



Leeds, AI Compute + Solar

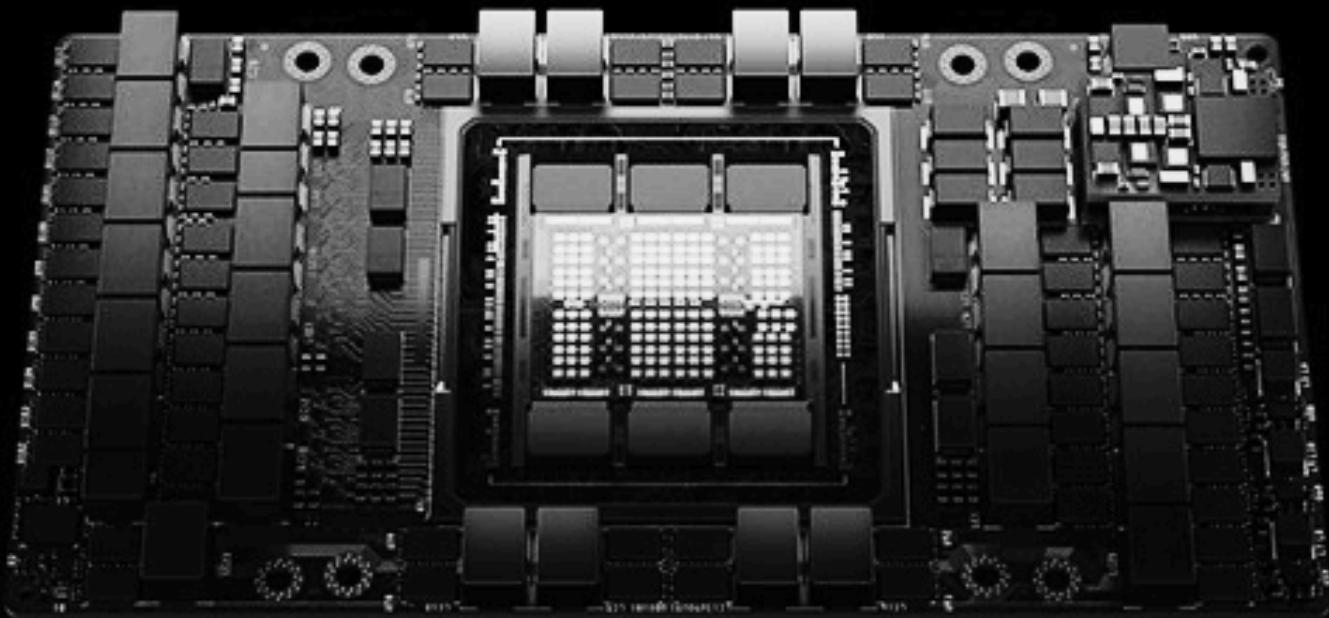




Table of Contents

01

Project Overview

- Description
- Project Parameters

02

Financial Model

- Annual Cashflow
- Revenue Split

03

Component Selection

- NVIDIA H100 PCIe
- Solar PV System

04

Structural Report

- K2 Report
- Structural Survey

