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Investors and security holders will be able to obtain free copies of the proxy statement/information statement/prospectus and all other relevant documents filed or that will be filed with the SEC by Good Works through the website maintained by the SEC at www.sec.gov, or by directing a request to Good Works Acquisition Corp., 4265 San Felipe, Suite 603, Houston, TX 77027.

PARTICIPANTS IN SOLICITATION

Good Works and Cipher and their respective directors and officers may be deemed to be participants in the solicitation of proxies from Good Works' stockholders in connection with the proposed business combination. Information about Good Works' directors and executive officers and their ownership of Good Works' securities is set forth in Good Works' filings with the SEC. Additional information regarding the interests of those persons and other persons who may be deemed participants in the proposed business combination may be obtained by reading the proxy statement/information statement/prospectus regarding the proposed business combination when it becomes available. You may obtain free copies of these documents as described in the preceding paragraph.

Good Works Leadership Team



Fred Zeidman
CEO & Co-Chairman



Doug Wurth
Co-Chairman



Cary Grossman
President



Team highlights

- ✓ Significant private investment and corporate finance experience
- ✓ Strong background in SPAC mergers; and board governance of public and private companies
- ✓ Deep experience in company due diligence and hiring talented management teams
- ✓ Experience in highly regulated and scrutinized sectors; including banking, oil and gas, and health care
- ✓ Experience in bitcoin mining through involvement in a Power Hosting Company
- ✓ Management has donated more than half of its shares to non-profit organizations

Transaction Summary

Transaction highlights

- ✓ \$2,000mm implied enterprise value at \$10 per share
 - ✓ 2.6x 2023E EBITDA or 3.4x 2023E FCF (25k-100k case) ⁽¹⁾
 - ✓ 4.3x 2023E EBITDA or 7.4x 2023E FCF (25k-50k case) ⁽²⁾
 - ✓ 5.4x 2023E EBITDA or 11.2x 2023E FCF (25k flat case) ⁽³⁾
 - ✓ 6.7x 2023E EBITDA or 19.3x 2023E FCF (25k-12.5k case) ⁽⁴⁾
- ✓ Implied market capitalization of \$2,501
- ✓ Cipher to receive \$501mm in primary proceeds to fund operations
- ✓ Bitfury to invest \$50mm in PIPE via equipment discount provided to Cipher; investment subject to 6-month lockup
- ✓ Cipher to remain debt free
- ✓ Good Works to receive 1 of 7 board seats
- ✓ Existing shareholders subject to 2-year lockup ⁽⁵⁾
- ✓ Transaction expected to close in Q2 2021E

Pro forma capitalization (at \$10.00)

(\$mm)	
Pro forma implied enterprise value	\$2,000
Pro forma gross debt	0
Pro forma cash	501
Pro forma implied market capitalization	\$2,501

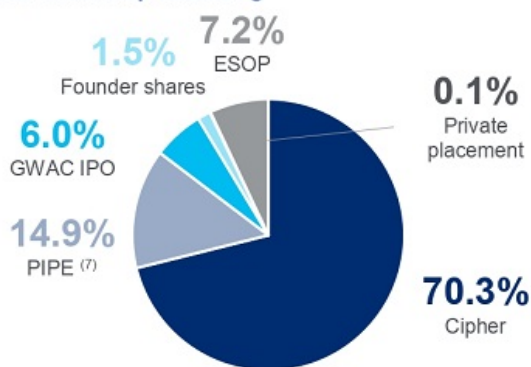
Sources

(\$mm)	
Cipher rollover equity	\$2,000
GWAC rollover equity	170
PIPE	425
Total sources	\$2,595

Uses

(\$mm)	
Cipher rollover equity	\$2,000
Cash to merged company balance sheet	501
Bitfury equipment discount	50
Transaction expenses	44
Total uses	\$2,595

Pro forma ownership at closing ⁽⁶⁾



Note: Assumes no secondary consideration, all cash after expenses go on balance sheet to fund operation; assumes a \$425mm PIPE at \$10 per share; assumes no GWAC stockholder redemption; EBITDA and Free Cash Flow are non-GAAP financial measures
⁽¹⁾ Average BTC price in 2023E: \$63,125; ⁽²⁾ Average BTC price in 2023E: \$37,708; ⁽³⁾ Average BTC price in 2023E: \$25,000; ⁽⁴⁾ Average BTC price in 2023E: \$18,646; ⁽⁵⁾ Certain shares are subject to be released from lock-up after share price achieves certain thresholds for a predetermined period; ⁽⁶⁾ Excludes SPAC and private placement warrants; ⁽⁷⁾ Includes additional shares issued in connection with Bitfury's \$50mm investment via equipment discount subject to 6-month lock up

Cipher Mining Leadership Team



Tyler Page
Chief Executive
Officer



Ed Farrell
Chief Financial
Officer



Patrick Kelly
Chief Operating
Officer



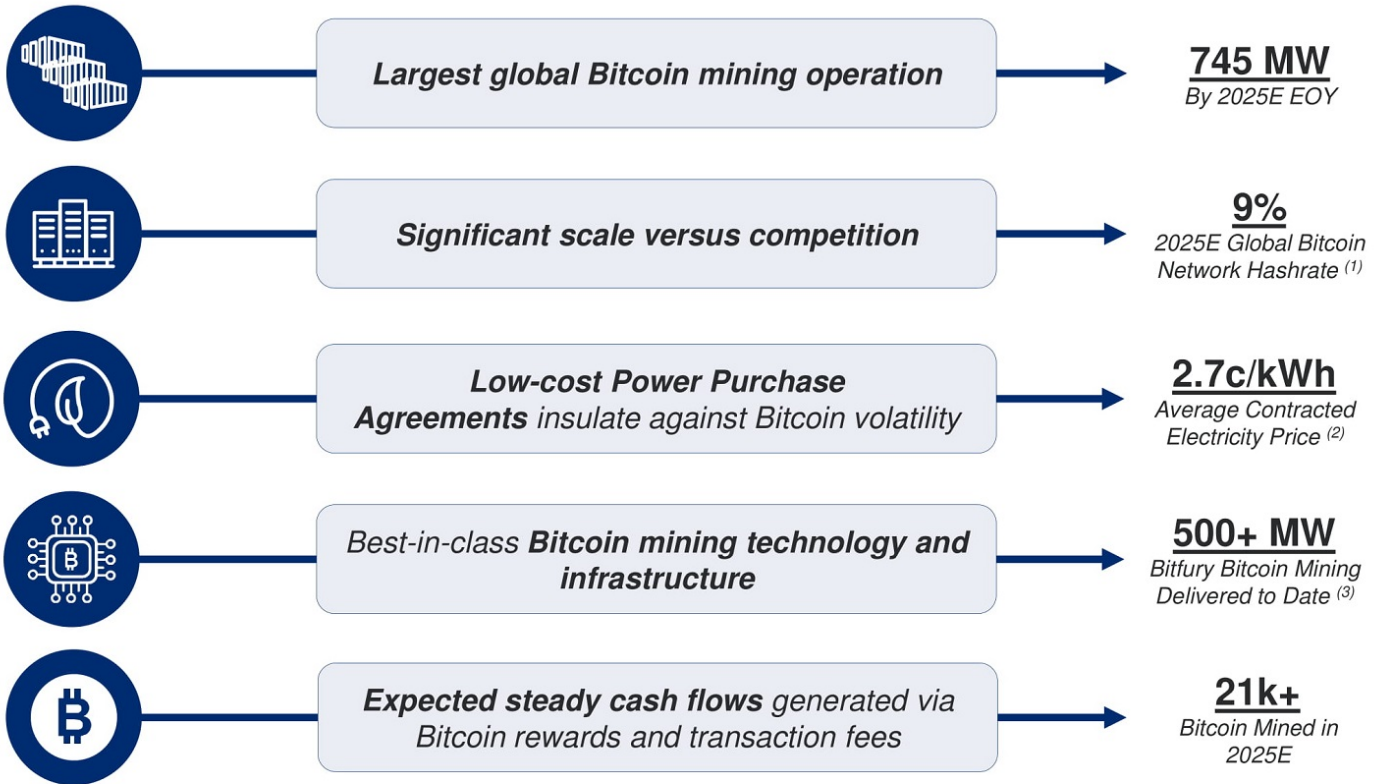
Samy Biyadi
Interim Head of
Power



NOMURA



Bitfury is Creating Cipher Mining, a New Bitcoin Mining Champion



Source: Cipher Mining management
 Note: Projections based upon BTC price increases from \$25k to \$50k from 2021E to 2025E
⁽¹⁾ Assuming overall computational power of Bitcoin network of 455 EH/s in December 2025E
⁽²⁾ Subject to LOI; ⁽³⁾ Cipher will be a separate company. Bitfury results may not be indicative of Cipher results

Bitfury Snapshot



Bitfury Today

 <p>120+ Employees</p>	 <p>50 R&D Employees</p>
 <p>5 Countries (Mining Operation)</p>	 <p>7 ASICs Generations</p>
 <p>500MW+ Computing Power Deployed to Date</p>	 <p>7 Data Centers</p>
 <p>>600k Bitcoins Mined Since Inception</p>	 <p>\$170MM+ Capital Raised</p>

Key highlights

- **Established in 2011**
- **\$1bn+** valuation during last fundraising round in 2018
- **Recognized global leader** in the blockchain sector
- **Proprietary chips, servers and industrial high-performance data centers:**
 - 7 generations of semiconductor chips, 500MW+ of data centers deployed
- **Breakthrough immersion cooling technology for industrial high-performance data centers** – the only company deploying technology at scale, pilot projects with large data-center owners

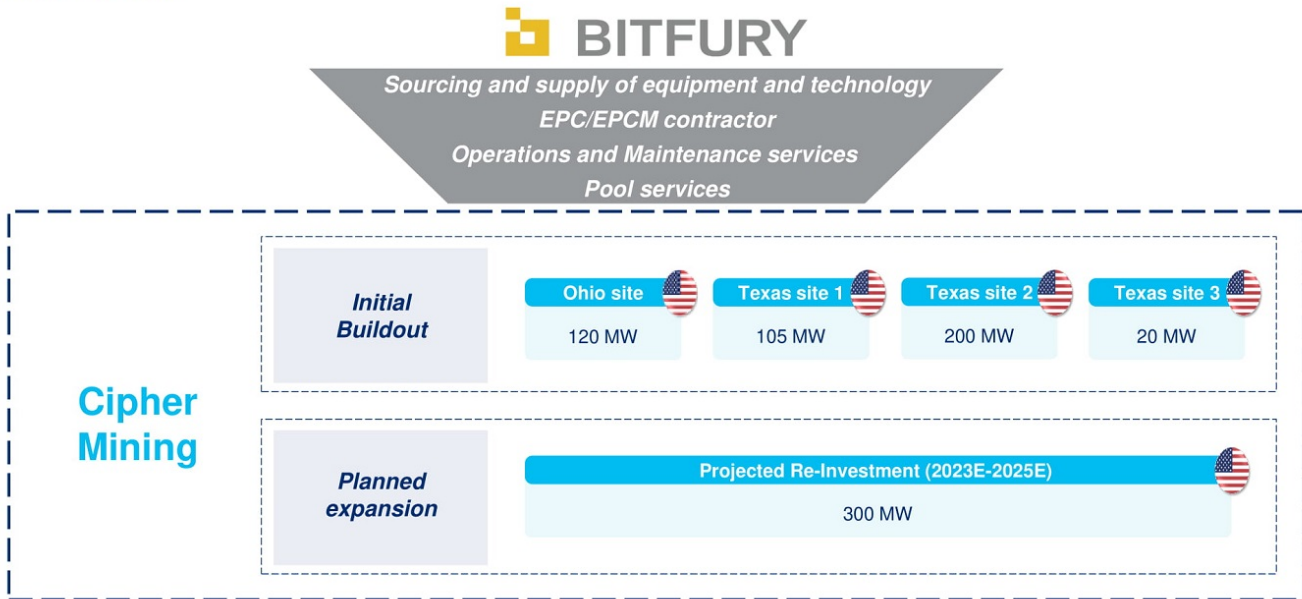
Bitfury Main Activities

<p>Data Centers for Digital Assets</p>  <p>Digital Assets Processing capacity with the world leading production costs</p>	<p>Liquid cooling for HPC data centers</p> <p>liquid°stack</p> <p>data centre efficiency reinvention with immersion cooling tech for High-Performance computing</p>	<p>Game-Changing technology for AI</p>  <p>Industry leading AI technology which provides breakthrough performance</p>	<p>Blockchain software</p> <p>BITFURY Exonum</p> <p>Adding trust to the globe</p>	<p>Clear Crypto Compliance</p> <p>BITFURY Crystal</p> <p>Digital Assets compliance analytics system</p>
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Source: Cipher Mining management

