



cATAPULT

Catapult Network

Launching your ideas with the UK's
new centres for innovation

Technology Strategy Board
Driving Innovation

The vision

Hundreds of thousands of businesses in the UK are hungry for growth and capable of bringing brilliant new products and services to market. However only a few have all the resources, expertise, equipment or contacts they need to develop their ideas into new products and services.

The Catapult vision is to bridge the gap between these ambitious businesses and the expertise of the UK's world-class research communities. Catapults exist to:

- Reduce the risk of innovation and accelerate the pace of business development
- Create sustainable jobs and growth
- Develop the UK's skills and knowledge base and its global competitiveness

Each Catapult focuses on an area in which the UK has genuine potential to generate growth in strategically important global markets. Our vision is to create the setting which enables you to be part of this success.

Find out how to achieve more at catapult.org.uk/work-with-us

What is a Catapult?

Catapults are not-for-profit, independent physical centres which connect businesses with the UK's research and academic communities.

Each Catapult centre specialises in a different area of technology, but all offer a space with the facilities and expertise to enable businesses and researchers to collaboratively solve key problems and develop new products and services on a commercial scale.

Whether you're in need of a new manufacturing process, a fresh approach to digital rights protection or a new way of balancing energy demands in a future city environment, Catapults will be able to help you.

Learn how and much more at catapult.org.uk

The seven existing centres include High Value Manufacturing, Cell Therapy, Offshore Renewable Energy, Satellite Applications, Connected Digital Economy, Future Cities and Transport Systems.



How can Catapults help you?

Universities and other research institutions make an essential contribution to the Catapult network.

Academic and research organisations were closely involved in the development of Catapults, and that will continue as they mature. Maintaining these close ties with the UK's world-leading academic and research communities will be essential to allow Catapults to offer the very best technical advice and expertise.

The Catapults offer academics the chance to work on real-world problems, to make a significant contribution to cutting-edge work that's done in partnership with the UK's most exciting businesses, and to prove the economic impact of academic research.

If you'd like to find out more about how you can get involved, visit catapult.org.uk/research

Catapults for businesses

Whether you have a product that needs development, a difficult technical problem to solve or a question about how to scale your business to the next level, Catapults can help.

Catapult centres are one-stop shops for expertise, equipment, advice and networking. They are staffed by experts in their field who are drawn from leading business, academic and research institutions.

Catapult centres offer:

- development and research capability
- technical expertise and access to cutting-edge specialist equipment
- expertise in accreditation and approval of regulatory and technical requirements
- advice on taking ideas and product to market, developing supply chains and scaling businesses
- access to people and organisations who are working on common challenges in the same area
- help with accessing funding.

Catapults are open to organisations or businesses of any size which might benefit from the services they provide. They can help with specific problems, and also offer more general advice, support and networking opportunities.

If you think a Catapult might be able to help you, now or in the future, get in touch:

✉ Email catapult@tsb.gov.uk

🐦 Twitter at [@Catapult_TSB](https://twitter.com/Catapult_TSB)

☎ Telephone +44 (0) 1793 442700

@ Visit catapult.org.uk.



“The HVM Catapult is the catalyst for the future growth and success of manufacturing in the UK”



High Value Manufacturing Catapult

The High Value Manufacturing Catapult is the catalyst for the future growth and success of our manufacturing in the UK.

It combines seven world-class centres of industrial innovation into one cohesive force, helping to create a sustainable high value manufacturing future for this country.

The centres support innovation across all high value manufacturing areas, from raw materials and high-integrity product assembly processes to scaling-up and proving-out processes and supply chain networks.