05

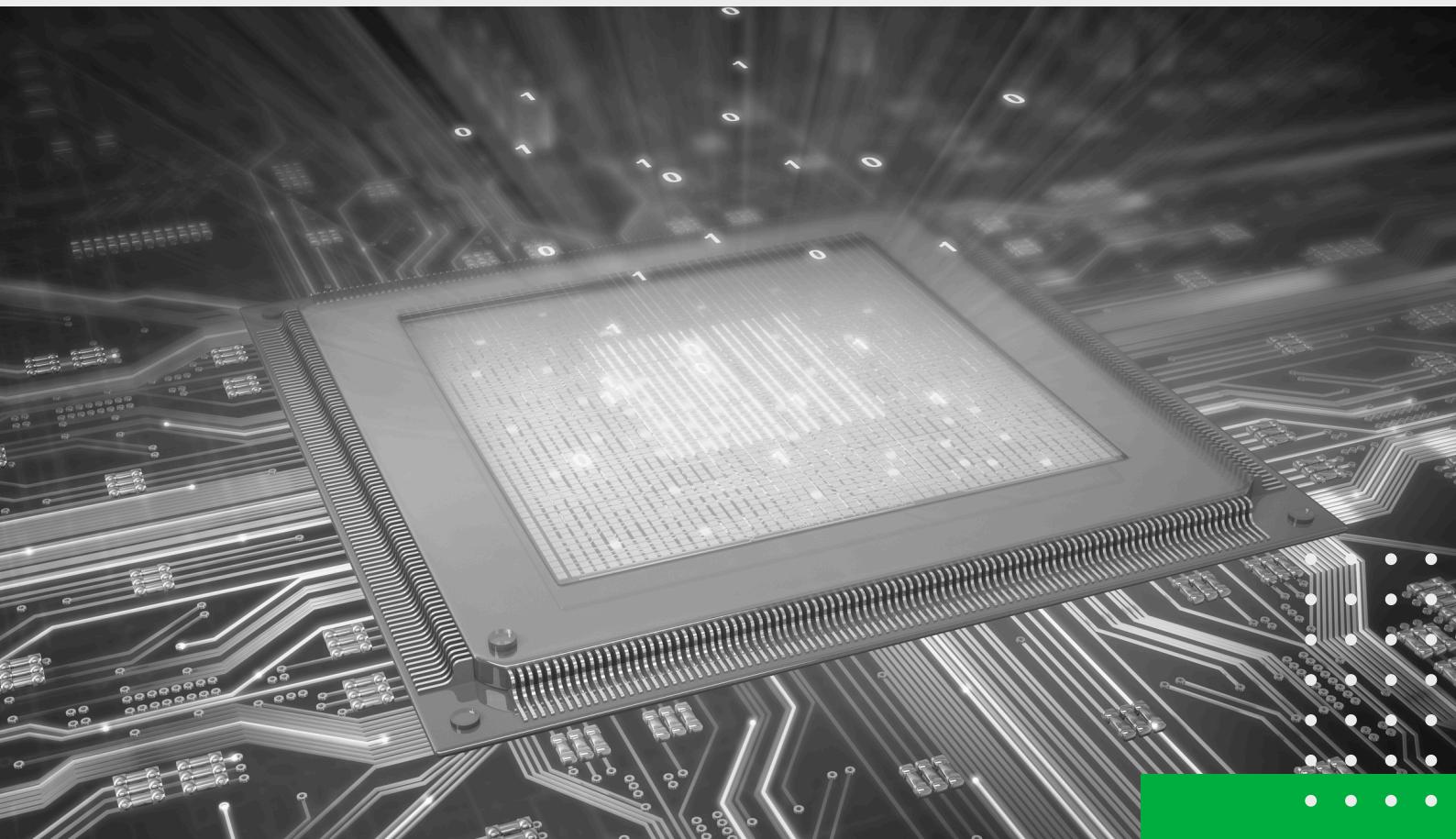
Solar Design

- Roof Selection
- Performance

06

Summary

- JLM Statement
- Notable Figures



Project Overview

JLM Energy will be commissioned to install a series of GPU units at a site in Leeds, powered by a solar array. These GPUs are then to be leased for AI computing.



