
SOLUNA
Power AI & Bitcoin,
sustain tomorrow:
Renewable
Computing.
Nasdaq: SLNH

Legal Disclosure & Disclaimer

This presentation includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act that reflect our current views with respect to, among other things, our operations, business strategy, interpretation of prior development activities, plans to develop and commercialize our products and services, potential market opportunity, financial performance and needs for additional financing. We have used words like "anticipate," "believe," "could," "estimate," "expect," "future," "intend," "may," "plan," "potential," "project," "will," and similar terms and phrases to identify forward-looking statements in this presentation.

The forward-looking statements contained in this presentation are based on management's current expectations and are subject to substantial risks, uncertainty and changes in circumstances. Actual results may differ materially from those expressed by these expectations due to risks and uncertainties, including, among others, those related to our ability to obtain additional capital on favorable terms to us, or at all, the success, timing and cost of ongoing or future operations, the lengthy and unpredictable nature of the project development, and technology process and businesses in which we currently engage or may engage.

These risks and uncertainties include, but may not be limited to, those described in our filings with the SEC. Forward-looking statements speak only as of the date of this presentation, and we undertake no obligation to review or update any forward-looking statement except as may be required by applicable law.

The material in this presentation has been prepared by Soluna and is general background information about Soluna's activities, current as at the date of this presentation and is provided for information purposes only. It should be read in conjunction with Soluna's periodic and continuous disclosure announcements filed with the Securities and Exchange Commission. This presentation provides information in summary form only and is not intended to be complete. Soluna makes no representation or warranty, express or implied, as to the accuracy, completeness, fairness or reliability of any of the information, illustrations, examples, opinions, forecasts, reports, estimates and conclusions contained in this presentation. It is not intended to be relied upon as advice or a recommendation to investors or potential investors and does not take into account the investment objectives, financial situation, taxation situation or needs of any particular investor. Due care and consideration should be undertaken when considering and analyzing Soluna's future performance and business prospects. THIS PRESENTATION IS NOT INTENDED TO SERVE AS A FORECAST OF ANY SUCH FUTURE PERFORMANCE OR PROSPECTS. An investor must not act on any matter contained in this document but must make its own assessment of Soluna and conduct its own investigations and analysis. Investors should assess their own individual financial circumstances and consider talking to a financial adviser, professional adviser or consultant before making any investment decision. This document does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in Soluna nor does it constitute financial product advice. This document is not a prospectus, product disclosure statement or other offer document under United States federal or state securities law or under any other law. This document has not been filed, registered or approved by regulatory authorities in any jurisdiction.

This presentation contains statistical and market data that we obtained from industry publications, reports generated by third parties, and third-party studies. Although we believe that the publications, reports, and studies are reliable as of the date of this presentation, we have not independently verified such statistical or market data.

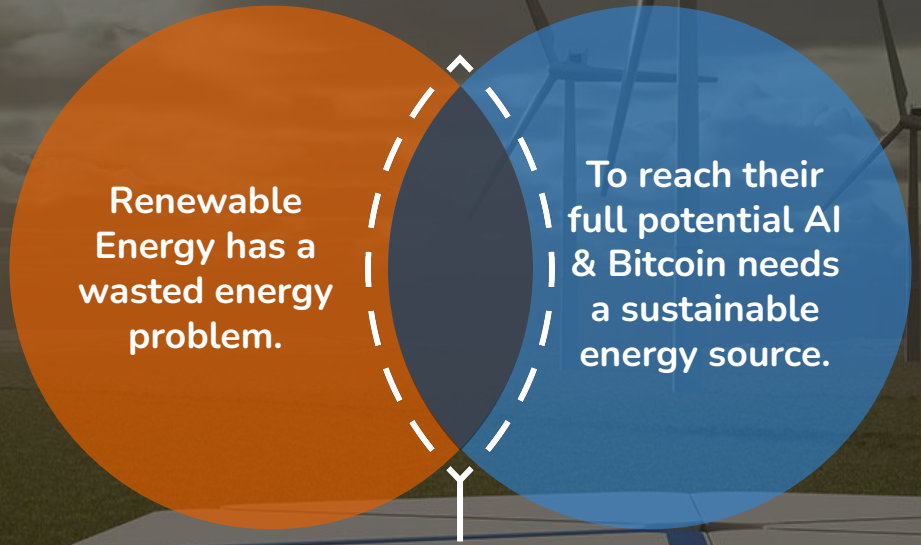
Any projection, forecast, estimate or other "forward-looking" statement in this presentation only illustrates hypothetical performance under specified assumptions of events or conditions that have been clearly delineated herein. Such projections, forecasts, estimates or other "forward-looking" statements are not reliable indicators of future performance. Hypothetical or illustrative performance information contained in these materials may not be relied upon as a promise, prediction or projection of future performance and are subject to significant assumptions and limitations. In addition, not all relevant events or conditions may have been considered in developing such assumptions. READERS OF THIS DOCUMENT SHOULD UNDERSTAND THE ASSUMPTIONS AND EVALUATE WHETHER THEY ARE APPROPRIATE FOR THEIR PURPOSES. SOME EVENTS OR CONDITIONS MAY NOT HAVE BEEN CONSIDERED IN SUCH ASSUMPTIONS. ACTUAL EVENTS OR CONDITIONS WILL VARY AND MAY DIFFER MATERIALLY FROM SUCH ASSUMPTIONS. READERS SHOULD UNDERSTAND SUCH ASSUMPTIONS AND EVALUATE WHETHER THEY ARE APPROPRIATE FOR THEIR PURPOSES. This presentation may include figures related to past performance or simulated past performance as well as forecasted or simulated future performance. Soluna disclaims any obligation to update their views of such risks and uncertainties or to publicly announce the results of any revision to the forward-looking statements made herein.

Use of Projections and Illustrations - this presentation contains certain financial forecasts and illustrations. Neither Soluna's nor Soluna's independent auditors have studied, reviewed, compiled or performed any procedures with respect to the projections for the purpose of their inclusion in this presentation. The material in this presentation is for illustrative purposes only and should not be relied upon as being necessarily indicative of future results.

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 AI and Bitcoin.



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

EXECUTIVE SUMMARY

Company Overview

AI is the fastest growing technology today, with **exponentially growing demand for compute** and a corresponding insatiable demand for power and data center availability.

Bitcoin mining is consolidating into fewer, larger, mining companies that **prefer scalable, well-managed, and cost-advantaged hosting partners**.

Clean energy goes to waste due to curtailment and there's a critical shortage of power for AI, HPC, and Bitcoin mining.

Soluna bridges this gap - unlocking stranded renewable energy and turning it into scalable computing power.

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.**

Our mission is to make renewable energy a global superpower using computing as a catalyst. We develop and operate digital infrastructure that taps into a growing global opportunity: the convergence of renewable energy and High Performance Computing (HPC). We call this model Renewable Computing ™.

Soluna Highlights [1]

INSTALLED HASHRATE

2.9 EH/s [2]

MW MANAGED

89 MW ▸ ~775 MW [3]

2025 Q1 REVENUE

$5.9 Million

AVERAGE POWER COST

$35 / MWh [4]

CURTAILED ENERGY MONETIZED

140,812 MWh

GROWTH EQUITY LINE

$25 Million

EMPLOYEES

48

POWER DEVELOPMENT PIPELINE

~2.8 GW

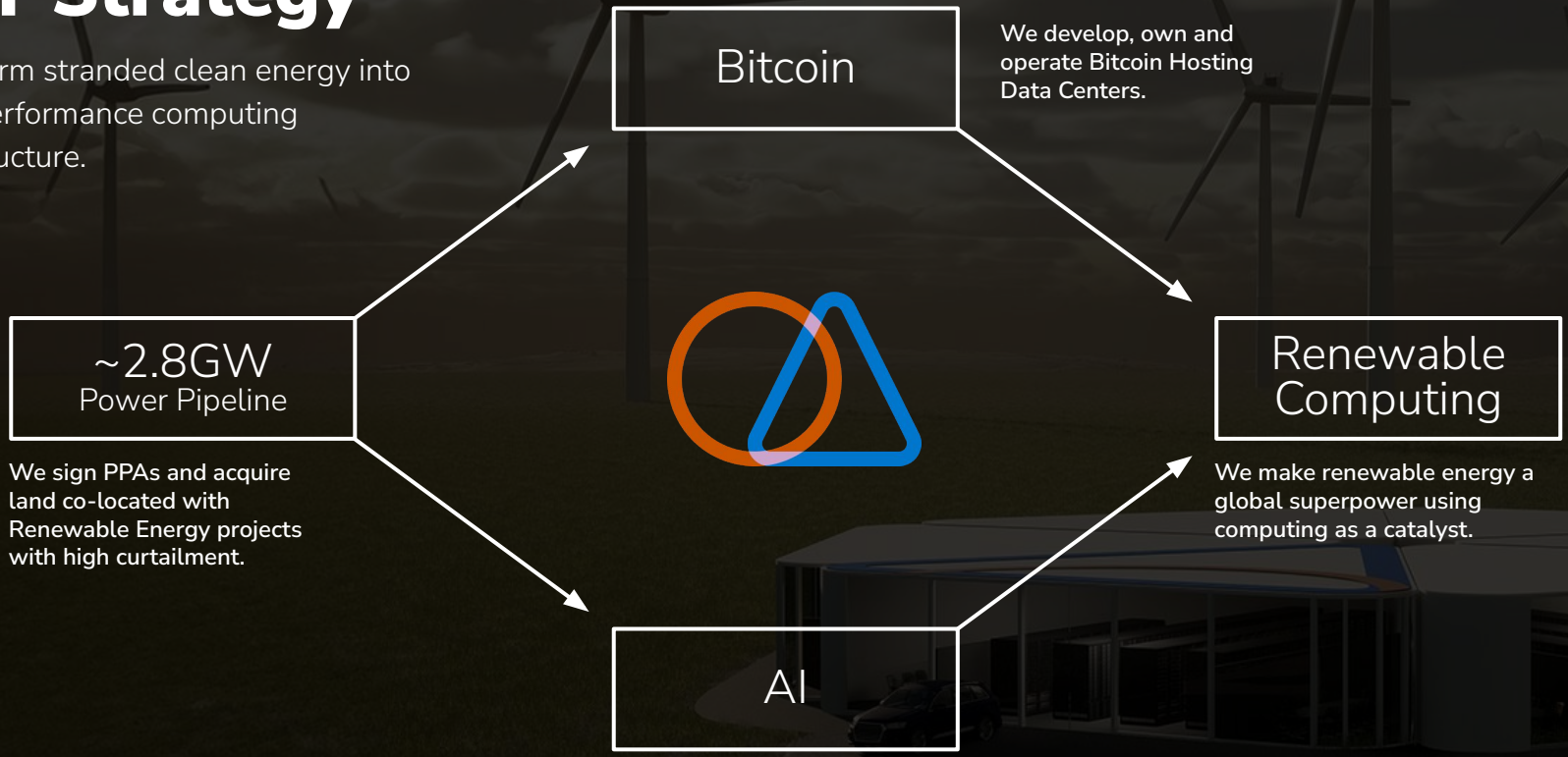
AVERAGE J / TH/s

<23 J / TH/s [4]

