GeSI GLOBAL ENABLING SUSTAINABILITY INITIATIVE

USE CASE SHEET

Data Centres, Energy and Water Working Group

Building Digital Infrastructure Around Local Opportunity

greensparc

1. The shift: Start with the place, then design the infrastructure

Greensparc's development approach starts with communities, utilities and existing assets. The company focuses on modular, utility-aligned data centres in locations with stranded or underutilised energy, connecting digital infrastructure investment with opportunities already present in the local economy and energy system.

2. The challenge: Connecting available resources with local opportunity

Communities can have energy or industrial assets with potential to support new economic activity, while lacking access to the investment and computing infrastructure needed to realise that opportunity. Greensparc works with property owners, energy operators and communities to identify how existing assets can support digital services and productive uses of available energy.

3. The practice: Modular development with a local utility partner

In Cordova, Alaska, Greensparc partnered with Cordova Electric Cooperative to deploy a 150-kW modular data centre at the Humpback Creek Hydro Facility in spring 2024. The company reports that deployment took 90 days, demonstrating a modular approach to bringing computing capacity closer to a remote community.
The project connects hydro-powered infrastructure with opportunities to expand local computing services supporting education, healthcare and economic development. Greensparc's wider approach emphasises early engagement with utilities and communities, including discussion of workforce participation, emergency planning and feasible heat-recovery opportunities.

4. The Blueprint connection: Context first

The Blueprint encourages developers to consider local energy conditions, existing infrastructure and community priorities from the outset. Greensparc illustrates how those considerations can shape the development model itself: where to locate, which partners to involve and how to connect infrastructure investment with local opportunity.

5. The takeaway: Local fit can be a starting point for growth

Greensparc demonstrates an approach in which community relationships and available resources help guide digital infrastructure development. Modular deployment and utility partnerships can connect computing investment with the strengths and ambitions of the places hosting it.

Source notes: Greensparc, company development approach and "Cordova Electric Data Center"; Greensparc submission to the Alaska legislature on HB259 (February 2026).

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