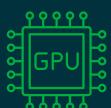
Funding Required

\$406,625

Projected Yield

24.7%

Project Parameters



GPU Units

10x NVIDIA H100



Year 1 Revenue

\$30,563.32



Total Return

\$4,463,565.08



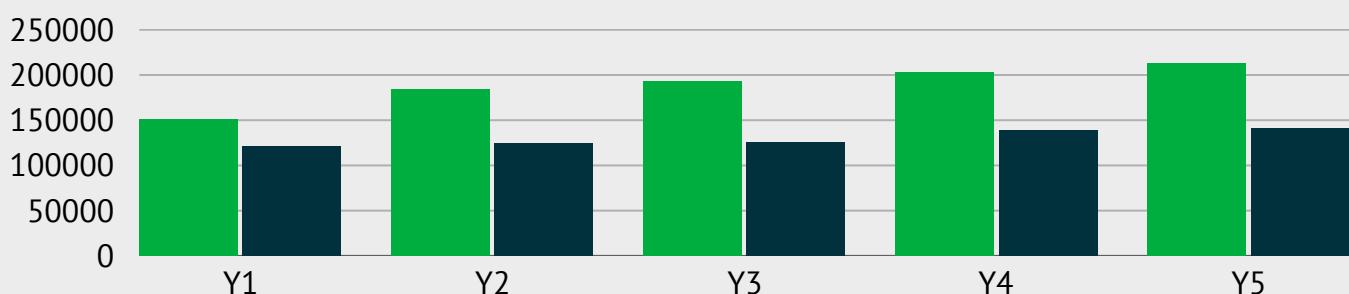
Financial Model

Annual Cashflow

Below is a breakdown of the cashflows in our financial model. The model is based on a lease rate of \$2.50 per hour and a utilisation of 80%.



Revenue Split ■ Total Expenses ■ GPU Revenue



Annual Revenue

\$ 151,200

Lease Rate

\$2.50/hour

Positive

Utilisation

80%

Efficiency

93%

Per Day

19.2 hours

GPU Power Draw

1.5 kW

Positive

Electricity Cost

\$ 15,898

Electricity Rate

\$0.34/kWh

Negative

Total Expenses

\$ 104,738

Index

5%

GPU Replacement

\$97,488

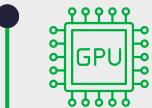
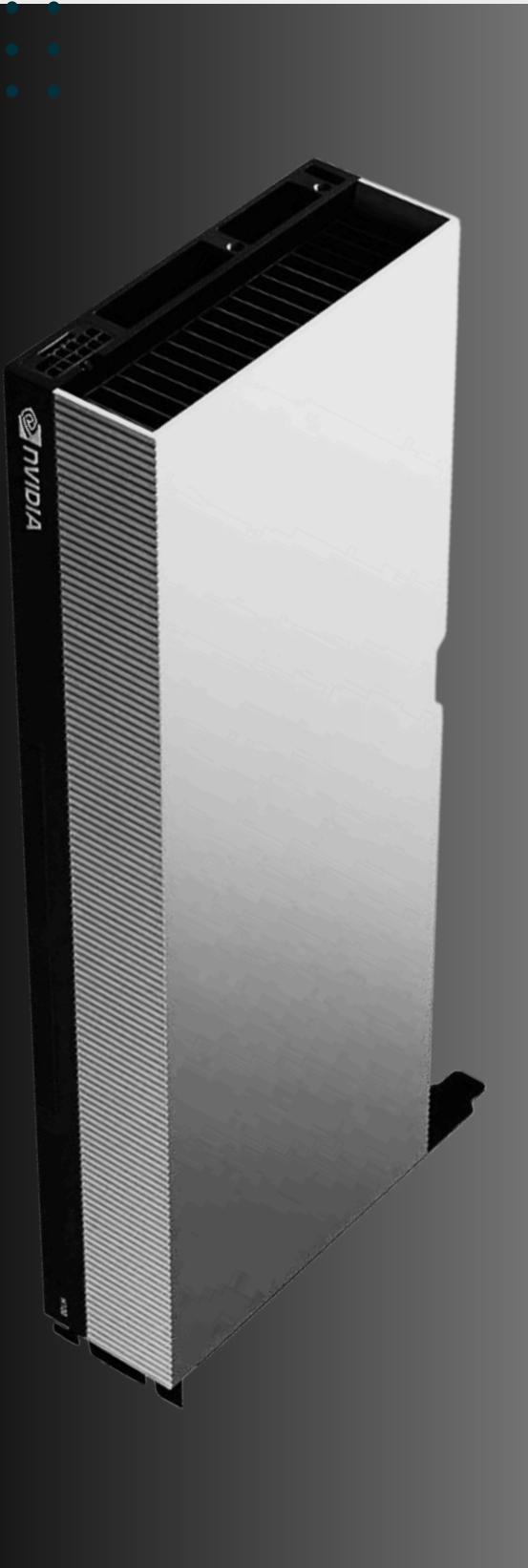
O&M

\$7,250

Negative



Component Selection



NVIDIA H100 PCIe GPU

The H100 PCIe fits into a standard dual-slot PCIe Gen5 x16 slot with a 350 W TDP. Deployable in a wide range of servers



HBM2e High-Bandwidth Memory

Equipped with 80 GB HBM2e memory and up to ~2.0 TB/s bandwidth. Delivers the throughput required for large model inference and training.



