

Power AI & Bitcoin, sustain tomorrow:

# Renewable Computing.

Nasdaq: SLNH



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In addition to figures prepared in accordance with U.S. Generally Accepted Accounting Principles ("GAAP"), Soluna from time to time presents alternative non-GAAP performance measures, e.g., EBITDA, adjusted EBITDA, Return on Invested Capital ("ROIC"), and Internal Rate of Return ("IRR"). For more information on the non-GAAP financial measures used in this presentation, please see the Appendix.



# We are driving the convergence of renewable energy & advanced computing infrastructure.

Up to 40% of generated energy goes unused. Soluna's mission is to convert this unused energy into high performance computing, turning wasted power into value for Al and Bitcoin.

Renewable Energy has a wasted energy problem. To reach their full potential AI & Bitcoin needs a sustainable energy source.

RENEWABLE COMPUTING

Source: Soluna Curtailment Assessments of IPPs in Pipeline. Curtailment estimates from ISO/RTO websites. Wood Mackenzie.



### **Company Overview**



Al is driving exponentially growing demand for compute



Miners prefer scalable, wellmanaged, and cost-advantaged hosting partners.



Soluna bridges this gap



Clean energy goes to waste due to curtailment



Co-locating data centers behind the meter at renewable power generation enables us to bypass long interconnection queues, improve power economics, and accelerate

time-to-market.



### Q3 Soluna Highlights 1

INSTALLED HASHRATE

4.5 EH/s<sup>2</sup>

**AVERAGE POWER COST** 

\$32.5 / MWh<sup>5</sup> EMPLOYEES

**50** 

MW MANAGED

105 MW > ~1.0 GW 3

**CURTAILED ENERGY MONETIZED** 

166,151 MWh

POWER DEVELOPMENT PIPELINE

~2.8 GW

2025 Q3 REVENUE

\$8.4 Million

**CAPITAL RAISED in Q3** 

\$64 Million <sup>4</sup>

**AVERAGE J / TH/s** 

<26 J / TH/s <sup>5</sup>



<sup>(1)</sup> As of September 30, 2025 unless otherwise noted

<sup>(2)</sup> Includes a mix of Prop Miners and Hosted Miners. Q3 2025, was a growth period, energization of Dorothy 2, and transition of customers at Sophie.

(3) Sophie (25 MW - operational) + Dorothy 1 (50 MW - operational) + Dorothy 2 (30 MW operational, 18 MW Construction) + Kati (83 MW Construction, 83 MW Shovel Ready) + Grace (2 MW - In Development) + Rosa (187 MW - In Development) + Ellen (100 MW - In Development) + Hedy (120 MW - In Development) + Annie (75 MW - In Development) + Fei (100 MW - In Development) + Gladys (150 MW - In Development), amounts are approximate (4) Capital raised in Q3 2025 includes ATM \$20.8M, Warrants \$8.9M, SEPA \$4.2M, July 2025 Offering \$5.0M, SLC investment in Kati \$10.6M, SLC investment in D2 \$2.3M, Generate Debt draw for D1A \$5.5M, and Generate debt draw in D2 \$7.1M.

<sup>(5)</sup> Year-to-Date average (January 2025 - September 2025)

### **Our Strategy**

Transform stranded clean energy into high-performance computing infrastructure.

> ~2.8GW Power Pipeline

We sign PPAs and acquire land co-located with Renewable Energy projects with high curtailment.

Bitcoin

We develop, own and operate Bitcoin Hosting Data Centers.

> Renewable Computing

We make renewable energy a global superpower using computing as a catalyst.

Al

We develop AI data center projects and form JVs with data center operators (DCOs).



### Soluna Organizational Structure

Soluna Holdings, Inc. (Nasdaq: SLNH)

#### Soluna Energy, Inc.

The development platform that identifies and acquires co-located sites with renewables to construct data center assets.

#### Soluna Digital, Inc.

The Bitcoin Hosting business that builds, operates and leases Bitcoin mines powered by Soluna Energy.

#### Soluna Cloud, Inc.

The AI business that builds and operates data centers that offer single-tenant leases.



# **Business Segments**

Diversified Revenue Streams



### Prop Bitcoin Mining

- Soluna or JV owned Bitcoin mining machines
- Bitcoin sold daily
- Soluna provides Managed Infrastructure Services



## **Grid Ancillary Services**

- Compensation to act as behind-the-meter flexible load for the grid
- Paid on \$/MWh basis by Utility or Grid Operator



## High Performance Computing

- Colocation and hosting services for companies that need AI-ready data centers.
- Soluna develops data centers with JV partners and provides Managed Infrastructure Services.



## Hosting for Bitcoin Miners

- Third-party machines hosted at Soluna Data Centers
- Soluna provides Managed Infrastructure Services



# SOLUNA16W+

## Our Data Center Projects

We have over 1GW of data center capacity in operation, construction or development

ProjectA	Location	Power Source	Size (MW)	Model	Status <sup>1</sup>	Power Cost	Partner(s)
Dorothy 1A	TX	Wind	25	BTC Hosting	Operating	\$35	Spring Lane, Generate
Dorothy 1B	TX	Wind	25	BTC Mining	Operating	\$35	Navitas
Sophie	KY	Grid	25	BTC Hosting	Operating	\$33	N/A
Dorothy 2	TX	Wind	48	BTC Hosting	Operating	\$35	Spring Lane, Generate
Kati	TX	Wind	166	BTC Hosting / Al	Construction	\$40	Spring Lane, Generate
Grace	TX	Wind	2	Al Hosting	Development	\$40	TBD
Rosa	TX	Wind	187	BTC Hosting / Al	Development	\$40	TBD
Hedy	TX	Wind	120	BTC Hosting / Al	Development	\$40	TBD
Ellen	TX	Wind	100	BTC Hosting / Al	Development	\$40	TBD
Annie	TX	Solar	75	BTC Hosting / Al	Development	\$40	TBD
Fei	TX	Solar	100	BTC Hosting / Al	Development	\$40	TBD
Gladys	TX	Wind	150	BTC Hosting / Al	Development	\$40	TBD

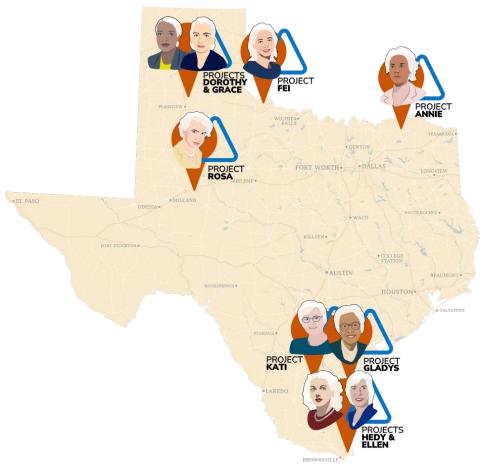
Note: (1) Development includes: PPA, Land Acquisition, Engineering & Regulatory Studies, ERCOT Planning.



