

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 13, 2022

MARATHON DIGITAL HOLDINGS, INC.

(Exact Name of Registrant as Specified in Charter)

<u>Nevada</u> (State or other jurisdiction of incorporation)	<u>001-36555</u> (Commission File Number)	<u>01-0949984</u> (IRS Employer Identification No.)
<u>1180 North Town Center Drive, Suite 100 Las Vegas, NV</u> (Address of principal executive offices)		<u>89144</u> (Zip Code)

Registrant's telephone number, including area code: (800) 804-1690

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u> Common Stock	<u>Trading Symbol(s)</u> MARA	<u>Name of each exchange on which registered</u> The Nasdaq Capital Market
--------------------------------------------	----------------------------------	-------------------------------------------------------------------------------

FORWARD-LOOKING STATEMENTS

This Form 8-K and other reports filed by Registrant from time to time with the Securities and Exchange Commission (collectively, the "Filings") contain or may contain forward-looking statements and information that are based upon beliefs of, and information currently available to, Registrant's management as well as estimates and assumptions made by Registrant's management. When used in the Filings the words "anticipate," "believe," "estimate," "expect," "future," "intend," "plan" or the negative of these terms and similar expressions as they relate to Registrant or Registrant's management identify forward-looking statements. Such statements reflect the current view of Registrant with respect to future events and are subject to risks, uncertainties, assumptions and other factors relating to Registrant's industry, Registrant's operations and results of operations and any businesses that may be acquired by Registrant. Should one or more of these risks or uncertainties materialize, or should the underlying assumptions prove incorrect, actual results may differ significantly from those anticipated, believed, estimated, expected, intended or planned.

Although Registrant believes that the expectations reflected in the forward-looking statements are reasonable, Registrant cannot guarantee future results, levels of activity, performance or achievements. Except as required by applicable law, including the securities laws of the United States, Registrant does not intend to update any of the forward-looking statements to conform these statements to actual results.

ITEM 7.01 Regulation FD Disclosure

On September 13, 2022, Hugh Gallagher, CFO of Marathon Digital Holdings, Inc. (the "Company"), is making a presentation at the H.C. Wainwright 24th Annual Global Investment Conference at 9:00 AM ET, which is also being posted on its website at: <https://ir.marathondh.com/company-information/presentations>.

ITEM 9.01 Exhibit

Exhibit 99.1 [September 2022 IR Presentation](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: September 13, 2022

MARATHON DIGITAL HOLDINGS, INC.

By: /s/ Fred Thiel

Name: Fred Thiel

Title: Chief Executive Officer and Chairman of the Board



MARATHON™
DIGITAL HOLDINGS

**Securing & Supporting the
Bitcoin Ecosystem**

NASDAQ: **MARA**

SEPTEMBER 2022

SAFE HARBOR STATEMENT

Statements made in this presentation include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements can be identified by the use of words such as “may,” “will,” “plan,” “should,” “expect,” “anticipate,” “estimate,” “continue,” or comparable terminology. Such forward-looking statements are inherently subject to certain risks, trends and uncertainties, many of which the Company cannot predict with accuracy and some of which the Company might not even anticipate and involve factors that may cause actual results to differ materially from those projected or suggested. Readers are cautioned not to place undue reliance on these forward-looking statements and are advised to consider the factors listed above together with the additional factors under the heading “Risk Factors” in the Company's Annual Reports on Form 10-K, as may be supplemented or amended by the Company's Quarterly Reports on Form 10-Q. The Company assumes no obligation to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

DISCLAIMER

This presentation is not intended to be and should not be considered as forward-looking statements by the Company. It is impossible to forecast what the price of bitcoin, hash rate, or the difficulty rate will be on any specific date, including during 2023, when all the Company's miners are expected to be deployed. This presentation is for illustrative purposes only to provide the reader with an estimate of the Company's potential gross revenue, mining power and hosting costs, which might be attained if all miners were deployed as of a specific date and with certain parameters used, as set forth below. The parameters used were network hash rate projections from BitOoda's research reports and bitcoin price ranging from \$19,000 - \$40,000.

INVESTOR NOTICE

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully consider the risks, uncertainties and forward-looking statements described under "Risk Factors" in Item 1A of our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2021. If any of these risks were to occur, our business, financial condition or results of operations would likely suffer. In that event, the value of our securities could decline, and you could lose part or all of your investment. The risks and uncertainties we describe are not the only ones facing us. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. In addition, our past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results in the future. Lastly, with the current worldwide situation caused by COVID-19, there can be no assurances as to when we may see any long-term sustained recovery in the bitcoin market, and if so, whether any recovery might be significant.

Recent Company Highlights

TICKER SYMBOL

MARA

Share Price **\$14.43**

Market Cap **\$1.7B**

Shares Issued & Outstanding **116.8M**

Avg. Daily Trading Volume **19.7M**

AS OF SEPT 12, 2022¹

RECENT CORPORATE UPDATES

\$71.4 Million in Unrestricted Cash

\$130 Million in Unrestricted BTC (6,483 BTC)

34,000 Miners in Operation → 3.2 EH/s

Transitioning Out of Hardin, MT Facility by End of September 2022

AS OF AUG 31, 2022²

Marathon at-a-Glance

AGILE, SCALABLE, & SUSTAINABLE

OUR MISSION

To support the development and security of the world's first public blockchain (Bitcoin) by building one of the largest, most agile, and most sustainably operated bitcoin mining operations in the world.

OUR STRATEGY

Invest in Miners > Infrastructure
Prioritize efficiency and minimize costs

OUR FOCUS

Increasing hash rate (probability of earning bitcoin)



Growing from 3.2 EH/s in Aug 2022 to 23 EH/s in mid 2023

OUR IMPACT

Deploying at renewable power stations



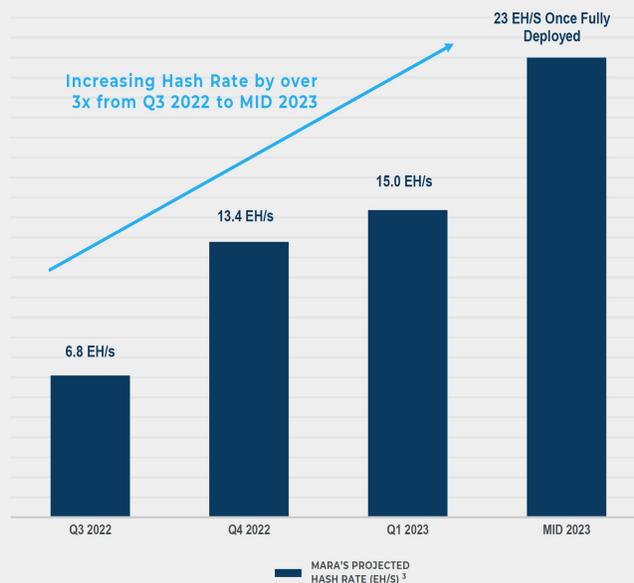
On track to be 100% carbon neutral
Returning energy back to the grid in times of crisis

Operating with low costs of power + hosting



Strong relationships with multiple hosting companies and energy providers

PROJECTED HASH RATE GROWTH



Scale + Low Cost of Operations → Resilience & Leverage

In 2023, once all 23 EH/s of miners are installed & energized...