Fourth-Generation Tensor Cores

Supports the new FP8 precision format, delivering up to 3,026 TFLOPS (with sparsity). Enables significant acceleration for large language models.



Transformer Engine

Provides up to 9× faster training and 30× faster inference on large language models compared to the previous A100 generation.



MIG (Multi-Instance GPU) Support

Allows the GPU to be partitioned into up to 7 isolated instances, each with dedicated compute, memory, and cache.



NVLink Bridge Option

Two H100 PCIe GPUs can be connected via an NVLink bridge at 600 GB/s, nearly 5× faster than PCIe Gen5.





Component Selection



Solar PV Modules

High-efficiency, Tier 1 rated modules designed for long-term performance. Certified to international standards for durability, reliability, and yield.



Inverters

Grid-tied inverters with advanced monitoring and maximum power point tracking (MPPT). Selected from proven manufacturers.



Mounting Structure

Corrosion-resistant, high-strength racking and mounting systems. Engineered for local wind/snow load requirements and long-term stability.



Cabling & Connectors

UV-resistant, weatherproof DC cabling and certified connectors. Installed to industry standards for safety and minimal losses.



Switchgear & Protection Equipment

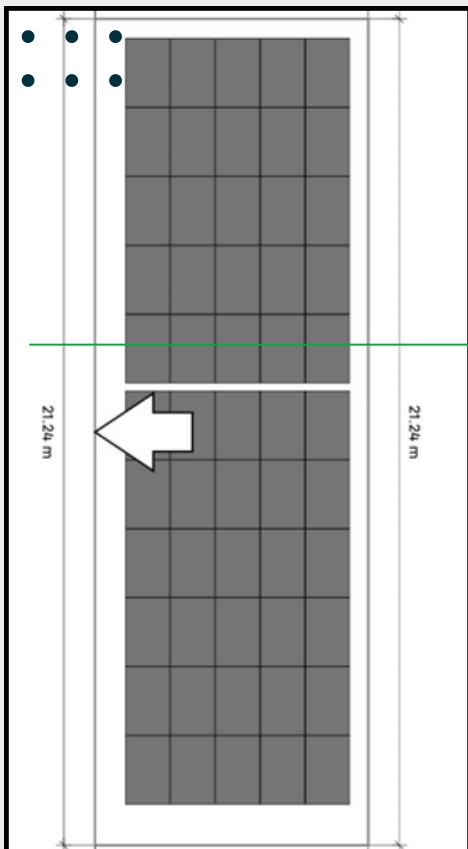
Includes AC/DC isolators, breakers, surge protection devices, and fuses. Ensures system safety and compliance with electrical codes.



Monitoring & Control System

Integrated monitoring platform for performance tracking and fault detection. Enables real-time reporting.