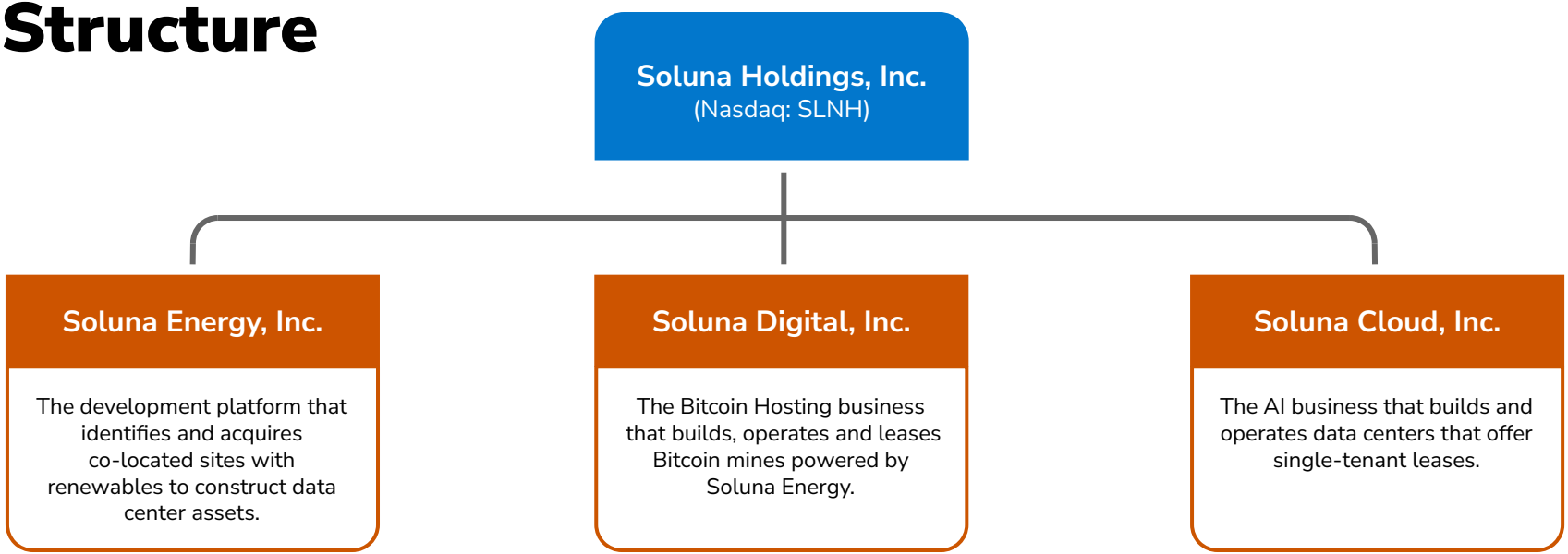
(1) As of March 31st 2025 unless otherwise noted
(2) Includes a mix of Prop Miners and Hosted Miners. Dorothy 1A transitioned customers, the individual slides will not total to 2.9 EH/s, 2.9 EH/s after customer transition in Q1 2025.
(3) Sophie (25 MW - operational) + Dorothy 1 (50MW - operational) + Dorothy 2 (14 MW operational, 34 MW – Construction) + Grace (2 MW - In Development) + Kati (166 MW – In Development) + Rosa (187MW - In Development) + Ellen (100MW - In Development) + Hedy (120MW - In Development) + Annie (75MW - In Development), amounts are approximate
(4) 3-month average (January 2025 - March 2025)

Our Strategy

Transform stranded clean energy into high-performance computing infrastructure.



Soluna Organizational Structure



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*

Hosting for Bitcoin Miners

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

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.*

Our Data Center Projects

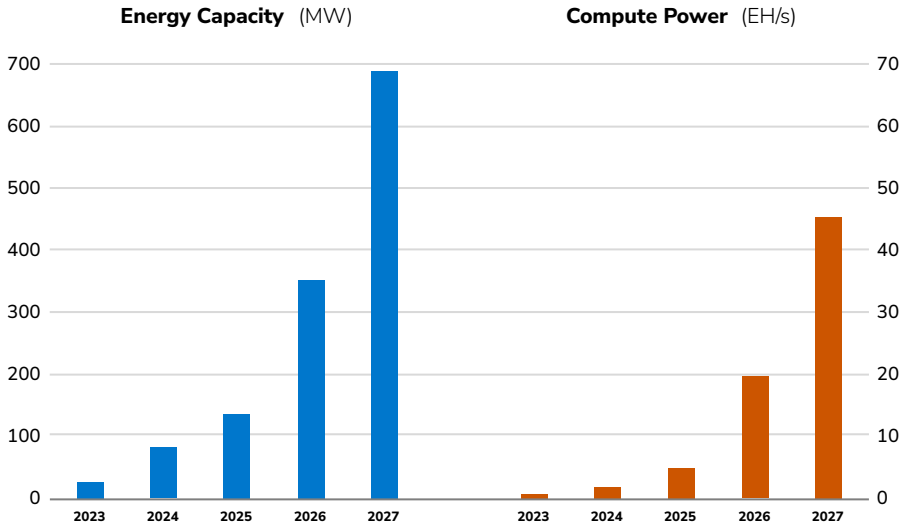
We have over 773 MW of data center capacity in operation, construction or development

Project	Location	Power Source	Size (MW)	Model	Status	Power Cost	Partner
Dorothy 1A	TX	Wind	25	BTC Hosting	Operating	$35	Spring Lane
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	Construction	$35	Spring Lane
Kati	TX	Wind	166	BTC Hosting / AI	Shovel Ready	$40	TBD
Grace	TX	Wind	2	AI Hosting	Development	$40	TBD
Rosa	TX	Wind	187	BTC Hosting / AI	Development	$40	TBD
Hedy	TX	Wind	120	BTC Hosting / AI	Development	$40	TBD
Ellen	TX	Wind	100	BTC Hosting / AI	Development	$40	TBD
Annie	TX	Solar	75	BTC Hosting / AI	Development	$40	TBD

Energized Data Center Capacity and Growth

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

Year	Energy (MW) [1]	Hashrate (EH/s2) [1]
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 [3]

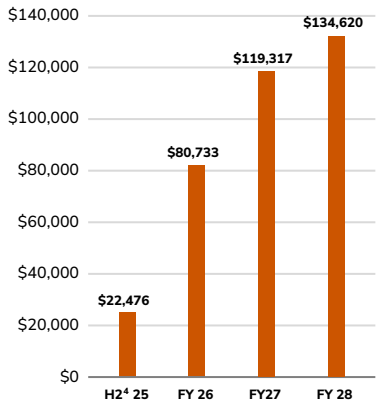
Non-GAAP Financials

Substantial potential ramp of Consolidated Total Revenue and Adj. EBITDA[1,2] driven by completion of the following projects:

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

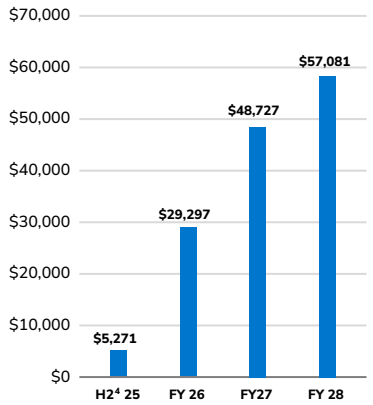
Consolidated Total Revenue

$000



Consolidated Total Adj. EBITDA [1,2]

$000



(1) 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.
(3) 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.
(4) H2 is 2nd half or 3rd and 4th quarters of 2025
(5) See Appendix for management statements on non-GAAP measures.

Illustrative Earnings Potential

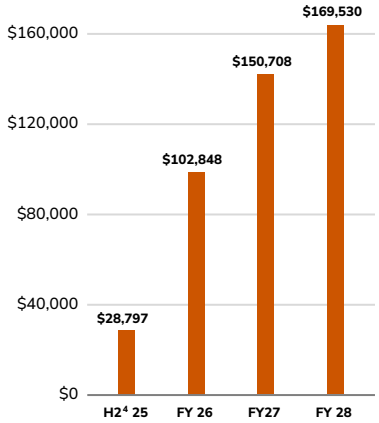
Upside case - $75 Hashprice [3]

Non-GAAP Financials

Additional $20 of Hashprice vs. base case adds approximately $35 million to annual Consolidated Total Adj. EBITDA[1,2] by 2028

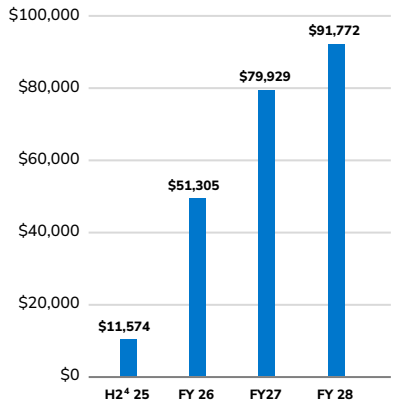
Consolidated Total Revenue

$000



Consolidated Total Adj. EBITDA [1,2]

$000

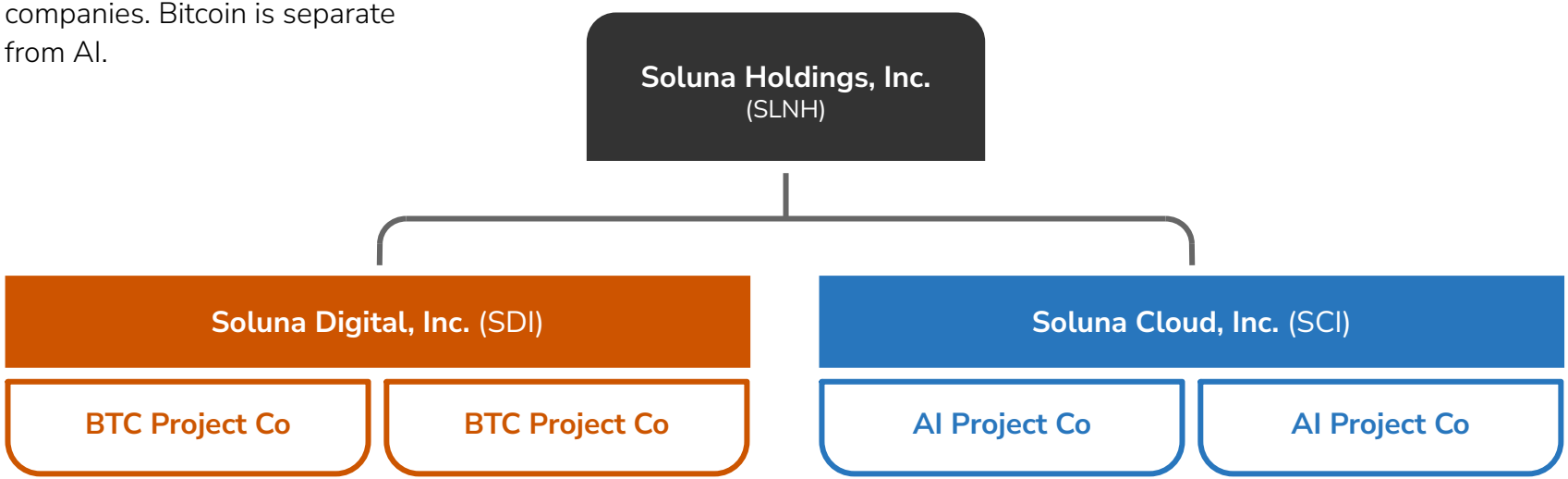


(1) Consolidated Adj. EBITDA is total company EBITDA, including any Soluna SG&A.
(2) Soluna's ownership stake in each of the projects varies. See slides later in the presentation for more details.
(3) Hashprice is a term created by Luxor in 2019. It is a measure used in the Bitcoin mining industry to 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.
(4) H2 is 2nd half or 3rd and 4th quarters of 2025
(5) See Appendix for management statements on non-GAAP measures.