The centres that make up the Catapult are:

- The Advanced Forming Research Centre (AFRC) in Glasgow

- The Advanced Manufacturing Research Centre (AMRC) in Sheffield
- The Centre for Process Innovation (CPI) in Wilton
- The Manufacturing Technology Centre (MTC) in Ansty
- The National Composite Centre (NCC) in Bristol
- The Nuclear Advanced Manufacturing Research Centre (NAMRC) in Sheffield
- The Warwick Manufacturing Group (WMG) in Coventry

Find out more at hvm.catapult.org.uk



Cell Therapy Catapult

The Cell Therapy Catapult was established as a centre of excellence in 2012 to create a world-leading cell therapy industry in the UK through innovation and collaboration.

Supported by the UK Government, its mission is to drive the growth of the industry by helping cell therapy organisations across the world translate early stage research into commercially viable and investable therapies.

With one of the largest dedicated cell therapy teams anywhere, its scientists, business development, manufacturing and regulatory experts are collaborating with cell therapy organisations and other interested parties from across the globe. Together they are also finding solutions to industry-wide challenges including business models, logistics and reimbursement.

Building on the UK's strength in scientific research and the healthcare industry, its vision is to grow a cell therapy critical mass, helping organisations advance their therapies towards the market and tackle unmet medical needs.

Working with the Cell Therapy Catapult brings world-class laboratory facilities; clinical expertise and a rapid trial and patient network in the NHS and throughout Europe; infrastructure, supply chain management and manufacturing expertise; regulatory knowledge and leadership; financial and industry networks; health economics and reimbursement expertise; business and commercialisation expertise and reach into European markets.

Find out more at ct.catapult.org.uk



“The UK space market is currently worth £9.1bn, a 6 per cent share of the global market”



Offshore Renewable Energy Catapult

The Offshore Renewable Energy Catapult aims to be a leading international centre recognised for the identification, development and rapid commercialisation of technological innovation, maintaining the UK's position at the forefront of a vibrant and growing offshore renewable energy sector.

The Catapult supports innovation in design, manufacture and deployment of offshore wind technology and in development of energy devices utilising tidal and wave power. It is also

opening up further opportunities for supporting operations, service and maintenance activities as key components of a sustainable offshore wind, wave and tidal industry.

Find out more at ore.catapult.org.uk



Satellite Applications Catapult

Technologies and applications derived from satellites will be a major growth area for the UK economy over the next decade and beyond. The Catapult will help UK businesses make use of and benefit from satellite data, developing new applications, products and services.

The UK space market is currently worth £9.1bn, a 6% share of the global market. The Catapult will help the UK achieve targets set out in the UK Space Innovation and Growth Strategy to increase UK market share to 10% by 2030, and create a wealth of new high-value jobs.

The centre is a catalyst for developing new satellite-based applications and services, such as mobile communications, navigation, TV, weather forecasting and using Earth observation data to help farmers, transport logistics, flood defences and monitor man's impact on the Earth.

Find out more at sa.catapult.org.uk



“The UK is one of the world’s strongest digital markets... valued at more than £100bn”



Connected Digital Economy Catapult

This Catapult aims to stimulate and support digital sector companies, with a primary focus on small and medium-sized enterprises, and to raise awareness across the economy of the power of digital technology.

So far it has launched the Open Health Data Platform, which integrates NHS data with other information and aims to demonstrate and allow innovators to innovate with new sources and types of linked health data.

It has also kicked off the Greater Manchester Data Synchronisation Project in partnership with the Future Cities Catapult and research

and development hub FutureEverything. The project will support the coordinated release of city datasets from participating local authorities in the area.

The Catapult will focus initially on developing digital platforms in creative media and content, cities and health. Other priorities include data and data science, next generation connectivity such as 5G, issues of security and cities and their innovation clusters.

Find out more at cde.catapult.org.uk



Future Cities Catapult

The Future Cities Catapult is a global centre of excellence on urban innovation. It’s a place where cities, businesses and universities come together to develop solutions to the future needs of our cities.

Its focus is squarely on the challenge of urban integration: how cities can take a more joined-up approach to the way they plan and operate. This will help to improve quality of life, strengthen their economies and protect the environment.