Investment Opportunity Overview

Transaction Perimeter



Transaction funds buildout of 4 new data centers in the United States

- Greenfield projects are ready-for-deployment with lease agreements and power purchase agreements ⁽¹⁾
- 445 MW initial buildout of mining capacity
- Additional deployment of 300 MW from 2023E-2025E in existing facilities

Source: Cipher Mining management
⁽¹⁾ Subject to LOI

Key Partnerships Drive Industry-Leading Execution



Power Procurement



Deployment Services

- Site development oversight and management
- Exclusive development of US assets (non-compete) ⁽¹⁾
- Pool services agreement



Technology Advantage

- Industry leading ASICs optimized for Bitcoin mining cost-efficiency with 5 nm chips
- Participation in sophisticated demand response programs built into Bitfury servers
- Access to two-phase immersion cooling technology to reduce system energy consumption



Supply Chain Visibility

- Wafer supply relationships de-risk large scale purchase orders of mining equipment
- Accelerates deployment of next-generation machines
- Over 500 MW of capacity delivered to date provides considerable supply chain expertise

Low-cost electricity supply to be locked in at **average price of 2.7c/kWh** ⁽²⁾ via long-term power purchase agreements with reliable industry partners



Texas 1 & 3
5 year power supply arrangements



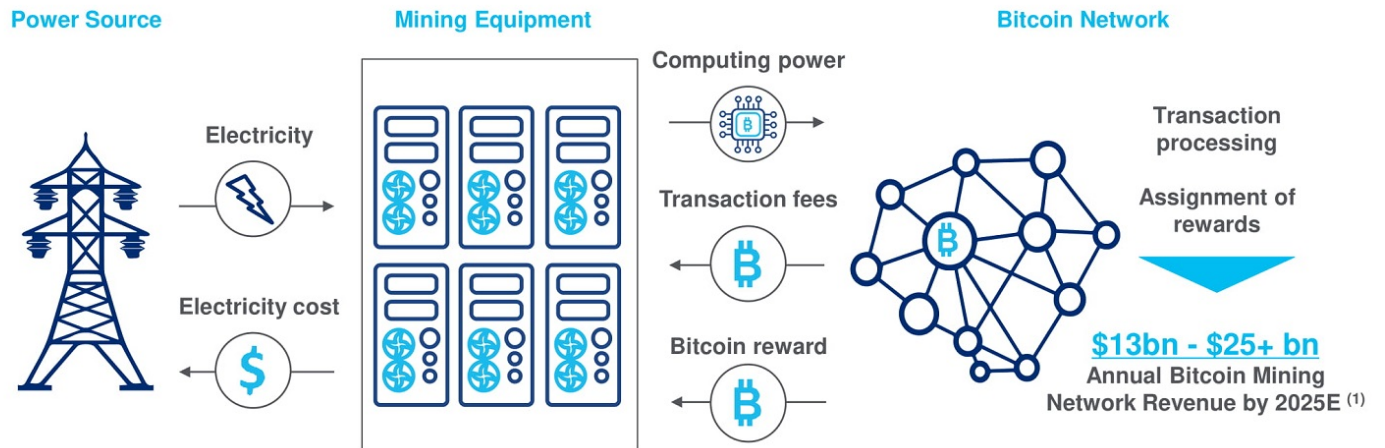
Texas 2
5 year power supply arrangements



Ohio
5 year power supply arrangements

Source: Cipher Mining management
⁽¹⁾ Subject to certain de minimis thresholds
⁽²⁾ Subject to LOI

Business Model Overview



Bitcoin Mining Dynamics

- Data center revenue consists of a reward for the block mined and a transaction fee
- Average block time is 10 minutes (time for Bitcoin system to mine a new block)
- Block reward based on ratio of data center's computing power to that of entire Bitcoin network
- Current block reward amounts to 6.25 Bitcoins per block ⁽²⁾
- Transaction fees are additional Bitcoin paid to miners for confirming transactions

Source: Cipher Mining management

⁽¹⁾ Range represents BTC price increase from \$25K in 2021E to \$50K or \$100K in 2025E

⁽²⁾ The block reward is cut in half after every 210,000 blocks are mined (~every 4 years); the latest revision was in May 2020

Growing Bitcoin Acceptance Among Institutions...

"We believe bitcoin offers one of the most compelling risk-reward profiles among assets"



"Our fundamental work shows that Bitcoin should be worth about \$400,000"



"Cryptocurrencies are here to stay and they could take the place of gold. It is so much more functional than passing a bar of gold around"



"We believe that bitcoin has the potential to be a more ubiquitous currency in the future"



"Increased scrutiny of crypto-assets would accelerate institutional money into bitcoin"



"I also made the case for owning Bitcoin, the quintessence of scarcity premium. It is literally the only large tradeable asset in the world that has a known fixed maximum supply"



"There is no other asset that combines Bitcoin's liquidity with its upside potential"



"Fidelity has made a long-term commitment to the future of blockchain technology and to making digitally-native assets, such as Bitcoin, more accessible to investors"



"... We invested an aggregate \$1.50 billion in bitcoin under this policy and may acquire and hold digital assets from time to time or long-term. Moreover, we expect to begin accepting bitcoin as a form of payment for our products in the near future..."



...and Favorable Market Dynamics Could Push Market Cap to ~\$2T+

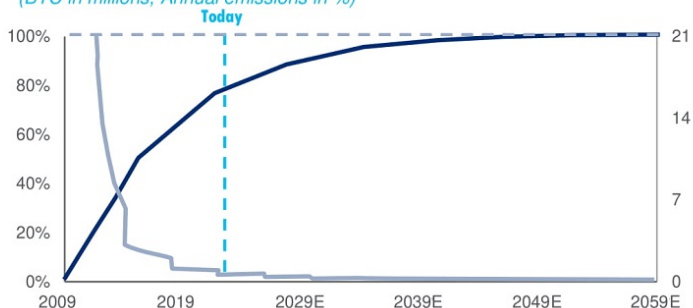
The Leading Digital Currency...

Exponential Price Appreciation
(BTC Logarithmic Scale)



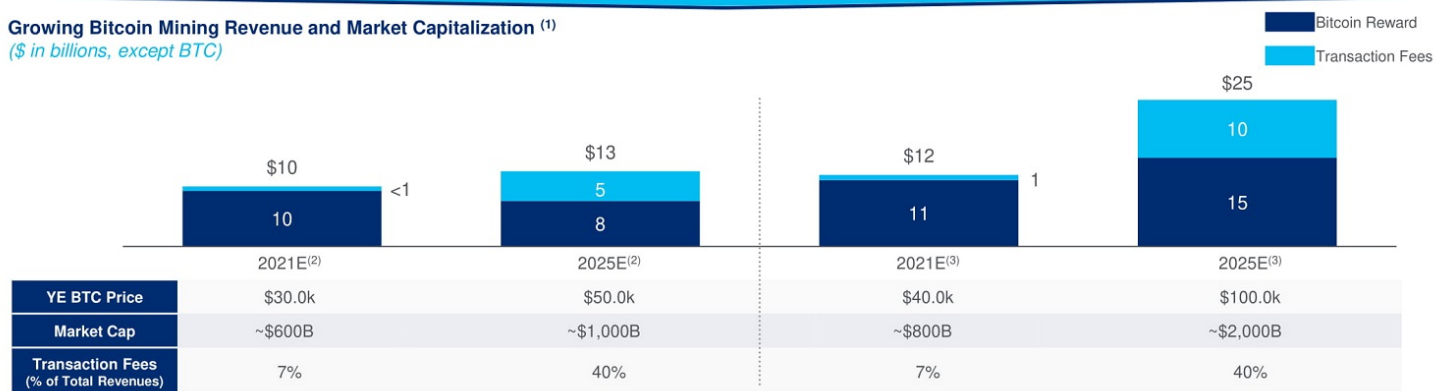
...With Finite Supply...

Limited Supply Drives Demand
(BTC in millions, Annual emissions in %)



...Creating a Massive Bitcoin Mining Opportunity

Growing Bitcoin Mining Revenue and Market Capitalization ⁽¹⁾
(*\$ in billions, except BTC*)



Source: Cipher Mining management, Wall Street research, Coin Metrics

Note: Bitcoin market data as of 2/8/21

⁽¹⁾ Denotes market capitalization at 12/31/21 and 12/31/25 using year end 2021E and 2025E BTC price; ⁽²⁾ Assumes BTC price increases from \$25K in 2021E to \$50K in 2025E; ⁽³⁾ Assumes BTC price increases from \$25K in 2021E to \$100K in 2025E

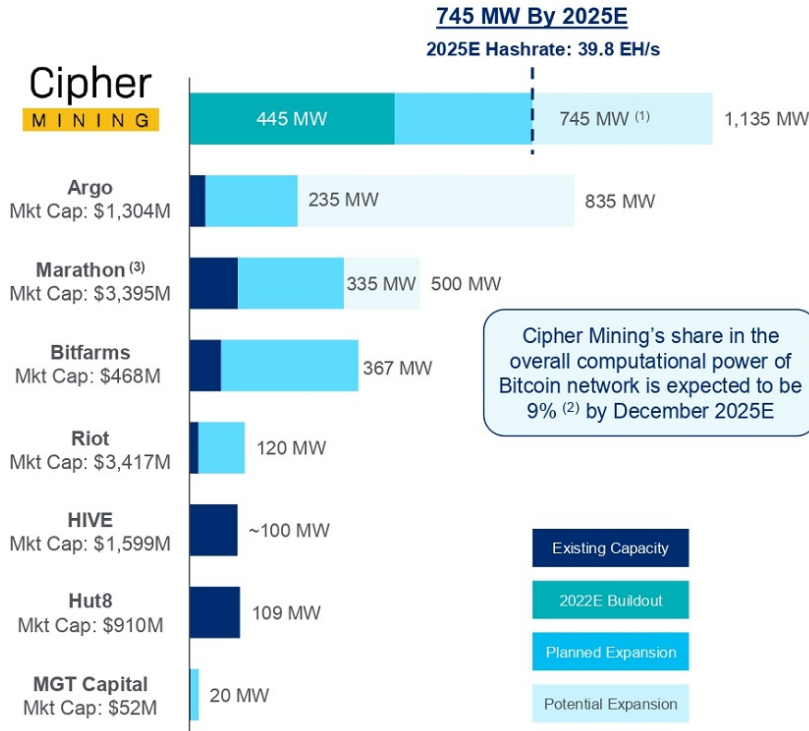
Investment Highlights for Cipher Mining



Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E
⁽¹⁾ Subject to LOI
⁽²⁾ Cipher will be a separate company, Bitfury results may not be indicative of Cipher results

1 Creation of US Bitcoin Mining Champion

Mining Capacity of World's Largest Bitcoin Miners (MW)



Scale and Geography Matter

Benefits of Scale

- ✓ The overall computational power of the Bitcoin network is highly correlated with Bitcoin price
- ✓ Any significant fall in price forces high-cost miners to cease mining which results in proportional decrease of the network power
- ✓ Number of blocks available for mining is pre-set by Bitcoin protocol irrespective of network computational power or Bitcoin price increases
- ✓ In periods of low Bitcoin price, **low-cost producers take the market share of less-efficient players and keep their economics resilient by mining higher number of blocks**

Benefits of a US Platform

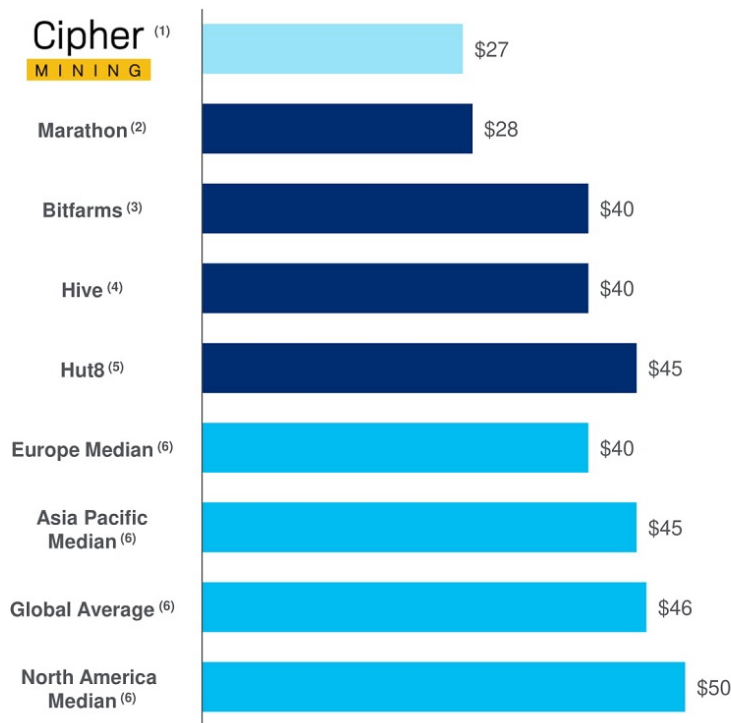
- ✓ First truly large-scale mining platform in the US provides investors an opportunity to invest in a transparent, highly regulated environment
- ✓ Creation of "New" onshore Bitcoin drives premium value and drives institutional investor appetite
- ✓ Supportive regulatory environment for North America miners and mining pools
- ✓ Reliable supply of power without fear of government shutdown
- ✓ Robust legal and banking framework to safeguard custody of mined Bitcoins