Project Finance & Unit Economics

Our Corporate Structure Supports Flexible Capital Formation for Infrastructure

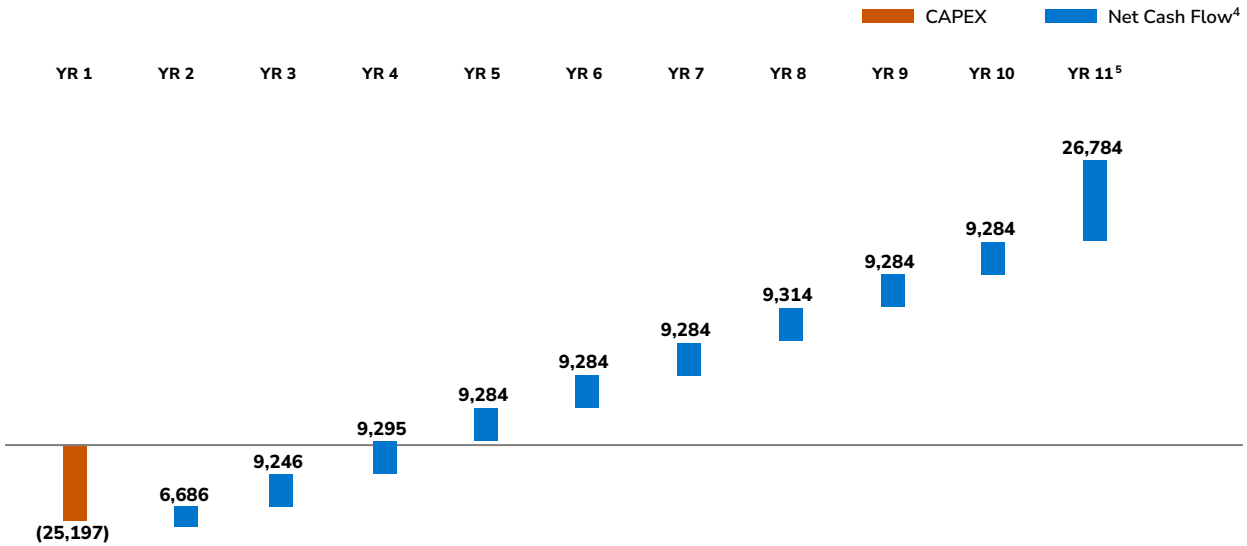
Capital formation occurs at project-level and at parent-level companies. Bitcoin is separate from AI.



Bitcoin Data Center Project [1]

Project Return on Invested Capital (ROIC[2])

- 44 months to return capital
- 34.9% IRR[3]
- 225% ROIC[2]



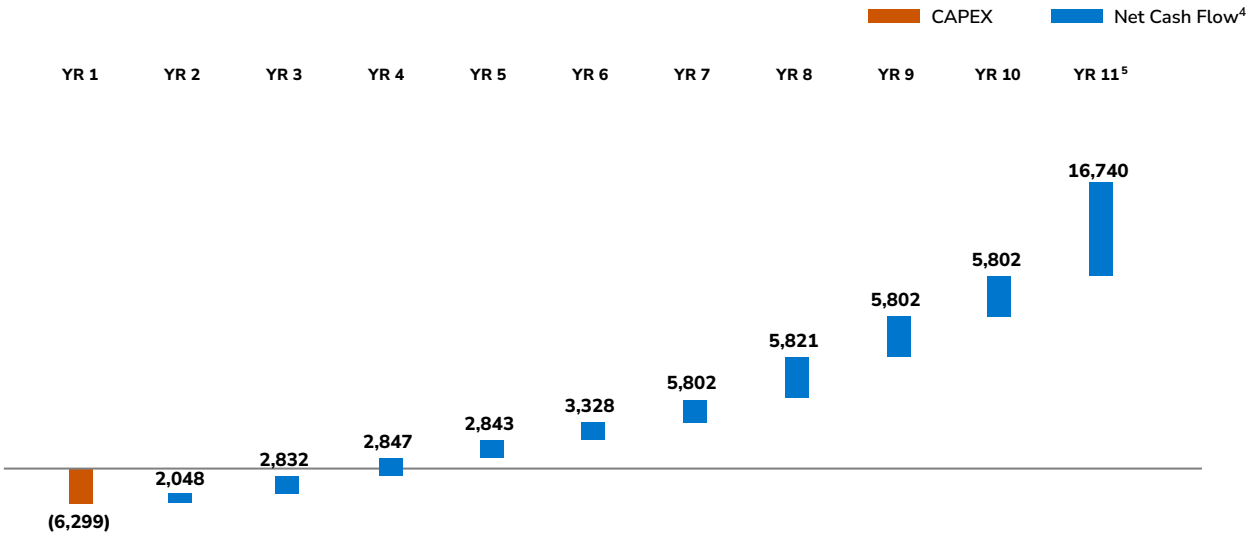
	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11[5]
IRR[3]	—	—	—	*0.1%*	*14.1%*	*21.9%*	*26.7%*	*29.6%*	*31.5%*	*32.8%*	*34.9%*
ROIC[2]	—	—	—	—	*31%*	*63%*	*96%*	*128%*	*160%*	*192%*	*225%*

(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 [1]

Soluna ROIC [2] (25% ownership)

- 38 months to return capital
- 50.1% IRR[3]
- 755% ROIC[2]



	YR 1	YR 2	YR 3	YR 4	YR 5	YR 6	YR 7	YR 8	YR 9	YR 10	YR 11[5]
IRR[3]	—	—	—	*11.2%*	*24.8%*	*33.0%*	*40.6%*	*44.5%*	*46.8%*	*48.1%*	*50.1%*
ROIC[2]	—	—	—	*23%*	*68%*	*121%*	*213%*	*305%*	*397%*	*489%*	*755%*

(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.

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"[5]	Soluna Developer Profit "Post-Flip"[6]	Debt
Dorothy 1A	14.6%	85.4%	-	0%	10%/50%[(1)]	-
Dorothy 1B	51%	-	49%	n/a	n/a	-
Dorothy 2	0%[3]	100%	-	7.5%	50%[(2)]	-
Sophie	100%	-	-	n/a	n/a	$5M

(1) 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%.
(2) 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.
(3) Subject to ongoing capital formation and partner discussion, this could grow.
(4) See Appendix for management statements on non-GAAP measures.
(5) "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
(6) "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.

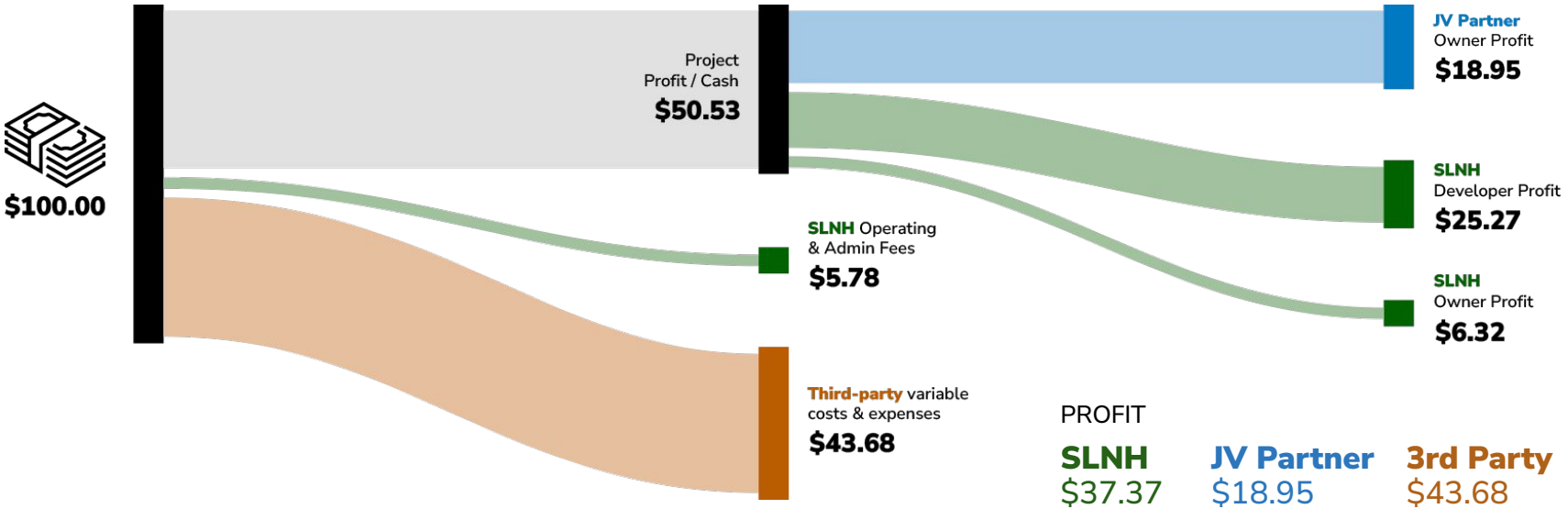
PROFIT

SLNH	JV Partner	3rd Party
$21.26	$35.06	$43.68

(1) "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
(2) 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
(4) 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.



PROFIT

SLNH	JV Partner	3rd Party
$37.37	$18.95	$43.68

(1) “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
(2) 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
(4) 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.

PROFIT

SLNH	JV Partner	3rd Party
$24.72	$20.58	$54.70

(1) 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
(3) See Appendix for management statements on non-GAAP measures.

Summary of Existing Debt [1]

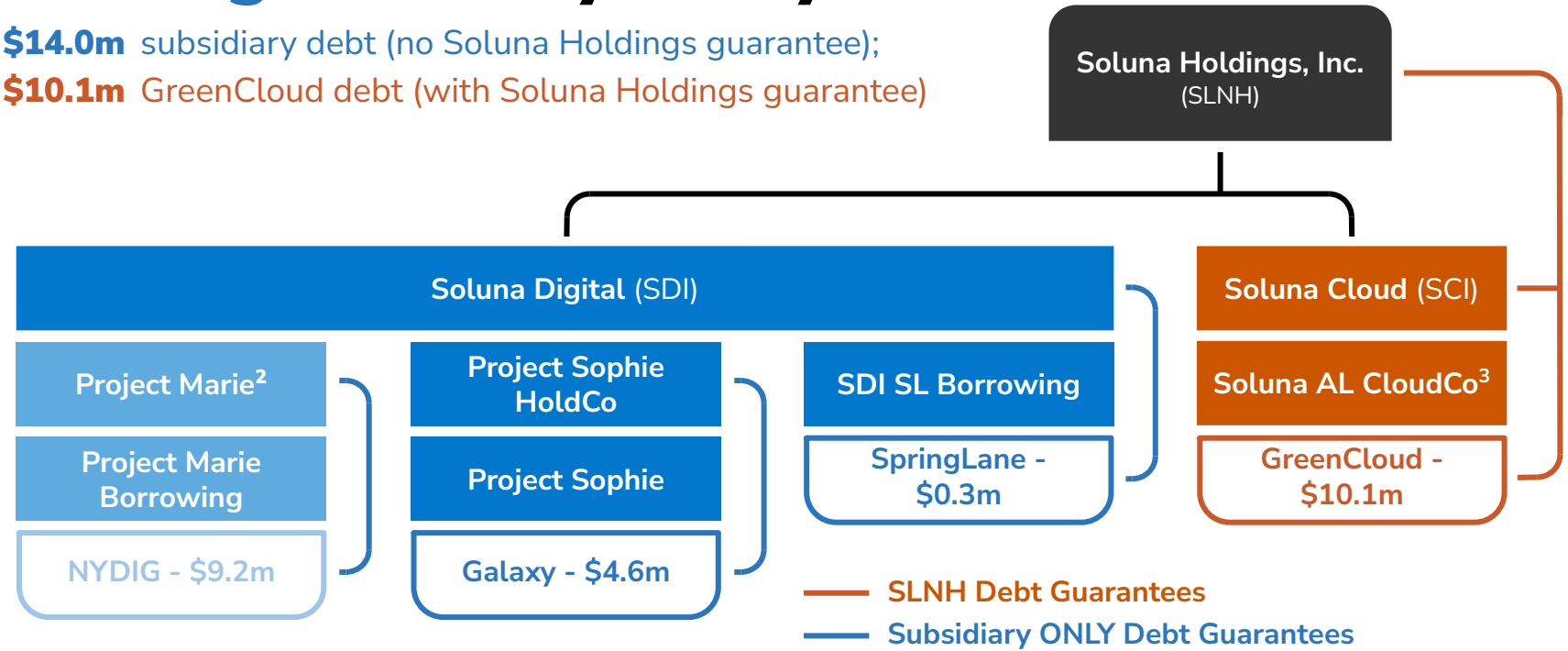
$14.0m subsidiary debt (no Soluna Holdings guarantee);
$10.1m GreenCloud debt (with Soluna Holdings guarantee)[2]