The Future Cities Catapult goal is to help UK businesses create the products and services to meet the future needs of the world’s cities. As a large and growing market, over £6.5tn will be invested in city infrastructure across

the world over the next 10 to 15 years. The accessible market for integrated city systems is estimated to be £200bn year by 2030.

The Catapult helps cities to share what’s worked for them in the past, and gets companies and universities working together. The Catapult road tests new innovations at scale and gets new solutions to market. It gets financiers, lawyers and city governments teaming up to remove barriers to innovation. The Future Cities Catapult is a neutral space where all this happens.

Find out more at futurecities.catapult.org.uk



“In developed countries, transportation accounts for up to 12 per cent of gross domestic product”



Transport Systems Catapult

The Transport Systems Catapult is driving the UK's global leadership in Intelligent Mobility: the efficient and cost effective movement of people and goods.

The Catapult promotes sustained economic growth and wellbeing by enabling UK businesses to develop innovative products and services, unlocking latent capacity and meeting global demand – potentially worth £900 billion annually by 2025.

The UK is well positioned to take advantage of this opportunity through its expertise in transport modelling, design, planning and testing, and there is scope to do much more. The Catapult brings together industry, the Government and academia to work collaboratively, providing a

focus for innovation in mobility and helping turn great ideas into commercial reality.

The Catapult is building advanced integrated modelling and test facilities that will promote the development of a multi-modal transport approach proving the viability of new concepts and accelerating their development to market.

The Catapult will drive the development of thought leadership across the different transport-related communities, changing the way in which they think about their role in delivering a seamless end-user experience and create a unified transport sector.

Find out more at ts.catapult.org.uk

Two new Catapults

As part of the Government's commitment to the work of the Technology Strategy Board and the Catapults programme, funding is being provided for two new Catapults that will be up and running in 2015.

Energy Systems Catapult

This Catapult will help UK businesses to create systems capable of handling future energy demand and supply, both in domestic and overseas markets. It will play a part in accelerating the market viability of technologies that underpin whole energy systems, building on existing UK strengths in this area.

One estimate has valued the global market for integration and control technologies at up to £1.6tn by 2050. The new centre will work closely with others in the network, especially the Transport, Future Cities and Offshore Renewable Energy Catapults.

Diagnostics for Stratified Medicine Catapult

This Catapult will focus on more personalised – or 'stratified' – medicine. This is about identifying and deploying the right treatment for individual patients, rather than following a one-size-fits-all approach. Improved diagnostic tools will mean better and faster care for patients and will help companies to devise new treatments. In the long term, this should improve patient outcomes and reduce the cost of healthcare.

The Technology Strategy Board has been working in this area for some time – with an innovation platform backed by £200m of investment – giving the Catapult a great head-start in driving this significant market forward.



“Two new Catapults will be up and running in 2015”

Working together

Catapults are already working together on increasing the reach of the network and providing customers with further services.