# **Project Locations**

**Soluna has 1GW+** of Renewable Computing Projects in Texas. A major location for Bitcoin and AI data centers.

The proximity of several projects creates "clustering." This potentially creates opportunities for larger data center campuses at our sites.

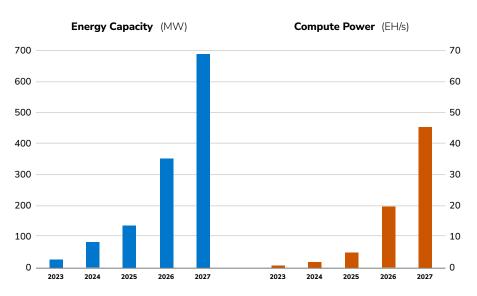




# **Energized Data Center Capacity and Growth**

We are building the largest clean-energy-powered Bitcoin infrastructure platform.

Year	Energy (MW) <sup>1</sup>	Hashrate (EH/s2) <sup>1</sup>
2023	25	1.0
2024	75	2.9
2025	129	5.8
2026	368	19.8
2027	696	46.4



(1) 2023 & 2024 Energy and Hashrate are actual, while 2025-2027 Energy are estimated based on expected project ramp (which could vary up or down) and 2025-2027 Hashrate are estimated as a ramp from about 25J/Th in 2023/2024 to about 15J/Th by 2027 (which also could vary up or down)



### **Illustrative Earnings Potential**

#### Base case - \$55 Hashprice <sup>3</sup>

Non-GAAP Financials

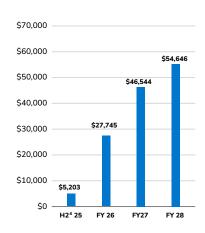
Substantial potential ramp of Consolidated Total Revenue and Adj. EBITDA<sup>1,2</sup> driven by completion of the following projects:

- Dorothy 2
- Kati 1
- Additional Projects (illustrative model assume 2 similarly sized projects to Kati)





### Consolidated Total Adj. EBITDA 1,2





<sup>(1)</sup> Consolidated Adj. EBITDA is total company EBITDA, including any Soluna SG&A. (2) Soluna's ownership stake in each of the projects varies. See following slides for more details.

<sup>(3)</sup> Hashprice is a term created by Luxor Technology in 2019. It is a measure used in the Bitcoin mining industry to represent the revenue earned per unit of hashrate (usually per petahash per second, or TH/s). It is calculated by dividing the total daily mining revenue by the total network hash rate, giving an indication of the profitability of mining operations. Changes in Bitcoin price, network difficulty, and transaction fees all influence Hashprice. Actual Hashprice may vary substantially from illustrative modeled Hashprice.

<sup>(4)</sup> H2 is 2nd half or 3rd and 4th guarters of 2025

<sup>(5)</sup> See Appendix for management statements on non-GAAP measures.

### **Illustrative Earnings Potential**

#### **Upside case - \$75 Hashprice** <sup>3</sup>

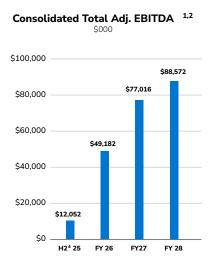
Non-GAAP Financials

Additional \$20 of Hashprice vs. base case adds approximately \$35 million to annual Consolidated Total Adj. EBITDA<sup>1,2</sup> by 2028.



\$28,709

H24 25



FY 26

FY27

FY 28



<sup>(1)</sup> Consolidated Adj. EBITDA is total company EBITDA, including any Soluna SG&A.

<sup>(2)</sup> Soluna's ownership stake in each of the projects varies. See slides later in the presentation for more details.

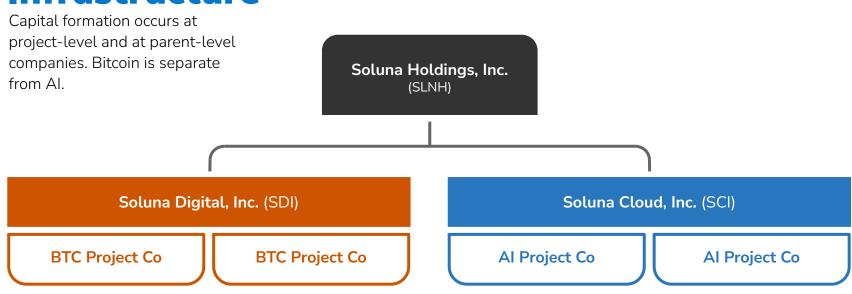
<sup>(3)</sup> Hashprice is a term created by Luxor in 2019. It is a measure used in the Bitcoin mining industry to represent the revenue earned per unit of hashrate (usually per petahash per second, or TH/s). It is calculated by dividing the total daily mining revenue by the total network hash rate, giving an indication of the profitability of mining operations. Changes in Bitcoin price, network difficulty, and transaction fees all influence hashprice. Actual hashprice may vary substantially from illustrative modeled hashprice.

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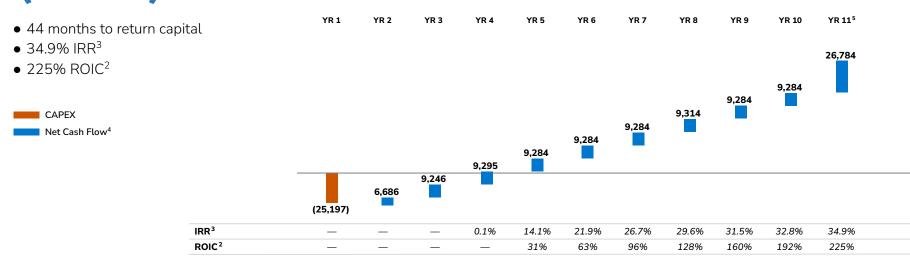


# Our Corporate Structure Supports Flexible Capital Formation for Infrastructure





# Bitcoin Data Center Project <sup>1</sup> Project Return on Invested Capital (ROIC<sup>2</sup>)



- (1) Key assumptions: a) \$55 hashprice b) 95% availability c) 35MW capacity d) 10 years from initial energization to project recapitalization
- (2) ROIC = Return on Invested Capital = sum of cumulative Net Cash Flow divided by sum of CAPEX
- (3) IRR = Internal Rate of Return discount rate that makes the net present value (NPV) of Net Cash Flow equal to \$0.
- (4) Net Cash Flow and CAPEX are consolidated Project Cash Flows
- (5) Includes terminal value from asset sale of \$500k/MW after 10 years of operations
- (6) See Appendix for management statements on non-GAAP measures.