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

(1) As of March 31st 2025, stated in $ thousands unless otherwise noted
(2) Debt held at below listed entities with below listed guarantor(s), if applicable
(3) 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)
(4) 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)
(5) Galaxy Digital note (original principal $5.0m, borrower Soluna SW, LLC and guarantor Soluna SW Holdings, LLC, 5 year amortization from March 2025)
(6) 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 [1] By Entity

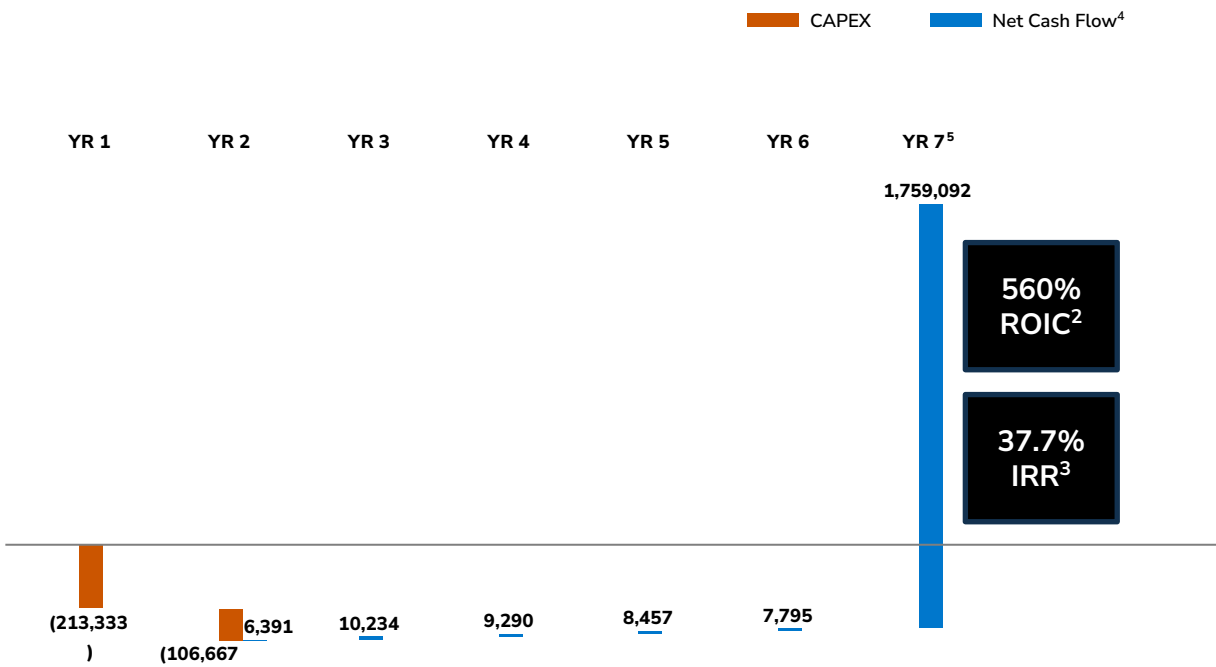
$14.0m subsidiary debt (no Soluna Holdings guarantee);
$10.1m GreenCloud debt (with Soluna Holdings guarantee)



(1) See prior slide entitled "Summary of Existing Debt" additional notes that cover this slide.
(2) Project Marie data center was decommissioned and has no remaining assets.
(3) Soluna AL CloudCo has ceased operations and has no remaining assets.

AI / HPC Data Center Project [1] ROIC [2]

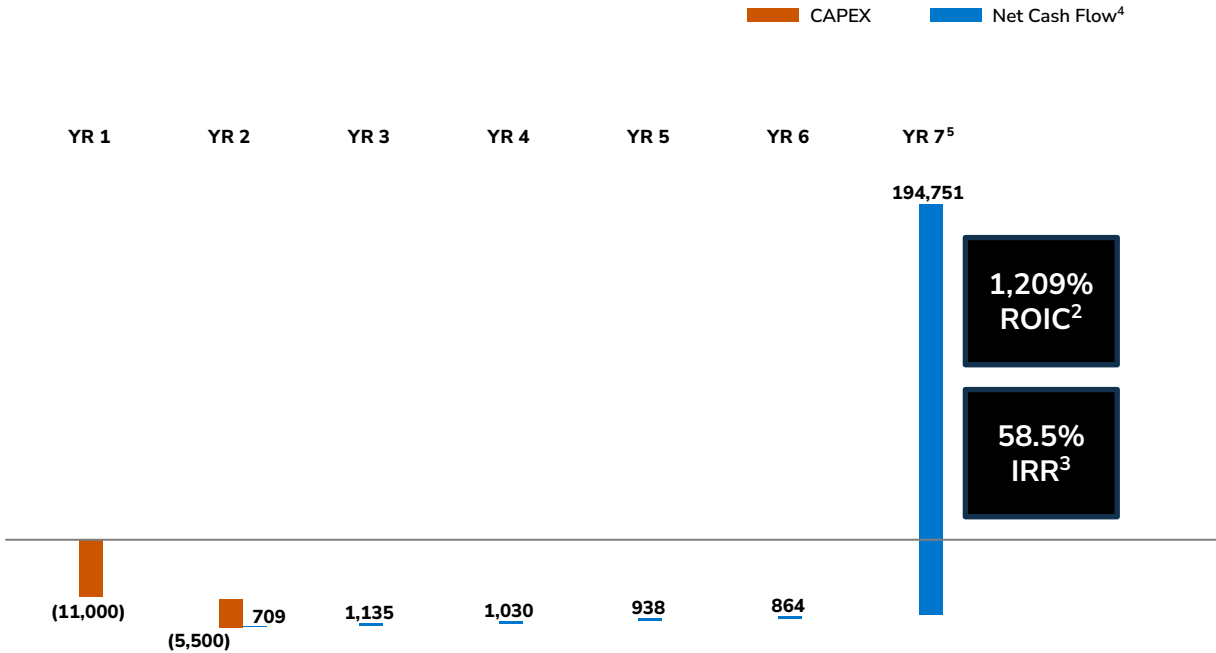
- Capital is returned at refinance
- 37.7% IRR[3]
- 560% ROIC[2]



(1) Key assumptions: (a) Assumes 18-month build period and subsequent 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
(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.

AI / HPC Data Center [1] Soluna ROIC[2]

- Significant uplift to both IRR and ROIC, driven by equity uplift of delivering power and land to the project
- 58.5% IRR[3]
- 1,209% ROIC[2]



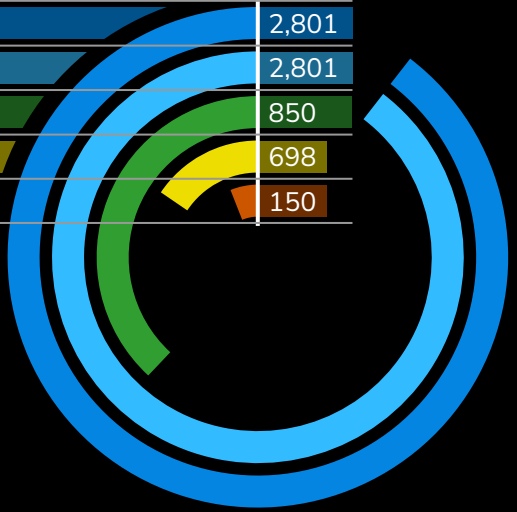
(1) Key assumptions: (a) Assumes 18-month build period and 5 years of operations. (b) Capitalized with non-amortizing, ROIC-based construction debt (~60% LTC, 3-year tenor), refinanced at month 12 into bullet term loan (SOFR + 375 bps, 5–10 year tenor) post-lease signing, (c) 100 MW gross capacity, (d)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

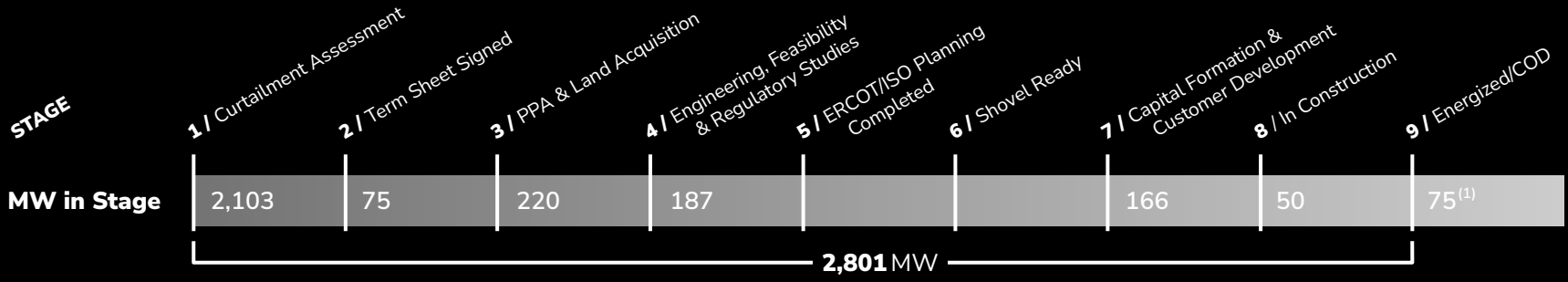
Pipeline & Distinctives

We have a growing pipeline of projects

2GW+ long-term pipeline with large IPPs and infrastructure funds in the US and beyond

	PROJECTS	MW
Total Long-Term Pipeline	22	2,801
Total Curtailment Assessment Completed (YTD)	22	2,801
Active Term Sheet Negotiations	5	850
Shovel Ready, PPA, or Signed Term Sheets	6	698
Average Data Center Project Size		150
Total Power Partners	13	
Average Projects per Power Partner	2	
States	2	

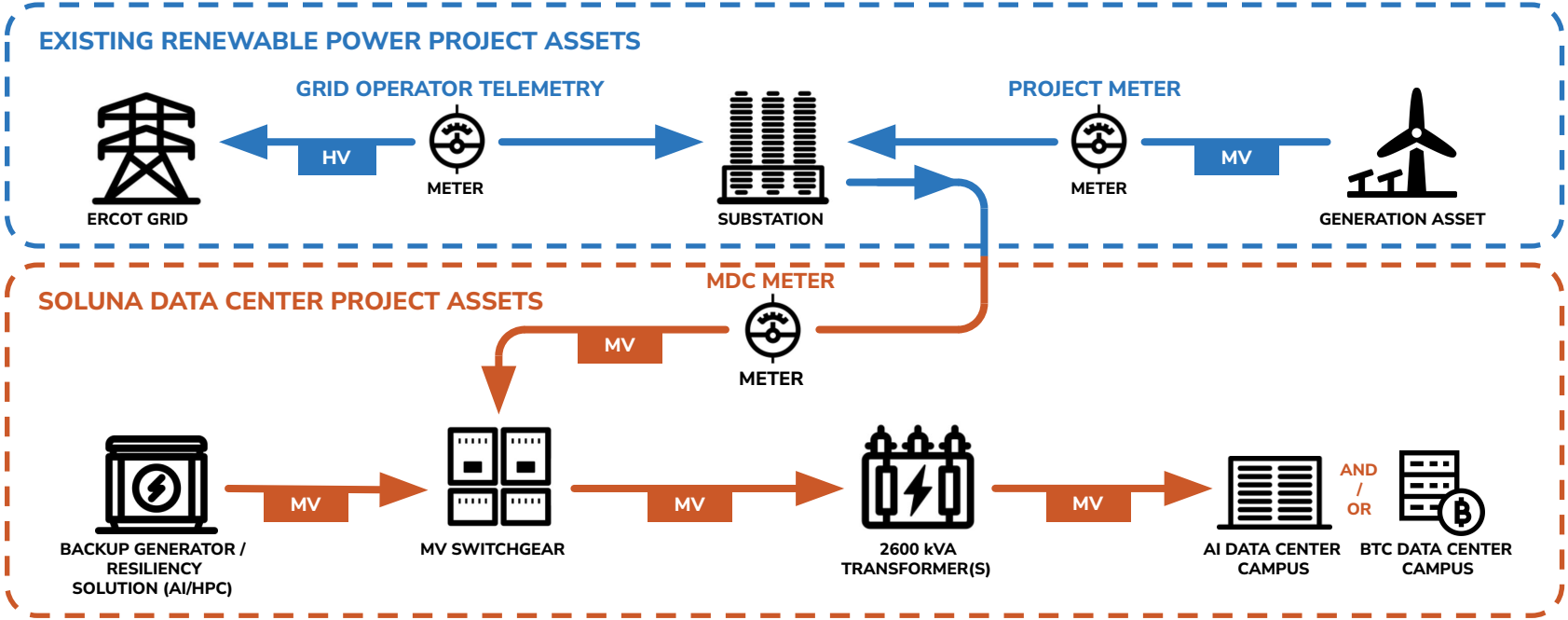




(1) Current operating hosting and mining projects.

