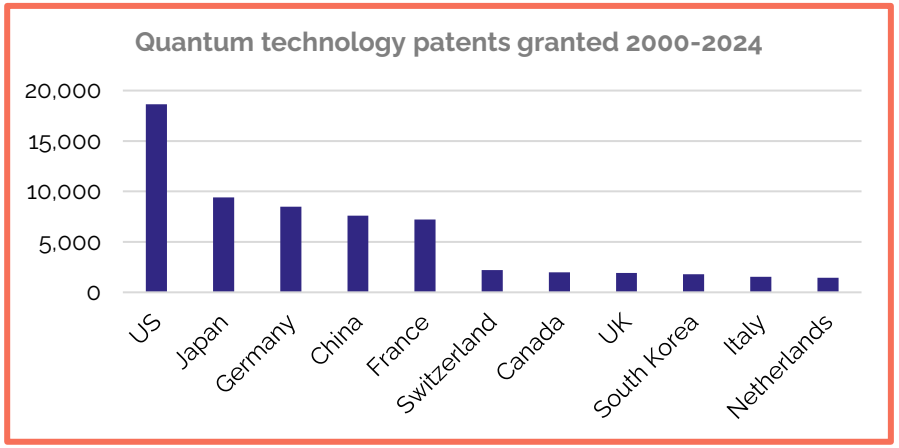
The US races to hold its lead in the global quantum revolution

By Erin Caddell, Anchor Advisors, in partnership with GK Strategy

It is only with a hint of American bravado that one can say quantum computing is a homegrown industry. The first digital computer was built at the University of Pennsylvania in 1943 for the US Army[42], while the first computer using quantum mechanics was produced by American researchers in 1998.[43] Since that time, many innovations in quantum have been driven by US national laboratories, universities and tech firms (though even an avowed American exceptionalist must acknowledge the influence of prior work in quantum by peers in the UK and elsewhere around the world).

Today, quantum computing is moving from the development phase to real-world deployment. As this transition occurs, the US has a strong hand in holding its lead in the global quantum race. US-based entities have been awarded nearly double the number of quantum technology patents over the past five years of those of the next-highest country (Japan), and 27% of the total quantum patents during that period (see figure 2.1). Thanks to America's robust capital markets, the world's largest publicly traded quantum firms are all US-based, led by IonQ (ticker: IONQ), D-Wave (QBTS) and Rigetti Computing (RGTI). In November 2025, the US government announced the latest phase of a years-long strategy to fuel development in quantum as well as several other emerging technologies through a combination of US$625 million in funding, government support and partnerships with US universities and businesses, a notable exception for an Administration focused on cutting budgets, staffing and existing projects in many other areas of science.[44] The Trump Administration appears to be maintaining its emphasis on quantum development into 2026. A draft Administration executive order (EO) leaked to industry media outlets in early February urges federal agencies to lower regulatory barriers to quantum innovation, expand US access to foreign markets emphasizing development in quantum, and encourage domestic quantum research and manufacturing. Trump Administration EOs are often formally released a few weeks after being floated for industry feedback.

Figure 2.1 Quantum technology patents granted 2000-2024[45]



[42] SIMS lifecycle services, The Journey of ENIAC, 04.01.2022
[43] Britannica, How Do Quantum Computers Work? 03.12.2025
[44] The White House, Launching The Genesis Mission, 24.11.2025
[45] McKinsey, The year of quantum: from concept to reality in 2025, 23.06.2025

US states are also getting in on the act, seeing a path to jobs and tax revenue as well as to enhance their reputations as technology leaders. Illinois allocated US$500 million to a new quantum park that broke ground in Chicago in October, supported by several of the state's universities and commitments from companies in the US and overseas. And in January 2025, Maryland announced a potential US$1 billion investment from state funds, matching federal grants, private-sector investments and philanthropic contributions over five years to build a quantum hub at the University of Maryland. Other US states will likely follow as governors attempt to capitalize on what some see as the next chapter of the AI boom, whose startups and data centres are now transforming many American communities.