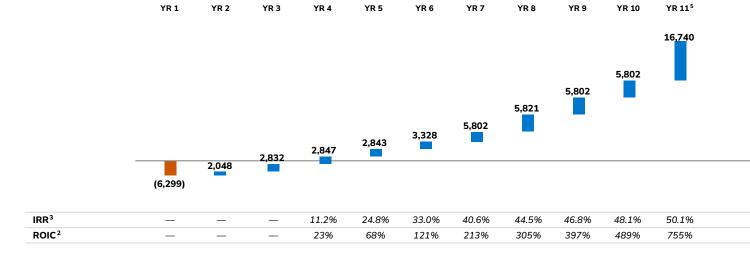


# Bitcoin Data Center Project <sup>1</sup> Soluna ROIC <sup>2</sup> (25% ownership)

- 38 months to return capital
- 50 1% IRR3
- 755% ROIC<sup>2</sup>







<sup>(1)</sup> Key assumptions: a) \$55 hashprice b) 95% availability c) 35MW capacity d) 10 years from initial energization to project recapitalization (2) ROIC = Return on Invested Capital = sum of cumulative Net Cash Flow divided by sum of CAPEX

(6) See Appendix for management statements on non-GAAP measures.



<sup>(3)</sup> IRR = Internal Rate of Return - discount rate that makes the net present value (NPV) of Net Cash Flow equal to \$0

<sup>(4)</sup> Net Cash Flow and CAPEX are consolidated Project Cash Flows

<sup>(5)</sup> Includes terminal value from asset sale of \$500k/MW after 10 years of operations

### We finance our projects using a combination of Project Level **Equity and Debt**

ProjectCo	Soluna Owner Equity	Spring Lane Owner Equity	Navitas Equity	Soluna Developer Profit "Pre-Flip" <sup>5</sup>	Soluna Developer Profit "Post-Flip" <sup>6</sup>	Debt
Dorothy 1A	14.6%	85.4%	-	0%	10%/50% <sup>(1)</sup>	-
Dorothy 1B	51%	-	49%	n/a	n/a	-
Dorothy 2	0% <sup>3</sup>	100%	-	7.5%	50% <sup>(2)</sup>	-
Sophie	100%	-	-	n/a	n/a	\$5M



<sup>(1)</sup> Soluna as Developer receives 0% of equity cash flows until equity owners achieve a 1.0x Multiple on Invested Capital ("MOIC"); thereafter, developer receives 10% of equity cash flows. Once equity owners achieve a 16% Extended Internal Rate of Return ("XIRR"), the developer's share increases to 50%.

<sup>(2)</sup> Soluna as Developer receives 7.5% of equity cash flows until equity owners achieve a 18% XIRR; thereafter, developer receives 50% of equity cash flows.

<sup>(3)</sup> Subject to ongoing capital formation and partner discussion, this could grow.

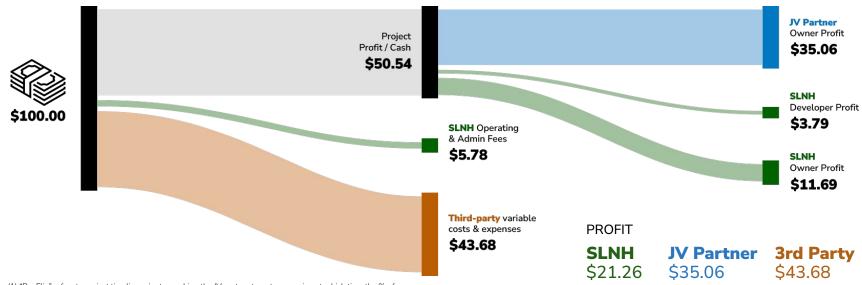
<sup>(4)</sup> See Appendix for management statements on non-GAAP measures.

<sup>(5) &</sup>quot;Pre Flip" refers to project timeline prior to reaching the JV partner target economics, at which time the % of developer profit increases to 50% of all project cash flow

<sup>(6) &</sup>quot;Post Flip" refers to project timeline after reaching the JV partner target economics, at which time the % of developer profit increases to 50% of all project cash flow

# Project Cash Flows Bitcoin Hosting Pre Flip 1,2,3

We make money from services fees, developer profit and our share of owner profit.



<sup>(1) &</sup>quot;Pre Flip" refers to project timeline prior to reaching the JV partner target economics, at which time the % of developer profit increases to 50% of all project cash flow



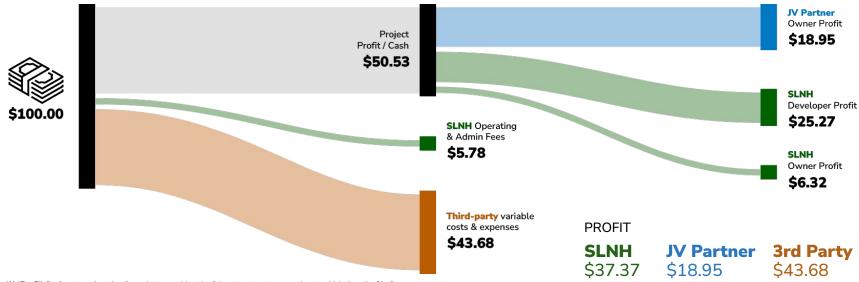
<sup>(2)</sup> All values are indicative based on certain key assumptions which may vary from any actual project specifically

<sup>(3)</sup> Key assumptions: a) 20% O&M margin and fixed Admin Fees; b) 7.5% Developer Profit; c) 25% / 75% Ownership SLNH / JV Partner

<sup>(4)</sup> See Appendix for management statements on non-GAAP measures.

# Project Cash Flows Bitcoin Hosting Post Flip 1,2,3

After the "Flip" our developer profit increases significantly.



<sup>(1) &</sup>quot;Pre Flip" refers to project timeline prior to reaching the JV partner target economics, at which time the % of developer profit increases to 50% of all project cash flow



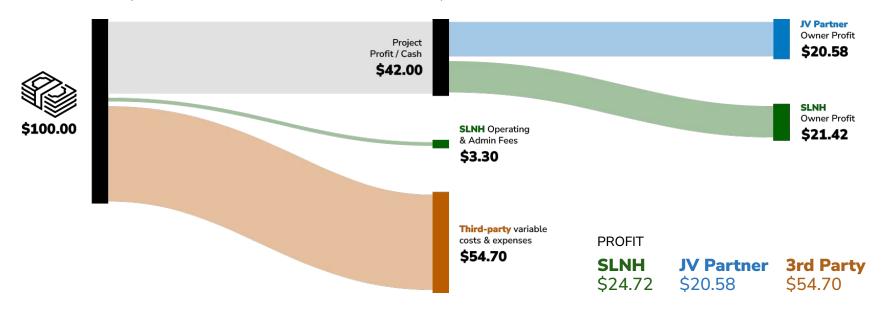
<sup>(2)</sup> All values are indicative based on certain key assumptions which may vary from any actual project specifically (3) Key assumptions: a) 20% O&M margin and fixed Admin Fees; b) 7.5% Developer Profit: c) 25% / 75% Ownership

SLNH / JV Partner

<sup>(4)</sup> See Appendix for management statements on non-GAAP measures.

