

Cambridge Agri-Tech & Community Campus

CAMBRIDGE AGRI-TECH PARK

Cambridge's Hyperscale AI Data Centre and Agri-Tech Campus designed to globalise Cambridge in the AI space whilst transforming the local South Cambs. Community

Introduction

Set across 107 acres including the 65m-gallon Dernford Reservoir, the vision is to develop a major Data Centre tailored to the needs of the AI boom, complemented by innovation-inducing infrastructure in agricultural technology to contribute the local community's talent pool and economy, whilst making a global presence for Cambridge in AI.

The UK's Data Centre Past

Data Centres (DCs) are warehouse-like buildings which house computing units needed to store data for all modern I.T. uses: Meta's DCs store your WhatsApp messages, Google/Microsoft DCs store your emails and 'Co-location' DCs store the data of local businesses, which is critical for the growth of AI start-ups, big pharmaceuticals and I.T. companies as they need DCs within close proximity.

AI use is set to require the doubling of hyperscale data centre capacity in the next four years.

Savills Data Centres.

Due to a constrained Grid and cumbersome planning system, the UK has lagged behind the rest of the World in developing DCs which has restricted a major technological advancement. This has meant that the UK currently only has c. 500 Data Centres with a power capacity of **1.6GW**, while the Government has announced that **we need 6GW** of AI-capable DC capacity, and the capacity including the pipeline is just **3.6GW**.

Data center projects worth £14 billion have been announced as part of a new AI action plan launched by the UK government.

Data Centre Dynamics.

The pipeline includes Blackstone's £10bn Blythe DC, CloudHQ's £1.9bn Oxfordshire site, Vantage's £1bn project in Wales.

Cambridge is even further behind with only 3 small co-location facilities under 20,000 square feet and less than 2MW in power, meaning it has a shortage of sufficient digital infrastructure to support AI incubation and new life sciences parks, so it will not be as competitive in comparison to cities like Oxford where there is already an AI Growth Zone allocated at Culham.

The Cambridge Agri-Tech and Community Campus will bring this attention and capital to Cambridge, whilst creating a DC that is needed to be physically close to local data-intensive businesses.

Why Dernford Reservoir?

DCs require two critical resources: power and water. The National Grid is heavily saturated across the country, and water supplies are becoming increasingly scarce in the South-East of England. This makes it extremely difficult to find a suitable DC site.

Dernford Reservoir has a reservation for 450MW of power and can connect to one of three major substations within a 20-mile radius – a pivotal feature. A DC of this size would make it appealing to AI demand from Hyperscalers (Google, Amazon, Meta, Microsoft and Oracle) with global customers, as well as major co-locators who lease 'Racks' to local businesses in AI, R and D, life sciences etc. to enable their growth.

Furthermore, a DC of this scale would attract the attention of the major institutional capital that is investing in DC development in the UK like Blackstone, L and G and Macquarie. Recently Swiss institutional investor SWI Group acquired 100 acres for a major DC by Ely, Cambridgeshire, proving the demand from both DC operators and funds in investing in this sector in Cambridge.

In addition, we currently have a 65m gallon reservoir connected to our private pipeline network that moves over 300m gallons of water – a rare and valuable feature of a DC site.

Fibre connectivity is uniquely strong, with both dark fibre and the JANET cables running just metres away from the site. This is the UK's national research and education network dedicated to facilitating data transfers between academic institutions, meaning the DC will be able to support Cambridge's growing academic requirements.

For the above reasons, the project has garnered the interest of DC operators and investment firms like Goldman Sachs and Blackstone who are keen to see this progress soon in local planning to unlock their development capital. They appreciate the rare combination of essential features for a DC site, and understand Cambridge's vision to be the next AI hub of Europe.

Local Benefits

The Cambridge Agri-Tech and Community Campus is more than a Data Centre Campus. It incorporates other forms of infrastructure to promote sustainability, clean energy, R and D, and the development of the local talent pool.

The site already has consent for 10,000 square feet of Indoor Farming space, which will benefit from the specialised technologies of project partner Yellow Brick AgTech to encourage consumption of home-grown produce with minimal food miles. This will be facilitated by the distribution hub which would accommodate the Cambridge Organic Food Hub, a local distributor procuring from organic farmers and selling to local residents. The Agri-Tech hub will facilitate the research and development of unique software and hardware to enhance the UK's offering to our farmers in a market where most are struggling with rising costs and inconsistent yields. The solar panels will be able to partly supply power the development to reduce reliance on the Grid and promote the use of clean energy. The South-West corner with more dense greenery has been favoured by the Scouts to be used as a hub for outdoor activities, making a valuable contribution to the surrounding young people.

Overall, the campus offers a range of benefits to foster a leisurely, educational, healthy and environmentally-conscious lifestyle for the local residents and the wider Cambridge community.

Why does Cambridge need this?

Government's ambition is for Cambridge to become the 'Silicon Valley of Europe', but lacks the digital infrastructure to enable this. Their AI Growth Zone taskforce has already designated areas by Oxford and Newcastle as such incubation hubs of AI businesses and DCs, and we want the Cambridge Growth Company's support in making one in Cambridge.

Cambridge is experiencing an unprecedented surge in AI businesses and life science campuses which produce vast data sets (genomics, trial data, quantum simulation) and require nearby DCs for real-time processing and data sovereignty as a result of GDPR – Government is prioritising storing British data in Britain, not overseas. For these businesses to grow rapidly, it is essential to have high-performance computing, secure storage with low latency, and computing systems for big data analytics all in modern DCs.

Fundamentally, our vision is to enable this growth of Cambridge with the unique features of our site and by leveraging the institutional capital ready to be deployed into projects like ours.