And yet, America's continued pre-eminence in quantum is by no means assured

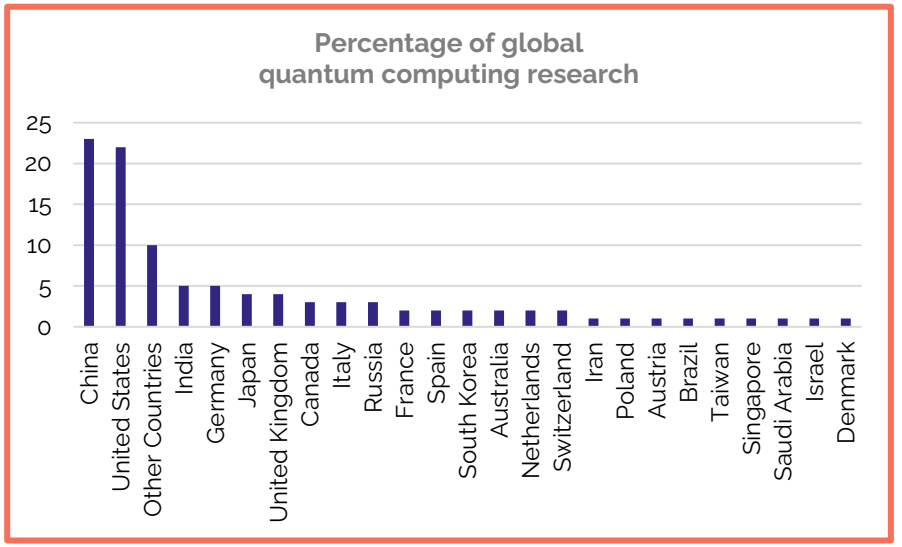
The quantum industry has been caught up in a new American industrial strategy that poses both opportunities and risks to domestic players. In October 2025, a *Wall Street Journal* report said the US government was considering taking equity stakes in several quantum computing firms.[46] Financial markets cheered the news, with shares of companies mentioned rising 7-13% the next day. While the Administration contradicted the report, the denial was carefully worded, merely specifying it was 'not currently negotiating equity stakes' with the firms. Such an initiative would be consistent with the Trump Administration's strategy of investing in private industries deemed critical to US national security, from semiconductors to rare earths. That said, the Administration's strategy could set tricky precedents for the future. How does the government decide which quantum firms – or any companies – are deemed worthy of investment? Why should the federal government commit taxpayer funds to firms that can raise private capital on their own? And how might such tools be used not by a free-market Republican president but by a progressive Democrat one, who may place more emphasis on protecting consumers or workers?

Then there is the small matter that quantum computing may not work – at least not in a way that produces profit-generating businesses in an investable timeframe. In offering processing speeds much faster than their traditional counterparts, quantum computers promise to revolutionize industries from pharmaceuticals to financial services to manufacturing. Yet quantum also faces a series of hurdles, from high error rates; to adequate refrigeration capacity needed to minimize the vibration of the atomic particles used in quantum computers (some must be kept at a temperature near absolute zero - -270 degrees Celsius or -450 degrees Fahrenheit); to shortages in the number of programmers qualified to manage complex quantum processes. Though venture capital funding for quantum hit a record US$2.5 billion in 2024, that figure still represented less than 1% of global VC funding in that year, according to the MIT Initiative on the Digital Economy. In January 2025, Nvidia CEO Jensen Huang drew headlines when he said useful applications for quantum computing were "decades away", though he later softened the claim.