Source: Ciper Mining management, Capital IQ, company press releases and filings
 Note: Fully diluted market capitalization data as of 3/2/21

⁽¹⁾ Re-investment as stated on slide 9; ⁽²⁾ Assuming overall computational power of Bitcoin network of 455 EH/s in December 2025E; ⁽³⁾ Planned expansion assumes 103,000 miners deployed with power consumption of 3,250W per miner

2 Strong Position on the Global Cost Curve

Low Electricity Costs Relative to Peers (\$/MWh)



Positioned to be Industry Leader in Equipment Efficiency

- **Top-notch technology** and best-in-class mining equipment to maximize compute power output per MW
- Highly reliable, **minimizing downtime and repair costs**
- **Proven ability to vary power consumption within seconds** to participate in demand-response programs and reduce energy costs (>100MW in North America to date)
- Different operational modes allow balance between maximum output per chip and **maximum efficiency to respond to market conditions**

Source: Cipher Mining management, Cambridge Centre for Alternative Finance, and company filings

⁽¹⁾ Cost for initial buildout, subject to LOI; ⁽²⁾ Company presentation as of January 2021; ⁽³⁾ Company presentation as of March 2020; ⁽⁴⁾ Energy price for HIVE's 30MW facility in Quebec; Company presentation as of September 2020; ⁽⁵⁾ Average of Wall Street research estimate range; ⁽⁶⁾ Based on '3rd Global Cryptoasset Benchmarking Study' (September 2020) from Cambridge Centre for Alternative Finance

3 Technology Leadership Delivers Best-in-Class Performance

Proprietary High-Performance Equipment and Breakthrough Technologies

Highest Performance Chips



- Equipment combines highest performance chips and cost-efficient utilization
- Bitfury has developed in-house 7 generations of ASICs
- Bitfury owns 4 patent families in the area of chips design

Servers with Proven Demand Response Features



- Automatic demand response system allows equipment to rapidly switch on and off by a command from the dispatcher in order to help balance the power grid supply and demand
- The technology gives an ability to participate in sophisticated demand response programs to reduce effective power price by up to 1.0-1.5 cents
- The technology has been successfully applied by Bitfury equipment in Canada over the past 2 years

Established Leader in Immersion Cooling Technology

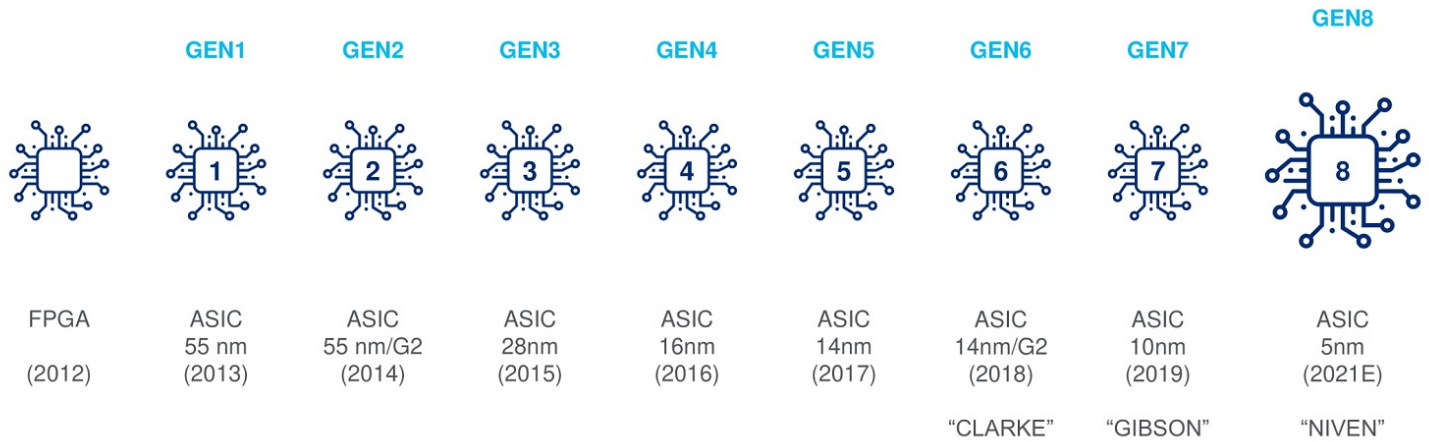


- Running data centers in regions with attractive energy prices, but harsh climatic conditions may require considerable amount of energy for cooling – up to 50-100% of useful consumption (PUE 1.5-2.0)
- 2-phase immersion cooling radically reduces energy consumption of auxiliary systems – less than 5% of useful consumption (PUE 1.03-1.05)
- 2-phase immersion cooling is the most environmentally responsible cooling solution
- Bitfury believes it is the only company in the world that deploys and runs technology at industrial scale - more than 150MW deployed since 2015 ⁽¹⁾
- Bitfury has one of the industry's largest IP portfolio for immersion cooling – 8 filed (already published or pending) patent families, covering all key components of solution

Source: Cipher Mining management
⁽¹⁾ Management estimate based on publicly available sources

3 Partnership with Bitfury Provides Access to Next-Gen ASIC Chips

Evolution of Bitfury's BTC ASICs



Source: Cipher Mining management

3 NIVEN Deployment Timeline



Anticipated Schedule

Event

Tape Out	March 2021E
Engineering Sample / Pilot Production	June / July 2021E
Mass Production	SOP in Q3 2021E

Ramp-up

Phase	Volume (wafer)
Engineering Sample	50...100
Pilot Production	Up to 2,000
Mass Production	Depending on forecast

Production Capacity (wafer)

SAMSUNG

Bitfury is expected to be able to utilize up to 10k wafers (equivalent to 200MW capacity) / month capacity at Samsung foundry due to long-term relationship (tier 1 partner), advanced planning and optimized supply chain

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4 Unique Track Record of Execution

Bitfury Is Among the Most Experienced Providers of Digital Infrastructure Solutions Globally

Well-Developed Supply Chain



- **Wafer supply agreements** de-risk large scale purchase orders and accelerate deployment for next-generation machines
- Established supply chain and **strong relationships with key suppliers** ensure timely project delivery

Highly Experienced Engineering Team



- **Large team of engineers** covering electrical, mechanical and civil trades
- Prolific **experience in deploying large data centers** and operating existing facilities

One-Stop Provider of Full-Scope Services

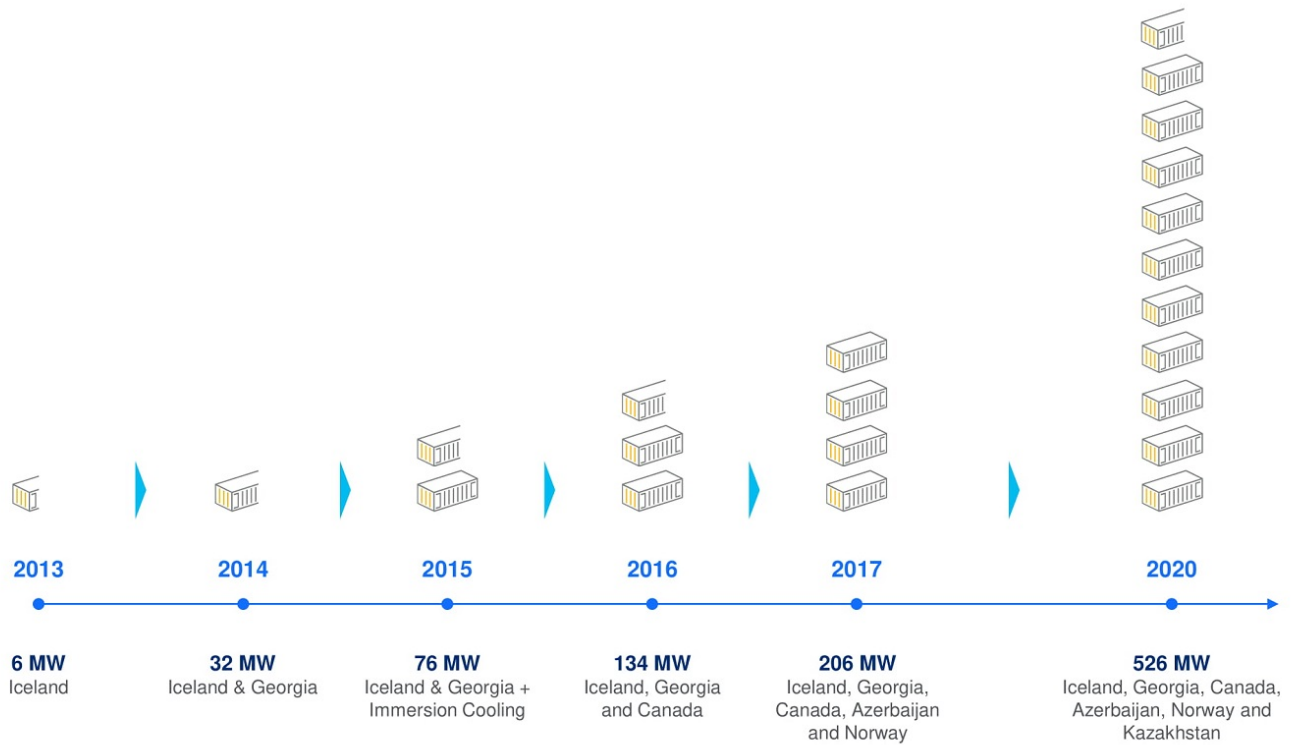


- **Deployment Stage:**
 - Engineering, procurement and construction management
- **Maintenance and Operation:**
 - Software configuration and monitoring
 - Hardware maintenance, diagnostics and repairs

Tremendous experience launching and maintaining mining pools

5 Bitfury's Track Record of Complex and Large-Scale Data Center Development

Proven Ability To Scale Quickly



Source: Cipher Mining management
Note: Each container ~50MW

6 Strategic Adjacencies Present Compelling Long-Term Opportunities



Industry Tailwinds

- ✓ Available supply of Bitcoin is shrinking as more is being bought than mined
- ✓ Bitcoin is becoming more of its own asset class and less of a “cryptocurrency”
- ✓ Institutional investors will increasingly access this asset class directly, not via private funds
- ✓ Partnerships with larger companies in technology and financial services driven by large investment pools and corporate treasuries

Source: Cipher Mining management

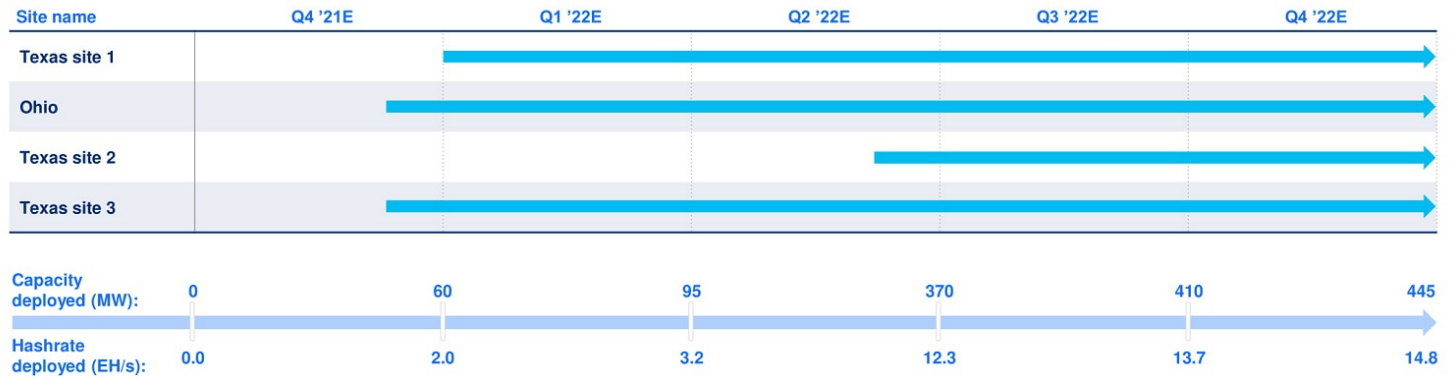
Cipher Mining



Data Center Economics and Implementation

Cipher Mining Expected Timeline and Details

Investment in Initial Buildout



Additional Investment - Cumulative Greenfield Capacity Deployed

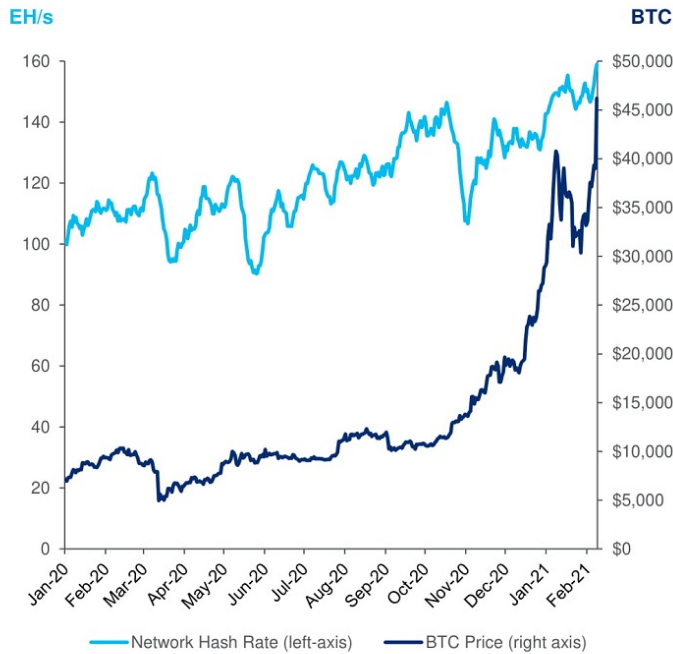


Source: Cipher Mining management
 Note: Assumes initial buildout to begin December 1, 2021E