Bitcoin "Bear" Case

Potentially Higher BTC Production

Price of Bitcoin	\$19,200		
Total Network's Hash Rate	288 EH/s		
Marathon's % of the Total Bitcoin Network's Hash Rate	7.9%		
	Per Day	Per Month	Per Year
BTC Produced	70	2,170	26,040
Revenue	\$1.4M	\$41.7M	\$500.4M

Base Case

Price of Bitcoin	\$26,560		
Total Network's Hash Rate	332 EH/s		
Marathon's % of the Total Bitcoin Network's Hash Rate	6.9%		
	Per Day	Per Month	Per Year
BTC Produced	61	1,880	22,560
Revenue	\$1.65M	\$50.0M	\$600.5M

Bitcoin "Bull" Case

Potentially Improved Financial Performance

Price of Bitcoin	\$38,840		
Total Network's Hash Rate	356 EH/s		
Marathon's % of the Total Bitcoin Network's Hash Rate	6.4%		
	Per Day	Per Month	Per Year
BTC Produced	57	1,760	21,120
Revenue	\$2.2M	\$68.2M	\$818.9M

*See slide 33 for detailed overview of assumptions.

Bitcoin vs Internet Users Growth

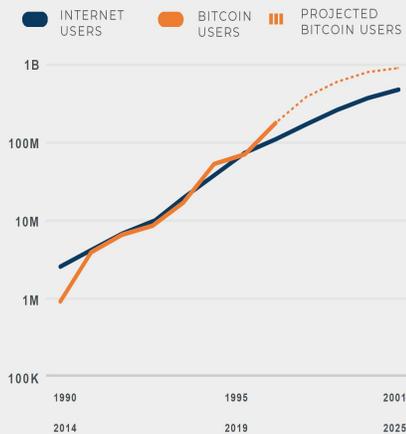
At the end of 2021, there were as many users of Bitcoin as there were Internet users in early 1998, but...

Bitcoin's adoption is growing faster than the Internet's did, with nearly 1 billion users expected by 2025 ⁴

In 2021, Bitcoin processed over \$13 trillion worth of transactions, surpassing Visa

45%+ of on-chain transactions over \$10 million, indicating increased institutional activity

BTC NETWORK'S NUMBER OF USERS⁵



BTC vs. VISA TRANSACTIONS⁶



BTC NETWORK'S TRANSFER VOLUME (\$)⁷



A Bitcoin Miner of a Different Breed

SECOND QUARTER 2022 HIGHLIGHTS

THE MARATHON MINING METHOD: BE AGILE. GET BIG.

Maximizing return on assets and agility by investing in miners rather than infrastructure
Growing hash rate from 3.2 EH/s in Aug 2022 to 23 EH/s by mid 2023⁸
< 25 full time employees

EFFICIENTLY SCALING

+60% of hash rate powered by S19 XPs (27% more energy efficient than prior generation) when fully deployed
Paying low cost for electricity + hosting
Low-cost production ▶ profitability in bull markets & resilience in bear markets

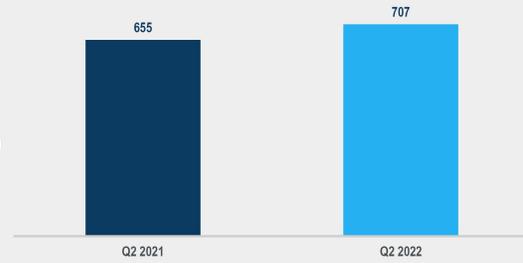
LIQUIDITY & ACCESS TO CAPITAL

\$71.4M in unrestricted cash on hand – 8/31/22
\$130M in unrestricted BTC (6,483 BTC) – 8/31/22
Equity capital access through ATM program ▶ \$161 million YTD through 6/30/22
Access to \$200M term loan and RLOC facilities collateralized by BTC ▶ \$50M drawn – 8/31/22

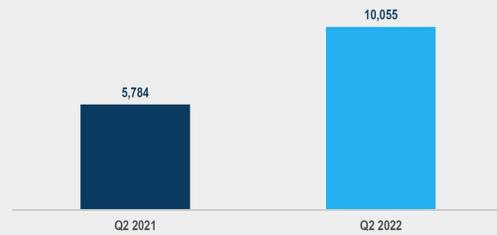
QUALITY RELATIONSHIPS

Access to top-tier mining hardware
Access to low energy costs
Strong relationships with hosting companies & sustainable power providers

BTC PRODUCTION



BTC HELD



⁸For adjusted EBITDA definition, see appendix slide 21.

Asset Light Model: Optimized for Agility & Flexibility

LACK OF INFRASTRUCTURE INVESTMENT LEADS TO...



Co-locating at renewable energy sites

- Decreased dependency on fluctuating grid energy
- Benefits from selling excess power to back to the grid
- Behind the meter to avoid competing with consumers



Increasing Flexibility

- Ability to move servers to sites with better economics, tech, etc.
- No long-term ties to real estate & PPA agreements
- Geographic diversification



Optimizing ROI on CAPEX

- Maximize investment in revenue generating assets
- Relatively liquid assets that can be relocated or resold
- Lean internal headcount

Asset Light Model: Key to Staying Ahead of the Technology Curve

Mining continues to evolve, which requires...

- Reinvesting in or renovating existing facilities ~ every 5 years

An Asset Light Approach...

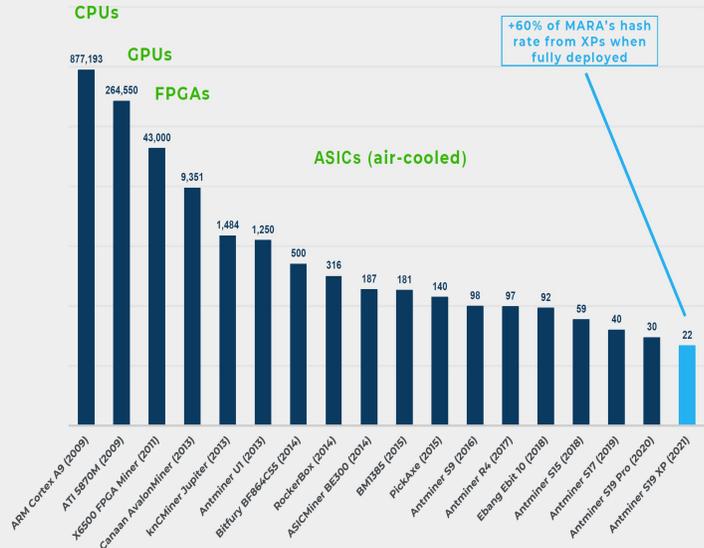
- Minimizes the need to deploy capital into fixed structures
- Frees up capital to invest in revenue generating assets
- Provides optionality to upgrade to latest and most efficient servers

Marathon in Practice...