[46] The Wall Street Journal, Trump Administration in Talks to Take Equity Stakes in Quantum Computing Firms, 23.10.2025

With the timeframe for commercial viability uncertain, public-private partnerships are often thought to offer the best structure to support quantum development. But the Trump Administration's campaign to rein in many American research universities through funding cuts and limiting visiting foreign scholars, as well as the Administration's efforts to reduce federal spending on science research, may limit US advancement in quantum, even as the Administration expresses commitment to the industry in other ways. While the Trump Administration proposed flat funding for quantum projects sponsored by the National Science Foundation (NSF) in its F2026 budget request, critics argued spending should be increased given the rapid pace of developments. The NSF reported that it cancelled 18 grants related to quantum development totalling US$59 million in 2025, out of more than 1,600 rescinded awards exceeding US$1.3 billion.[47] All but two of the quantum grants cancelled were affiliated with Harvard, a particular target of Trump's ire. By one measure – academic research to advance quantum theory – the US finds itself slightly behind China, at least based on one survey (see figure 2.2), followed by India, Germany, Japan and the UK.

Figure 2.2 National share of quantum computing published research, 2019-2023[48]



The rest of the world is by no means ceding the quantum race to the US

Last year, Australia agreed to provide A$940M (US$620M) to build the world's first utility-scale quantum computer in partnership with US - based PSIQuantum. In January 2025, Japan announced a ¥1 trillion (US$7 billion) package for quantum as well as advanced semiconductors, the largest of several government-led investments in quantum around the globe in 2025,

[47] COSSA, NSF Releases List of Terminated Grants, 27.03.2025

[48] Ruane, J., Kiesow, E., Galatsanos, J., Dukatz, C., Blomquist, E., Shukla, P., "The Quantum Index Report 2025", MIT Initiative on the Digital Economy, Massachusetts Institute of Technology, Cambridge, MA, May 2025.

The US holds a number of advantages in the global race to commercialize quantum computing. But the team seeded first in any tournament must play its best to win the trophy over hard-charging rivals.

A new era for regulation

The sky's not the limit: regulating the space economy

The rapidly growing global space economy will affect all sectors, with enormous potential for future growth if the challenges of international cooperation are considered and addressed

Media coverage of the space economy over the past decade has largely focused on launch capabilities. SpaceX's reusable rocket technology has reshaped the commercial launch market with its lower-cost, higher frequency launch capabilities, particularly within the heavy launch class which includes lifting payloads of more than 20,000kg to Low Earth Orbit (LEO). There has been a significant downward trend in the costs associated with heavy launches, driven primarily by the introduction of SpaceX's Falcon Heavy rocket in 2018. SpaceX's next-generation Starship vehicle aims to reduce these costs even further, targeting launch costs below $100 per kg to LEO. If achieved, this would mark a significant turning point in the economics of space access.

The most exciting opportunities lie not in space launch, but in the space-based innovation it will catalyse. Innovators in the UK and around the world are exploring a growing range of commercial opportunities made possible by the unique conditions of space:

- **Pharmaceuticals:** The pharmaceutical industry is developing orbital labs to create treatments in a way that is not possible on Earth. BioOrbit, a UK based space manufacturing company, hopes to begin clinical trials on space manufactured cancer treatments in 2026. Microgravity in space allows for significantly better crystallisation of pharmaceuticals, which allows for more concentrated therapies. In practice this will mean cancer treatments that are currently administered intravenously could be administered via an injection, leading to a large reduction in the time and costs of delivering some cancer treatments.
- **Life-sciences:** Microgravity also allows human tissue to be grown in much greater quantities than on Earth, which could enable human organs to be grown in space. This possibility is being explored by US company Techshot and pharma giant GSK.
- **Data centres:** Google has launched Project Suncatch, a moonshot exploring solar-powered satellite constellations with TPUs (Google's custom-built chip for Machine Learning tasks) and free-space optical links. While this application faces significant technical challenges, space and the raw power of the sun offer a potential route to meeting the rapidly growing energy demands of data centres.
- **Energy production:** Solar panels in space can be up to eight times more productive than on earth and can produce power nearly continuously. UK based Space Solar are planning to place solar panels in orbit, with the aim of reaching net zero targets by harnessing the constant and unfiltered power of the sun and beaming this down to earth.
- **Mining:** Mining space for raw critical minerals is set to become a huge industry. The moon holds valuable resources, including an

abundance of common metals, as well as rare earth elements such as scandium and yttrium, and the incredibly rare helium-3 (He-3) which could be used in nuclear fusion and quantum computing. Some businesses, such as Terra Luna and Interlune, aim to harvest these materials from space.