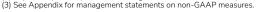
# Project Cash Flows Bitcoin Prop Mining 1,2

We make money from services fees and our share of owner profit.



<sup>(1)</sup> All values are indicative based on certain key assumptions which may vary from any actual project specifically (2) Key assumptions: a) 20% O&M margin and fixed Admin Fees: b) 51% / 49% Ownership SLNH / JV Partner

<sup>(2)</sup> Key assumptions: a) 20% OWM margin and fixed Admin Fees; b) 51% / 49% Ownership SLNH / JV Partner (2) See Appendix for management statements on page (A) Page 2016





### **Summary of Existing Debt <sup>1</sup>**

**\$14.0m** subsidiary debt (no Soluna Holdings guarantee);

\$10.1m GreenCloud debt (with Soluna Holdings guarantee)<sup>2</sup>

Debt Tranche (Entity) / (Guarantor)	Total	Amort Remaining
GreenCloud (Cloud) / (Holdings) <sup>3</sup>	\$10,055	~2 years
Spring Lane Equipment (Dorothy 2) / (None) <sup>4</sup>	\$250	n/a
Galaxy Digital (Sophie) / (Sophie Holdings) <sup>5</sup>	\$4,550	~4.75 years
Total Amortizing	\$14,855	
NYDIG (Marie Borrowing) / (Marie) <sup>6</sup>	\$9,183	n/a
Total	\$24,038	



<sup>(1)</sup> As of March 31st 2025, stated in \$ thousands unless otherwise noted

<sup>(2)</sup> Debt held at below listed entities with below listed guarantor(s), if applicable

<sup>(3)</sup> GreenCloud note (original principal \$12.5m, borrower Soluna AL CloudCo, LLC and guarantors Soluna Cloud, Inc. and Soluna Holdings, Inc., 3 year amortization from June 2024)

<sup>(4)</sup> Springlane Equipment note (\$250k related to Project Kati, borrower Soluna DVSL II ComputeCo, LLC and no guarantor, non amortizing, expected payoff upon Dorothy 2 completion or Kati project finance closing)

<sup>(5)</sup> Galaxy Digital note (original principal \$5.0m, borrower Soluna SW, LLC and guarantor Soluna SW Holdings, LLC, 5 year amortization from March 2025)

<sup>(6)</sup> NYDIG note (original principal of \$14.4, borrower Soluna MC Borrowings, LLC and guarantor Soluna MC, LLC, no longer amortizing, no operating assets)

### **Existing Debt** <sup>1</sup> By Entity

**\$14.0m** subsidiary debt (no Soluna Holdings guarantee); Soluna Holdings, Inc. **\$10.1m** GreenCloud debt (with Soluna Holdings guarantee) (SLNH) Soluna Digital (SDI) Soluna Cloud (SCI) **Project Sophie** Soluna AL CloudCo<sup>3</sup> Project Marie<sup>2</sup> **SDI SL Borrowing** HoldCo GreenCloud -SpringLane -**Project Marie Project Sophie** \$0.3m \$10.1m **Borrowing** NYDIG - \$9.2m **Galaxy - \$4.6m** SLNH Debt Guarantees **Subsidiary ONLY Debt Guarantees** 

<sup>(1)</sup> See prior slide entitled "Summary of Existing Debt" additional notes that cover this slide.

<sup>(2)</sup> Project Marie data center was decommissioned and has no remaining assets.

<sup>(3)</sup> Soluna AL CloudCo has ceased operations and has no remaining assets.

### AI / HPC Data Center Project <sup>1</sup> ROIC<sup>2</sup>

YR 1

(213.333

- Capital is returned at refinance
- 37 7% IRR<sup>3</sup>



YR 3

10,234

YR 4

9.290

YR 5

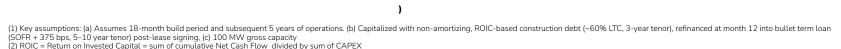
8,457

YR 6

7,795

YR 7<sup>5</sup>

YR 2



(106,667

6,391

- (3) IRR = Internal Rate of Return discount rate that makes the net present value (NPV) of Net Cash Flow equal to \$0.
- (4) Net Cash Flow and CAPEX are consolidated Project Cash Flows after debt service
- (5) Includes terminal value from asset sale at 3x capex-build after 5 years of operations
- (6) See Appendix for management statements on non-GAAP measures.



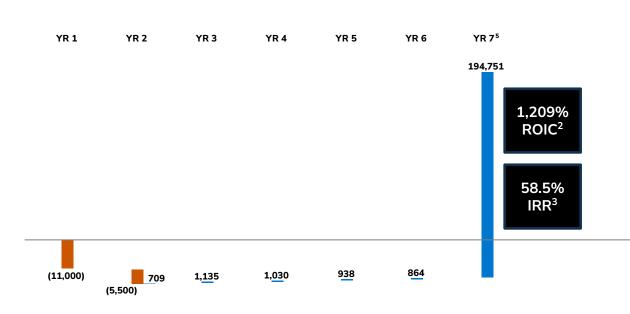
37.7% IRR<sup>3</sup>

### AI / HPC Data Center <sup>1</sup> Soluna ROIC<sup>2</sup>

 Significant uplift to both IRR and ROIC, driven by equity uplift of delivering power and land to the project

- 58.5% IRR<sup>3</sup>
- 1.209% ROIC<sup>2</sup>





(1) Key assumptions: (a) Assumes 18-month build period and 5 years of operations. (b) Capitalized with non-amortizing, ROIC-based construction debt (~60% LTC, 3-year tenor), refinanced at month 12 into bullet term loan (SOFR + 375 bps, 5–10 year tenor) post-lease signing, (c) 100 MW gross capacity, (d) Assumes Soluna equity ownership of 11.1%

(2) ROIC = Return on Invested Capital = sum of cumulative Net Cash Flow divided by sum of CAPEX

(3) IRR = Internal Rate of Return - discount rate that makes the net present value (NPV) of Net Cash Flow equal to \$0

(4) Net Cash Flow and CAPEX are consolidated Project Cash Flows after debt service

(5) Includes terminal value from asset sale at 3x capex-build after 5 years of operations

(6) See Appendix for management statements on non-GAAP measures.