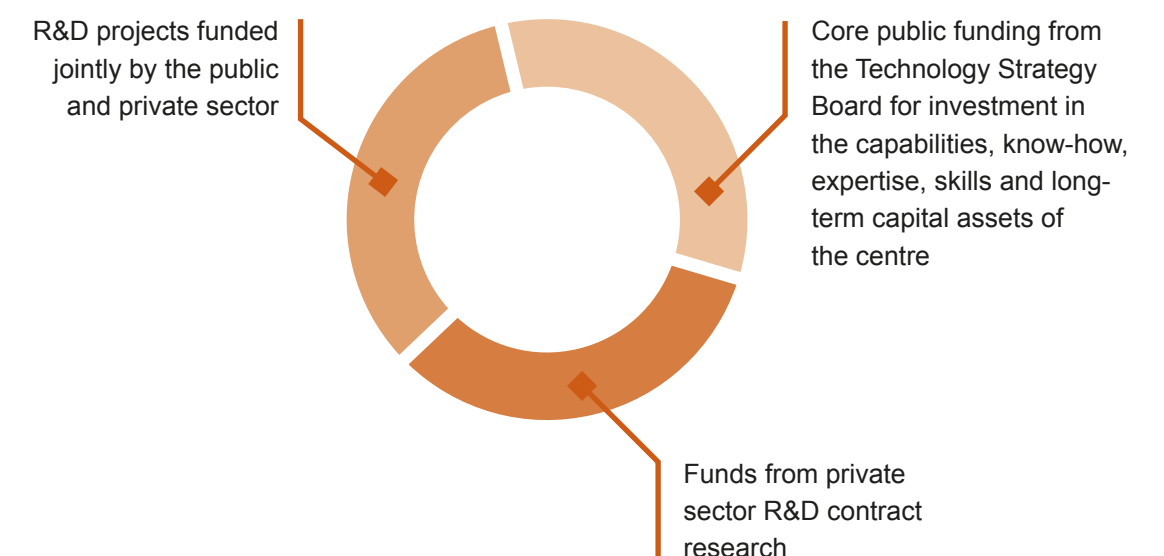
Good examples include the Satellite Applications and Offshore Renewable Energy Catapults working on radar solutions for offshore wind.

Transport Systems and Satellite Applications Catapults have also been collaborating on GPS positioning with the rail industry. Further projects are being scoped out between Future Cities, Connected Digital Economy and Transport Systems Catapults and between Cell Therapy, High Value Manufacturing and Satellite Applications Catapults.

Funding / Technology Strategy Board

Catapults are backed by considerable amounts of investment; their funds come from a combination of core Technology Strategy Board support and competitively won business and public sector funding.

Once the Catapults are fully established, they will generate their funding broadly equally from three sources. Core funded projects will address key, cross industry challenges and barriers that are slowing commercialisation.





“Catapults encourage the development & exploitation of new technology”

Intellectual Property

All Catapults understand the importance of intellectual property.

IP is managed in a transparent manner, with sufficient flexibility to accommodate differing circumstances. The Catapult teams will ensure that all rights are clearly identified and protected, in keeping with the generating source of the IP and with meticulous consideration for existing third-party IP rights.

The IP arrangements will vary to fit the funding model for the project. For example, the Catapult will own and manage IP created as a result of work done exclusively under core Technology Strategy Board funding. In contrast, all partners

will agree appropriate arrangements to share the IP rights for jointly funded private/public sector collaborative work and the Catapults will safeguard any IP that customers bring with them as part of a project. IP which is developed during commercial R&D contracts will generally remain with the customers.

For the centres, coordinated collaboration with businesses and the research/knowledge base to manage IP is key.

Find out about the specifics at catapult.org.uk/intellectual-property

How can you get involved?

Together we have achieved a huge amount, thanks to the wide participation and enthusiasm shown by everyone involved.

The first seven Catapult centres are open and waiting to hear from you.

Other Catapults continue to develop their business and delivery plans and to engage with the relevant business and academic communities. To get involved with the various centres, please see the contact details to the right and on the following page.

Join in

To join in, please sign up through the _connect collaboration and networking platform at:

<https://connect.innovateuk.org/catapult-networks>

Email: catapult@tsb.gov.uk

Visit: <http://www.catapult.org.uk>

Follow us on Twitter: [@Catapult_TSB](https://twitter.com/Catapult_TSB)



“The first seven Catapult centres are open and waiting to hear from you”

Contacting the Catapult centres

High Value Manufacturing

Email: info@hvm.catapult.org.uk
 Visit: <http://hvm.catapult.org.uk>
 Follow us on Twitter: @HVM_Catapult

Cell Therapy

Email: info@ct.catapult.org.uk
 Visit: <http://ct.catapult.org.uk>
 Follow us on Twitter: @CTCatapult

Offshore Renewable Energy

Email: info@ore.catapult.org.uk
 Visit: <http://ore.catapult.org.uk>
 Follow us on Twitter: @ORECatapult