- +60% of hash rate powered by S19 XPs – 21.5 J/TH & 27% more energy efficient than the prior gen – once fully deployed
- Efficiency of approximately 24.2 J/TH once fully deployed
- Positioned for immersion

INVESTING IN THE INDUSTRY'S MOST EFFICIENT EQUIPMENT

MINING HARDWARE (LOG SCALE, J/TH)⁹



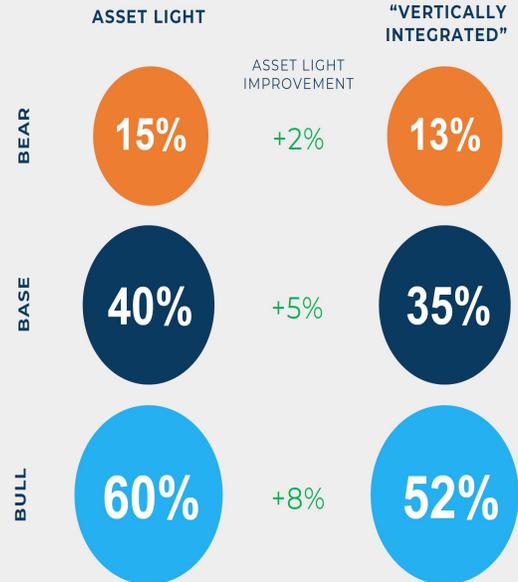
Asset Light Model Provides Superior Return & Optionality

THEORETICAL RETURNS OF AN ASSET LIGHT VS. "VERTICALLY INTEGRATED" MODEL OVER A 5-YEAR PERIOD*

	ASSET LIGHT	"VERTICALLY INTEGRATED"
<i>Assumptions</i>		
Total Capital to Invest (\$MM)	\$226	\$226
Power + Hosting/Operating costs	\$0.065/kWh	\$0.055/kWh
Deployment Date	Oct '22	Oct '22
<i>CAPEX (\$MM)</i>		
# of Miners (140 TH/s) Purchased	32,292	26,578
Miners	\$226	\$186
Infrastructure	\$0	\$40
Total CAPEX	\$226	\$226
<i>Income Statement (\$MM)</i>		
Revenue (BTC)	14,841	12,215
Revenue (\$MM)	\$826	\$679
Cost of Revenues (Power + Hosting + Hosting Operations)	(\$277)	(\$193)
EBITDA	\$549	\$487
D&A	(\$226)	(\$226)
EBIT	\$323	\$261
Net Present Value (NPV)	\$160	\$124
Internal Rate of Return (IRR)	40%	35%

*See slide 32 for detailed overview of hash rate and Bitcoin price assumptions.

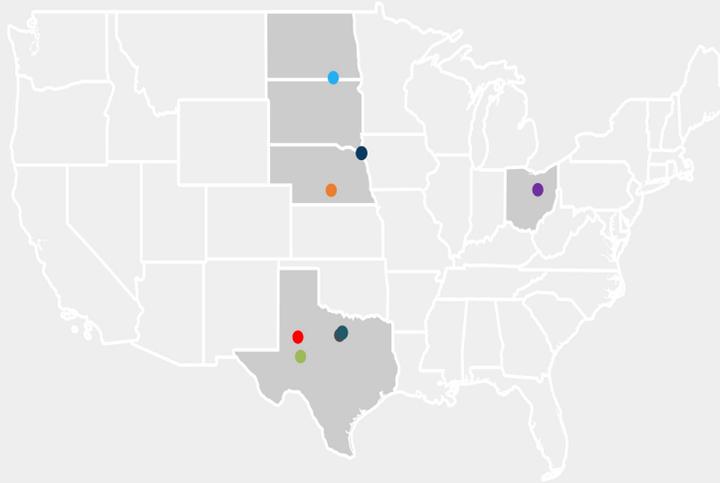
IRR OVER A 5-YEAR PERIOD*



Distributed Mining Operations

Installing 23 EH/s by mid 2023 with multiple hosting providers across multiple geographies

On track to be 100% carbon neutral



HOSTED BY COMPUTENORTH

● KING MOUNTAIN, TX | Wind + Grid

- ~7.0EH/s | ~200 MW
- ~29,000 active servers
- Under construction

● GRANBURY, TX | Grid

- ~3.2EH/s | ~80 MW
- ~2,800 active servers
- Under construction

● KEARNEY, NE | Grid

- ~0.2EH/s | ~8 MW
- ~2,300 active servers

● NORTH SIOUX CITY, SD | Grid

- ~0.07EH/s | ~2 MW
- ~700 active servers

HOSTED BY APPLIED BLOCKCHAIN

● ELLENDALE, ND | Grid

- ~8.0EH/s | ~180 MW
- Under construction

● GARDEN CITY, TX | Grid

- ~4.2EH/s | ~90 MW
- Under construction

HOSTED BY OTHER

● COSHOCTON, OH | Nuclear + Grid

- ~0.33EH/s | ~10 MW
- Under construction

● PLANO, TX | Grid

- ~0.08EH/s | ~2 MW
- Under construction

ESG – Environmental. Social. Governance.

DOING GOOD & DOING IT WELL



ENVIRONMENTAL

- On track to be 100% carbon neutral
- Transitioned away from coal-powered plant in Hardin, MT
- Leveraging sustainable power at the source
- Incentivizing & facilitating the transition to renewable energy



Solar



Wind



Biomass



Nuclear



SOCIAL

- Voluntarily curtailing to supply local communities & businesses with power in times of crisis
- Supporting & securing a global network that:
 1. Enhances financial inclusion
 2. Empowers greater economic freedom



GOVERNANCE

- Transparency & accountability throughout company & operations
- Informed & effective decision making by board of directors & governance structure
- Monitoring performance & maintaining compliance
- Insight into operations and bitcoin production in real time via MaraPool

Innovating within the Technology Stack

MARA RESEARCH LAB

- Researching and testing new technologies (incl. immersion, hardware, firmware, miner software, etc.) to improve mining efficiency