# The Perfect Storm: Driving Energy Demand



### Historic Load Spike <sup>1,2</sup>

Explosive load growth: U.S. utilities now forecast 50 GW of new generation needed by 2030.

Unprecedented scale: Individual campuses now reach **100 MW–5 GW** each—comparable to small cities.



#### Infrastructure Bottlenecks <sup>3,4,5</sup>

Interconnection queues exceed **2.6 TW** nationally.

Permitting and build times lag load arrival by **3–5 years**.

Equipment shortage with lead times exceeding **5 years**.

- https://www.deloitte.com/us/en/insights/industrv/power-and-utilities/data-center-infrastructure-artificial-intelligence.html
- 3: https://emp.lbl.gov/news/grid-connection-backlog-grows-30-2023-dominated-reguests-solar-wind-and-energy-storage
- 4: https://www.pv-tech.org/80-of-energy-projects-withdraw-from-inefficient-us-grid-gueues/
- https://eepower.com/tech-insights/transformer-supply-chain-woes-persist-as-energy-demand-grows
- 6: https://www.energy.gov/sites/default/files/2025-07/DOE%20Final%20E0%20Report%20%28FINAL%20JULY%207%29.pd
- 7: https://www.nerc.com/globalassets/our-work/assessments/2024-ltra\_corrected\_iulv\_2025.pd
- 8. https://www.nerc.com/alobalassets/who-we-are/standing-committees/rstc/3\_doc\_white-paper-characteristics-and-risks-of-emerging-large-loads
- https://newsletter.semianalysis.com/p/ai-training-load-fluctuations-at-gigawatt-scale-risk-of-power-grid-blackout



### Grid Reliability Strained <sup>6,7,8,9</sup>

DOE (2025) and NERC (2024 LTRA) warn of rising reliability risks without major new generation and transmission.

**Policy response forming:** FERC, ISO-NE, and states launching large-load forecasting rules and data-center reporting mandates.

Al Load Fluctuates: unprecedented load fluctuations



#### Energy Arms Race <sup>1,2,6</sup>

Unprecedented scale: CapEx is expected to grow to \$1 trillion cumulatively over the next 5 years for energy utilities and 3 years for hyperscalers.

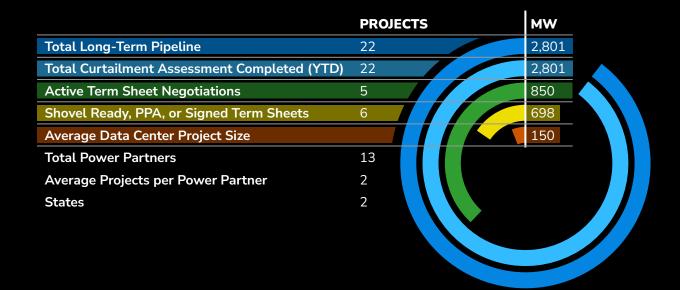
**National security lens:** DOE frames large-load planning as critical infrastructure resilience.

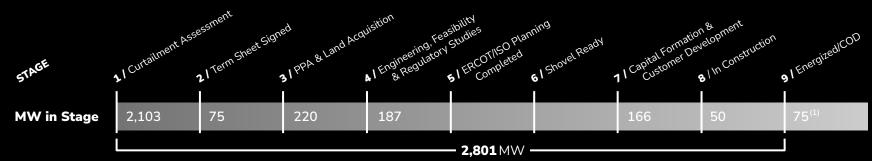
China built 429 GW of capacity in 2024, US only 50 GW.



# We have a growing pipeline of projects

**2.8GW+** long-term pipeline with large IPPs and infrastructure funds in the US and beyond



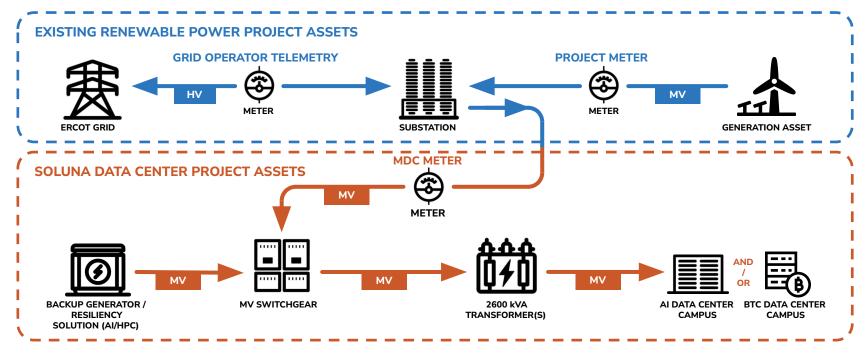






### **Unique Interconnection Strategy**

**Behind-the-Meter Structure** Allows Our Data Centers to Remain Flexible, Drawing Power from the Grid or Renewable Power Plant and Provide Ancillary Services. **Rapid Time to Interconnection**.



# Maestro OS<sup>™</sup> Is Our Force Multiplier

Our proprietary software streamlines site operations with intelligent monitoring, precise data, and full-stack automation—enabling faster decisions, higher uptime, and seamless grid integration.



#### Control

Extend equipment lifespan and reduce failures with built-in redundancies.

Fully automated and manual control of fans, miners, PDUs, power, and network systems for optimized performance.

Robust, redundant computing at both building and site levels to eliminate single points of failure.

Cloud-based simulator enables software and algorithm testing before deployment.

#### Data Collection

Comprehensive data collection across all PDU plugs, network, and power systems.

Aggregation of grid telemetry from multiple sources.

Post-processing of site and grid data to enable advanced analytics and insights.

High-fidelity hash rate and power data collection to support customer contracts and operations.

#### Operations

Real-time tracking of computing systems, PDUs, networking gear, and power systems enables centralized site management and remote diagnostics.

Comprehensive diagnostics and alerting system allows operators to detect issues and take immediate action

Pinpoints the exact location of computing systems and equipment to quickly identify anomalies.

#### Power

Extensible architecture enables rapid adaptation of algorithms for seamless integration with various grid and behind-the-meter configurations.

Accepts multiple grid and power inputs to inform algorithm performance.

Fully compliant with ERCOT 4CP and other demand response protocols.

Automated compliance with PPA and ancillary service requirements.



### **Soluna's Distinctiveness**



Behind the Meter (BTM) model captures stranded energy and eases grid congestion

Monetizing stranded power while reducing infrastructure stress



BTM model enables accelerated access to low cost power

Using existing substations and interconnections enables faster project timelines, simplified permitting, and rapid access to power



Flexible power design with redundant options for power

Tailored for resilient, flexible scalable BTM data center deployments for both AI and BTC



Proprietary software and proven execution

Significantly reduces project, technical and commercial risks for investors and partners





### **2025 Corporate Focus**



Increasing the number of curtailment assessments completed with power partners, advancing more projects to shovel-ready status, and executing additional project term sheets.