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™ 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
Focus & Catalysts

2025 Corporate Focus

Develop AI

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.

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.

Grow Pipeline

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

Our Accomplishments in H1 2025

Business Milestones

- Inked $20M Financing from Spring Lane Capital
- Secured $5 Million in Non-Dilutive Debt Financing from Galaxy Digital
- Reported 80.5% revenue growth YoY — $38M in 2024
- Received Second Patent Award
- Exited HPE Partnership
- Expanded partnerships with Bit Digital and Compass Mining

Project Milestones

- 166 MW Project Kati exited ERCOT planning – land secured and development greenlit
- 48 MW Dorothy 2 began steps to energize and ramp
- 187 MW Project Rosa land secured
- 120 MW Project Hedy term sheet signed
- 100 MW Project Ellen term sheet signed
- 75 MW Project Annie marks first solar-powered facility
- Long term pipeline exceeds 2.8GW
- 160,739 MWh of curtailed energy monetized[1]

(1) through May 2025

Q3-Q4 Roadmap of Upcoming Catalysts

- Energize Phase 1 (16 MW) of Dorothy 2
- Pipeline expansions and new project announcements
- Project-level Capital Formation Progress
- New Dorothy 2 customer announcements
- Development work kickoffs on Projects Rosa, Hedy, Ellen, Annie
- Energize Phase 2 (16 MW) of Dorothy 2
- Financing and Break Ground on Project Kati 1
- Energize Phase 3 of Dorothy 2

IMAGE: Project Dorothy 2 - Phase I energized, Phase II nearing completion, Phase III being framed out.

Company Overview

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.

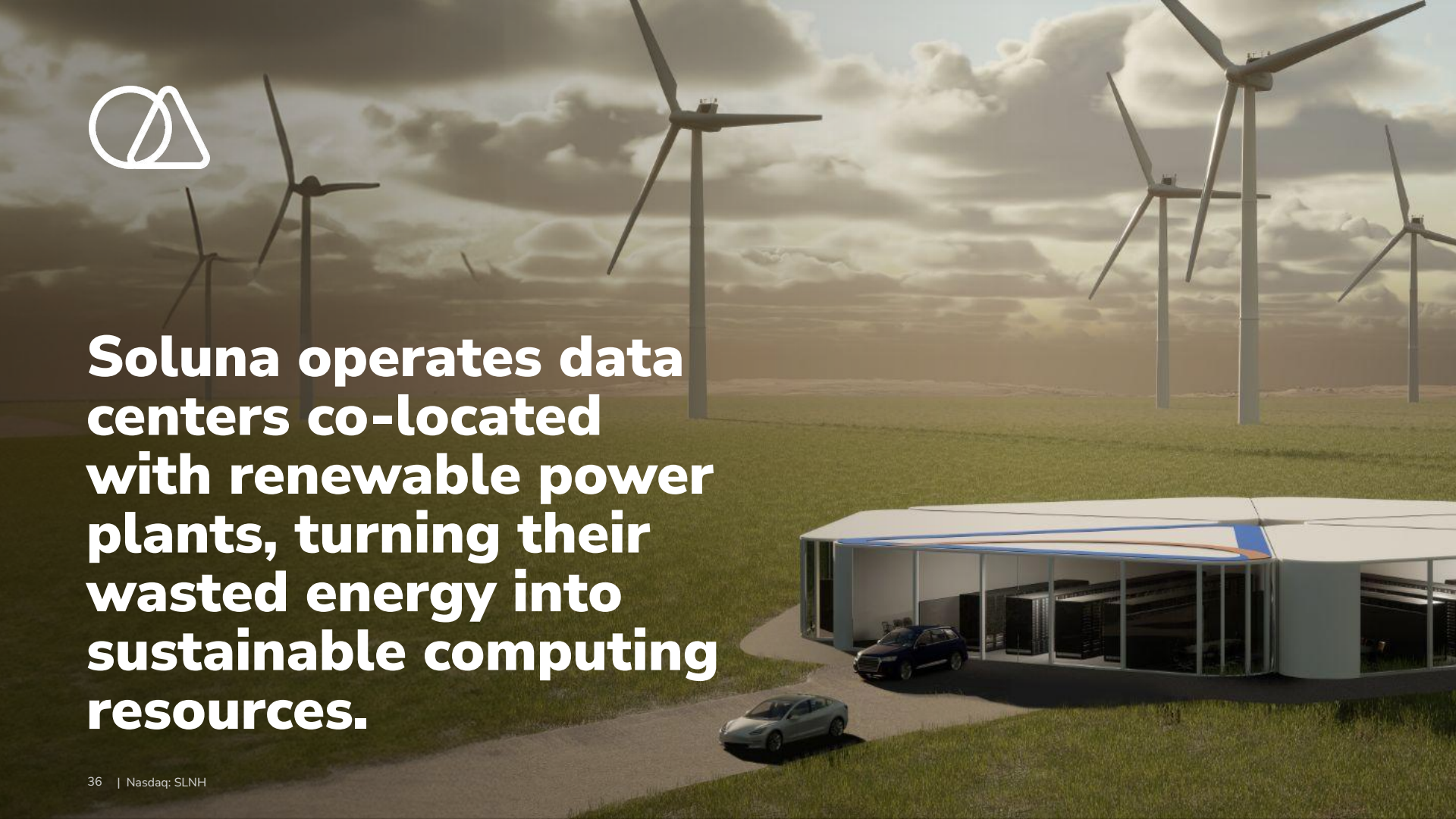
Grid is Constrained

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

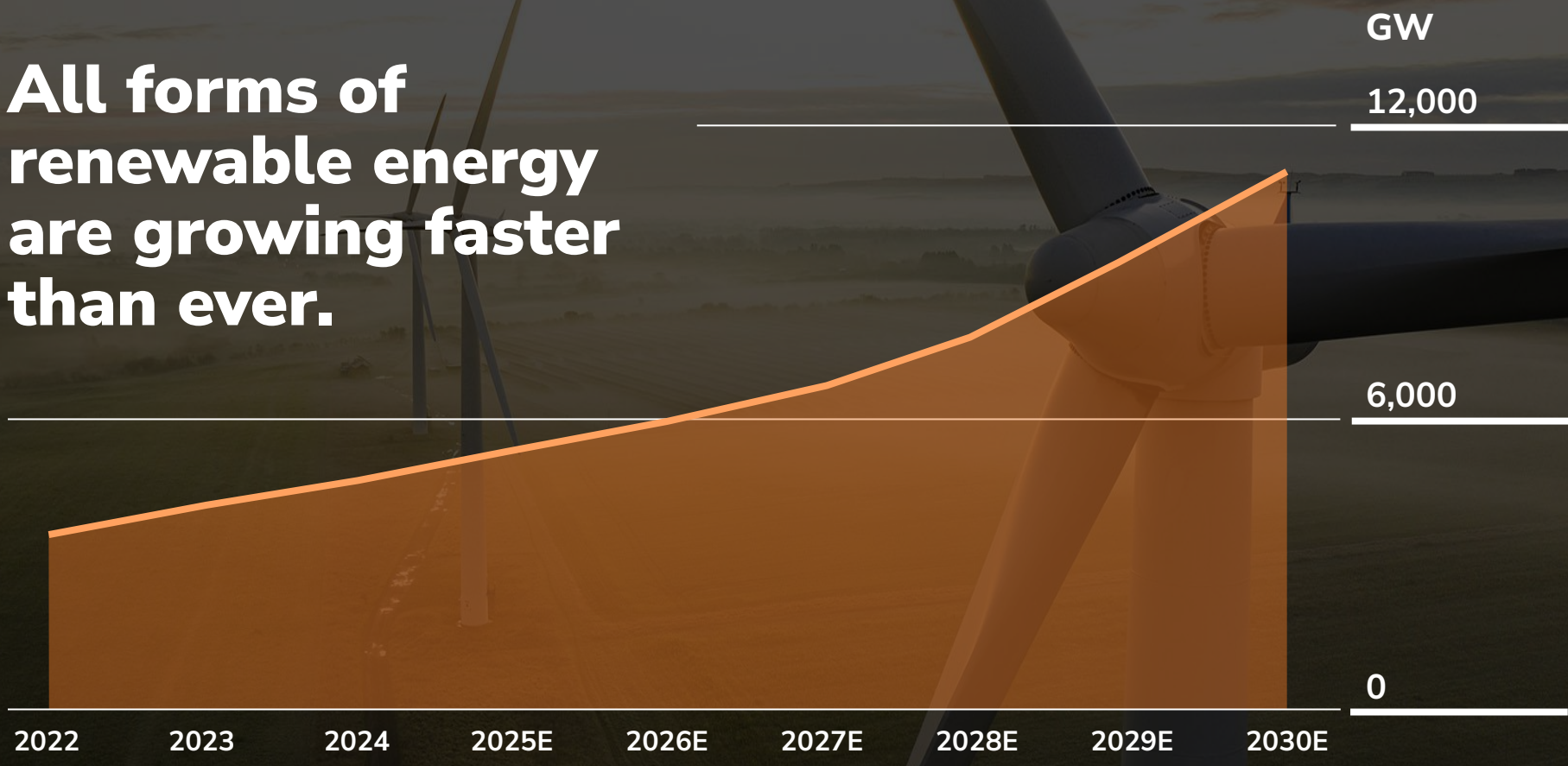
Exploding Compute Demand

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

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


Soluna operates data centers co-located with renewable power plants, turning their wasted energy into sustainable computing resources.

All forms of renewable energy are growing faster than ever.