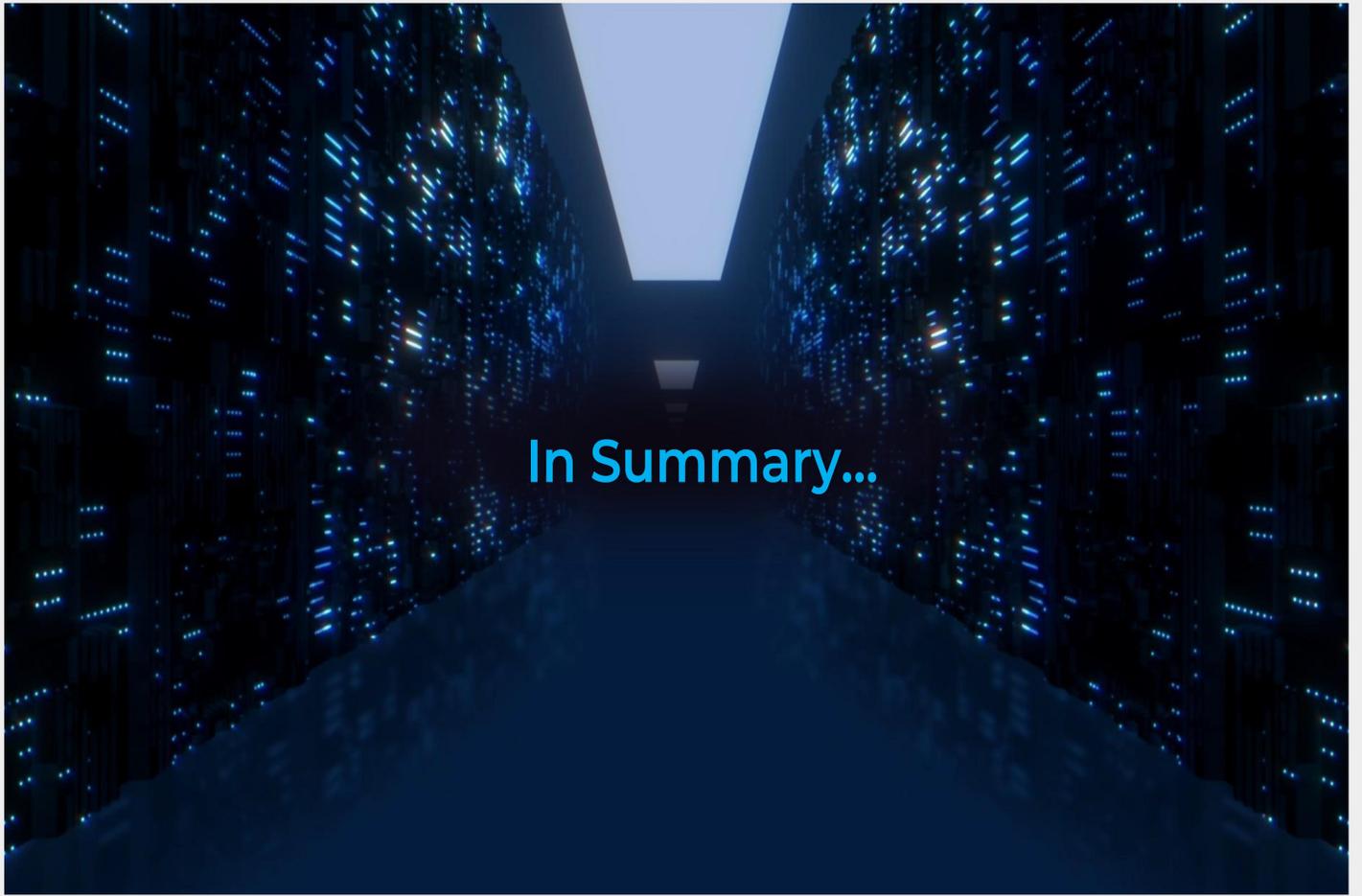
MARA INCUBATOR

- Supporting the development of new technologies & businesses seeking to build, expand, & enrich the Bitcoin ecosystem

MARA CORPORATE INVESTMENTS

- Advancing early-stage startups in infrastructure building blocks, layer 2 protocols, and DeFi via funding, mentorship, and strategic partnerships





In Summary...

Marathon at-a-Glance

AGILE, SCALABLE, & SUSTAINABLE

OUR MISSION

To support the development and security of the world's first public blockchain (Bitcoin) by building one of the largest, most agile, and most sustainably operated bitcoin mining operations in the world.

OUR STRATEGY

Invest in Miners > Infrastructure
Prioritize efficiency and minimize costs

OUR FOCUS

Increasing hash rate (probability of earning bitcoin)



Growing from 3.2 EH/s in Aug 2022 to 23 EH/s in mid 2023

OUR IMPACT

Deploying at renewable power stations



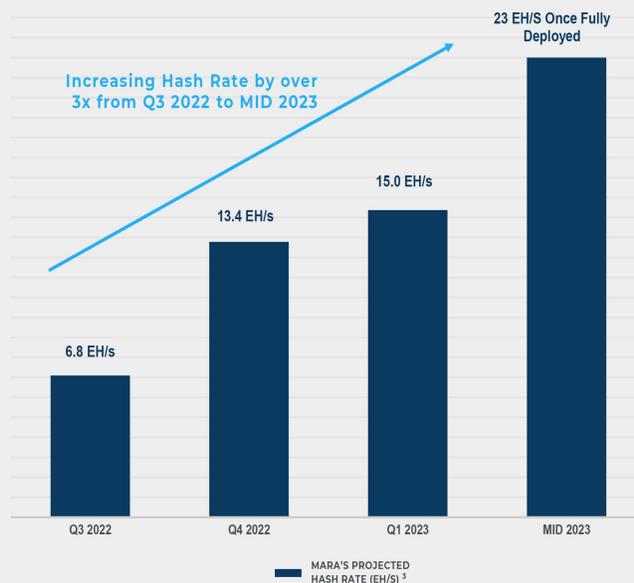
On track to be 100% carbon neutral
Returning energy back to the grid in times of crisis

Operating with low costs of power + hosting



Strong relationships with multiple hosting companies and energy providers

PROJECTED HASH RATE GROWTH



Recent Company Highlights

TICKER SYMBOL

MARA

Share Price **\$14.43**

Market Cap **\$1.7B**

Shares Issued & Outstanding **116.8M**

Avg. Daily Trading Volume **19.7M**

AS OF SEPT 12, 2022¹

RECENT CORPORATE UPDATES

\$71.4 Million in Unrestricted Cash

\$130 Million in Unrestricted BTC (6,483 BTC)

34,000 Miners in Operation → 3.2 EH/s

Transitioning Out of Hardin, MT Facility by End of September 2022

AS OF AUG 31, 2022²



Appendix



Income Statements

	Three month period ended June 30,		Year to date period ended June 30,	
	2022	2021	2022	2021
Revenues	\$ 24,921,816	\$ 29,321,857	\$ 76,639,534	\$ 38,474,672
Costs and expenses:				
Cost of revenues:				
Energy, hosting and other costs	(16,684,759)	(4,056,168)	(29,201,710)	(5,724,646)
Depreciation and amortization	(24,709,797)	(2,937,666)	(38,586,480)	(3,675,603)
	(41,394,555)	(6,993,834)	(67,788,191)	(9,400,249)
Operating and administrative expenses:				
General and administrative expenses	(12,641,332)	(6,831,039)	(26,835,089)	(60,175,421)
Impairment of digital currencies	(127,590,231)	(11,078,660)	(147,141,486)	(11,740,859)
Impairment of patents	-	-	(919,363)	-
	(140,231,563)	(17,909,699)	(174,895,938)	(71,916,280)
Other operating income (expense):				
Change in fair value of digital currencies held in fund	(79,688,590)	(114,704,596)	(85,016,208)	17,323,121
Gain on sale of equipment	58,181,516	-	58,181,516	-
	(21,507,074)	(114,704,596)	(26,834,692)	17,323,121
Operating loss	(178,211,376)	(110,286,272)	(192,879,286)	(25,518,736)
Non-operating income (expense)	165,280	1,400,872	393,973	(7,250)
Interest expense	(3,748,322)	(1,203)	(6,562,358)	(2,406)
Loss before income taxes	(181,794,418)	(108,886,603)	(199,047,671)	(25,528,391)
Income tax (expense) benefit	(9,852,224)	1,984	(5,557,560)	514
Net loss	\$ (191,646,642)	\$ (108,884,619)	\$ (204,605,231)	\$ (25,527,878)
Net loss per share, basic and diluted	\$ (1.75)	\$ (1.09)	\$ (1.93)	\$ (0.26)
Weighted average shares outstanding, basic and diluted	109,437,293	99,466,946	106,101,762	96,922,964