# Optimize Projects

Energize Project Dorothy 2. And enhancing the profitability, operational efficiency, and customer mix of our operating data centers, while improving overall customer satisfaction.

### Capital Formation

Pursuing financing opportunities to support key growth initiatives, including Projects Kati and Rosa.
Leveraging strength of project cash flows to refinance and/or pull forward value of existing projects and to deploy debt financing in new projects.

### Develop Al

Form partnerships to harness the value of our considerable and growing pipeline by developing AI/HPC data center joint ventures. Building governance, advisory and employee AI/HPC expertise in support of expected growth strategy.



### Our Accomplishments in 2025

as of November 2025



- Raised \$64M+ to fund growth
- Secured \$20M from Spring Lane Capital
- Secured \$5M non-dilutive debt from Galaxy Digital
- Closed \$100M credit facility with Generate Capital
- Launched \$87M ATM program
- Reached agreement with NYDIG
- Regained Nasdag listing compliance
- Awarded **second patent**
- Exited **HPE partnership**
- Expanded partnerships with Bit Digital, Compass Mining, and top-tier miners
- Surpassed 4 EH/s hash rate under management
- Added Projects Gladys + Fei, pushing portfolio past 1 **GW** of clean computing projects



## Project Milestones

- Project Kati (166 MW) groundbreaking completed and construction is underway
- Signed 48 MW Galaxy Digital partnership at Kati
- Dorothy 2 (48 MW) completed, bringing the full Project Dorothy site (98 MW) to full operation
- Signed 20 MW Canaan deployment for January 2026
- Signed 3.3 MW partnership with KULR at Project Sophie
- Al partnerships for Projects Grace and Kati 2 underway
- 187 MW Rosa land secured
- 120 MW Hedy term sheet signed
- 100 MW Ellen term sheet signed
- **75 MW Annie** first solar-powered facility
- Long-term pipeline now 2.8 GW+
- Monetized 160,739 MWh of curtailed energy







# We unlock wasted renewable power, meet compute and energy demand and lighten the burden on the grid

## Energy Supply-Demand is Imbalanced

30-40% of Renewable energy generation is stranded.

## Grid is Constrained

Rising energy costs, slow interconnection timelines, and limited transmission capacity delay new power plants.

## Exploding Compute Demand

BTC and AI/HPC workloads are driving massive, fast-changing energy needs with 26–36%<sup>1</sup> annual growth.

(1) The Computational Limits of Deep Learning, Thompson N et Al - 2022

37 | Nasdag: SLNH







Source: IEA data - https://www.iea.org/reports/renewables-2024/executive-summary

2024

2025E

2026E

2027E

2028E

2029E

2023



2030E

2022

RENEWABLE ENERGY HAS A WASTED ENERGY PROBLEM

30-40%

of energy produced by renewable plants goes unused.

Source: Soluna Curtailment Assessments of IPPs in Pipeline. Curtailment estimates from ISO/RTO websites. Wood Mackenzie.

**MIGW**+

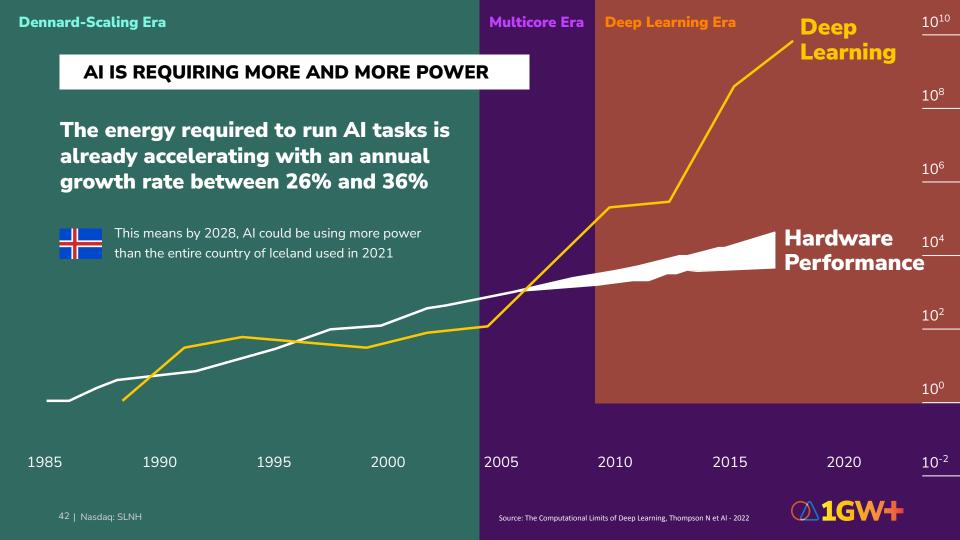


Transmission upgrades face too many challenges & take too long...



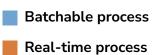
Computing is ready now.

**16W+** 



## The Lifecycle of AI

**Gen AI is batchable:** Parts of the Generative AI lifecycle are perfect computing applications for co-location with renewable power plants, because they are inherently batchable.

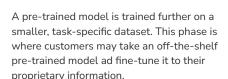






A new model is created from scratch by learning from a large corpus of text. The phase requires the largest number of resources. For example, an iteration of OpenAl's GPT-3 was trained on 10,000 NVIDIA V100 GPUs for 15 days.

## Fine Tuning



### Inferencing

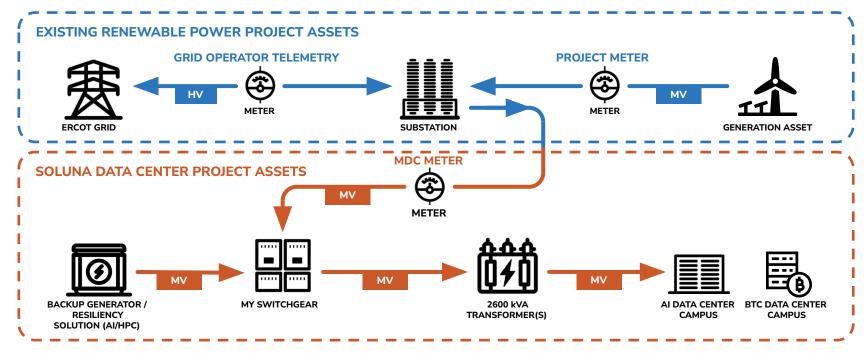


Using a pre-trained model to generate predictions or outputs based on input data. This is 'using' the AI, such as when ChatGPT gives a response, or Stable Diffusion generates an image.



### **Unique Interconnection Strategy**

**Behind-the-Meter Structure** Allows Our Data Centers to Remain Flexible, Drawing Power from the Grid or Renewable Power Plant and Provide Ancillary Services. **Rapid Time to Interconnection**.