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

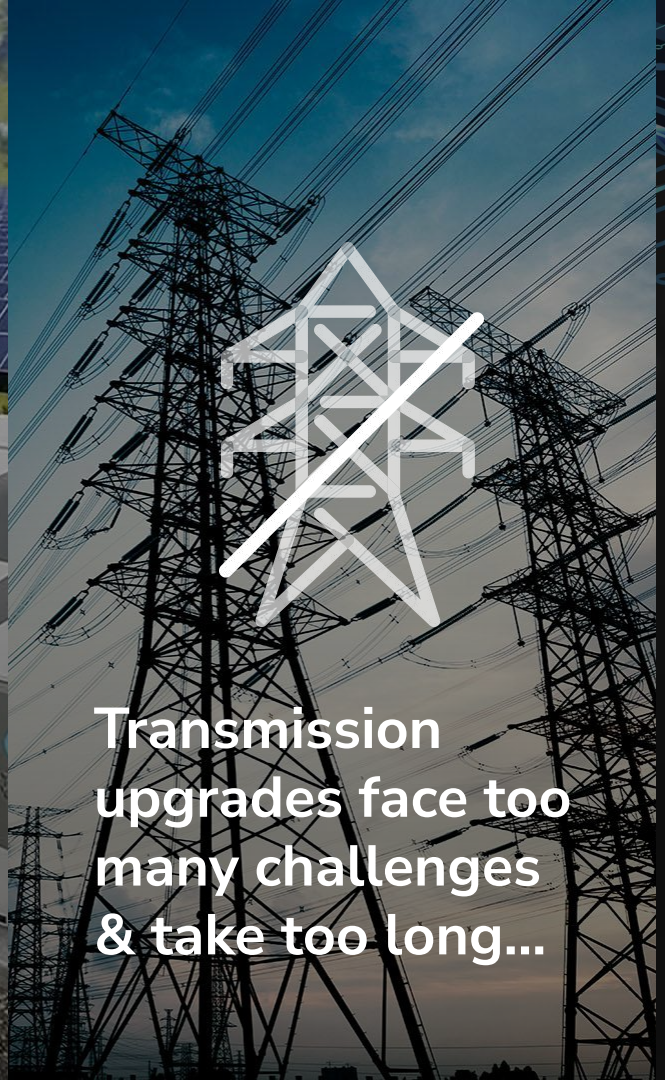
RENEWABLE ENERGY HAS A WASTED ENERGY PROBLEM

30-40%

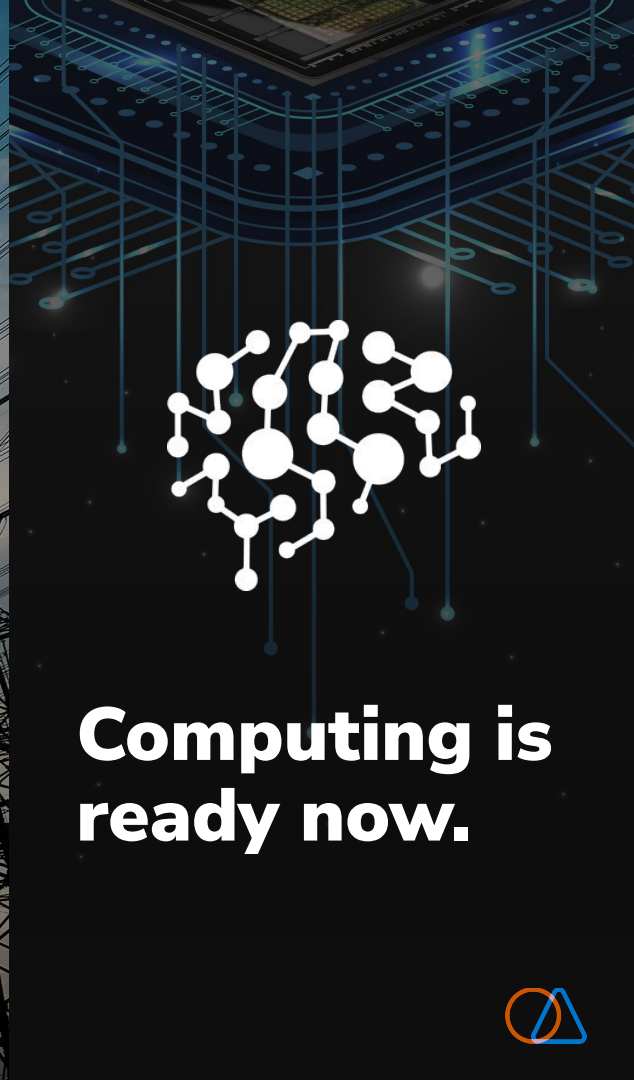
of energy produced by renewable plants goes unused.

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

Storage is not yet sufficiently scalable...



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



Computing is ready now.

Dennard-Scaling Era

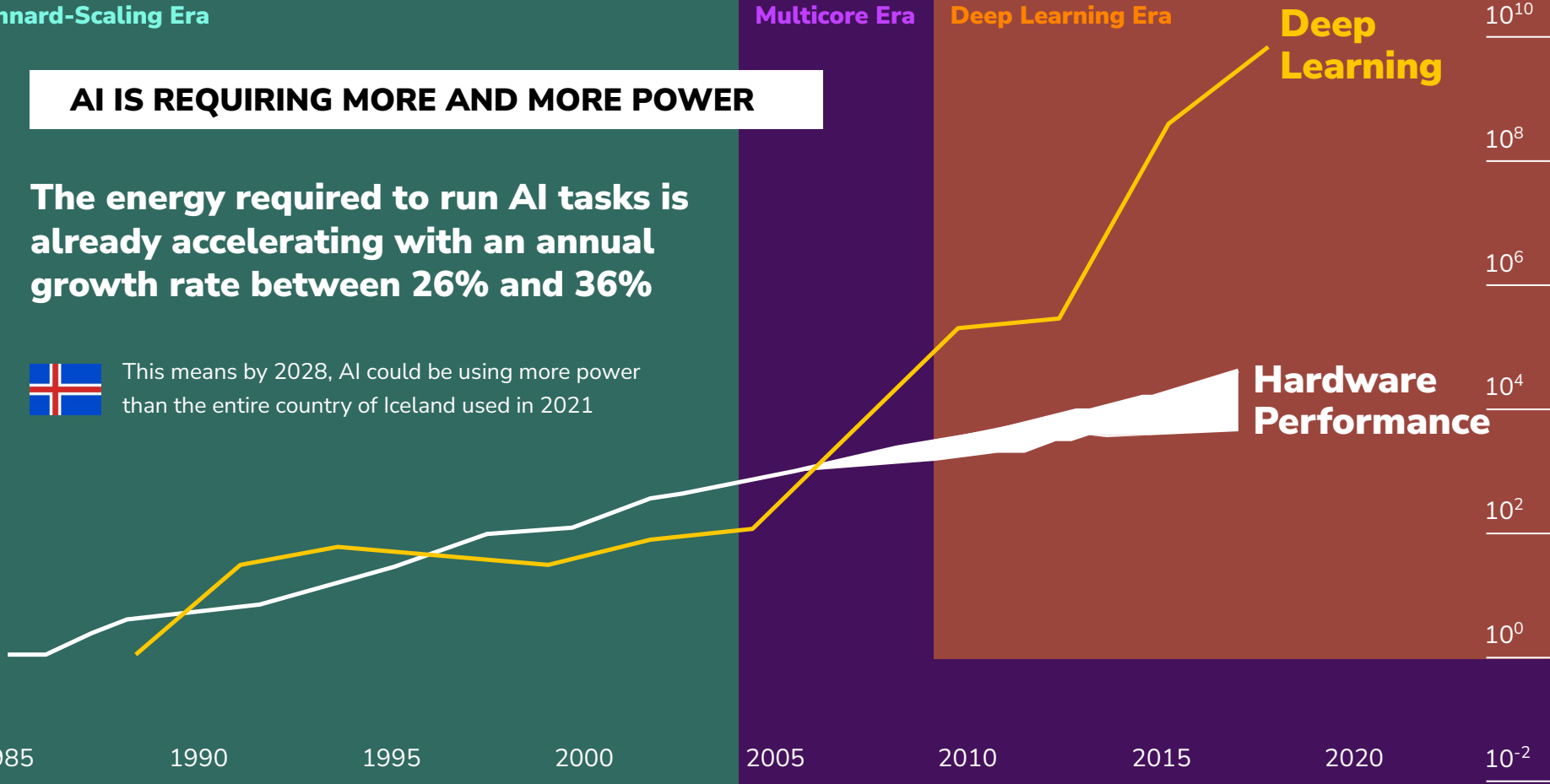
Multicore Era

Deep Learning Era

AI IS REQUIRING MORE AND MORE POWER

The energy required to run AI tasks is already accelerating with an annual growth rate between 26% and 36%

This means by 2028, AI could be using more power than the entire country of Iceland used in 2021



Source: The Computational Limits of Deep Learning, Thompson N et Al - 2022

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.

Batchable process

Real-time process

Training

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 OpenAI's GPT-3 was trained on 10,000 NVIDIA V100 GPUs for 15 days.

Fine Tuning

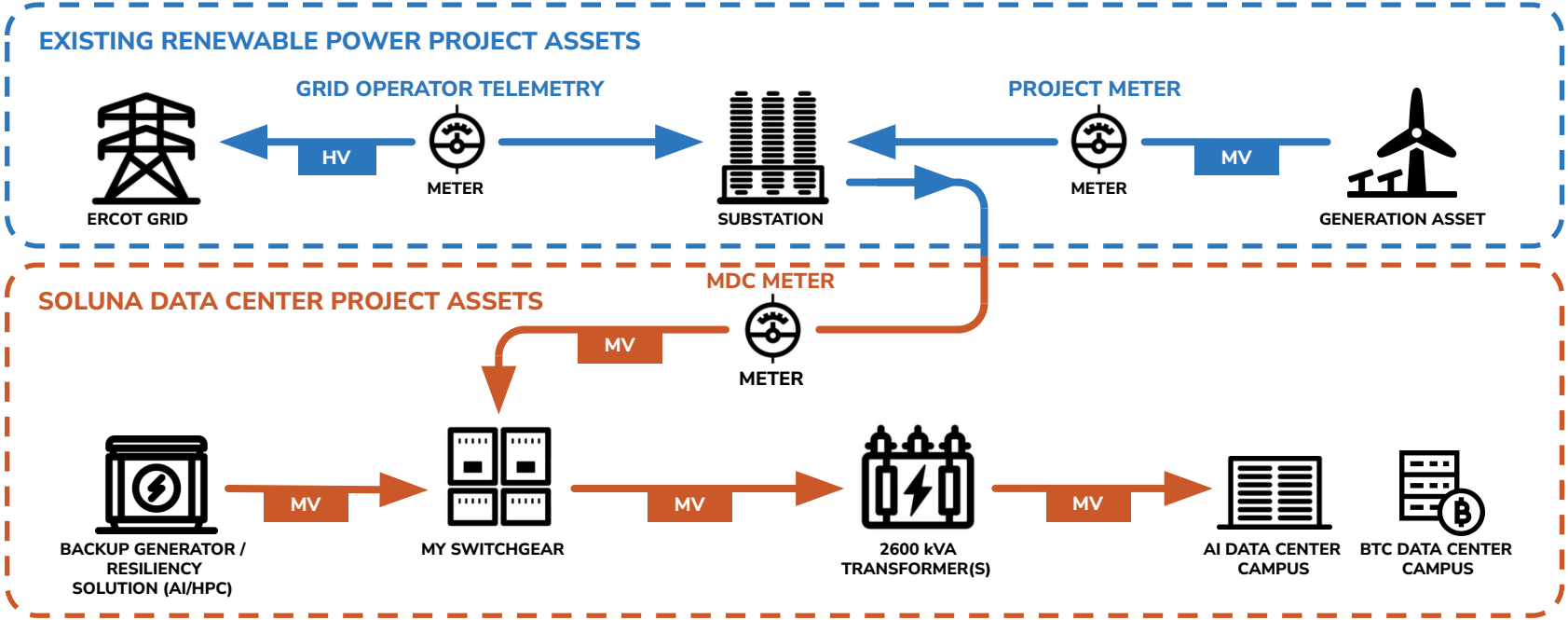
A pre-trained model is trained further on a smaller, task-specific dataset. This phase is where customers may take an off-the-shelf pre-trained model ad fine-tune it to their proprietary information.

