



Data Centre Expansion Plan

Scotland: the Next Frontier
for Data Centres



Executive Summary

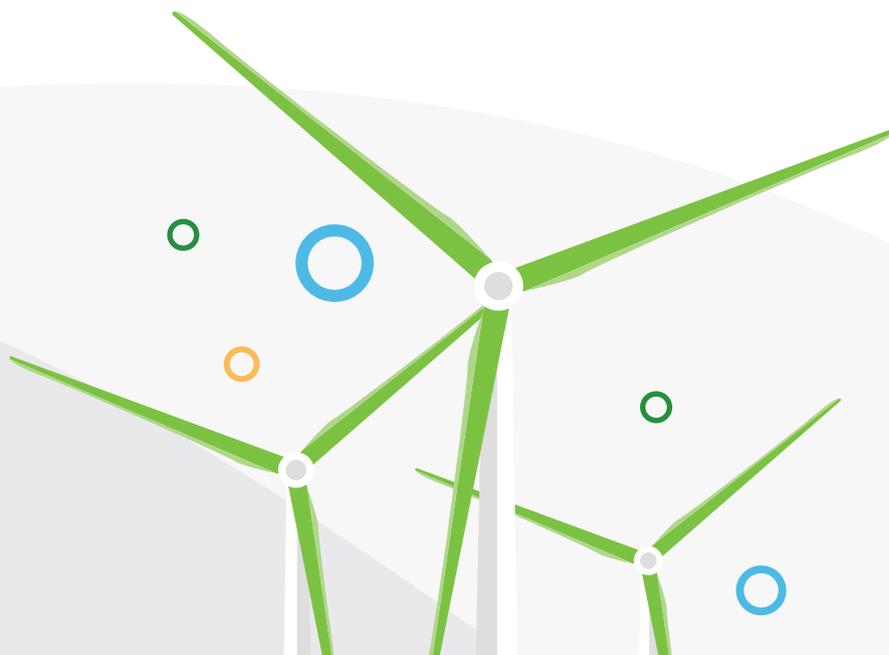
As global demand for data centre capacity surges, traditional hubs like Frankfurt, London, Amsterdam, Paris, and Dublin (FLAP-D) face capacity constraints and escalating costs.

Scotland emerges as a compelling alternative, offering unparalleled sustainability, significant cost savings, and advanced technological infrastructure. DataVita, part of the HFD Group, uniquely positions itself to lead this transformation by providing end-to-end data centre solutions that de-risk projects and reduce costs. With expertise in design, construction, and operation—all under one roof—DataVita offers organisations the opportunity to optimise their data centre strategies for the future.

Why host with DataVita in Scotland?

- ✓ **Capacity** - with over 500MW of capacity coming to market over the next 3 years, there is room for expansion.
- ✓ **Low Carbon** - with no layers of profit at each stage, we reduce costs significantly, passing the savings directly to you.
- ✓ **Cost** - lower land and operational costs in Scotland translate up to a 35% saving on hosting costs compared to FLAP-D.
- ✓ **Renewable Energy Leadership** - DataVita is investing in its own renewable energy projects, including wind and solar farms, to power data centres directly and generate hydrogen for a circular economy.
- ✓ **Flexibility** - our equipped ownership model allows DataVita to offer a high amount of flexibility, both commercially and technically.

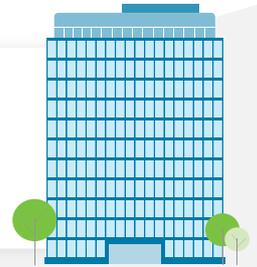
Scotland has all the attributes to become one of Europe's emerging data centre hubs and DataVita offers organisations the opportunity to optimise their data centre strategies for the future.



Who is DataVita?

Founded in 2014, DataVita is Scotland's premier provider of Data Centre and Connectivity services. Strategically located between Glasgow and Edinburgh, our state-of-the-art data centres are renowned for their exceptional quality, sustainability, and security. As the only Uptime Institute Tier III certified facility for both design and construction in Scotland, we set the benchmark for resilience and reliability.

As part of the HFD Group, DataVita offers unparalleled expertise in data centre design, construction, and operations — all managed in-house.



Cost Efficiency

With no layers of profit at each stage, we reduce costs significantly, passing the savings directly to you.



Risk Reduction

Our integrated approach minimises risks associated with multi-vendor projects, ensuring timely delivery and operational excellence.