Business Model Resilience and Downside Protection against BTC Price Drop

Bitcoin Network Computational Power vs. BTC Price ⁽¹⁾

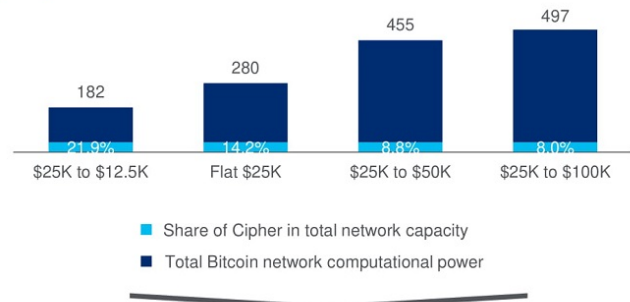
The overall computational power of Bitcoin network is highly correlated with Bitcoin price, and any significant fall in price forces high-cost miners to cease mining which results in proportional decrease of the network power



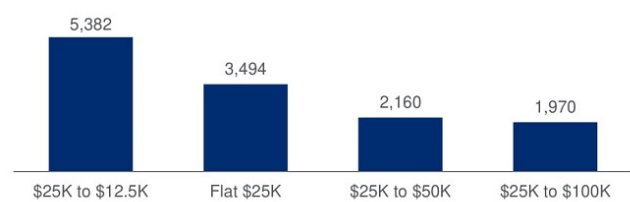
Illustrative Simulation of CIPHER's 745 MW Miner Economics

The amount of blocks that can be mined is pre-set by Bitcoin protocol and is irrespective of network computational power, therefore in periods of low BTC price low-cost producers historically take market share from less-efficient players and maintain economics by increasing the number of blocks mined

Bitcoin network computational power at different BTC prices ⁽²⁾ (EH/s)



Monthly Quantity of Bitcoins Reward Received per 745 MW ⁽²⁾ (BTC)



Source: CIPHER Mining management and Coin Metrics
 Note: Bitcoin market data from 1/1/20 to 2/8/21
⁽¹⁾ Hash Rate represents 7-day average; ⁽²⁾ Based on CIPHER projections for December 2025E

Cipher Mining



Financial Overview

Financial Highlights

*Ability to **scale operation to 745 MW and mine 21k+ Bitcoins per year by 2025E***

EBITDA and cash flow positive by Q4 2021E and Q1 2022E, respectively

Expected ~71% EBITDA margin and ~58% FCF conversion by 2023E

Business model resilience with downside protection against BTC drop

Lean operating model with low management overhead

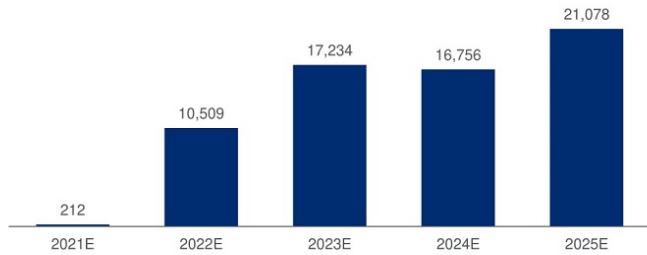
Source: Cipher Mining management

Note: Based upon BTC price increases from \$25k to \$50k from 2021E to 2025E; EBITDA is a non-GAAP financial measure; EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization; EBITDA margin defined as EBITDA / revenue; FCF conversion calculated as (EBITDA – Capex) / EBITDA

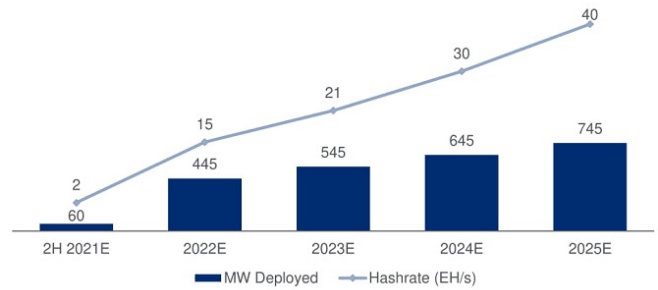
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Illustrative Key Performance Indicators, with BTC from \$25K to \$50K

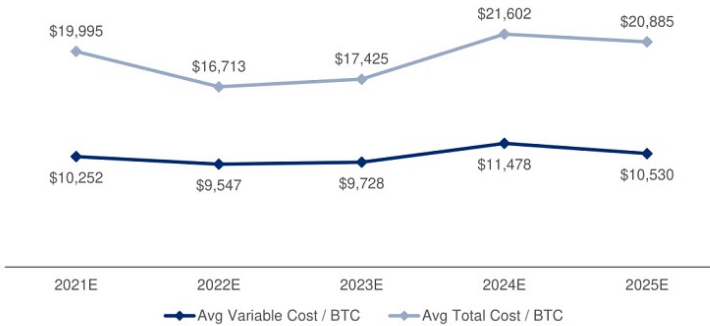
Illustrative Annual Bitcoin Mined



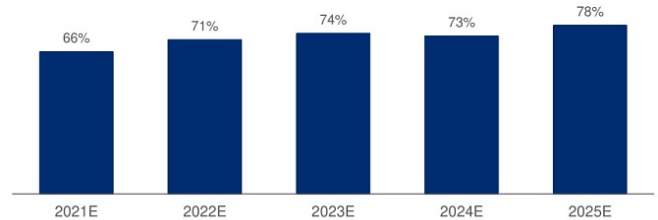
Illustrative Total MW Deployed and Hashrate (EH/s)



Illustrative Average Cost per Bitcoin Mined ⁽¹⁾



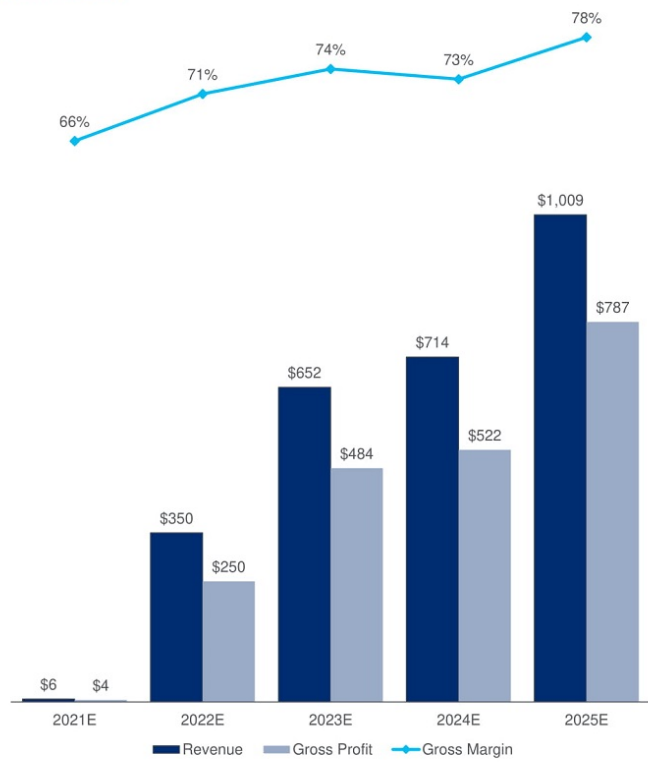
Illustrative Gross Margin



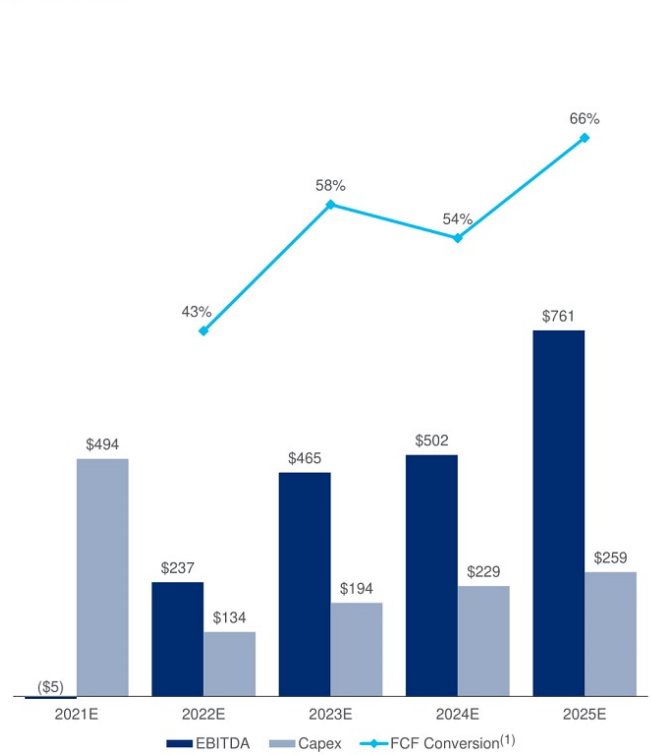
Source: Cipher Mining management
 Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E
⁽¹⁾ Variable cost / BTC = OpEx / Total Bitcoin Mined; Total Cost / BTC includes SG&A and depreciation & amortization

Illustrative Selected Financial Projections, with BTC from \$25K to \$50K

Illustrative Revenue and Gross Profit
(\$ in millions)



Illustrative EBITDA and Capex
(\$ in millions)



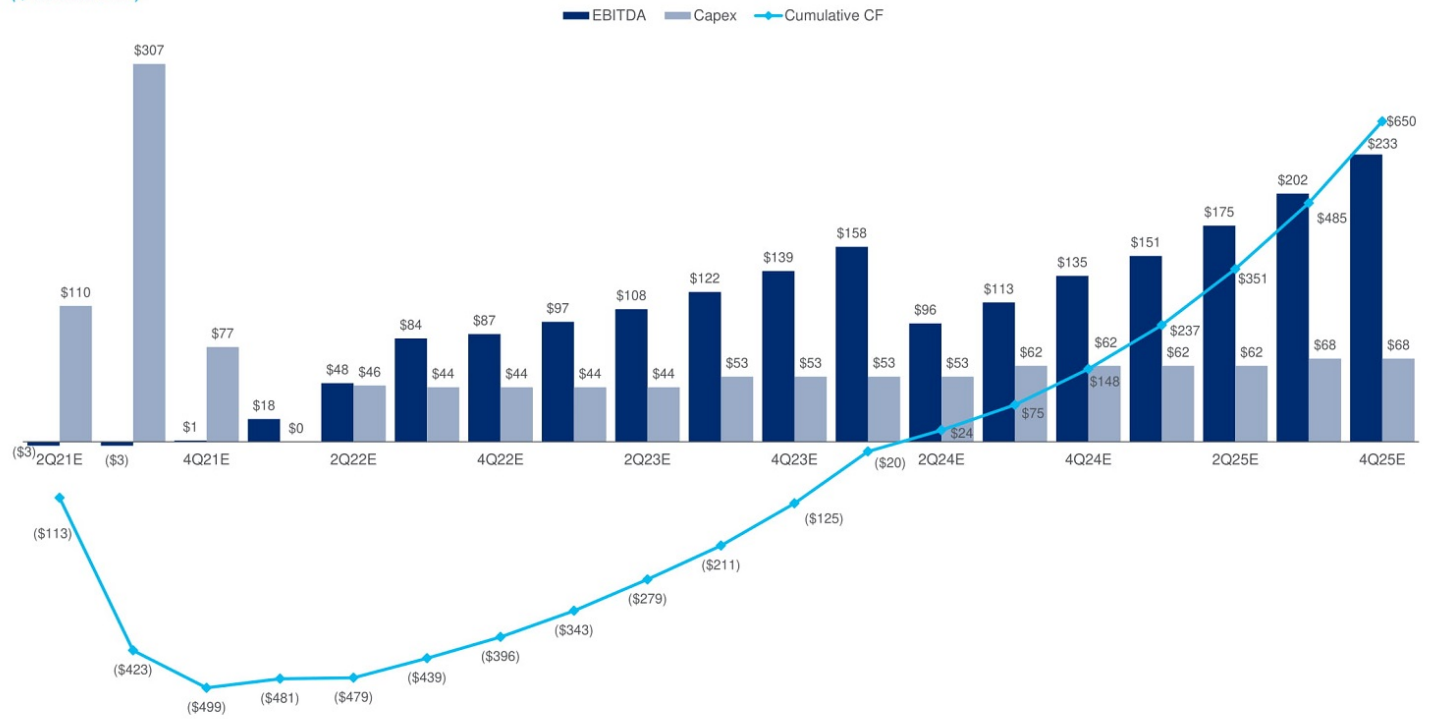
Source: Cipher Mining management

Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E; EBITDA and Free Cash Flow are non-GAAP financial measures