Supplemental information

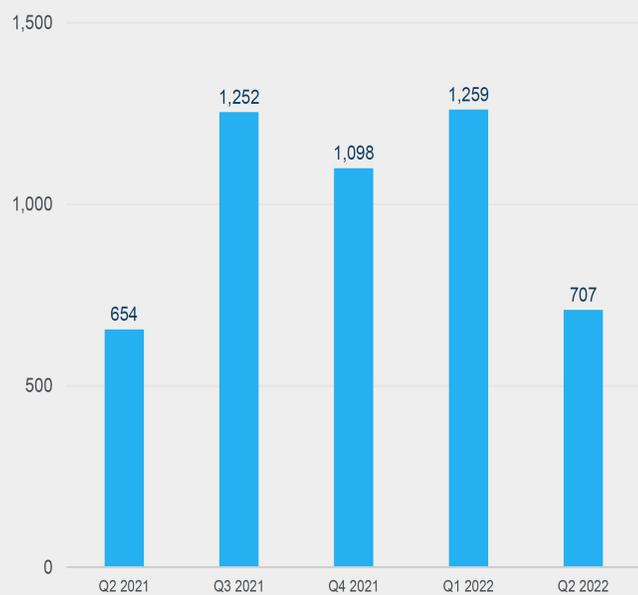
Supplemental Information:	Three month period ended June 30,		Year to date period ended June 30,	
	2022	2021	2022	2021
Operating margin (1)	\$ 8,237,057	\$ 25,265,689	\$ 47,437,824	\$ 32,750,026
bitcoin ("BTC") production during the period, in BTC	707.1	654.4	1,965.6	846.2
Adjusted EBITDA				
Net loss	\$ (191,646,642)	\$ (108,884,619)	\$ (204,605,231)	\$ (25,527,878)
Exclude: Interest expense	3,748,322	1,203	6,562,358	2,406
Exclude: Income tax expense (benefit)	9,852,224	(1,984)	5,557,560	(514)
EBIT	(178,046,096)	(108,885,400)	(192,485,313)	(25,525,985)
Exclude: Depreciation and Amortization	24,709,797	2,937,666	38,586,480	3,675,603
EBITDA	(153,336,300)	(105,947,734)	(153,898,833)	(21,850,383)
Adjustments for non-cash and non-recurring items:				
Stock compensation expense, net of withholding tax	6,132,224	875,971	15,407,576	51,907,111
Impairment of patents	-	-	919,363	-
Adjusted EBITDA	\$ (147,204,076)	\$ (105,071,763)	\$ (137,571,894)	\$ 30,056,728
Changes in carrying value of digital assets:				
Change in fair value of investment fund	\$ (79,688,590)	\$ (114,704,596)	\$ (85,016,208)	\$ 17,323,121
Impairment of digital currencies	(127,590,231)	(11,078,660)	(147,141,486)	(11,740,859)
	\$ (207,278,821)	\$ (125,783,256)	\$ (232,157,694)	\$ 5,582,262

BTC held at end of period:	As of June 30,	
	2022	2021
Total BTC held	10,054.8	5,783.7
BTC utilized as collateral for borrowings	2,820.4	-
Market value of 1 BTC (in USD)	\$ 19,785	\$ 35,041
FMV of BTC held	\$ 198,931,636	\$ 202,665,625
Carrying value of all BTC held	\$ 190,438,773	\$ 195,881,475

(1) Operating margin is defined as Revenues less Cost of revenues - energy, hosting, other

Recent Trends

Quarterly BTC production



Revenue (in millions)



Non-GAAP Financial Measures

We provide investors with a reconciliation from net income to the non-GAAP measure known as Adjusted EBITDA as a component of this presentation. For each period in question, we define "Adjusted EBITDA" as (a) GAAP net income (or loss) plus (b) adjustments to add back the impacts of (1) depreciation and amortization, (2) interest expense, (3) income tax expense and (4) adjustments for non-cash and non-recurring items (which currently include (i) stock compensation expense, (ii) net of withholding taxes and (iii) impairments of patents (if any).

Adjusted EBITDA is not a measurement of financial performance under GAAP and, as a result, this measure may not be comparable to similarly titled measures of other companies. Non-GAAP financial measures are subject to material limitations as they are not in accordance with, or a substitute for, measurements prepared in accordance with GAAP. Adjusted EBITDA is not meant to be considered in isolation and should be read only in conjunction with our Quarterly Reports on Form 10-Q and our Annual Reports on Form 10-K as filed with the Securities and Exchange Commission. Management uses both Adjusted EBITDA and the supplemental information provided herein as a means of understanding, managing and evaluating business performance and to help inform operating decision making. We rely primarily on our Consolidated Condensed Financial Statements to understand, manage, and evaluate our financial performance and use the non-GAAP financial measures only supplementally .