## How We Source Power for Our Data Centers

**Economic/Technical CURTAILED** curtailment from **ENERGY** negative LMP. DC\* **SUBTRACTIVE** Energy that is sourced **GRID** from the grid in excess **ENERGY ENERGY** of plant production.

Energy that would have gone to grid without the load.



<sup>\*</sup> Soluna BTC or AI Data Center.

CASE STUDY

# Texas Wind Farm Curtailment

**150 MW Wind Generation** 

2021

Generation
Curtailed



2022

Source: Soluna Data Analysis, Wind Farm Data

46 | Nasdag: SLNH

2023 2024

**16W+** 

CASE STUDY

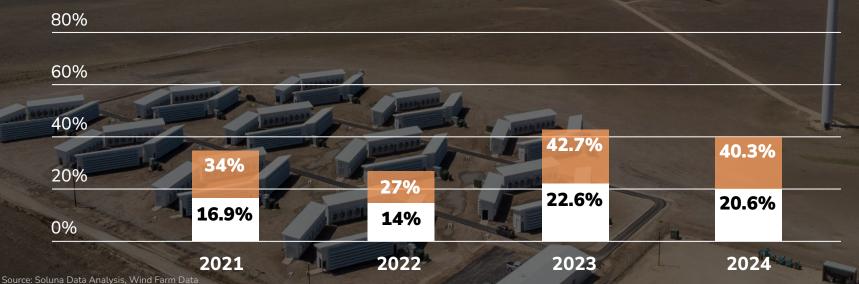
47 | Nasdag: SLNH

# Soluna Consumes ~50% of Curtailed Energy

50 MW Data Center - Project Dorothy 1

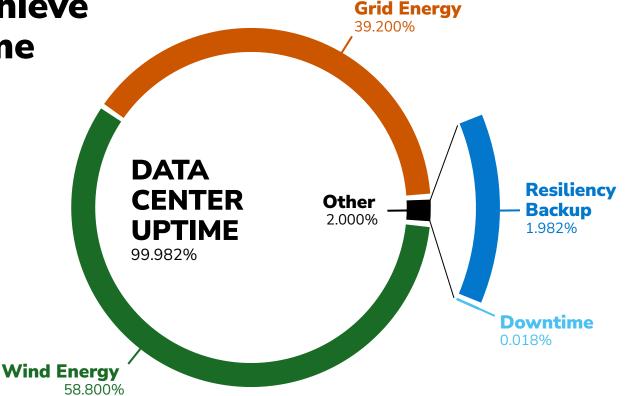
**Consumed by Soluna** 

Curtailed



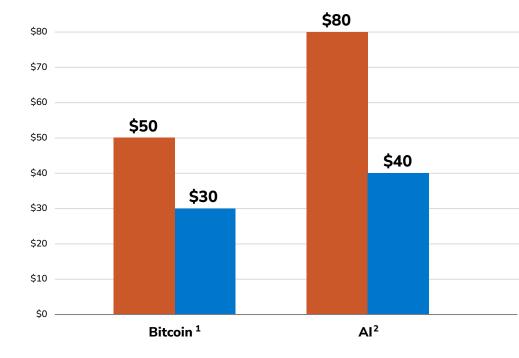
How We Achieve Tier-3 Uptime Behind the Meter

Energy is sourced from the grid, the renewable power plant, and a resiliency solution.





## Our Power Cost Is Among the Lowest In the Industry







<sup>(1)</sup> Luxor Research; Public filings from various miners

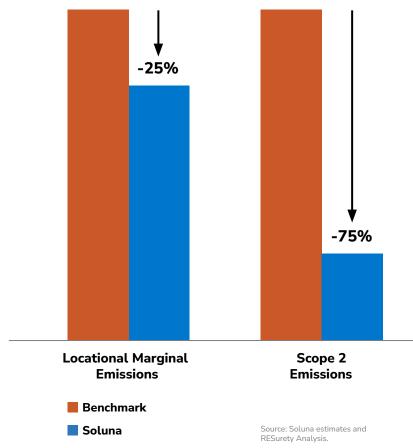
<sup>(2)</sup> EIA.gov | https://www.eia.gov/electricity/monthly/epm\_table\_grapher.php?t=epmt\_5\_6\_a

# Soluna's solution for grid and data center decarbonization

As new data-heavy applications drive massive energy demand, most data centers rely on carbon-intensive grids to power these workloads. While RECs are widely used to offset emissions, they often fail to reflect real-time energy usage and carbon impact.

We take a different approach by co-locating data centers with renewable power sources, directly consuming curtailed wind energy—power that would otherwise go to waste.

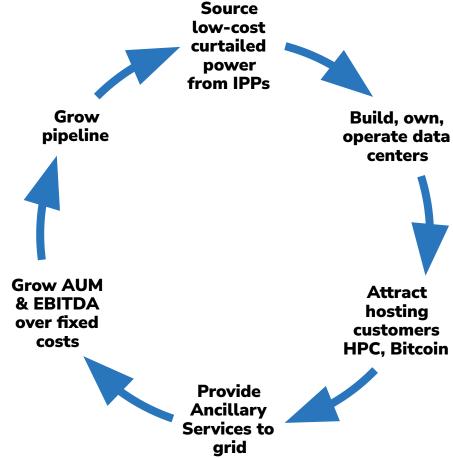
Our current data centers achieve a fraction of the emissions of a typical ATC data center. This model enables real emissions reductions while supporting the growth of renewable energy.





# The Soluna Way

We tackle wasted energy through digital infrastructure. As we optimize the grid and serve our customers, we fuel our growth, funding further expansion to make renewable energy a superpower.



### We serve some of Bitcoin's most successful miners

Here's a snapshot of our customers' total mining portfolios.<sup>1,2</sup>

(1) Source: Public filings, Luxor Research, Bitcoin Network, and Customer Surveys

(2) Total EH/s is for our customers' total mining portfolio - not the total installed in Soluna hosting data centers

Total EH/s<sup>2</sup>

Total No. Facilities

Percentage of **Bitcoin Network** 

**M** BLOCKWARE





Average J/TH









## **Bitcoin Hosting Contract Models**



**Profit Share** -- Power pass-through + Opex passthrough fee + BTC profit share + service fees



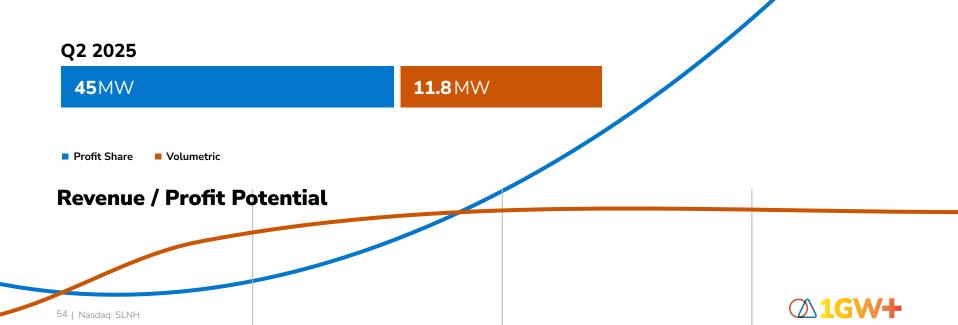
**Fixed Fee / Volumetric** -- Fixed price on \$/kWh + services fees.