However, these commercial opportunities can only be fully realised alongside an awareness of the international challenges facing the space sector. The global regulatory framework for space stretches back to The Outer Space Treaty 1967 and is outdated for today's era of space exploration and innovation. The treaty fails to address fundamental questions of property rights in space, whether conventional weapons can be stationed in space, and how to deal with space debris. While there have been attempts to address this through the Artemis Accords 2020, which establish a set of principles to guide civil space exploration, China and Russia are not signatories. Both nations criticised the accords for being too centred on America's commercial interests, condemning them as a 'blatant attempt to create international space law that favours the US.'[49]

The accords have received criticism more widely because they expressly violate the Outer Space Treaty by allowing signatories to lay claim to any resources extracted from celestial objects. This issue will become increasingly pertinent as terrestrial nations seek to mine the moon and asteroids for raw critical minerals. Forging consensus on answers to questions of who can lay claim to resources in outer space, and how countries can coexist peacefully in space, will dominate politics in the coming decades.

The lack of international cooperation between the US and China on space regulation means that investors and businesses must monitor and engage in these debates. Without understanding these risks, businesses and investors in the sector will fail to reap the full commercial benefits as international regulation and geopolitical competition will shape the market. For instance, monitoring the domestic efforts of nations looking to create independent space functions in a bid to safeguard national security will highlight areas for investment that are likely to provide rapid growth. Given the regulatory issues within the international space sector, many countries such as the UK are looking to develop domestic launch capabilities across both civilian and military markets. The UK will have its first vertical rocket launch at SaxaVord spaceport in 2026, ensuring it can independently launch payloads into space. Businesses and investors will need to understand these international dynamics to both anticipate regulatory risk and identify emerging areas for growth.

Underpinning the efforts of governments around the world to prioritise the space sector - despite these international challenges - is the significant economic potential of the space sector. Estimates project the global space economy tripling in size to $1.8 trillion by 2035.[50] Within the UK, the space sector is worth £18.6 billion and growth in the sector is wildly outpacing wider economic growth, growing at an average rate of 3.3% per year since 2009-10.[51] With the UK home to 5% of the global space economy, the Chair of the UK Space Agency expects significant

[49] Digital Journal, NASA-led Artemis Mission is really an event for international celebration, 29.08.22

[50] World Economic Forum, Space: The $1.8 Trillion Opportunity for Global Economic Growth, 08.04.24

[51] UK Space Agency, Size and Health of the UK Space Industry 2024, 20.08.25

opportunities for the UK's space sector as the global space economy is primed for rapid growth.[52] Since 2015, $47 billion of private capital has been invested in the global space sector, growing at an average annual rate of 21%. Over this period, the UK has been the second-largest recipient of space investment globally, attracting 17% of total private capital.[53] The space sector is primed for investment, with enormous opportunities for growth within the UK over the next decade.

The UK occupies a unique and growing position in the global space economy

Despite not having a national space programme as large as other countries such as the US and China, the UK has developed significant areas of industrial excellence. The UK's universities are globally renowned for space science and the UK possesses significant industrial capacity when it comes to bespoke small satellite manufacturing. The UK has also been an early mover in the nascent In-orbit Servicing, Assembly and Manufacturing (IOSAM) sub-sector and holds geographical advantages when it comes to orbital launch (mainly in the north of Scotland).

The UK also plays a world-leading role in space law and insurance. Several witnesses that gave evidence to the House of Lord's inquiry into the UK's role in the space economy cited the UK's legal sector as a comparative strength in space, highlighting how the UK is home to the world's leading satellite insurance firms. This expertise has led the Department for Science, Innovation and Technology to state that it sees "the UK and City of London becoming the pre-eminent global centre for space financial products and services".[54] The UK's particular legal and financial expertise position the UK as a future centre of growth, with these services enabling shared security with allies in the face of geopolitical challenges. This is indicative of the scale of the commercial opportunities that exist within the space sector, and the significant contribution that the UK already makes to the global space economy.