Our Live Sites



DV1 - Lanarkshire

Opened in 2016, DV1 is Scotland's premium, purpose-built co-location data centre. Located in the heart of Scotland we are the only facility to be Uptime Institute certified for design and construction. The data centre itself offers unrivalled security, efficiency, and uptime making it the best location for your most critical workloads.



DV2 - Glasgow City Centre

Our newest data centre is located in the heart of Glasgow's business district and the International Financial Services District (IFSD). Highly resilient, purpose-built, and of tier III design, situated in the basement of 177 Bothwell St, Glasgow with 130 racks worth of space.

Our Current Capacity and Expansion Plans

Data Centre Specifications

DataVita is currently designing and developing over 1 GW of low-carbon data centre capacity across central Scotland. Each new facility is purpose-built to support the latest AI and HPC workloads, ensuring you remain at the forefront of a rapidly evolving technological landscape. Our ambitious development plan aims to position Scotland as a major data centre hub. The table below provides our current development timelines, which are updated frequently as new sites are formalised.

Location	Total IT Load	Time to Deployment	Max Rack Density	Cooling Technology
DV1	5 MW	25 Weeks	200 kW+	Air & Liquid-Cooled
DV1	11 MW	9 Months	200 kW+	Air & Liquid-Cooled
DV3	13 MW	13 Months	200 kW+	Air & Liquid-Cooled
Data Centre Park 1	240MW	2027	900kW +	Air & Liquid-Cooled
Data Centre Park 2	240MW	2028	900kW +	Air & Liquid-Cooled
Data Centre Park 3	450 MW	2029	900kW +	Air & Liquid-Cooled
Total	959 MW			

Scalable Infrastructure

Our modular designs allow for easy expansion as your needs grow.

Advanced Cooling Solutions

Utilising both air and liquid cooling technologies to support high-density workloads and enhance energy efficiency.

Cutting-Edge Design and Technology



High-Density Capabilities

Support for rack densities exceeding 200 kW, ideal for AI and HPC applications.



Energy Efficiency

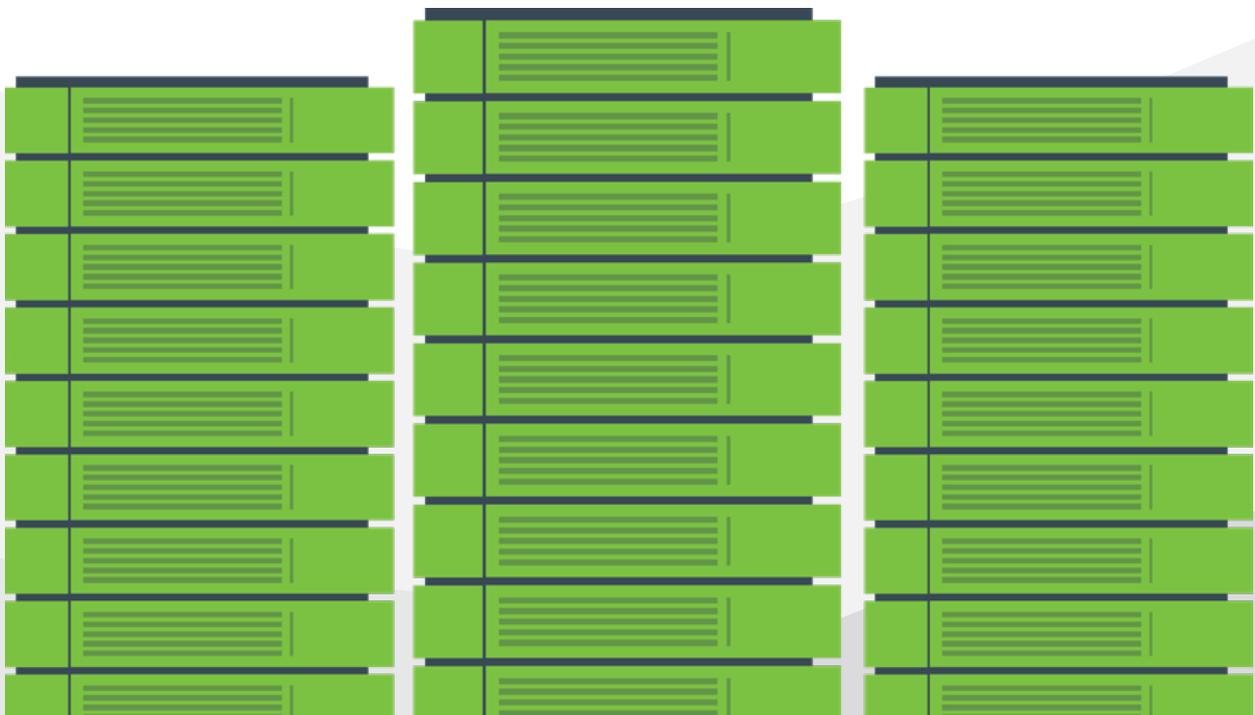
Optimised power distribution and cooling systems achieve low PUE ratios, reducing operational costs.