⁽¹⁾ FCF Conversion calculated as (EBITDA – Capex) / EBITDA, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Strong Return on Capital Investment

Illustrative EBITDA, Capex, and Cumulative Free Cash Flow, with BTC increasing from \$25K in 2021 to \$50K in 2025 ⁽¹⁾
 (\$ in millions)



Source: Cipher Mining management
 Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E; EBITDA and Free Cash Flow are non-GAAP financial measures
⁽¹⁾ Free Cash Flow = EBITDA – Capex, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Model Sensitivities to Bitcoin Price Movements

Revenue					
BTC Price	2021E	2022E	2023E	2024E	2025E
\$25k to \$50k	\$6	\$350	\$652	\$714	\$1,009
\$25k to \$12.5K	\$5	\$277	\$475	\$496	\$643
Flat \$25K	\$6	\$305	\$555	\$596	\$820
\$25k to \$100k	\$8	\$449	\$983	\$1,179	\$1,788

Gross Profit					
BTC Price	2021E	2022E	2023E	2024E	2025E
\$25k to \$50k	\$4	\$250	\$484	\$522	\$787
\$25k to \$12.5K	\$3	\$180	\$313	\$309	\$428
Flat \$25K	\$4	\$207	\$390	\$406	\$601
\$25k to \$100k	\$5	\$344	\$807	\$978	\$1,554

EBITDA					
BTC Price	2021E	2022E	2023E	2024E	2025E
\$25k to \$50k	(\$5)	\$237	\$465	\$502	\$761
\$25k to \$12.5K	(\$5)	\$169	\$298	\$293	\$409
Flat \$25K	(\$5)	\$195	\$374	\$389	\$579
\$25k to \$100k	(\$5)	\$330	\$782	\$948	\$1,513

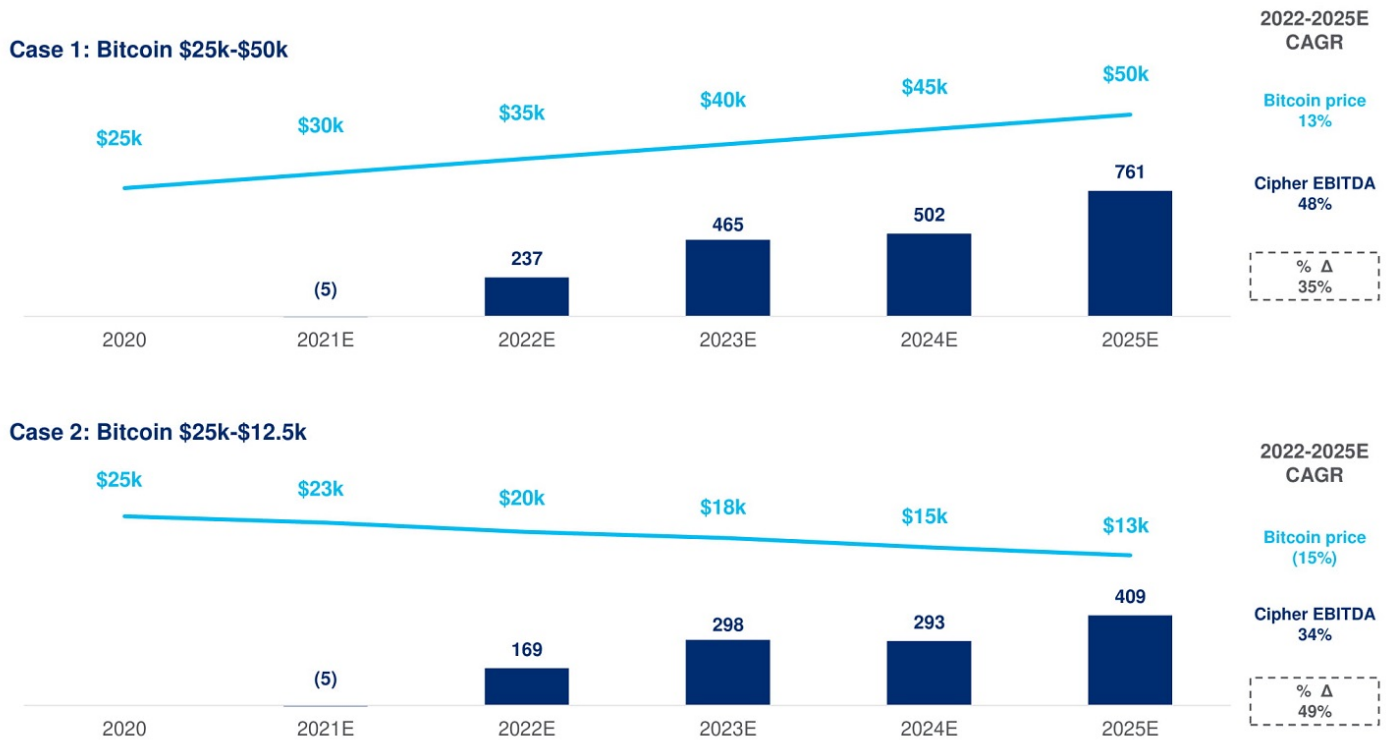
Free Cash Flow ⁽¹⁾					
BTC Price	2021E	2022E	2023E	2024E	2025E
\$25k to \$50k	(\$499)	\$103	\$271	\$273	\$503
\$25k to \$12.5K	(\$499)	\$35	\$104	\$64	\$151
Flat \$25K	(\$499)	\$61	\$179	\$160	\$321
\$25k to \$100k	(\$500)	\$195	\$588	\$719	\$1,254

Source: Cipher Mining management

Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E; EBITDA and Free Cash Flow are non-GAAP financial measures

⁽¹⁾ Free Cash Flow = EBITDA - Capex, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

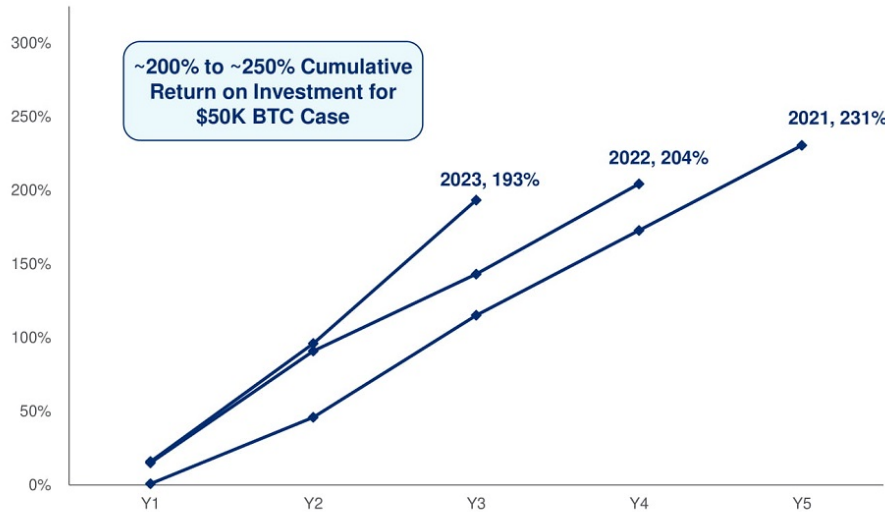
Cipher's Projected EBITDA Growth Outpaces Bitcoin Price in Both Upside and Downside Bitcoin Price Scenarios



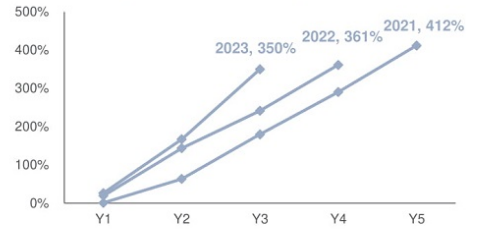
Source: Cipher Mining management
 Assumes Bitcoin price increases linearly from \$25k to \$50k from 2021E to 2025E in case 1 and assumes Bitcoin price decreases linearly from \$25k to \$12.5k from 2021E to 2025E in case 2
 Note: EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization; EBITDA is a non-GAAP financial measure

Strong Return and Downside Protection

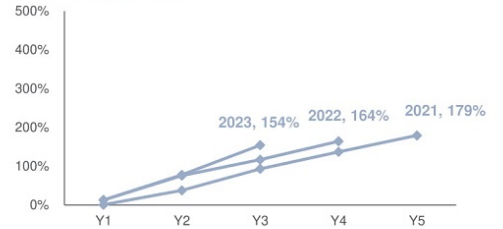
Illustrative Cumulative ROI by Year of Initial Investment, for BTC to \$50K in 2025E ⁽¹⁾



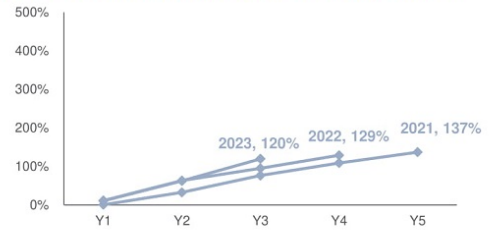
BTC from \$25K in 2021 to \$100K in 2025E



BTC at \$25K Flat



BTC from \$25K in 2021 to \$12.5K in 2025E



BTC Increasing from \$25K in 2021 to \$50K in 2025E

Investment Year	Initial Investment	Y1	Y2	Y3	Y4	Y5
2021E	\$494	1%	46%	115%	173%	231%
2022E	\$134	15%	91%	143%	204%	
2023E	\$194	16%	96%	193%		

Source: Cipher Mining management

Note: EBITDA is a non-GAAP financial measure

⁽¹⁾ Return calculated as cumulative EBITDA / Capex for respective year, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Investment Highlights for Cipher Mining



Source: Cipher Mining management
 Assumes 745MW deployed by Dec 2025E
⁽¹⁾ Subject to LOI
⁽²⁾ Cipher Mining will be a separate company, Bitfury results may not be indicative of Cipher Mining results

Cipher Mining



Appendix

Bitfury Team and Investors

The Bitfury Group — Leadership



Valery Vavilov
Founder & CEO



George Kikvadze
Executive Vice Chairman



Antoine Dresch
Board of Directors member



Chris Allen
Chief Legal Officer



The Bitfury Group — Advisory Board



Bill Tai
Silicon Valley
Venture
Capitalist



Annette Nazareth
Attorney, former U.S.
SEC Commissioner



Brian Forde
MIT Senior Lecturer, former
White House Senior Advisor



Hernando de Soto
Economist & Thought
Leader



Dr. Tomicah Tillemann
Former Senior Advisor to
U.S. Secretary of State



Bob Dykes
Advisor to high-tech
start-ups



Dr. James Newsome
Co-founder at Delta
Strategy Group, former
U.S. CFTC Chairman



Jason Weinstein
Former senior U.S. Justice
Department official in charge
of cybercrime enforcement



Dr. Jackson Hu
Advisor for high-tech
start-ups, venture
partner and semiconductor
industry leader