K2

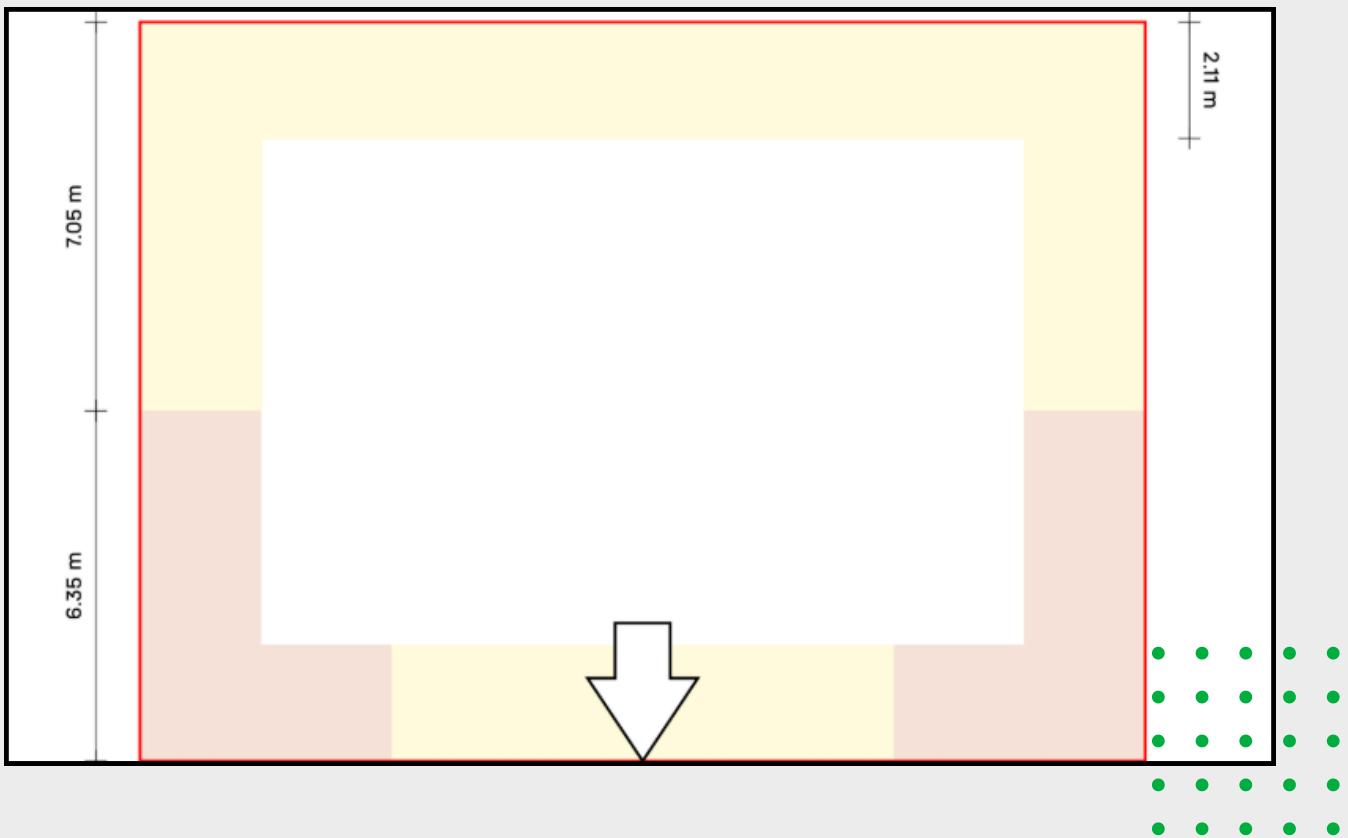
JLM Energy Engineered

Software

Before allocating the number and placement of panels on the Leeds property, a detailed structural assessment had to be completed.

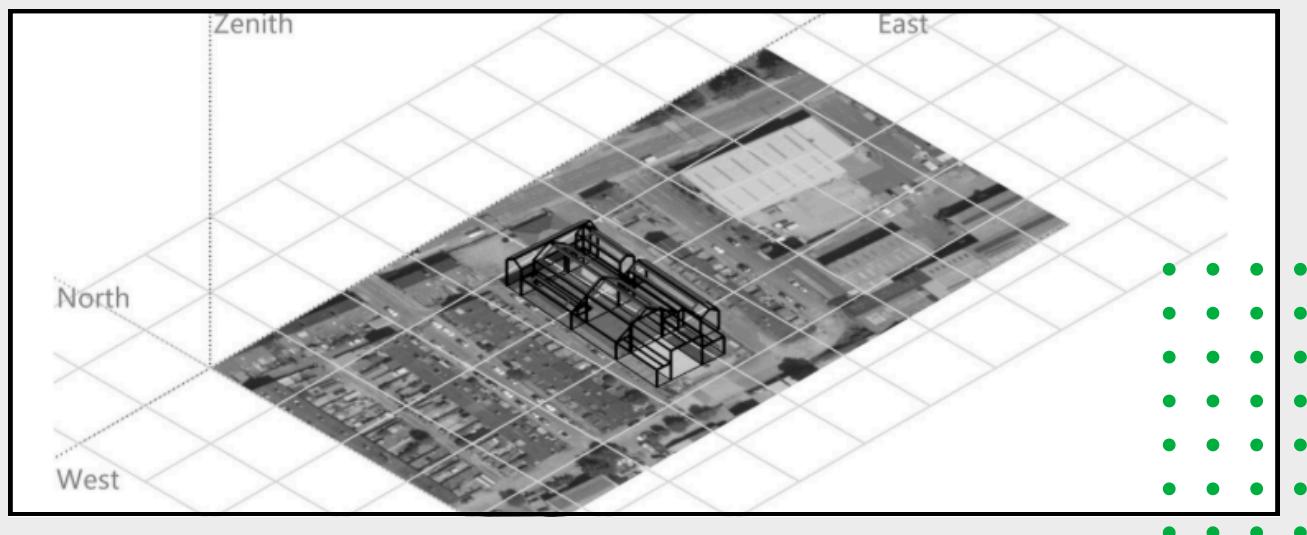
The roof and panel mounting has been designed to withstand the maximum wind and snow load for the site.