Security Measures

Multi-layered physical and digital security protocols safeguard your critical infrastructure. Flexible power options enabling the quick and easy deployment of customer power needs.

- ✓ **Comprehensive cooling solutions** to meet all customer needs with efficiency and customer cost in mind
- ✓ **Modular build approach** to expedite infrastructure delivery and to maintain a blank canvas for future phases
- ✓ **Designed to incorporate renewable energy sources** and facilitate the re-use of heat



Cooling



Direct Liquid Cooling: 200kW+

- ✓ **Direct liquid cooling loop** to facilitate direct to chip cooling
 - Server OEM Central Distribution Units (CDU)
 - Rear Door Heat Exchangers (RDHx)
- ✓ **Cooling water temperature** ASHRAE Class W32/W40
- ✓ **Resilient water loop and cooling infrastructure** to maximise uptime



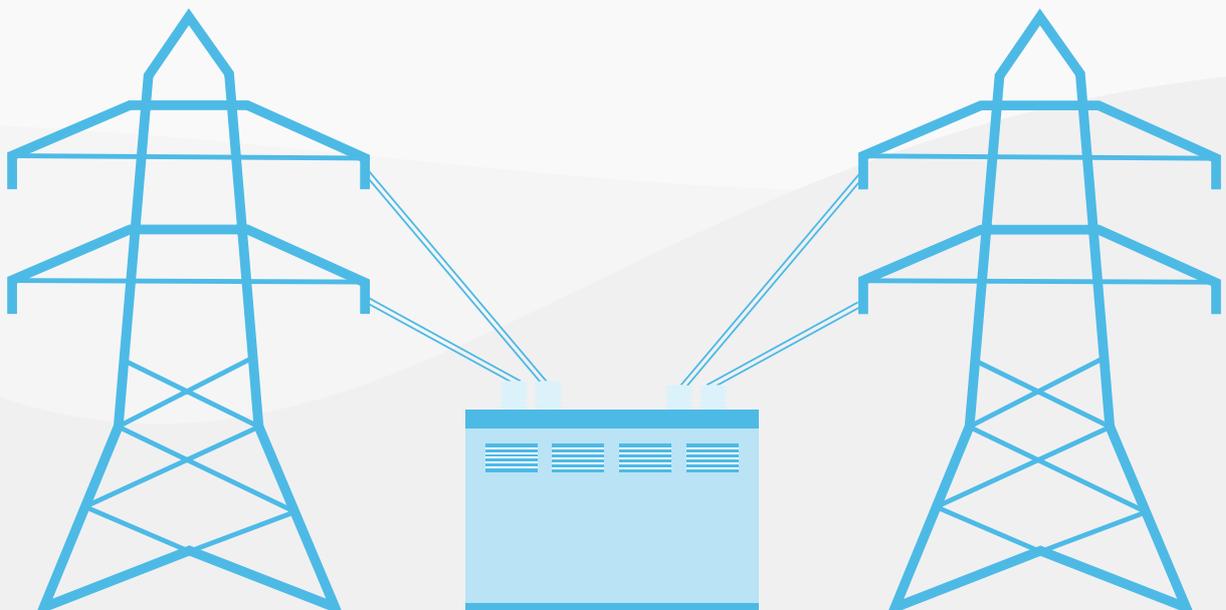
Air Cooling: 80kW

- ✓ **Independent cooling loop** to facilitate air cooling
 - CRAC/CRAH
 - In-row cooler
- ✓ **Environmental conditions** to ASHRAE Class Recommended A1 to A4
- ✓ **Resilient water loop and cooling infrastructure** to maximise uptime
- ✓ **Independent cooling loops** to maximise efficiency
 - Direct liquid cooling loop free cooled all year round
 - Chillers complete with free-cooling coils to maximise efficiency on air cooling