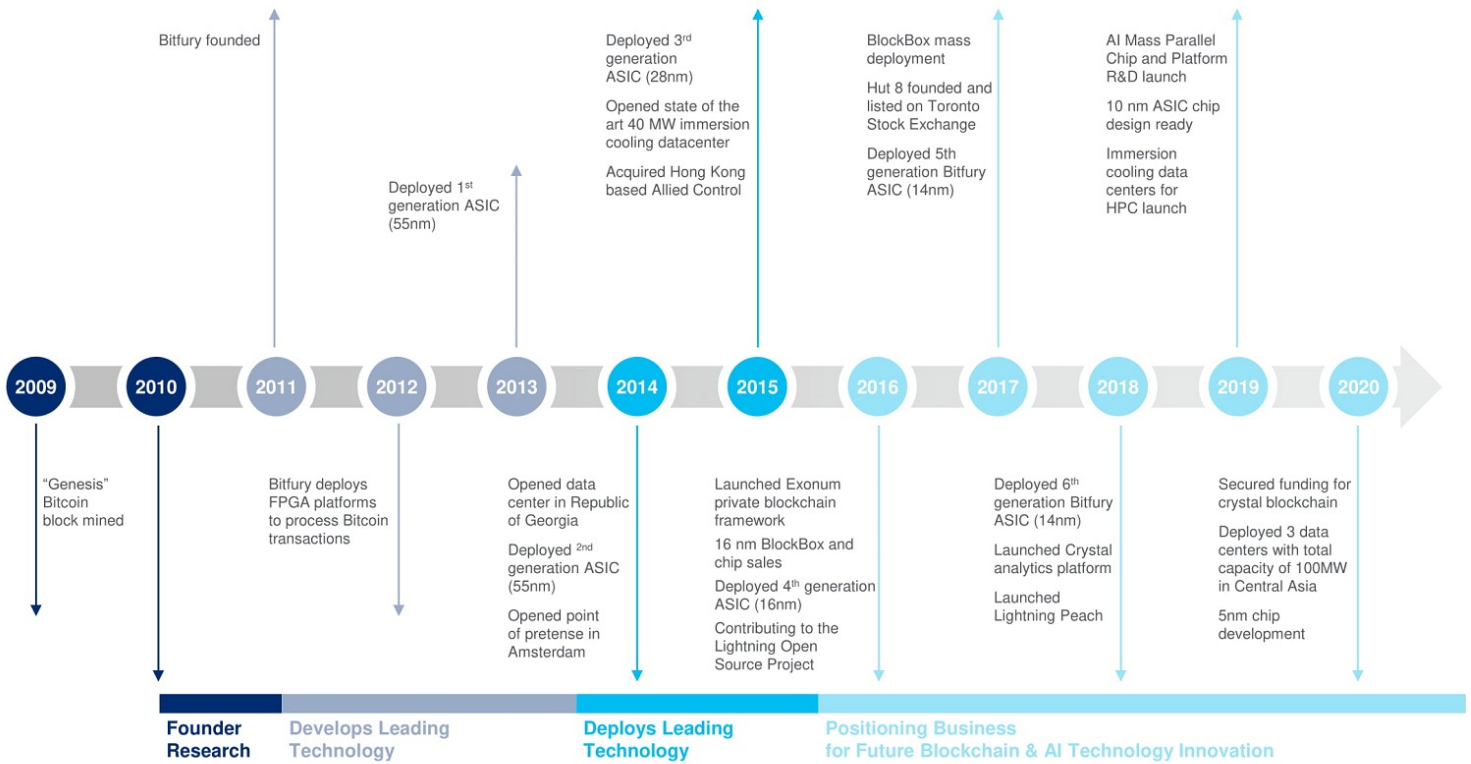


Young K. Sohn
President & Chief Strategy
Officer, ex-Samsung
Electronics, Chairman of the
Board, HARMAN



Investors

Bitfury's History



Source: Cipher Mining management

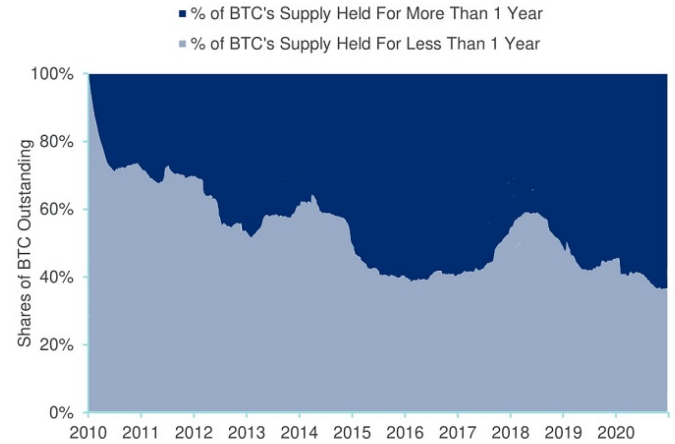
Growing Institutional Appetite for Bitcoin...

Rising Adoption From Investors looking to Diversify Portfolio Allocation

- High correlation: coefficient value lies between ± 0.50 and ± 1
- Moderate correlation: coefficient value lies between ± 0.30 and ± 0.49
- Low correlation: coefficient value lies below $\pm .29$

	Bitcoin	S&P 500	Bonds	Gold	Oil	Emerging Market Currencies	Real Estate
Bitcoin		0.26	(0.14)	0.24	0.19	0.13	0.34
S&P 500	0.26		(0.62)	0.37	0.59	0.52	0.89
Bonds	(0.14)	(0.62)		0.61	(0.44)	(0.36)	(0.49)
Gold	0.24	0.37	0.61		0.43	0.37	0.26
Oil	0.19	0.59	(0.44)	0.43		0.53	0.48
Emerging Market Currencies	0.13	0.52	(0.36)	0.37	0.53		0.45
Real Estate	0.34	0.89	(0.49)	0.26	0.48	0.45	

Increasing Long Term Focus from Investors Bitcoin "HODL" Waves



Only major asset class over the last decade with consistently low correlations to traditional asset classes

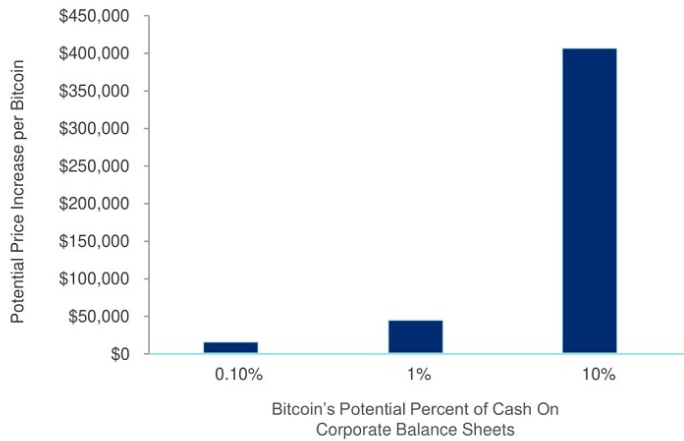
As of November 2020, 60% of Bitcoin has not moved in more than a year

Source: 'Big Ideas 2021' (January 2021) from ARKInvest

...With Upside from Continued Corporate and Institutional Interest

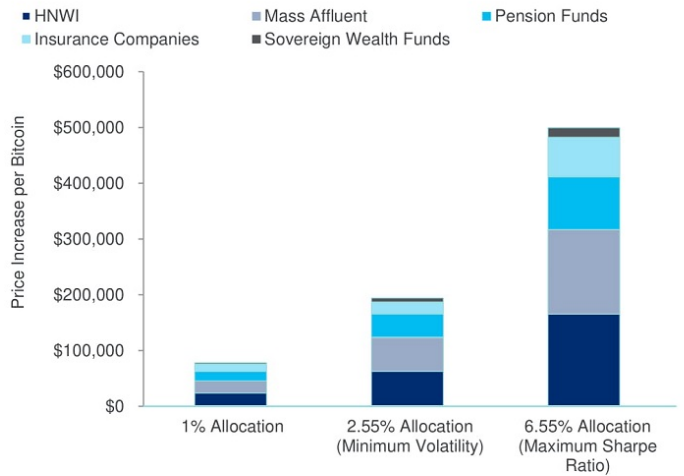
Corporates allocating Balance Sheet to Bitcoin

Hypothetical Price Increase If Bitcoin Were to Replace Cash on S&P500 Corporate Balance Sheets



Significant upside with growing institutional investment

Hypothetical Impact of Institutional Investment On the Price of Bitcoin



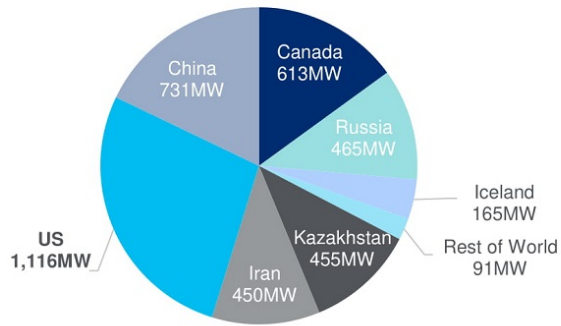
Representative companies with Balance Sheet investments in Bitcoin

Source: 'Big Ideas 2021' (January 2021) from ARKInvest

The Market is Ready for a North American Asset

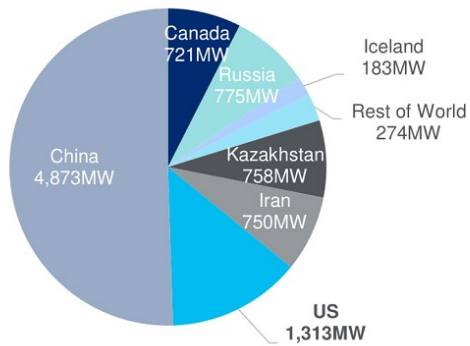
Known Capacity Distribution per July 2020 ⁽¹⁾

Total: 4,086MW



Estimated Total Capacity Distribution per July 2020 ⁽¹⁾

Total: 9,647MW



Increasing Interest in North American Operations

Attractive Market Dynamics

- ✓ Low-cost energy and power infrastructure
- ✓ Freshly minted Bitcoins
- ✓ Significant institutional investor interest
- ✓ Decentralize mining away from China

Stable Regulatory Environment

- ✓ US digital asset ecosystem is more tightly regulated
- ✓ Attracts compliance-wary investors
- ✓ Regulatory framework for Bitcoin is well established and accepted

Source: Cipher Mining management and BitOoda
⁽¹⁾ Based on 'Bitcoin Mining Hashrate and Power Analysis' (July 2020) from BitOoda

Projections Overview

- Creation of the largest computational infrastructure for Bitcoin mining globally with total capacity of 745+ MW and computational power of 39.8 EH/s
- In its initial build out, the building of four new data centers (greenfield projects) in the U.S., three in Texas and one in Ohio
- The greenfield projects are ready for deployment with lease agreements and power purchase agreements already agreed ⁽¹⁾
 - Two of the three power suppliers will finance a large portion of the capex required for certain infrastructure in exchange for a profit sharing arrangement that will be included in the respective power supply agreements, enhancing the ROI for investors in Cipher Mining
- Construction, engineering, operations and other services required to launch and maintain the data centers will be provided by Bitfury on arms' length terms
 - Bitfury will not compete with mining development projects in the U.S. ⁽²⁾
 - Bitfury to use commercially reasonable efforts to supply any specialist mining equipment required by Cipher
- The mining capacity will be deployed in an initial first phase, and a second phase of 100 MW per year beginning in 2023E
 - Flexibility on transaction timeline and capacity deployment for the further investment
- Financial projections, including revenue, gross profit, EBITDA and Free Cash Flow ⁽³⁾, sensitized around four possible Bitcoin price scenarios over the next five years
 - Base case of \$25K trending up to 50K by 2025E, price increases ~\$5K per annum
 - Downside case of \$25K trending down to \$12.5K by 2025E, price decreases ~\$2.5K per annum
 - Flat case of price staying constant at \$25K through 2025E
 - Upside case of \$25K trending up to \$100K by 2025E, price increases ~\$15K per annum

Source: Cipher Mining management

⁽¹⁾ Subject to LOIs; ⁽²⁾ Subject to certain de minimis thresholds; ⁽³⁾ Free Cash Flow = EBITDA – Capex, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Mining Costs Overview

Opex Breakdown

Category	Description	Indicative Amount
Electricity	The most important operating cost for Bitcoin mining; low electricity costs mitigate negative Bitcoin price movements	\$27 – \$28 ⁽¹⁾ / MWh average
Opex and Maintenance	Mining equipment and electric infrastructure need staff to perform ongoing troubleshooting and repairs	\$4,500 / MW per month

Capex Breakdown

Category	Description	Indicative Amount
Mining Equipment	Primary capex cost; used for purchasing equipment and high-efficiency ASIC-powered Bitcoin miners (includes taxes and duties)	\$962k / MW
Infrastructure	New site infrastructure build out, including substations, transformers and utility contract deposits	\$217k / MW
Blockbox	Repeatable 500 square foot datacenter container infrastructure	\$127k / MW

Source: Cipher Mining management
 Note: Assumes BTC price increases from \$25K to \$50K from 2021E to 2025E
⁽¹⁾ Subject to LOI