As a mid-sized space power, the UK has strong connections to international partners such as the European Space Agency and NASA. The UK Space Agency is complementing these relationships through new partnerships with countries such as Japan, Canada and New Zealand, reflecting a strategy focused on leveraging global collaboration to allow the UK to punch above its weight. These international partnerships outside of the US will help the UK navigate the geopolitics of the space economy, and investors and businesses will benefit from monitoring how these relationships develop.

> 'By 2035, the United Kingdom will be recognised as the best place in the world to start, grow, and invest in Advanced Manufacturing. To deliver this, we will make changes to the business environment, removing barriers to investment and innovation. We will prioritise six frontier industries … [including] space, driven by increasing economic, national security, defence, and geopolitical interests
>
> ***Sarah Jones**, Former Minister for Industry in the Department for Business and Trade*

[52] UK Parliament, UK Engagement with Space Committee - Oral Evidence from David Willetts, Chair of the UK Space Agency, 10.03.25

[53] PwC and the UK Space Agency, Expanding frontiers: The down to earth guide to investing in space, 16.05.23

[54] House of Lords, The Space Economy: Act Now or Lose Out, 04.11.25

The space sector is prioritised as a frontier industry in the industrial strategy

The government wants to support businesses to scale and grow in the UK by providing public funding that incentivises private investment. The Private Investment Framework for Space is being created to help government attract and channel private capital into the sector. The UK Space Agency also runs several initiatives to support investors to understand and navigate the opportunities in the sector. The government is looking to increase the levels of commercial return in the space sector by progressing regulatory reforms that will make it easier for businesses to scale.[55] The government is also expected to continue to announce further measures that will aim to benefit the sector. By supporting the commercialisation of the sector, the government hopes to transform the UK's home-grown research and innovation talent into the businesses fuelling the future economy and to capture the commercial returns in the UK.

To further establish the UK as a world leader in the space economy, the government's advanced manufacturing plan sets out several areas the government wants the sector to prioritise: These five areas are:

- **Space domain awareness:** Building on existing UK capabilities, this would deliver a world-class system of Earth- and space-based sensors and digital infrastructure to track and manage objects in space, improving the safety, security and sustainability of UK-licensed spacecraft.
- **In-Orbit Servicing, Assembly and Manufacturing (IOSAM):** This involves producing new materials and conducting manufacturing in space, as well as in-orbit services such as debris removal and refuelling satellites.
- **Space data for earth applications:** This would deliver new digital infrastructure that can provide insights from Earth Observation and Intelligence Surveillance Reconnaissance data, and weather monitoring.
- **Position, Navigation and Timing (PNT):** The government wants a new national space-based PNT augmentation system to provide the UK with high precision services. Policymakers consider this an essential part of supporting the UK's defence capabilities to provide greater information about aviation, maritime and defence issues.
- **Satellite Communication Technology:** The government has set an ambition for the UK to be a world leader in commercial satellite communications to support civil and defence telecommunications.

By aligning with these priority areas and continuing to monitor then government's priorities, businesses and investors can maximise commercial and funding tailwinds. Those who frame their engagement with government in the language of the advanced manufacturing plan and the industrial strategy are most likely to succeed in gaining support from government.

[55] Department for Science, Innovation, and Technology, Advanced Manufacturing Sector Plan, 23.06.25

The regulatory environment surrounding the space sector in the UK is still emerging, with challenges to be addressed

Investors and businesses must also consider the significant domestic regulatory barriers that could limit the growth of the sector. For instance, licensing processes are often too onerous for small businesses, with space missions usually requiring three licences: an operator licence from the CAA, a Permanent Earth Station licence from Ofcom and an export licence. Coupled with other regulatory barriers, the government must get handle these issues if it is to unlock the full potential of the sector.