Structural Survey



Solar Design

Designed on PVsyst and Orkestra Software



Roof Selection



A key aspect of solar design is selection of optimal roof areas. Solar generation is affected by the azimuth (orientation) and angle of panel placement, with a south-facing panel at 40 degrees producing maximum generation for a site in Leeds.

Solar Factor (SF)



Quantifies how much of the site's energy consumption is covered by solar generation. A 100% solar fraction means the PV system meets all the energy needs; a 50% solar fraction means half the demand is met by solar. The solar fraction for this system is 17.15%.

Performance Ratio (PR)



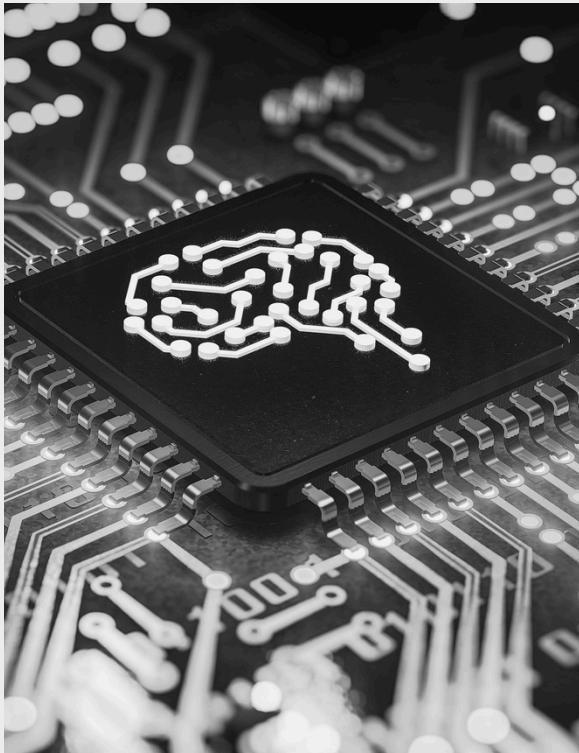
It accounts for system losses: shading, temperature effects, inverter inefficiencies, wiring losses, mismatch, and more. A PR of 100% would mean a perfect system with no losses, practically impossible. This system has a PR of 86.76%.

Specific Production



It tells you how many kilowatt-hours of electricity are generated per kilowatt-peak of installed capacity, typically over a year. The specific production for this system is 805 kWh/kWp/year.

Summary



JLM Energy

Leeds, AI Compute + Solar

JLM Energy's GPU and solar installation will deliver high-performance AI computing powered by clean, reliable renewable energy. Designed for scalable enterprise and research use, it combines Tier-1 hardware with efficient power integration, intuitive management, and clear operational frameworks. The system supports seamless deployment in diverse site conditions, with built-in safety, compliance, and long-term energy and performance value.



With projected utilisation levels of 80%, the GPU compute system will deliver consistently high performance and efficiency. This ensures strong return on investment while maximising the value of clean energy integration, helping to drive forward both digital innovation and sustainable infrastructure goals.

24.7%

Investors are projected to achieve a 24.7% yield from the combined GPU and solar installation, delivering robust returns while supporting the growth of renewable energy and digital infrastructure.

\$ 407K

JLM Energy is raising \$407,000 to fund the AI compute and solar project in Leeds, enabling renewable-powered digital infrastructure, strong investor returns, and long-term community benefit.