Financial Driver	Fixed Fee/Volumetric	Profit Share
Hash price up	no impact	gross profit up
Hash price down	no impact	gross profit down
Electricity up	gross profit down	gross profit down
Electricity down	gross profit up	gross profit up
Electricity in Revenue & Cost?	Yes	No
Gross Profit capped?	Yes	No



## Bitcoin Hosting Contract Mix Shift

Volumetric contracts at Dorothy more than doubled in Q2, up from 5MW in Q1 2025.



## What Our Customers Are Saying

Partnering with Soluna has been a game-changer for Compass. Their commitment to operational excellence and partnership sets them apart as a hosting partner.

Soluna is a real delight to work with. Their approach is professional, hands-on, and proactive. I trust them to handle any challenge with efficiency and provide solutions that consistently enhance our operations.

Soluna's expertise in optimizing mining operations has allowed BitMine to scale rapidly while maintaining a strong focus on sustainability and cost efficiency. They're more than just a hosting provider—they're a strategic partner.

**CJ** Burnett CPA, Compass Mining

**Dominick Binder** Senior Engineer, Bit Digital

Jonathan Bates

CEO. BitMine



### **Progress on our Mission**

#### **FEB 2022**

\$20M Debt Financing

#### **APR 2022**

Sale of MTI Instruments Subsidiary Business

#### **MAY 2022**

\$35M Raise from Spring Lane Capital

2022

#### 2021

#### **JUN 2021**

Construction Begins at Project Sophie

#### **AUG 2021**

Acquisition of Project Marie

#### **SEP 2021**

**Project Sophie Energizes** 

2023

#### FEB 2023

Funding for Project Dorothy 1 Secured

#### **SEP 2023**

Project Dorothy 1 Reaches Full Capacity; Soluna Hits 2.6 EH/s Milestone

#### **NOV 2023**

Jumpstart of Ancillary Services Revenue

#### **JAN 2024**

Project Dorothy Outperforms Traditional Centers with an 18% Lower Carbon Footprint

#### **JUN 2024**

\$30M from Spring Lane Capital for Project Dorothy 2 Secured

#### **AUG 2024**

Construction of Project Dorothy 2 Begins

#### 2024 2025

#### **MAR 2025**

\$5M Non-Dilutive Funding from Galaxy Digital Secured; Project Dorothy 2 Energizes

#### **AUG 2025**

Surpassed 1 Gigawatt of Projects in Operation, Construction, and Development

#### **SEP 2025**

Broke ground on Project Kati 1 in Willacy County, TX



### Meet the Soluna Leadership Team

150 years of combined experience in starting, managing, and leading companies



John Belizaire Chief Executive Officer



Michael Toporek **Executive Chairman** 

Phillip Ng

VP. Corporate

Development



**David Michaels** Chief Financial Officer



**Dipul Patel** Chief Technology Officer



Mary O'Reilly Chief People Officer

























Larbi Loudivi VP. Power



**Dan Golding** HPC/AI Advisor



HPC/Al Advisor







Jessica Thomas

Chief Accounting Officer



WELCOME TO

## RENEWABLE COMPUTING

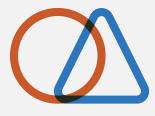
Learn more at solunacomputing.com

## **Connect With Us**





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**Newsletter** bit.ly/solunasubscribe



## Non-GAAP Measure Management Definitions

This presentation contains various non-GAAP financial measures which are defined on the following slide, each of which is not calculated in accordance with GAAP. Presentations of these non-GAAP financial measures are intended to aid investors in better understanding the factors and trends affecting the Company's performance and liquidity. However, investors should not consider these non-GAAP financial measures as a substitute for financial measures determined in accordance with GAAP. The Company cannot reconcile these measures without unreasonable effort because certain items that impact net income and other reconciling metrics are out of the Company's control and/or cannot be reasonably predicted at this time. Other companies may define these terms in different ways. See our annual report on Form 10-K for the year ended December 31, 2024 for an explanation of how management uses EBITDA, adjusted EBITDA and other measures in its operations.



## Non-GAAP Measure Management Definitions

Consolidated Adjusted EBITDA: total EBITDA, as adjusted by management for certain one-time impacts, on a fully consolidated basis, regardless of actual Soluna ownership percentage.

Developer Profit: profit and cash paid to project developer from Project Profit/Cash.

**EBITDA**: Earnings Before Interest, Taxes, Depreciation, and Amortization: a measure of a company's operating performance that shows earnings before accounting for financing costs, tax expenses, and non-cash charges.

IRR – Internal Rate of Return: the discount rate that makes the net present value (NPV) of a series of cash flows equal to zero, reflecting the annualized rate of return earned on an investment.

MOIC - Multiple on Invested Capital: number of times the initial quantity of invested capital dollars that has been returned by distributions of project cash flows.

NPV - Net Present Value: the sum of the present values of all expected future cash flows from an investment, minus the initial investment cost, used to assess profitability.

**O&M Margin, Operating & Admin Fees**: fees (and margin) paid to Soluna as the developer for ongoing operations, maintenance and administrative services provided to projects.

Owner Profit: profit and cash paid to project owners from Project Profit/Cash after paying Developer Profit.

Project Profit/Cash: profit and cash available to project owners after paying 3rd party expenses and O&M (Operating) / Admin Fees.

ROIC - Return on Invested Capital: percentage of the initial quantity of invested capital dollars that has been returned by distributions of project cash flows.

**SOFR** – **Secured Overnight Financing Rate**: is a benchmark interest rate that reflects the cost of borrowing cash overnight using U.S. Treasury securities as collateral and is published daily by the Federal Reserve Bank of New York.

Soluna SG&A – Soluna Selling, General & Administrative: expenses incurred that are not directly attributable to operating projects, excluding stock compensation, impairment expense, and other miscellaneous non-cash expenses but including other income/expense.

Variable Costs & Expenses: costs of revenue and direct expenses that, when subtracted from project revenue, yield Project Profit/Cash.

XIRR - Extended Internal Rate of Return: the annualized rate of return for a series of cash flows occurring at irregular intervals.