Power

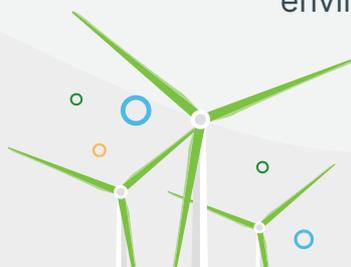
- ✓ **Flexible power options** to accommodate all customer's PDU requirements
- ✓ **Fully resilient** A&B power supplies
- ✓ All power from **100% renewable sources**



Sustainability

Our Commitment to the Environment

- ✓ **100% Renewable Energy Usage**
Achieved through Renewable Energy Guarantee of Origin (REGO) accredited sources and partnerships with renewable energy providers.
- ✓ **Cooling Optimisation**
Utilising techniques like free cooling chillers, direct/indirect cooling, cold/hot aisle containment, high-temperature chilled water set points, free-air cooling, and high-density data halls.
- ✓ **Operational Efficiency**
Employing variable speed control, Data Centre Infrastructure Management (DCIM), adaptive control systems, adherence to ASHRAE Thermal Guidelines, and energy-efficient lighting.
- ✓ **Accreditations and Memberships**
Obtaining certifications like ISO 14001 Environmental Management, ISO 50001, and participating in initiatives like the Climate Neutral Data Centre Pact (CNDCP) and iMasons Climate Accord (ICA).
- ✓ **Carbon Reduction Targets**
Setting ambitious goals to reach net-zero emissions by 2030 and actively working towards carbon neutrality.
- ✓ **Fuel**
Pioneering the use of Hydrotreated Vegetable Oil (HVO) as a sustainable alternative fuel in backup generators.
- ✓ **Waste Management**
Implementing robust recycling programs for end-of-life elements and waste, aiming for zero-landfill operations.
- ✓ **Green Building Standards**
Adhering to and achieving BREEAM 'Excellent' ratings for data centre infrastructure, signifying high sustainability standards.
- ✓ **Biodiversity Support**
Engaging in projects that encourage biodiversity, including initiatives like beehive sponsorship.
- ✓ **PUE Performance**
Achieving industry-leading Power Usage Effectiveness (PUE) ratios, some as low as 1.2, through efficient design and operations.
- ✓ **Environmental Responsibility**
Demonstrating a strong commitment to global sustainability standards and partnering with environmental organisations.
- ✓ **Transparency in Reporting**
Unlike some providers, we offer accurate carbon reporting, ensuring you truly understand your environmental impact.

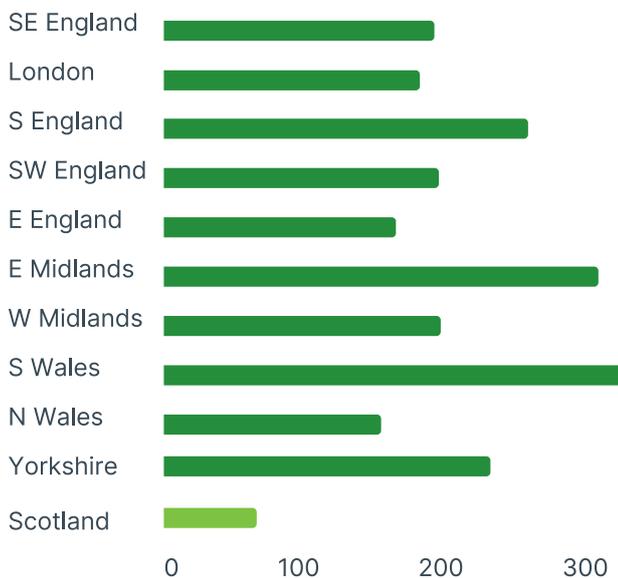


Reduce Your Digital Emissions by up to 11 times

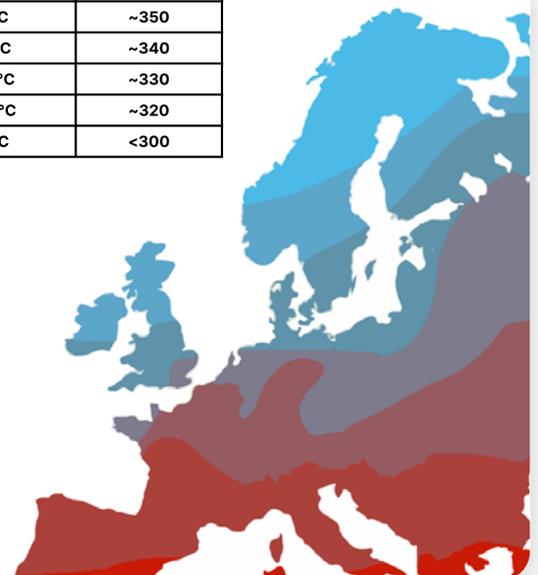
Not all green power in the UK is equal when it comes to carbon emissions. Carbon Intensity is a crucial metric that quantifies the environmental impact of our electricity usage. The National Grid provides daily data on the Carbon Intensity of all 14 Regions in the UK, with Scotland being the greenest anywhere in Great Britain since the turn of the decade. REGO backed energy tariffs are a positive step for Data Centres but do not negate the energy mix consumed at the location.