Inferencing

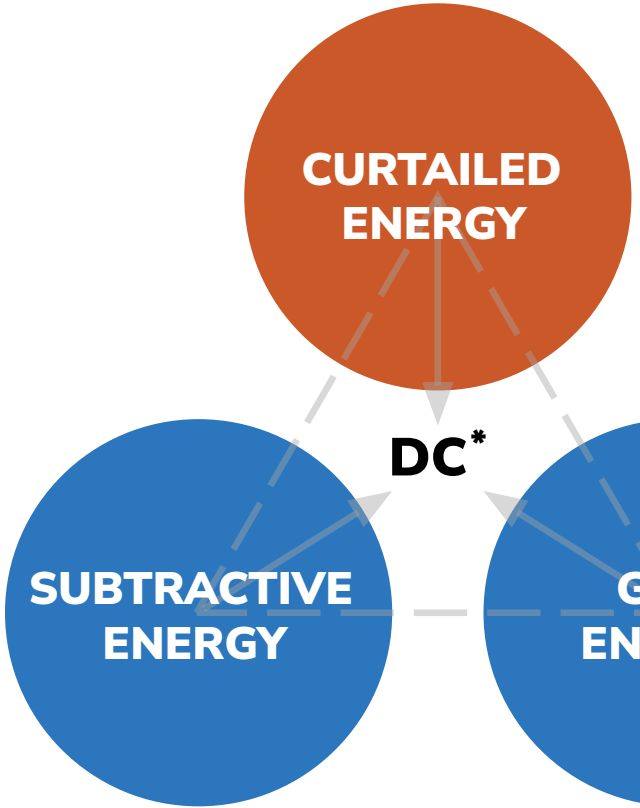
Using a pre-trained model to generate predictions or outputs based on input data. This is 'using' the AI, such as when ChatGPT gives a response, or Stable Diffusion generates an image.

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 curtailment from negative LMP.

Energy that would have gone to grid without the load.

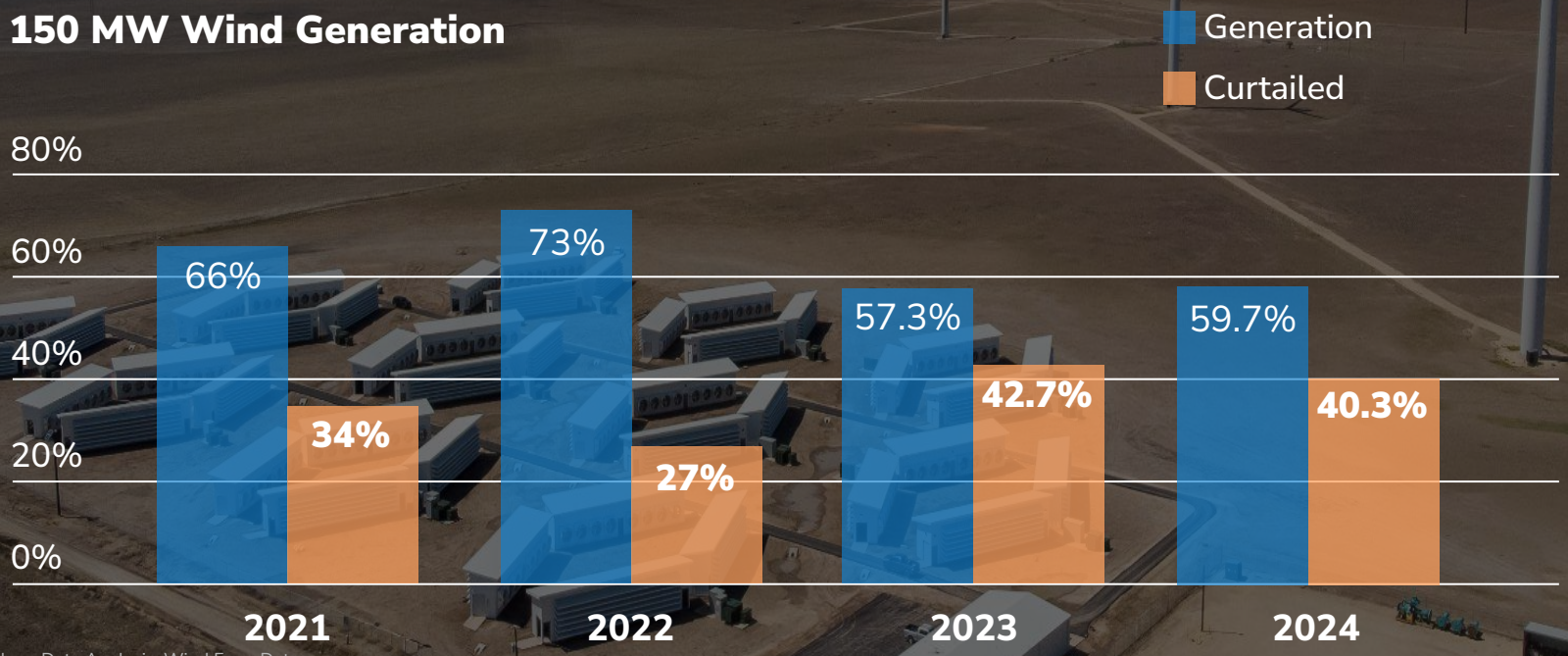
Energy that is sourced from the grid in excess of plant production.

* Soluna BTC or AI Data Center.