Leadership Team



Fred Thiel
CHAIRMAN & CEO



Jim Crawford
CHIEF OPERATING OFFICER



Hugh Gallagher
CHIEF FINANCIAL OFFICER



Sim Salzman
CHIEF ACCOUNTING OFFICER



Ashu Swami
CHIEF TECHNOLOGY OFFICER



Jolie Kahn
LEGAL COUNSEL



Raymond Walintukan
VP OF MINING OPERATIONS



Charlie Schumacher
VP OF CORPORATE COMMUNICATIONS



Adam Swick
VP OF STRATEGY



Will Beam
VP OF ACCOUNTING

Board of Directors



Fred Thiel
CHAIRMAN



Georges Antoun
INDEPENDENT DIRECTOR



Said Ouissal
INDEPENDENT DIRECTOR



Kevin DeNuccio
DIRECTOR



Jay Leupp
INDEPENDENT DIRECTOR

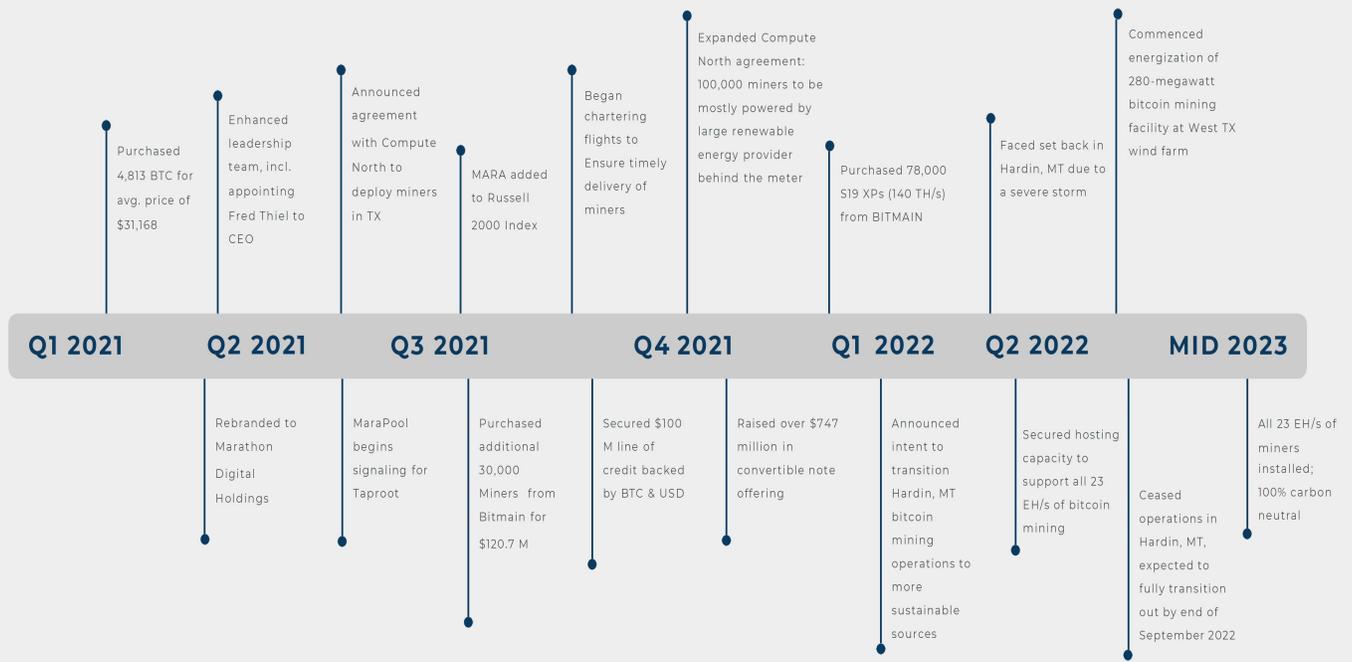


Sarita James
INDEPENDENT DIRECTOR



Doug Mellinger
INDEPENDENT DIRECTOR

“Timeline of Expansion & Growth”



MINING - The Engine that Fuels the Bitcoin Ecosystem

MINING - A system that adds transactions & provides security to the Bitcoin blockchain; How new bitcoin enter the market

A MINER - a computer designed to solve a mathematical algorithm (i.e., the Bitcoin code)

How it Works



A Bitcoin transaction occurs and is broadcast to the network



A miner pools together "pending" Bitcoin transactions in a "block"



Once a block is formed, miners compete to "hash" their block (i.e., solve a cryptographic puzzle)

Difficult to solve, yet simple to verify (Sudoku)



Once solved, the network checks the miner's work (i.e., verifies their "Proof of Work" adheres to rules of the Bitcoin protocol)



The new block of verified transactions is attached to a chain of prior blocks, hence "blockchain" (i.e., the public Bitcoin ledger) & the process repeats



For solving the puzzle, miners are rewarded with Bitcoin

Currently, 6.25 BTC per block / Blocks are solved on avg., every 10 min.

Only 21 million BTC can be mined, providing scarcity, currently 900BTC are mined per day

The Path to Profitable Mining



POWER (HASH RATE)

More powerful miners → increased power (hash rate)
 Increased power → higher probability of earning BTC



COST OF PRODUCTION

Lower costs → higher profits in bull markets & survivability in bear markets

Annual Mining Profitability

$$= \left[\left(\frac{\text{Marathon's Hash Rate}}{\text{Network Hash Rate}} \right) \times \left(\frac{\text{Price of BTC}}{\text{Price of Miners}} \right) \times \left(\frac{6.25}{\text{Block Reward}} \right) \times \left(\frac{52,560}{\text{Blocks/Year}} \right) \right] - \left[\left(\frac{\text{Price of Miners}}{\text{Price of Miners}} \right) + \left(\frac{\text{Costs of Electricity \& Hosting}}{\text{Price of Miners}} \right) + \left(\frac{\text{Marathon's Corporate Expenses*}}{\text{Price of Miners}} \right) \right]$$

Marathon Controls

- Its Hash Rate
- Cost of Electricity & Hosting
- Corporate Expenses
- Capital and liquidity

Marathon Doesn't Control

- Network Hash Rate
- Price of BTC
- Block Reward & # of Blocks / Year
- Price of Miners

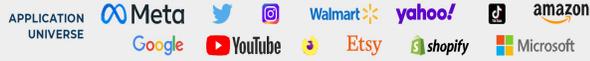
* Rent, employees, public company expense, etc.

Mining Is Critical Infrastructure for the Internet of Money

THE INTERNET

DEMATERIALIZED COMMUNICATION

- Inherent Qualities
- Open
 - Global
 - Permissionless
 - Censorship-Resistant



NATIVE UNITS

bytes



PROTOCOLS

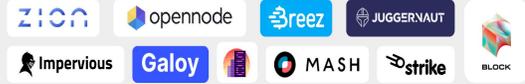
TCP/IP, HTTP, DNS, FTP, etc.

"In the not too distant future, users won't even know they're using Bitcoin and Lightning, much like users of the internet don't know they're using TCP/IP." - Elizabeth Stark, CEO Lightning Labs

BITCOIN

DEMATERIALIZING FINANCIAL/MONETARY NETWORKS

- Inherent Qualities
- Open
 - Global
 - Permissionless
 - Censorship-Resistant



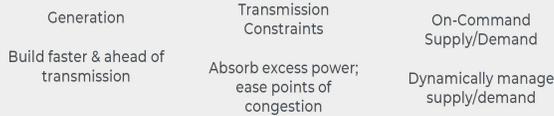
Power with a Purpose - Expanding Renewables, Increasing ROI, & Mitigating Blackouts

Accelerating the "Energy Transition"

Bitcoin mining is fundamentally different from traditional data centers:

1. Distributed / Portable demand (loads) can be located nearly anywhere
2. Load can be interrupted (curtailed) by utilities when needed

Solves for 3 major issues:

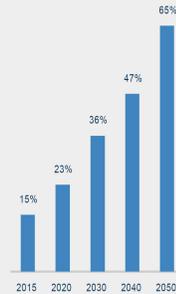


Marathon at Full Deployment in Mid 2023

- Working directly with some of the largest renewable energy providers in North America
- Refining local waste into global value by consuming excess renewable power
- Mitigating losses from transmission and maximizing renewable power mix
- Voluntary curtailment to provide flexible base load to the grid and mitigate consumer blackouts
- Leveraging sustainable energy (wind, solar, hydro, nuclear, etc.)
- On track to be 100% carbon neutral

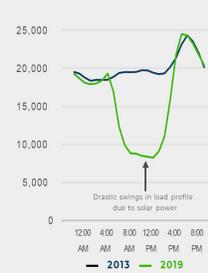
Renewables Are Expected to Grow Further...

US Renewable Energy Penetration (%)¹⁰



...Leading to Increased Intermittency...

Representative Net Load Profile¹¹



...And Higher Curtailment

Growth in Curtailment per ISO in 2020¹²

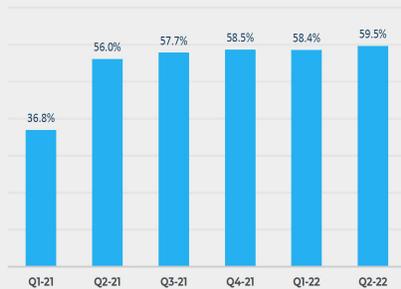


Bitcoin's Energy Usage Is Negligible, but Its Sustainability Is Industry Leading

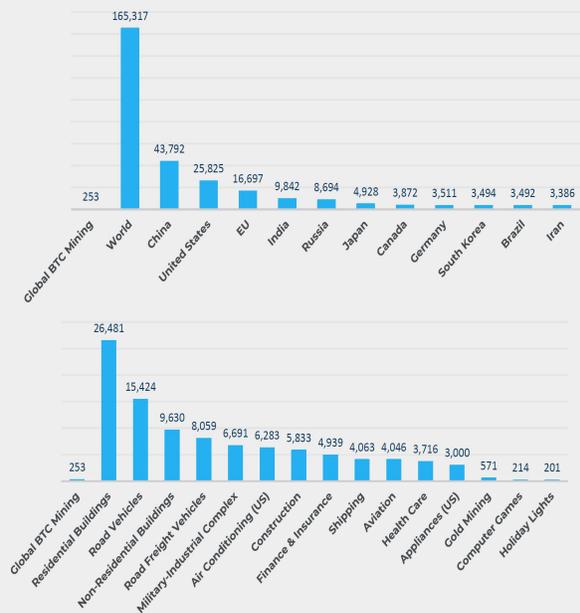
The Bitcoin Mining Industry in Q2 2022¹³