Satellite Applications

Email: info@sa.catapult.org.uk
 Visit: <http://sa.catapult.org.uk>
 Follow us on Twitter: @SatAppsCatapult

Connected Digital Economy

Email: info@cde.catapult.org.uk
 Visit: <http://cde.catapult.org.uk>
 Follow us on Twitter: @CDECatapult

Future Cities

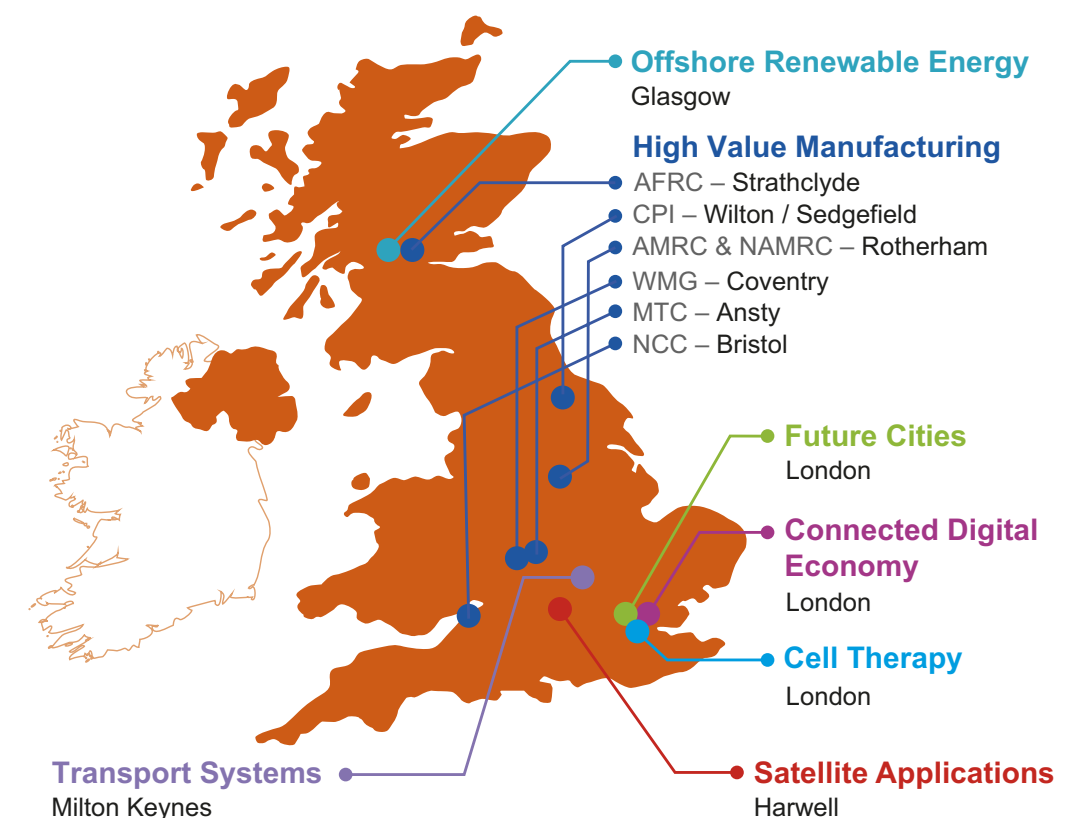
Email: info@futurecities.catapult.org.uk
 Visit: <http://futurecities.catapult.org.uk>
 Follow us on Twitter: @futurecitiescat

Transport Systems

Email: info@ts.catapult.org.uk
 Visit: <http://ts.catapult.org.uk>
 Follow us on Twitter: @TSCatapult

For enquiries relating to the two new Catapults (Energy Systems and Diagnostics for Stratified Medicine) please contact catapult@tsb.gov.uk

The Catapult Network



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Publication number T13/103

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