Taking into account Scotland's cooler climate, which allows for free air cooling for much of the year, along with all DataVita's data centres having industry-leading PUEs of 1.18 or lower we have enabled organisations to achieve massive carbon reductions simply by moving their data centre requirement to DataVita.

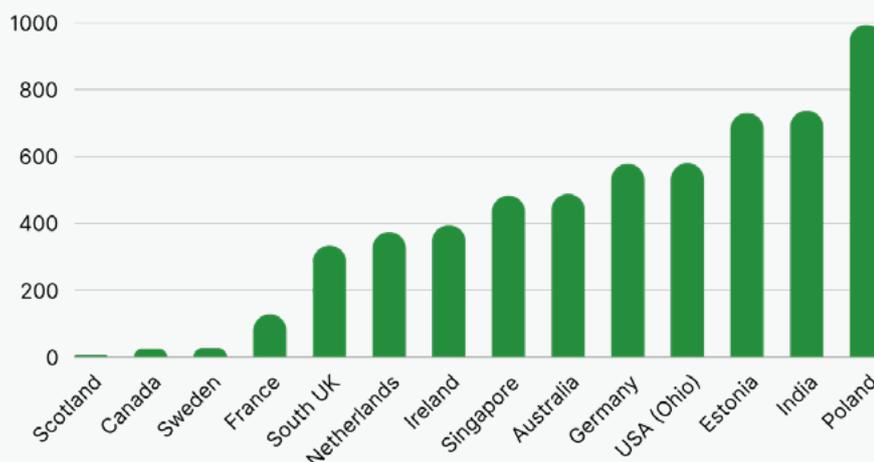
Average carbon intensity of electricity by region (gCO₂/kWh_e)



Est average temp	Est. days of "free cooling"
0-5°C	~365
5-7°C	~360
7-9°C	~350
9-11°C	~340
11-13°C	~330
13-15°C	~320
>15°C	<300



How Scotland compares to the rest of the world (gCo₂/kWh_e)



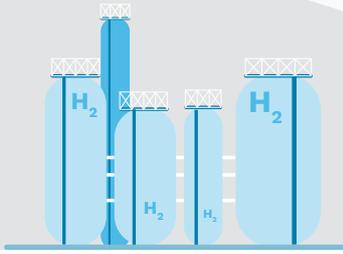
When it comes to comparing DataVita's green credentials to other global data centre hubs, the difference becomes even greater!

DataVita is also investing heavily in our own direct renewable energy source, which will be operational within 24-26 months.

Data Centres – Power the Community

1. Renewables

All new sites will have directly connected renewables.

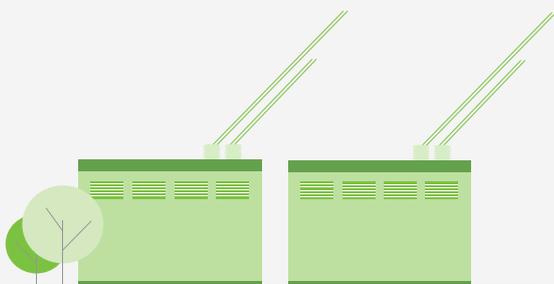
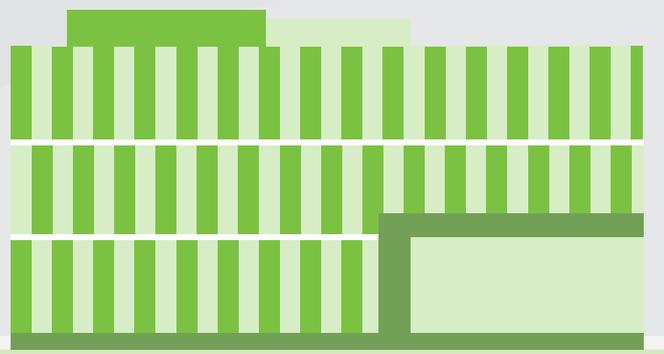
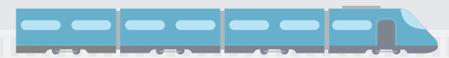


2. Hydrogen

Excess energy will be used to generate hydrogen.