- Uses an inconsequential amount of global energy (15 bps) & generates negligible carbon emissions (9 bps)
- 60% predominantly using sustainable power (up from 56% in 2021)
- Bitcoin mining hash rate is up 137% YoY, & energy usage is up only 63% YoY, due to an increase in efficiency of 46%

BTC Mining Sustainable Electricity Mix (%)¹³



Annual Electricity Consumption (TWH)¹³



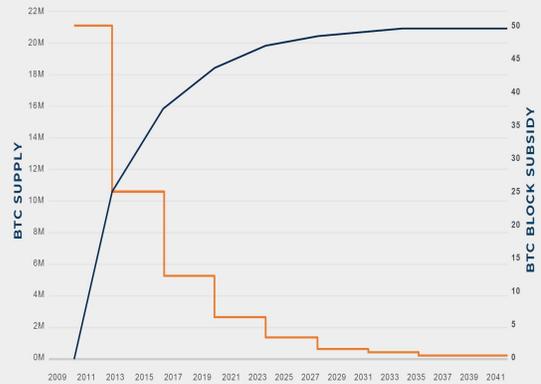
“Halving Events”

BITCOIN'S FINITE SUPPLY ALGORITHM¹⁴

Block rewards reduced by half every 210,000 blocks (c. 4 years) until all 21,000,000 BTC mined in c. 2140

DATE	BTC / BLOCK	% OF BTC SUPPLY MINED AT END OF PERIOD	PRICE OF DAY OF HALVING
JAN 3, 2009	50	50%	N/A
NOV 28, 2012	25	75%	\$12.35
JUL 9, 2016	12.5	87.5%	\$650.53
MAY 11, 2020	6.25	93.75%	\$8,821.42
EST. FEB - MAY 2024	3.125	96.875%	?
EST. 2028	11.565	98.4375%	?
EST. 2140	0	100%	?

BITCOIN SUPPLY & BLOCK SUBSIDY BY YEAR¹⁵



BITCOIN PRICE USD¹⁶



Bitcoin & Traditional Assets ROI

AS OF August 11, 2022¹⁷

	BITCOIN	GOLD	S&P
1 YEAR	-47%	+2%	-6%
2 YEAR	+108%	-7%	+25%
3 YEAR	+129%	+18%	+45%
4 YEAR	+284%	+49%	+49%
5 YEAR	+468%	+39%	+73%
6 YEAR	+3,979%	+34%	+93%
7 YEAR	+8,946%	+61%	+102%
8 YEAR	+4,408%	+37%	+116%
9 YEAR	+24,073%	+33%	+149%
10 YEAR	+187,284%	+12%	+200%



Assumptions, Glossary, & Footnotes

Asset Light & Vertically Integrated Key Assumptions

OVERALL ASSUMPTIONS

- Network's hash rate growth is primarily based on BitOoda's case 5 (bear), case 6 (base), and case 7 (bull) projection.¹⁸ Base case hash rate accelerates to ~300 EH/s by YE '22, ~350 EH/s by YE '23, and ~360 EH/s by April '24. Following the halving, in May '24 hash rate declines to ~306 EH/s and is increased 0.58%/month thereafter.
- Halvings
 - May 2024: BTC reward drops from 6.25 BTC to 3.125 BTC
 - May 2028: BTC reward drops from 3.125 BTC to 1.5625 BTC
- Base scenario assumes October 2022 BTC price of ~\$25k, increasing in line to support the projected growth in global hash rate, resulting in a 5-year average hash price of 10 cents (\$/TH), and Sep '27 BTC price of ~\$86k. The BTC price forecast is for illustrative purpose only and does not necessarily reflect the Company's perspective on BTC's future price. Infrastructure is depreciated over 5 years given anticipated technological advancements (e.g., immersion).
 - The model assumes after-tax cash flow is discounted at 15% (25% tax rate); BTC is only sold to pay for operating, interest, and tax expenses.
 - Bear, Base, and Bull cases assume an average hash price (\$/TH) of 7 cents, 10 cents, and 13 cents, respectively.
- No transaction fees awarded to miners
- Miner specifications
 - 140 TH/s
 - 3010 Watts
 - \$7,000 per miner
- Initial Capex Investment: \$226M
- When HODLing BTC, just enough BTC is sold to cover that month's variable expenses (power, operating, hosting, interest, taxes, etc.) The remainder is held.

"VERTICALLY INTEGRATED" ASSUMPTIONS

- Cost to build 100MW facility: \$40M
- Power + Operating cost per kWh: \$0.055
- # miners purchased: 26,578
(~\$186M worth, after spending \$40M on 100MW facility)
- Will consume 100MW assuming 80% efficiency at facility

ASSET LIGHT ASSUMPTIONS

- Power + Hosting cost per kWh: \$0.065
- # miners purchased: 32,292

Marathon's BTC Production and Revenue Projections - Assumptions

OVERALL ASSUMPTIONS

- Bitcoin price & network's hash rate estimates are based on 2022 YE hash price and a linear projection for bitcoin price & network hash rate using bear/base/bull scenarios (case 3, 4, 5) presented by BitOoda's The Weekly Hash August report.¹⁹ These models are not a guarantee of future results. All estimates include 90% efficiency of mining operations.
- Annual figures are calculated as monthly figures x 12. Daily figures are calculated as monthly figures x (12/365).
- Efficiency is based on weighted average hash rate of mining fleet.
- All figures are for illustrative purposes only and should not be considered as projections for FY 2023 as they do not account for changes in the price of bitcoin or the total network's hash rate.

Glossary of Relevant Terminology



BITCOIN (BTC) – a type of digital currency in which a record of transactions is maintained and new units of currency are generated by the computational solution of mathematical problems, and which operates independently of a central bank; a unit of bitcoin.



BLOCKCHAIN – a system in which a record of transactions made in bitcoin or another cryptocurrency are maintained across several computers that are linked in a peer-to-peer network.