However, it is clear that the government wants to do more to remove the barriers to growth. The Regulatory Innovation Office (RIO) is working with the Civil Aviation Authority (CAA) to simplify the licensing regime. The CAA is now aiming to deliver a more flexible regulatory framework by early 2027 and is working with industry and government to explore the potential of licensing operators rather than licensing individual missions.

It will be crucial for businesses and investors to work with government to shape the regulatory environment in a way that supports innovation from the start. Given the infancy of the space economy both domestically and internationally, now is the perfect opportunity to engage with government and be a partner in the co-creation of effective space regulation. Businesses and investors who do so will be the biggest beneficiaries of an effective regulatory regime that enables independent domestic space efforts and sustained private investment. As the market leaders in this sector, GK is ready to support businesses and investors to understand, navigate, and influence the political, policy and regulatory landscape of the space economy.

UK Space Agency supports sector growth and investment

The UK's Industrial Strategy positions space as a critical enabler of economic growth within the advanced manufacturing sector. This aligns with the Strategic Defence Review, which reflects the UK's objectives to strengthen national resilience and drive transformation across all aspects of defence, from upstream innovation and industrial capacity to the delivery of high-quality, globally competitive downstream services.

This ambition is underpinned by a coordinated 'one government' approach to space, with government demand emerging in resilient PNT, Earth observation and climate intelligence, secure satcom, and space sustainability. As space-based data, connectivity and timing become embedded across financial services, logistics, energy systems and digital infrastructure, new commercial markets are emerging beyond the traditional space sector. For most investors, significant opportunities sit in downstream applications where space is playing a key role in strengthening and transforming sectors such as defence and security, agriculture, insurance, and logistics. Space also plays a key role in cross-sector innovation as it powers advancements in AI, quantum technologies, biotech, and advanced manufacturing.

This growth is being fuelled by the UK's dynamic space ecosystem, supported by UK Space Agency programmes deploying grants, procurement and co-investment to bridge the scale up "valley of death". Alongside these, sovereign wealth-style vehicles such as the British Business Bank and the National Wealth Fund signal long-term sector confidence, helping to unlock private capital.

***Sofia Chaves**, Unlocking Space for Investment, UK Space Agency [N.B to discuss specific initiatives offered by UK Space Agency to support investment into the space sector, please contact GK Strategy who can make an introduction.]*

UK Space Agency supports sector growth and investment

The space sector is inherently dual-use in nature, as almost all space services and technologies can be used for either civil or defence/national security purposes. This is important for investors to understand and actively lean into; while space already underpins a vast amount of economic activity and therefore presents a strong investment opportunity for investors, it is now also critical to our defence and national security. This comes with checks and balances to make sure that national governments are encouraging and facilitating appropriate investments into sensitive space companies, but it also provides those space companies with even more commercial opportunities to work with defence and national security customers. Such breadth of use should encourage investors rather than deter them; defence is an engine for growth. Helping the investment community navigate the space sector is a priority for HM Government, as this will benefit both investors and the space companies they support.

Supporting investors navigate the sector is especially important in a rapidly changing global environment. The geopolitics of space, and of the world more widely, mean that space companies are more important for economic and national security than ever before. Bringing the investment community, and financial services more broadly, together with the space sector therefore is vital to the economic wellbeing and national defence of not only the UK but of our allies and partners too. That is why it is important to highlight the particularly powerful role the UK, and the City of London specifically, can play in connecting investors and financial service providers to high growth high impact space companies. The UK's Modern Industrial Strategy makes clear that HM Government wants to position the UK as the hub of finance for the space sector, including direct investment, both domestically and amongst our allies and partners - and this starts with helping to bridge the gap between those sectors by improving investors understanding of the opportunities and challenges that the current global landscape presents.

One way in which HM Government is doing this is by honing both our focus in the space sector and the interventions and policies we use to grow our space companies into more capable, better scaled, and financially successful businesses that generate genuine economic return and properly contribute to our defence and national security. This honing of our focus has been ongoing since the Space Industrial Plan in 2024, was reiterated under the current government through the Modern Industrial Strategy in 2025 and will continue as we refine our priorities and interventions even more. This will ensure that the whole of HM Government is working towards collective outcomes and targeted interventions that provide both domestic and international investors with the confidence to deploy their capital into British space companies.