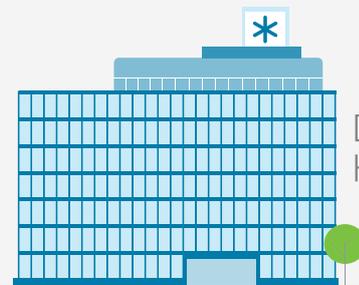
3. Clean Fuel

Hydrogen will be used to support the emerging clean fuel transportation market.



4. Hydrogen Generators

Backup power supplied by hydrogen generators.

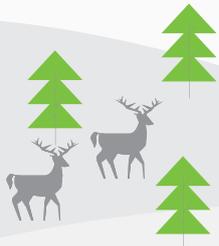


DISTRICT HEATING

5. Heating

Excess heat used to support the local community.

Data Centres – Supporting the Community



Local Wildlife Habitat

Our data centre campuses will create natural habitats to support local wild life.

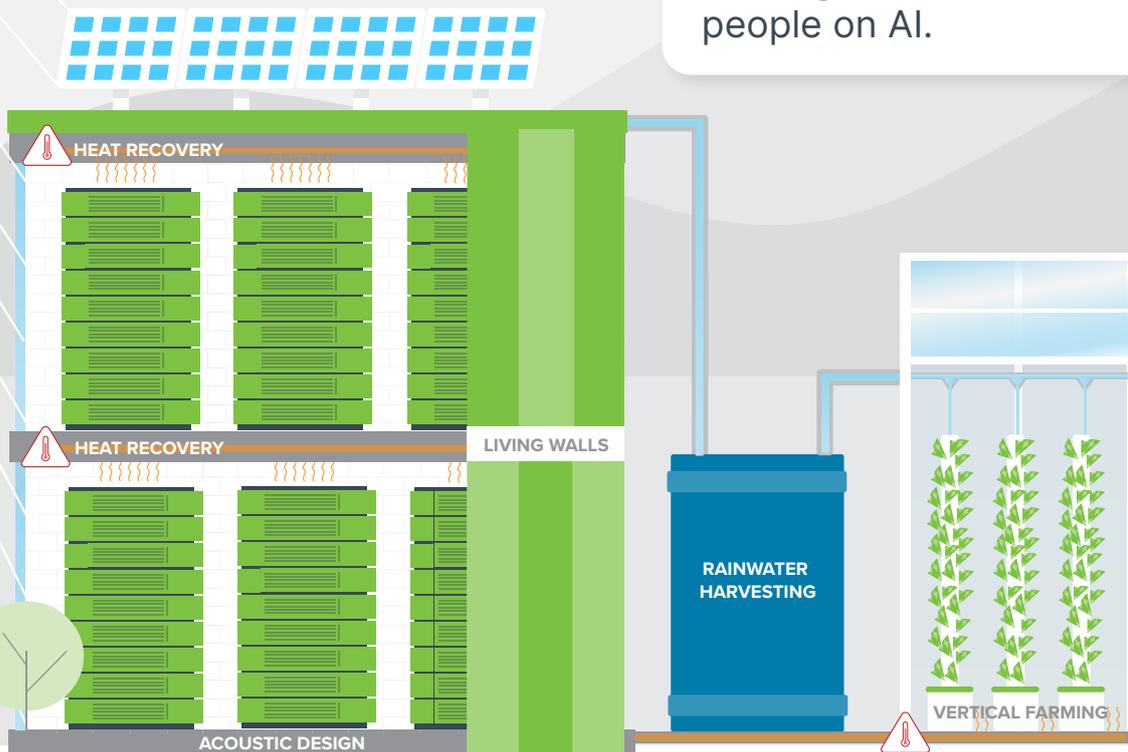
Solar Power

Our build will maximise solar and natural light to reduce energy consumption.



Community Training Centre

All sites will have community training centres to train people on AI.