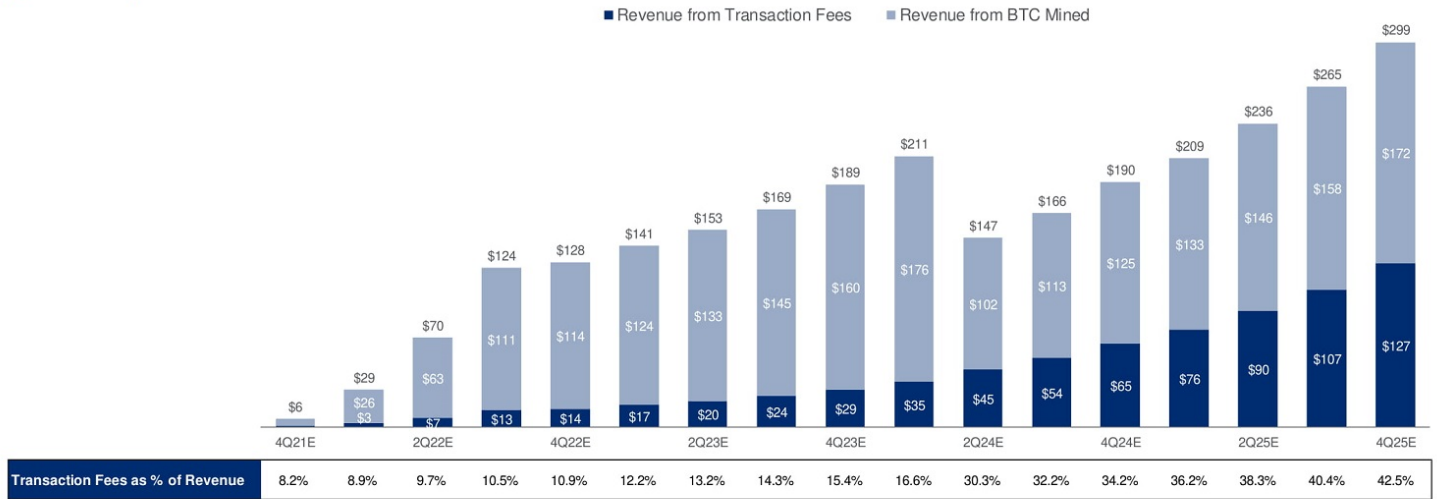
Expected Increasing Importance of Transaction Fees

Strong Ability to Capture Transaction Fees

- Projected revenue is earned from both the block reward and the transaction fees
- As the total number of Bitcoin available to mine declines over time, the transaction fees will become the main incentive driver for miners
- As use of the Bitcoin network expands, Cipher Mining will be well positioned to command an increasing portion of the network fees
- For Cipher Mining, the % of revenue expected to come from transaction fees increases from 7% in 2021E to 40% in 2025E for the base case

Illustrative Revenue from Transaction Fees and Bitcoin Mined, in Base Case of BTC to \$50K

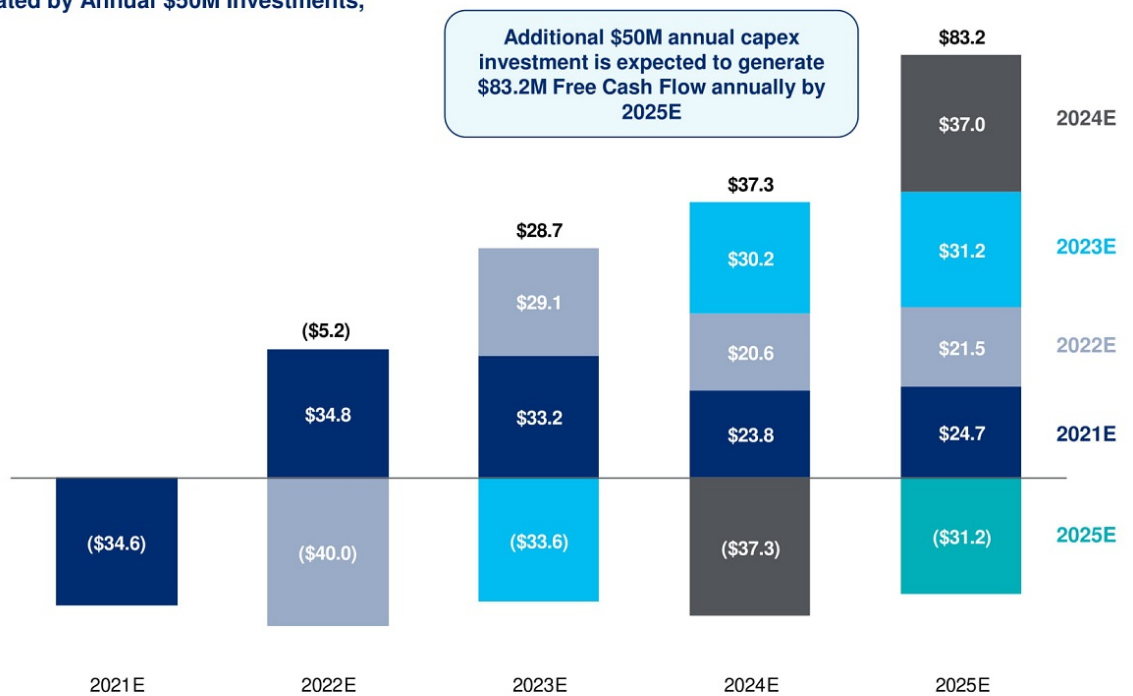
(\$ in millions)



Source: Cipher Mining management
 Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E

Significant Upside from Additional Capex Deployment

Illustrative Cash Flow Generated by Annual \$50M Investments, by Year of Investment ⁽¹⁾
 (\$ in millions)



Additional \$50M annual capex investment is expected to generate \$83.2M Free Cash Flow annually by 2025E

	2021E	2022E	2023E	2024E	2025E
Additional MW from \$50M Investment	38.3	35.2	28.3	23.6	20.2
Additional Hashrate from \$50M Investment (EH/s)	1.3	1.1	1.4	1.6	1.7

Source: Cipher Mining management
 Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH/s network hashrate by Dec 2025E; assumes 2.38 BTC transaction fees per block by Dec 2025E; assumes 745MW deployed by Dec 2025E; EBITDA and Free Cash Flow are non-GAAP financial measures
⁽¹⁾ Free Cash Flow = EBITDA – Capex. EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Projected Financials – BTC Price from \$25K to \$50K

(\$ in millions)

	Year ending December 31				
	2021E	2022E	2023E	2024E	2025E
Initial Investment Revenue	\$6	\$350	\$524	\$412	\$422
Additional Investment Revenue	0	0	128	303	586
Total Revenue	\$6	\$350	\$652	\$714	\$1,009
% Growth		5418.0%	86.1%	9.6%	41.2%
Initial Buildout OpEx	(1)	(83)	(128)	(128)	(128)
Additional Investment OpEx	0	0	(16)	(45)	(74)
Total Profit Sharing Payout	(1)	(17)	(24)	(20)	(20)
Gross Profit	\$4	\$250	\$484	\$522	\$787
% Margin	65.8%	71.4%	74.3%	73.1%	78.0%
SG&A	(9)	(13)	(19)	(20)	(26)
EBITDA	(\$5)	\$237	\$465	\$502	\$761
% Margin	(81.9%)	67.8%	71.4%	70.3%	75.5%
D&A	(1)	(63)	(114)	(150)	(193)
PIPE and Transaction Fees	(44)	0	0	0	0
Income Taxes ⁽¹⁾	11	(37)	(74)	(74)	(119)
Net Income	(\$40)	\$138	\$278	\$278	\$449
% Margin	(625.1%)	39.4%	42.6%	39.0%	44.5%
Capex and Investment	(494)	(134)	(194)	(229)	(259)
Free Cash Flow ⁽²⁾	(\$499)	\$103	\$271	\$273	\$503

Source: Cipher Mining management

Note: Projections based upon BTC increases from \$25k to \$50k from 2021E to 2025E; assumes 455 EH's network hashrate by Dec 2025; assumes 2.38 BTC transaction fees per block by Dec 2025; assumes 745MW deployed by Dec 2025; EBITDA and Free Cash Flow are non-GAAP financial measures; Assumes 21% income tax rate

⁽¹⁾ Excludes application of NOLs and bonus depreciation ⁽²⁾ Free Cash Flow = EBITDA – Capex, EBITDA defined as net earnings (loss) before interest expense, income tax expense (benefit), depreciation and amortization

Cipher Mining



Appendix: Bitcoin Mining 101

Key Terms



Bitcoin – a decentralized, permission-less digital currency in which new units are generated by computational solution of mathematical problems



Blockchain - a data system in which transactions are stored on a peer-to-peer digital ledger and based upon cryptographic engagement



Block - Bitcoin transaction records



Mining – current transaction processing in the Bitcoin network, whereby blocks are added to the blockchain, or history of past block transactions



Hash Rate - a miner's performance expressed via processing power, the number of calculations a miner can perform each second



Block Reward – Quantity of Bitcoin received for block mined

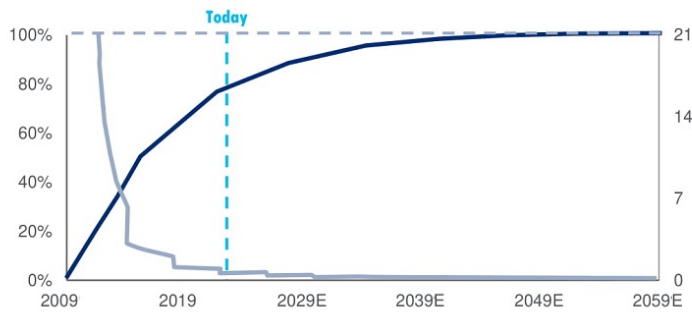
What is Bitcoin?

Bitcoin Overview

- Bitcoin is a digital commodity invented in January 2009 by an unknown person under the pseudonym of Satoshi Nakamoto
- By 2025E, Bitcoin is expected to surpass gold's annual stock to flow ratio (commodity's current stock divided by flow of new production)
- Gold has high storage and transport costs while Bitcoin requires no transport costs and has a transparent and diminishing supply schedule
- There is a finite supply of 21 million Bitcoins with ~18.6 million Bitcoins currently in circulation – it is a scarce asset that can serve as a hedge against various forms of inflation

Bitcoin Supply Schedule

(BTC in millions, Annual emissions in %)



18.6MM today (88%), 19.9MM by 2024 (94%), 21MM by 2141 (100%)

Bitcoin Marketplace

Regulation

- Regulated by the US Commodities Futures Trading Commission
- SEC oversee specific institutions while state regulators have jurisdiction over transactions in their states



Custody

- Self-custodied or custody can be assigned to third parties
- Most major custody platforms carry insurance to protect holders against theft



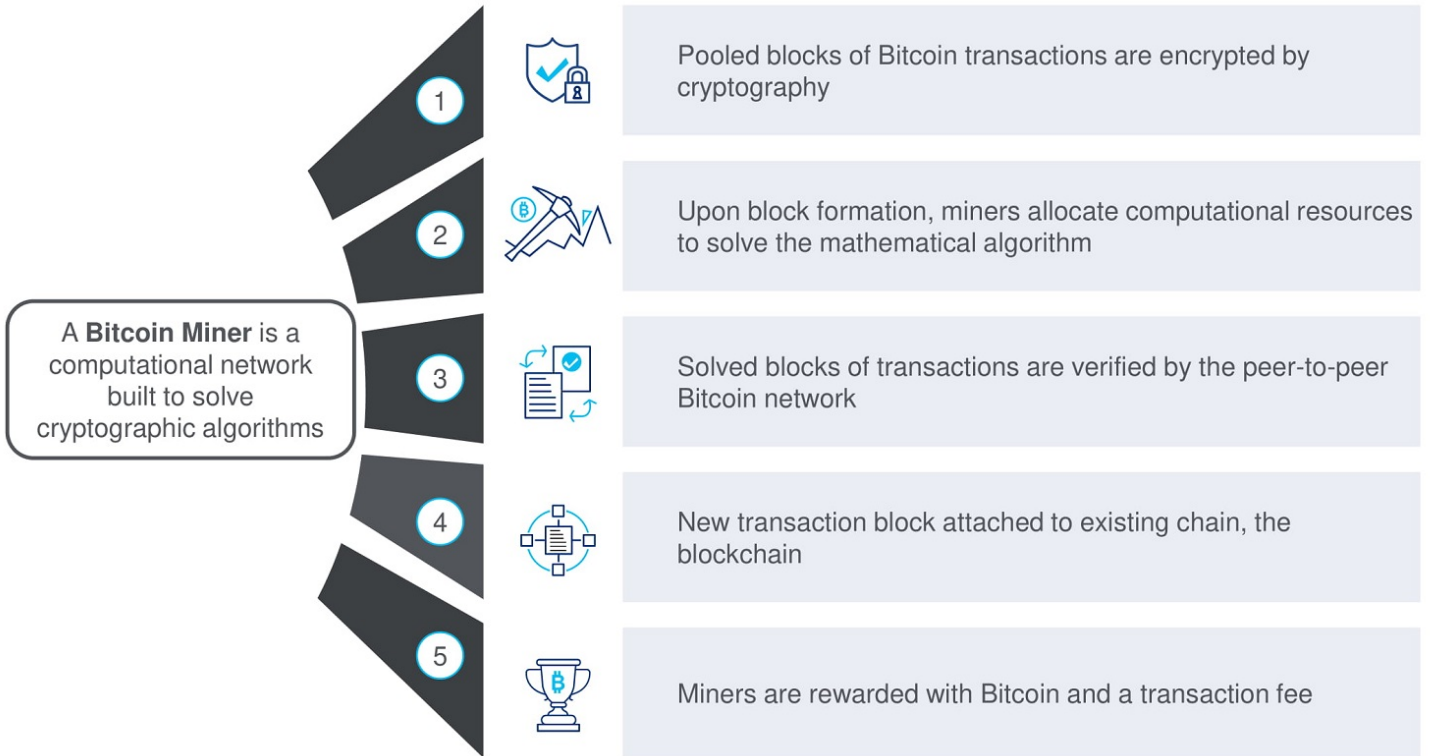
Trading

- Can be traded in spot or futures form (physically and cash settled)
- Almost all exchanges employ AML/KYC protocols to ensure "clean" trading pools