CASE STUDY

Texas Wind Farm Curtailment

150 MW Wind Generation

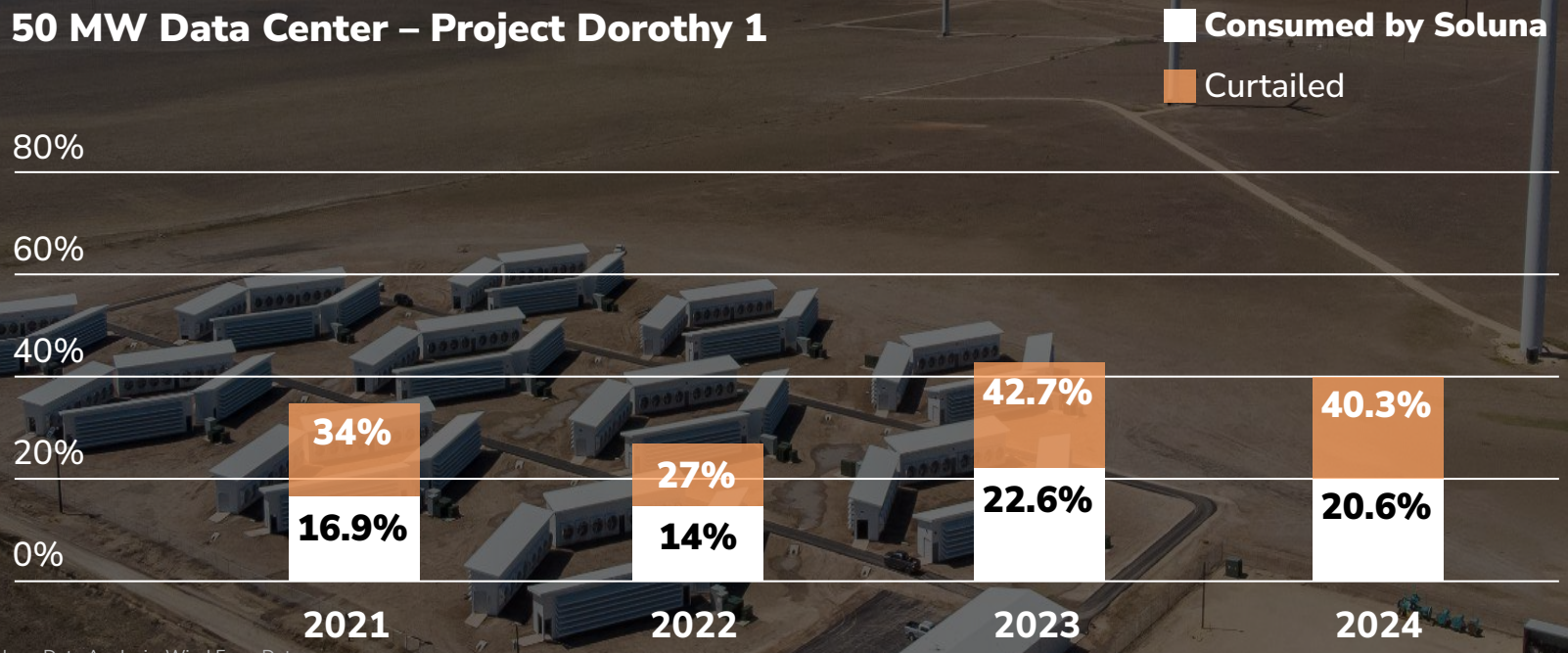


Source: Soluna Data Analysis, Wind Farm Data

CASE STUDY

Soluna Consumes ~50% of Curtailed Energy

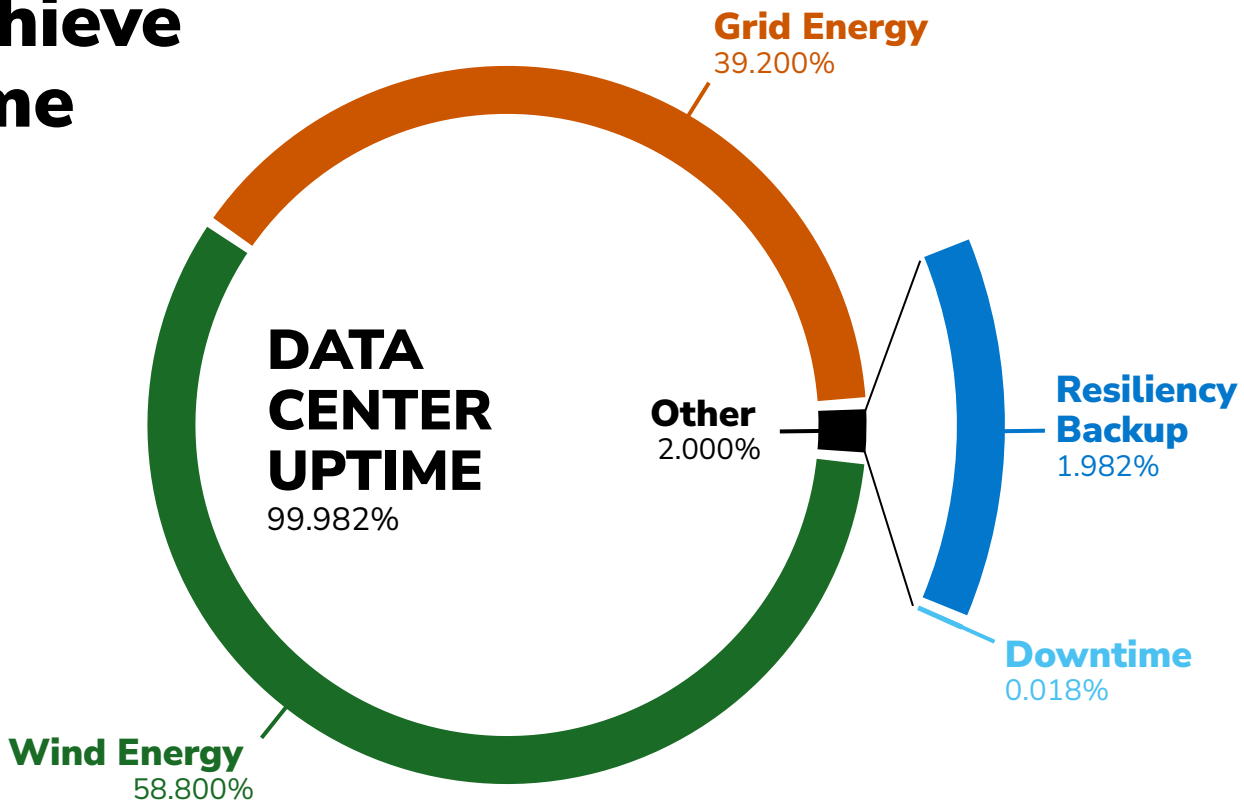
50 MW Data Center – Project Dorothy 1



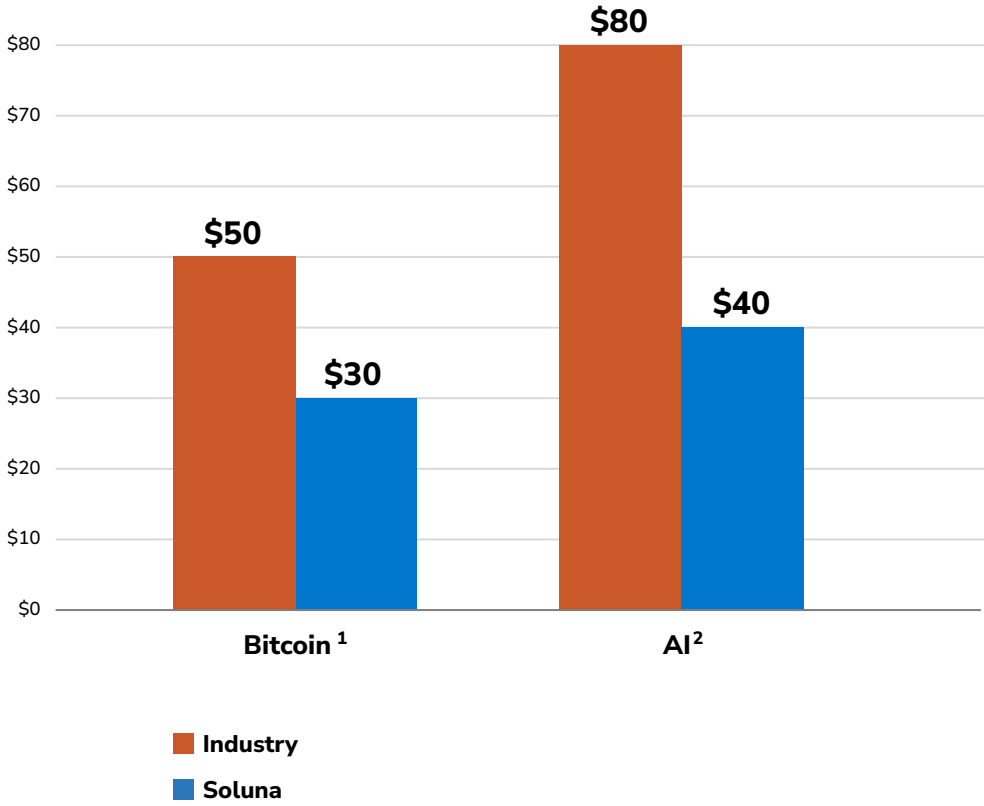
Source: Soluna Data Analysis, Wind Farm Data

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



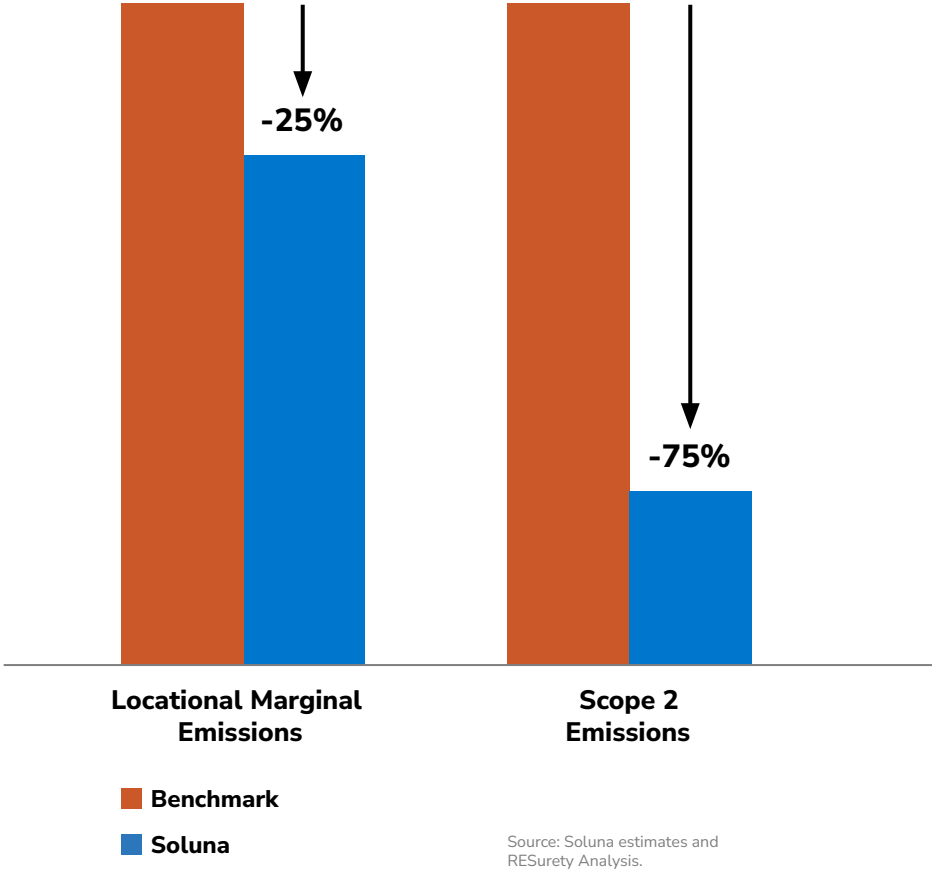
(1) Luxor Research; Public filings from various miners
(2) EIA.gov | https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a

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.

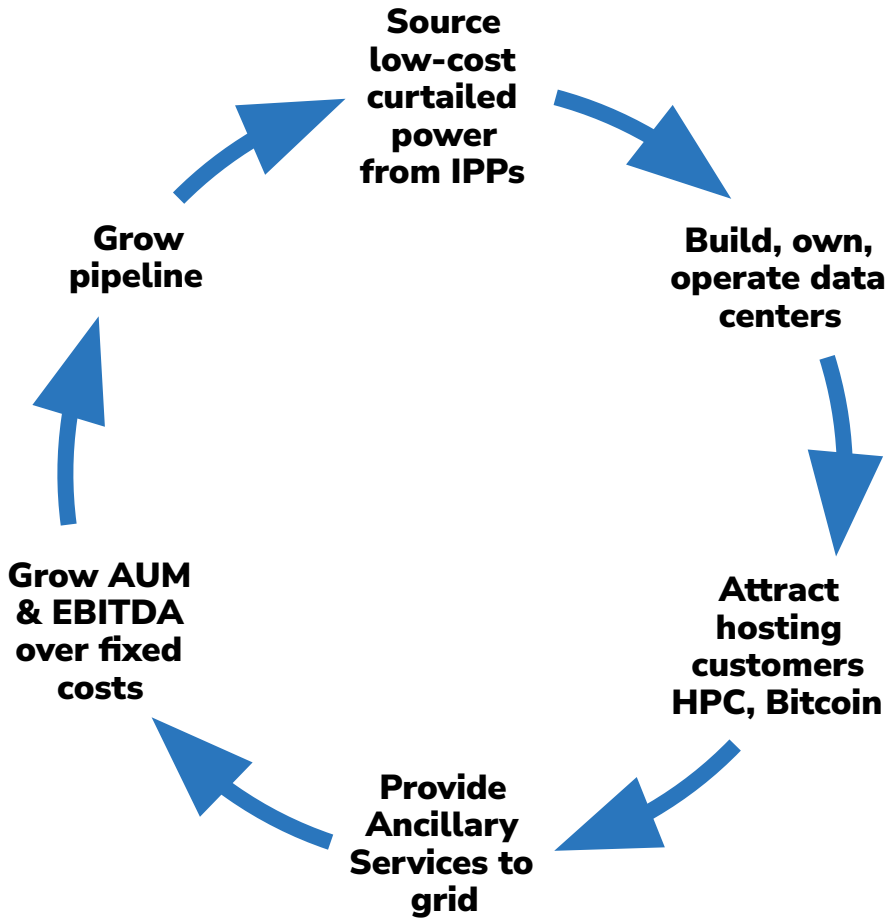
Our current data centers achieve a fraction of the emissions of a typical ATC data center. This model enables real emissions reductions while supporting the growth of renewable energy.



Source: Soluna estimates and RESurety Analysis.

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.



Our Customers by the Numbers [1]

We service some of the Bitcoin industry's largest, most successful miners.

71.8
Total EH/s[2]

54
Total No. Facilities

21.3
Average J/TH

8%
Percentage of Bitcoin Network

BLOCKWARE

BitMine Immersion Technologies

BIT DIGITAL

COMPASS MINING

(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

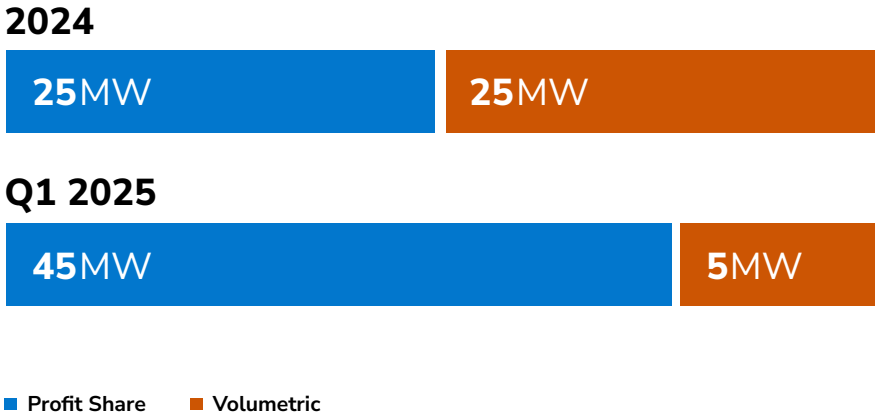
Bitcoin Hosting
Contract Models

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

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

Financial Driver	Volumetric	Profit Share
Hashprice up	no impact	gross profit up
Hashprice 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



Revenue / Profit Potential

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 provider.

CJ Burnett
Compass Mining

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.

Dominik Binder
Head of 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.

Jonathan Bates
CEO, BitMine

Progress on our Mission

2021

JUN 2021
Construction Begins at Project Sophie

AUG 2021
Acquisition of Project Marie

SEP 2021
Project Sophie Energizes

2022

FEB 2022
$20M Debt Financing

APR 2022
Sale of MTI Instruments Subsidiary Business

MAY 2022
$35M Raise from Spring Lane Capital

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

2024

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

2025

MAR 2025
$5M Non-Dilutive Funding from Galaxy Digital Secured; Project Dorothy 2 Energizes

APR 2025
Reports 80.5% Revenue Growth for 2024

MAY 2025
Launch of First Solar Powered Project, 75 MW Annie

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

John Tunison
Chief Financial Officer

Dipul Patel
Chief Technology Officer

Mary O'Reilly
Chief People Officer

Jessica Thomas
Chief Accounting Officer

Phillip Ng
VP, Corporate Development

Larbi Loudiyi
VP, Power

Dan Golding
HPC/AI Advisor

Ernest Popescu
HPC/AI Advisor


SOLUNA
WELCOME TO
RENEWABLE
COMPUTING
Learn more at
solunacomputing.com

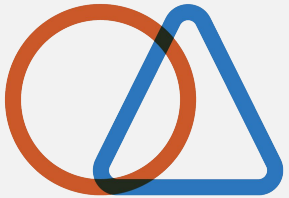
Connect With Us

X / Twitter

@SolunaHoldings

LinkedIn

Soluna Holdings



Newsletter

bit.ly/solunasubscribe

Appendix

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.