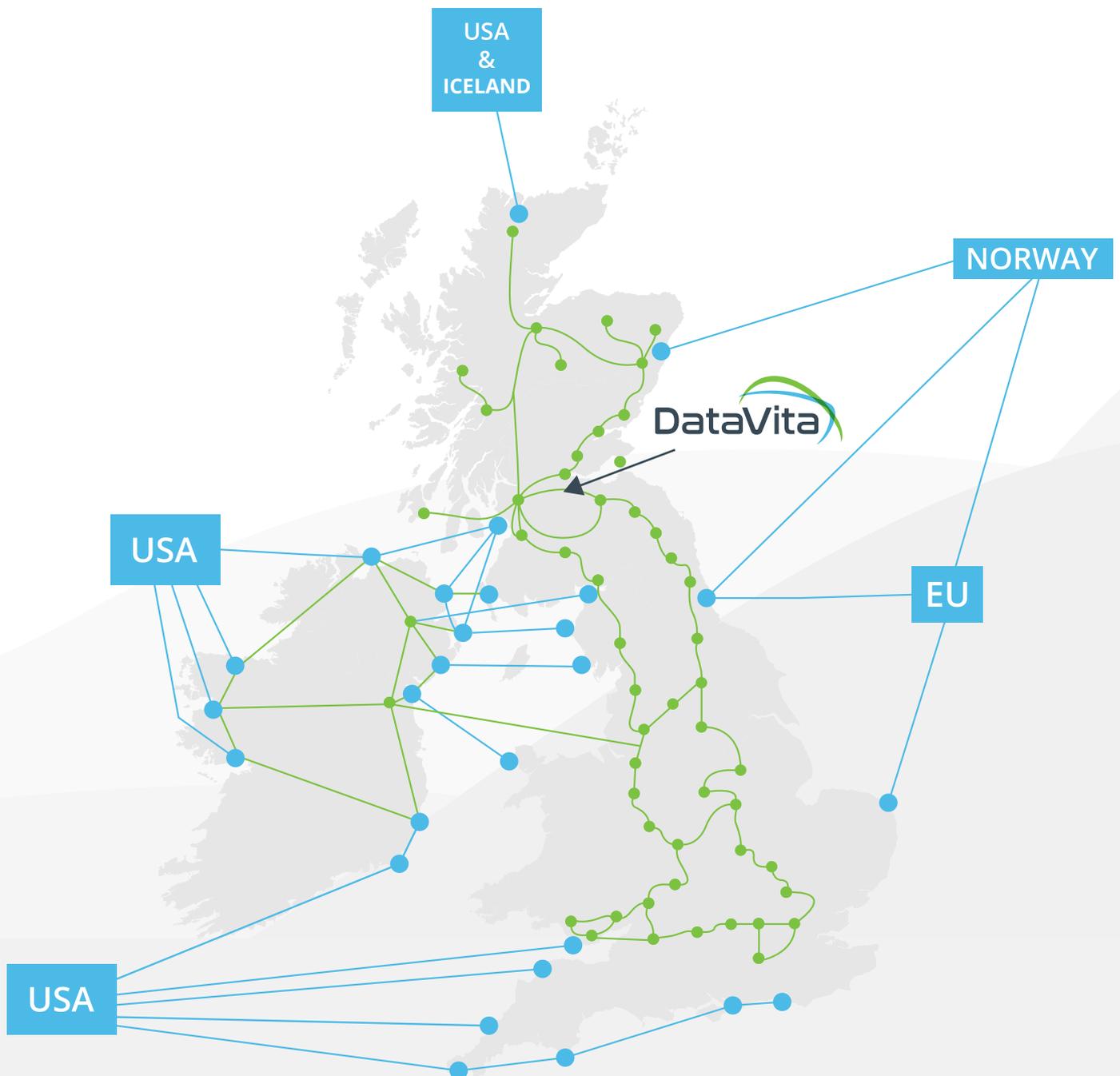


Supporting New Industries

Data centres generate substantial heat, and their large, flat roofs are ideal for rainwater collection. That's why we believe vertical farming and data centres are a perfect partnership. We are investing in research and development to explore how our data centres can foster sustainable farming within our communities, creating jobs and supplying locally grown produce.

