

## Green Datacentres Activity Briefing

In 2021, the Scottish Government launched the [Green Datacentres and Digital Connectivity Vision and Action Plan](#). The document sets out the co-ordinated action required to position Scotland as a leading zero-carbon, cost competitive green data hosting location, which can contribute towards our ambition of achieving net zero emissions by 2045. The document seeks to realise a portfolio of different sized Scottish datacentres – including edge, co-location and hyperscale facilities – delivering enhanced capacity and supported by a highly skilled workforce.

In 2023 we commenced a three year programme with Scottish Enterprise (SE) as strategic delivery partner on the Vision and Action Plan, working closely with other public sector partners, to develop an ecosystem and supply chain strengthening proposition for the Scottish datacentre industry.

We have commissioned a suite of research to determine the case for investment in datacentres. These can be viewed here: [Datacentres | Digital Scotland Superfast Broadband](#)

### Going Greener

We have reached out to all of the existing independent colocation datacentres in Scotland to understand each of their plans and ambitions for operations in Scotland and where there is alignment with aspirations in the Scottish Government's Green Datacentres (GDC) programme.

As part of this, SE is keen to work with the Scottish datacentre industry to explore opportunities to green operations and facilities by working with the green tech ecosystem as well as [Scottish Renewables](#) to scope opportunities and work on financing options including [The Bank](#), and the [UK Infrastructure Bank](#).

### Green Heat Re-Use

The GDC team has identified the opportunity around the provision of free/affordable clean heat from distributed computing as a key area of activity for focus. This technology has been deployed in England and requires hosts in Scotland to trial and prove the technology. The GDC team is working with key partners in the public and private sectors to identify opportunities to progress 'first of a kind' deployments in Scotland that will demonstrate the value of the technology and benefits derived from free/affordable clean heat. This will focus on identification of replicable deployment solutions, with clear pathways to future adoption across all aspects of Scotland's heat demand.

There will be a range of deliverables involved in this work including;

- Broad engagement across full range of public sector partners (hosts), with targeted and focused engagement with a small cohort of public sector partners; and
- Using SE's connections and relationships across the private sector, we will raise awareness of the opportunity with key sectors including leisure, food and drink and hospitality;
- Facilitating workshops between potential hosts and key industry contacts, including deeper dives with specific cohorts.

All of which leads to;

- First of a kind deployment in all areas of opportunity including, but not limited to;
  - Swimming pools (public and private)
  - Residential (social and private)
  - District Heat Network integration
  - Industry (incl. distilleries/manufacturing/chemical processing etc).
- A route map to broader deployment across Scotland in all areas of opportunity
- Main heat from edge companies bringing manufacturing and head office function to Scotland.

### **GreenShoring and Data Demand**

Our interest remains on reducing the climate impact of data processing and storage, and positioning Scotland as an attractive green data hosting location. We continue to work closely with colleagues across Scottish and UK governments, enterprise agencies, local government and the energy industry, along with network providers, to understand the developing picture of data and digital adoption across the country and the current state of the country's energy infrastructure to service this.

We are keen to work with domestic and international industry to explore opportunities to drive additional data demand to Scotland through a 'greenshoring' campaign. SE is working with Scottish Development International to promote Scotland as a green data hosting location to international data intense business and industry.

Our aim is to agree a path to becoming a green data hosting location to be able to service that demand.

We believe that datacentres utilising renewable energy sources in Scotland can:

- Decarbonise more rapidly to meet NetZero ambitions and achieve Scope 3 emissions reporting.
- Reduce total cost of ownership and unlock new revenue streams
- Demonstrate significant levels of Environmental Social Governance (ESG) potential impact for example free clean heat from distributed computing addressing heat poverty/ illness from coldness.
- Help your organisation scale distributed computing potential benefiting from low cost carbon reduction and reduced energy/ hosting costs.

Increased datacentre presence in the country will help position Scotland to fully embrace the substantial opportunities of the digital economy and open up the country to other such opportunities. This includes how the datacentre operators can support the ambitions within, for example, the [National Strategy for Economic Transformation \(NSET\)](#), [Scotland's National Innovation Strategy](#), [Scotland's Technology Ecosystem Review](#) and [Scotland's AI Strategy](#).

### **How you can get involved**

Whether you are a business involved in data processing or have solutions to help others to decarbonise their operations, we are seeking companies to help with the following:

1. Be willing to share information on AI and high performance computing workloads in order to help us inform our support service to help green those operations. We are seeking pathfinder companies willing to explore what could be possible and share learning experiences.
2. Understand how companies evaluate their carbon footprint of their digital operations today across scopes 1, 2 and 3 ([What are Scopes 1, 2 and 3 Emissions? \(greenly.earth\)](#)). We additionally want to explore ways to support you in reducing this.
3. Understand how the ScotlandIS membership can help others decarbonise their digital operations.
4. Taking part in a roundtable event later in the year to explore all of the above points.

If you would like to explore and discuss further, please direct your enquiry to the [Scottish Green Data Support Service enquiry | Scottish Enterprise \(scottish-enterprise.com\)](#)