Josh Broom, *Head of Space, Department of Business and Trade*

Opportunities emerge as the US space economy shifts from public to private leadership

By Erin Caddell, Anchor Advisors, in partnership with GK Strategy

For much of the world, the lasting images of US space exploration remain those of the Cold War more than 50 years ago. Spurred on by the rivalry with the Soviet Union, America plunged headfirst into the Space Race in the 1960s, culminating in the first moon landing in July 1969. Historic achievements, driven by a national resolve – and national treasure.

The budget for the US National Aeronautics and Space Administration (NASA) peaked at 4.4% of federal spending at the height of the Space Race in 1965 - not far from the 5.0% the US government spent on education that year - and exceeded 2% throughout the decade. All told, NASA spent US$49 billion between 1960 and 1973, equivalent to $482 billion adjusted for inflation, according to the Planetary Society.[56]

US-led space exploration looks quite different today. Lacking the urgency of the Soviet threat and the unifying goal of putting a man on the moon, NASA's budget has been flat at about US$25 billion for several years, now representing just 0.3% of federal spending. The Trump Administration proposed a 24% cut to NASA's budget for fiscal 2026 as part of its efforts to cut federal spending it views as wasteful, drawing objections from Congress (a debate paused by the partial US government shutdown last fall but soon to resume as Congress and the Administration debate the F27 budget).

Yet as the public sector has withdrawn, a vibrant, multi-faceted American private space industry has grown and become far larger than the US government's space program – indeed, one facilitated by the same US government that won the Space Race years ago. In 1970 – as the Apollo space program was winding down, culminating in the final moon landing in 1972 – President Nixon allowed private companies to operate satellites in space. In the intervening decades, satellites have become critical components of US infrastructure for communications, location tracking, weather forecasting and other functions. More than 12,000 satellites orbit the earth today, according to NanoAvionics, 62% of which are owned by US-based entities.[57]

With well-established business models and numerous commercial applications, satellites continue to dominate the space economy, garnering some 84% of total global private capital investment in the sector from 2009 to 2025, according to Space Capital, a private investment firm. However, in recent years, diversification of the space industry has accelerated as technology has opened new frontiers for investment and commercialization, in many cases taking on functions ceded by NASA to the private sector. Space Capital organizes the evolving ecosystem into three categories: Infrastructure, Distribution and Applications.[58]

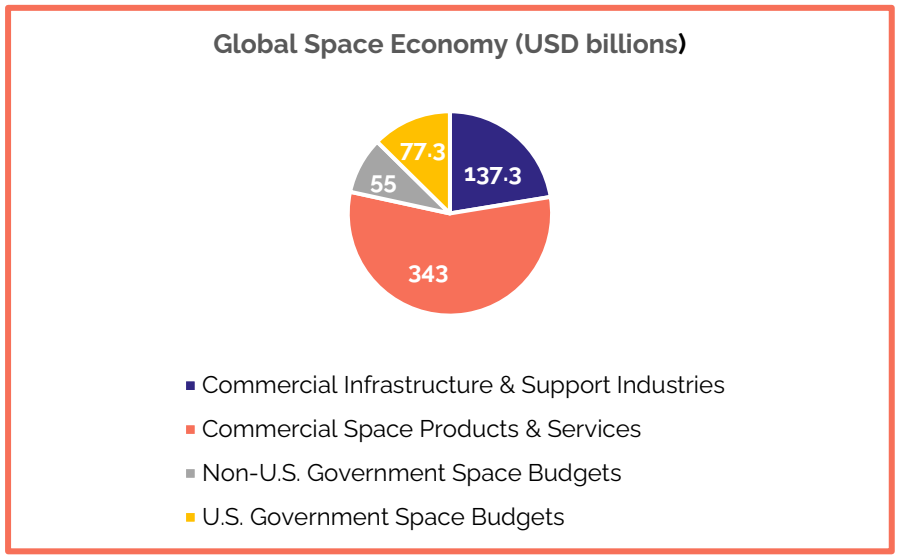
[56] The Planetary Society, How much did the Apollo program cost?, 10.07.20