Connectivity

Ensuring Global Reach and Compliance



Robust Network Infrastructure

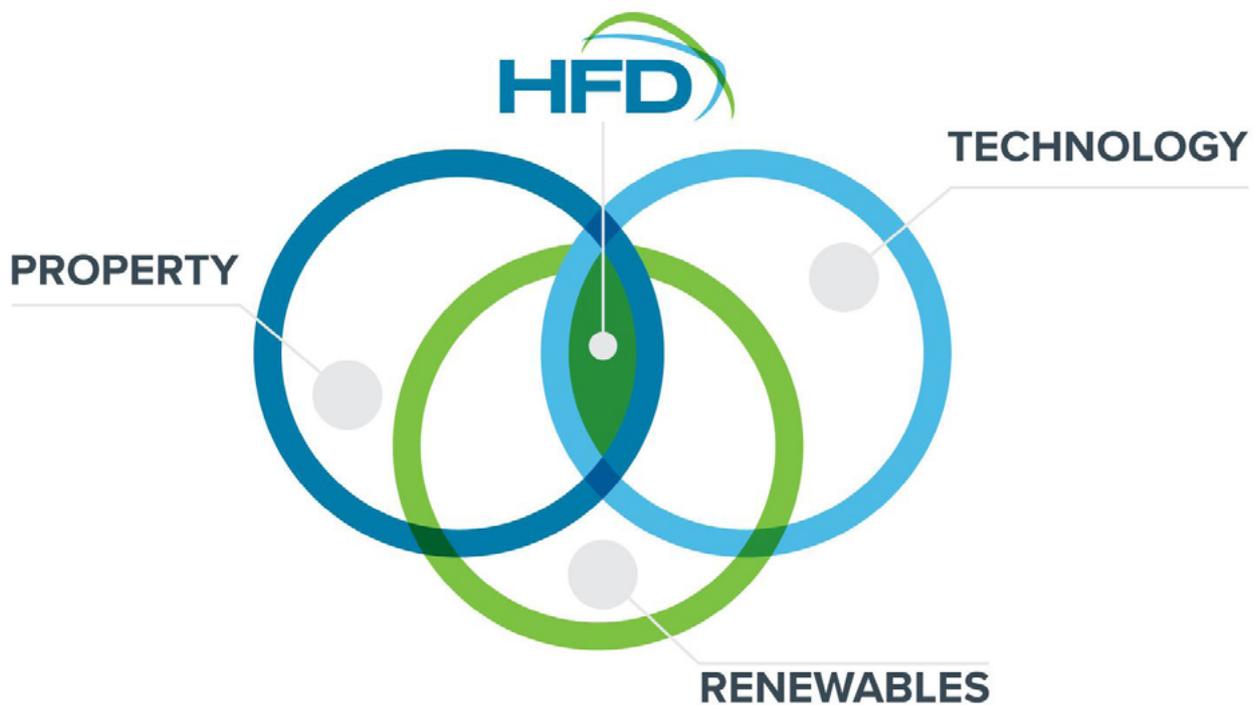
Multiple high-capacity fibre routes connect our data centres to global internet backbones, ensuring low-latency connectivity.

- Cloud On-Ramps to all major public cloud providers (AWS, Microsoft, Google, IBM & Oracle)
- Diverse and low latency routes to main Manchester and London data centre complexes (4ms latency from Manchester and 9ms from London)

Design and Build Services

Your Complete Data Centre Solution Provider

DataVita, a part of the HFD Group, offers a full-scale, turnkey solution for businesses seeking custom-built data centres. By combining expertise in commercial property development, advanced technology, and sustainable energy, DataVita ensures that your data centre is optimised for efficiency, scalability and sustainability.



Your Trusted Partners in a Sustainable Future

- **Integrated Expertise:** As part of the HFD Group, we offer a seamless experience from design and construction to operation, all managed in-house.
- **Innovation and Excellence:** With a focus on sustainability and technological advancement, we are committed to delivering superior data centre solutions.
- **Client-Centric Philosophy:** Your success is our priority. We work closely with you to understand your challenges and deliver solutions that exceed expectations.

Services Offered



Site Selection

Expert analysis to find the best location for your data centre, considering power, network connectivity, and geographical factors.



Land Procurement

Navigating the complexities of real estate to secure ideal plots for your current and future needs.



Design

Bespoke designs tailored to maximise efficiency and meet your business's sustainability goals.



Planning and Approvals

Handling all necessary permits and approvals for smooth construction.



Construction

Managing the entire process, ensuring quality and timely delivery.



Operations

Ongoing operational support to keep your data centre running smoothly.

Industry Leadership and Certifications

-  **Tier III Certification**
Our facilities are the first in the UK to achieve Tier III certification for both design and construction, ensuring top-tier reliability and security.
-  **100% Uptime Record**
With over eight years of uninterrupted service, we host some of the UK's most critical workloads.
-  **In-House Expertise**
Our dedicated team of industry professionals manages every aspect of your data centre needs, providing personalised service and streamlined operations.

By partnering with DataVita, you gain more than a data centre; **you gain a long-term partner** dedicated to your success.

Contact details

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