BLOCK – a file that contains a “permanent” record of transactions



MINING (BTC) – the processing of transactions in the digital currency system, in which the records of current Bitcoin transactions, known as a blocks, are added to the record of past transactions, known as the block chain



HASH RATE – The Measure of a Miners Performance – # of calculations a miner can perform in 1 second as it works to solve the BTC code



BLOCK REWARD – The amount of BTC “awarded/earned” for successfully mining / verifying a block

AVERAGE # OF BTC MINED EACH DAY =

(Block Reward)

X

(6X / Hour)

X

(24HRS / Day)

AS OF MAY 11, 2020:

(6.25 BTC / Block)

X

(6X / Hour)

X

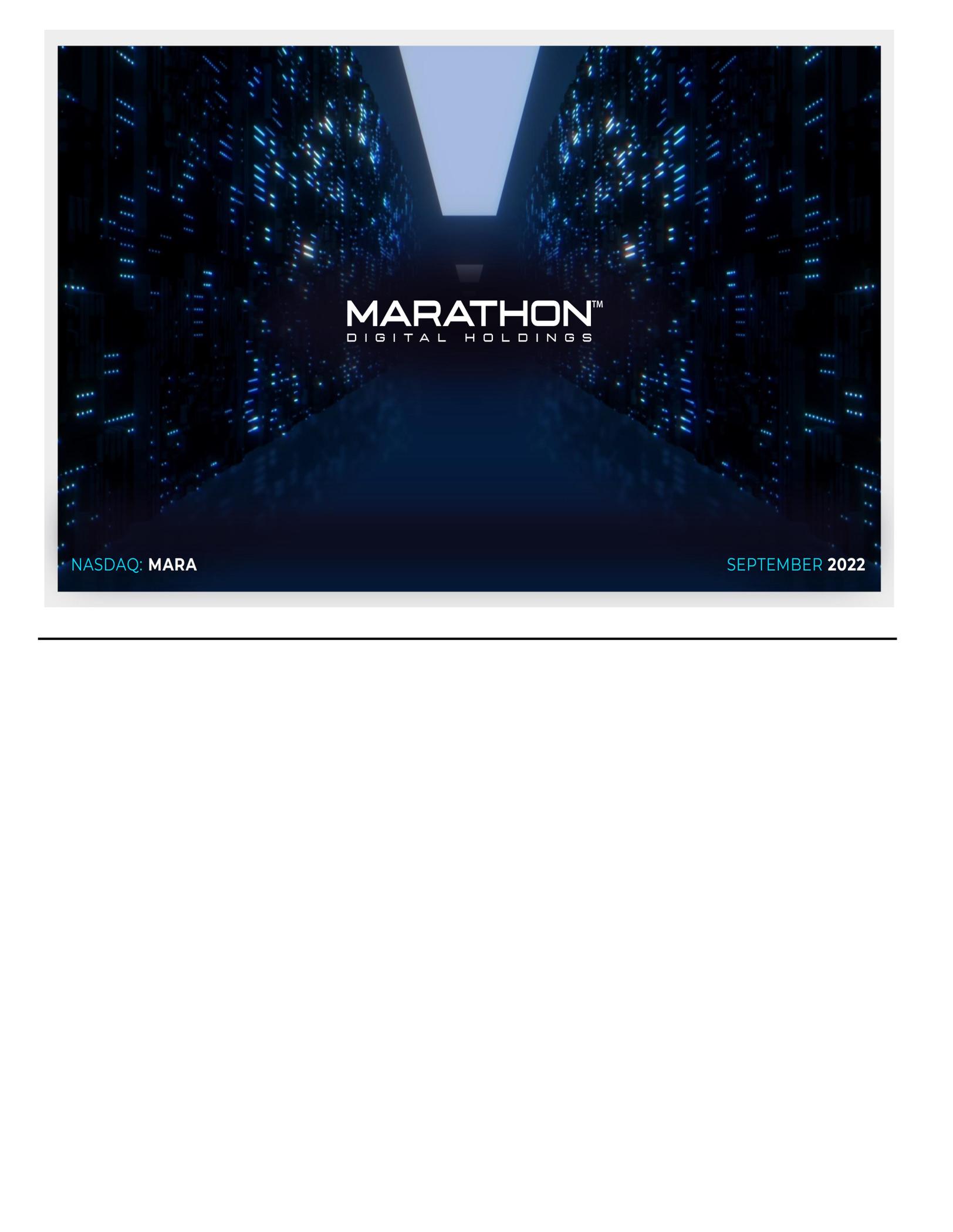
(24HRS / Day)

=

900 BTC PER DAY ON AVERAGE

Notes, Sources, & References

1. "Marathon Digital Holdings, Inc. (MARA) Stock Price, News, Quote & History." Yahoo! Finance. Accessed September 12, 2022. <https://finance.yahoo.com/quote/MARA/>.
2. "Marathon Digital Holdings Announces Bitcoin Production and Mining Operation Updates for August 2022." Marathon Digital Holdings, September 6, 2022. <https://ir.marathondh.com/news-events/press-releases/detail/1293/marathon-digital-holdings-announces-bitcoin-production-and>.
3. Hash rate of 23 EH/s is estimated based on current machine contracts.
4. Willy Woo (@woonomic). "In terms of adoption, Bitcoin has roughly the same users as the Internet had in 1997." Twitter, February 1, 2021. www.twitter.com/woonomic/status/1356310219215699968.
5. BTC Network's number of users is estimated based on Crypto.com's "Crypto Market Sizing Report 2021 and 2022 Forecast" and Willy Woo's "Adoption Curves". Internet number of users provided by [World Internet Stats](#).
6. "Visa Inc. - SEC Filings." Visa Inc. Accessed September 11, 2022. <https://investor.visa.com/SEC-Filings/>, "Bear Markets in Perspective." Grayscale, July 19, 2022. <https://grayscale.com/wp-content/uploads/2022/07/Bear-Markets-in-Perspective-FINAL-Designed.pdf>.
7. Total transfer volume by size (entity-adjusted) provided by [Classnode](#).
8. The projected hash rate is only an estimate based on installation and energization timelines Marathon receives from its hosting providers and does represent a guarantee of future results.
9. "Global Bitcoin Mining Data Review Q2 2022." Bitcoin Mining Council, July 19, 2022. <https://bitcoinminingcouncil.com/>.
10. S&P Global Market Intelligence. Accessed September 8, 2022. <https://www.spglobal.com/marketintelligence/en/>.
11. "Fast Facts." California ISO. Accessed September 8, 2022. https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf.
12. BTUAnalytics. Accessed September 8, 2022. <https://btuanalytics.com/>.
13. "Global Bitcoin Mining Data Review Q2 2022." Bitcoin Mining Council, July 19, 2022. <https://bitcoinminingcouncil.com/>.
14. "Bitcoin Halving Dates History & Future Dates." CryptoAnswers, October 25, 2021. <https://cryptoanswers.com/faq/bitcoin-halving-dates-history/>.
15. Hertig, Alyssa. "Bitcoin Halving, Explained." CoinDesk, October 6, 2021. <https://www.coindesk.com/learn/2020/03/24/bitcoin-halving-explained/>.
16. Conway, Luke. "Bitcoin Halving: What You Need to Know." Investopedia, August 15, 2022. <https://www.investopedia.com/bitcoin-halving-4843769>.
17. "Bitcoin & Traditional RIO (vs USD)." The Case for Bitcoin. Accessed August 11, 2022. <https://casebitcoin.com/>.
18. Doctor, Sam. "Bitcoin Public Miners & Hashrate." BitOoda, July 14, 2022.
19. Doctor, Sam, Vivek Raman, David Bellman, and Nick Yodder. "The Weekly Hash: Bitcoin & ETH Risks." BitOoda, August 11, 2022.



MARATHON™
DIGITAL HOLDINGS

NASDAQ: MARA

SEPTEMBER 2022