[57] NanoAvionics, How Many Satellites are in Space?, 04.05.25

[58] Space Capital, Space Investment Quarterly: Q4 2025, 14.01.26

In the investment firm's rubric, Infrastructure includes technology to build, launch and operate space-based assets. Distribution represents the hardware and software used to connect, process and manage data from space-based assets, notably but not exclusively the Global Positioning System (GPS) navigation network many of us use every day. And Applications utilize data from space-based assets for earth-bound intelligence, from planting agricultural crops to deploying drones in a military counterattack.

Figure 3.1: Global Space Economy in 2024[59]



[59] Space Foundation, Space Report 2025, 22.07.25
[60] Space.com, SpaceX shatters its rocket launch record yet again — 165 orbital flights in 2025, 31.12.25

Looking ahead, the Infrastructure sector is sure to draw considerable attention from investors in 2026. Media reports suggest that SpaceX, founded by Elon Musk in 2002, is considering a US IPO to raise a rumoured $30 billion in 2026 after completing its latest private funding round at a valuation of US$800 billion in 2025. SpaceX currently dominates the launch industry in the US and globally, successfully completing 165 orbital liftoffs in 2025, 85% of the total completed by US-based private companies and more than double the number initiated by China.[60]

Some three-quarters of SpaceX's missions last year were designed to support its Starlink satellite communications network, which announced last month announced it had crossed the 9 million subscriber mark globally for its internet and communications services. Reaching more than 150 countries, Starlink has become a geopolitical as well as a commercial tool, with Iran becoming the latest nation to attempt to block the service to quell the recent protests there.

Given Starlink's huge scale and Musk's omnipresent public profile, the SpaceX IPO is sure to be a defining event for the space economy and would give SpaceX substantial capital to invest in its orbital and terrestrial network should it go forward. But SpaceX's competitors are by no means standing still. In November, Blue Origin, backed by Amazon founder Jeff Bezos, launched a NASA probe into orbit and then recovered the rocket booster, only the second private company to do so after SpaceX. While less successful than SpaceX and Blue Origin to date, United Launch Alliance has completed over 150 launches for private

entities as well as NASA since its founding in 2006. As a 50/50 joint venture of US defence giants Boeing and Lockheed Martin, United Launch Alliance has the deep pockets to remain a viable competitor in the market.

Geospatial intelligence (GEOINT) is also thought by many industry observers to hold substantial promise, marrying the new space revolution with the artificial intelligence (AI) boom drawing so much attention back on Earth. GEOINT uses satellite images to map, forecast and analyse activities on the Earth's surface for everything from military troop movements to wildfires to ships at sea. AI is being employed by a number of government agencies and private firms to attempt to process the massive amounts of data coming in from satellites literally around the world for military and commercial use.

Risks abound in space development, as any sci-fi fan is well aware. Key operational risks include the harsh environment of space, failed launches, and a regulatory framework that has failed to keep pace with the rapid pace of commercial development in the industry, according to a recent report by KPMG[61]. And just like a crowded beach, space debris has also become a bigger problem as more stuff is launched skyward. A November 2025 analysis by Georgetown University[62] found that more than 13,000 pieces of "space junk" remain in orbit, endangering satellites and human missions alike. That said, the handoff from the national triumph of the Apollo missions to the profit-driven endeavours of SpaceX, Blue Origin and their privately owned peers appear poised to keep the US as a global leader in space as the industry moves to its next cycle of commercial applications.

[61] KPMG, A galaxy of opportunities, 2023

[62] Georgetown University, Mapping Space Debris: An Interactive Data Visualization of Orbital Debris and Its Origins, 03.11.25

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