Source: Cipher Mining management and Coin Metrics
 Note: Bitcoin market data as of 1/15/21

Bitcoin Mining, Explained



Source: Cipher Mining management

Bitcoin Mining Economics

Mining Revenue Generation

$$\text{Bitcoin Mining Revenue} = \left(\text{Mining Difficulty} \right) \times \left(\text{Price of BTC} \right) \times \left(\text{Block Reward} \right) \times \left(\text{Blocks/Year} \right) + \left(\text{Transaction Fees} \right)$$

Driven by miner's hash rate as a fraction of the overall network

Determined by scarcity, finite supply and investor demand

6.25 Bitcoin reward ⁽¹⁾ per block, halving every four years

52,560 Bitcoin blocks awarded per year

Miners awarded transaction fee for successful block verification

Profitability Drivers

Industry and Network Factors



Mining Difficulty, Bitcoin Price



Mining Hardware Expense



Political and Regulatory Acceptance

Project-Specific Factors



Scale and Bolt-on Ability



Electricity Source and Data Center Efficiency



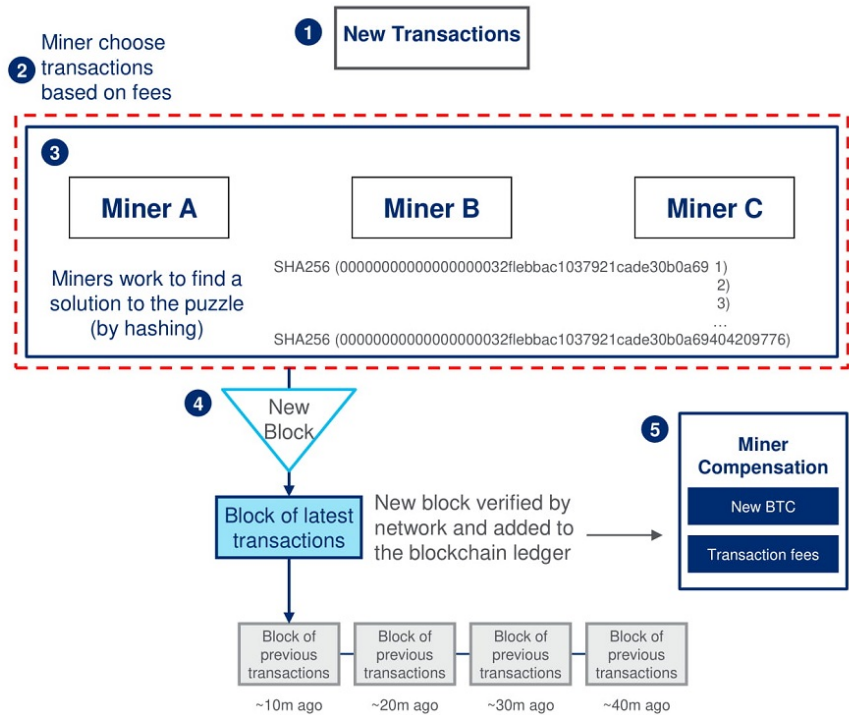
Performance Monitoring Software

Source: Cipher Mining management
⁽¹⁾ As of May 2020

Bitcoin Mining Technical Overview

Bitcoin mining is based on a trustless algorithm requiring miners to solve cryptographic puzzles in order to create new blocks of transactions

- 1 New transactions are broadcast to the network
- 2 Economically-motivated miners select transactions with the highest fees to construct potential blocks
- 3 Miners work in competition to solve the cryptographic puzzle, spending electricity and time to find the solution via brute force guessing (hashing)
- 4 Once a miner finds a correct solution, the new block is broadcast and verified across the network, thus being added to the blockchain
- 5 In adding this block to the blockchain, the winning miner is compensated for their work through:
 - 1) block reward (new Bitcoins)
 - 2) transaction fees

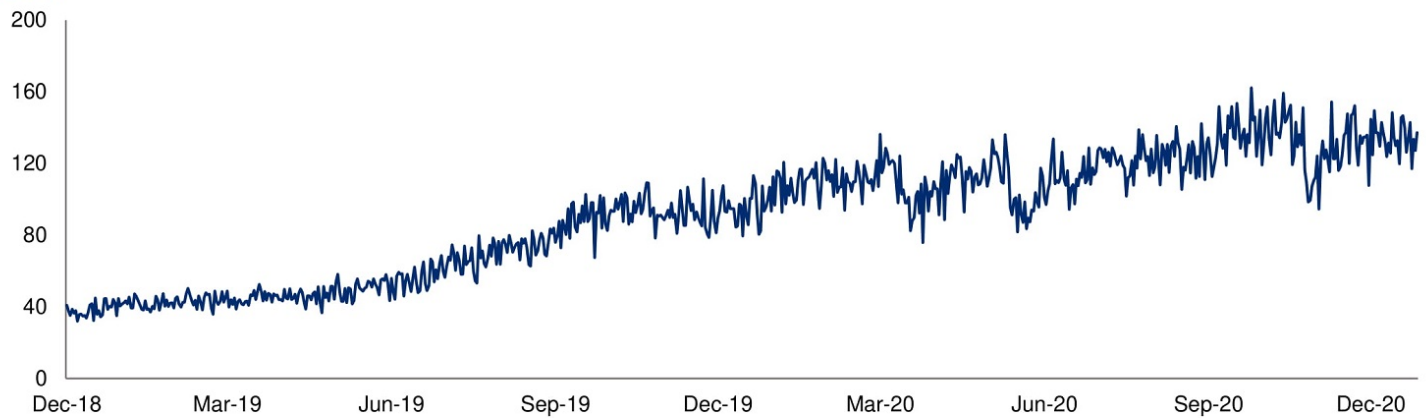


Source: Cipher Mining management and Galaxy Digital Research

Hash Rate and Network Dynamics

Steady Increase in Network Hash Rate ⁽¹⁾

(EH/s)



Hash Rate

- The processing power of the Bitcoin network is expressed in Hash Rate (hashes, or calculations, per second or H/s)
- Hash rate is often measured in Exa hashes per second (EH/s) or Tera hashes per second (TH/s)

Block Reward

- A new block of transactions (a Block Reward) is created every ~10 minutes, each consisting of 6.25 Bitcoin (as of May 2020)
- Miners are awarded Block Rewards in proportion to their processing contribution of the overall network

Network Hash Rate is Related to Spot Price Based on Rational Economic Decisions of Miners

- Rising spot prices expand margins and attract more miners, driving hash rates higher and market share lower
- Margins have an upper bound limited by competition and a lower bound limited by miners' required minimum return

Source: Coin Metrics
 Note: Bitcoin market data from 12/1/18 to 12/31/20
⁽¹⁾ 1-day average

Halving Drives Bitcoin Scarcity

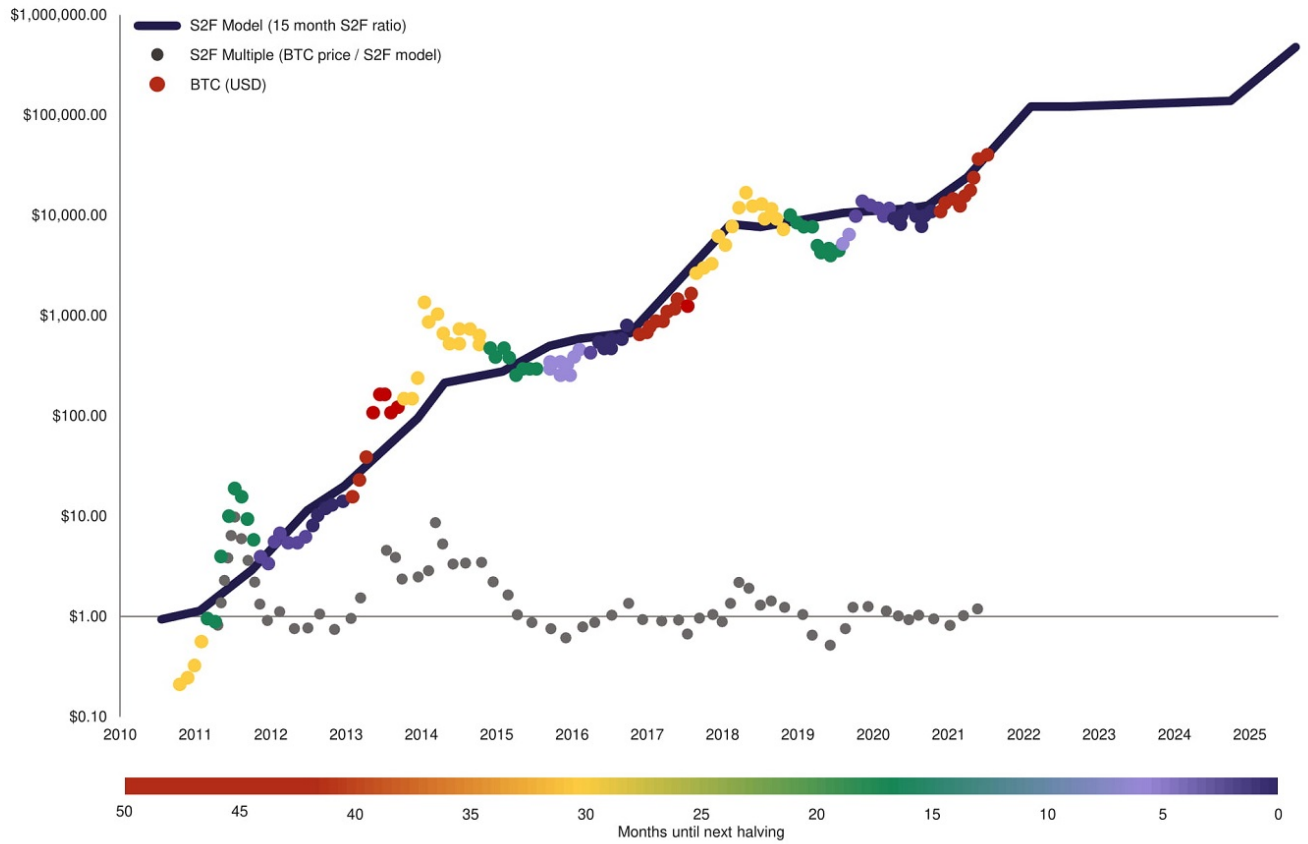
Bitcoin Halvings Have Led to Dramatic Price Increases

- Following each halving, Bitcoin miners receive half the Bitcoin per block mined
- Halving will occur until 2140, when Bitcoin outstanding will reach its maximum of 21 million
- Bitcoin mining block rewards have halved twice prior to May 2020, in 2012 and 2016, each seeing significant price appreciation in the ensuing 18 months








































Source: Cipher Mining management and Coin Metrics
Note: Bitcoin market data as of 1/15/21

Stock-to-Flow Model a Reflection of BTC Price Trajectory



Source: PlanB@100trillionUSD

What to Look for in a Bitcoin Mining Project

Factor	CIPHER MINING	Role
 Power Cost	   	As the largest mining cost, electricity price drives project competitiveness
 Operator/ Management	   	Bitcoin mining datacenters vary significantly from traditional datacenters, and market nuances vary by region
 Jurisdiction	   	Regulatory clarity and acceptance makes some countries and states inhospitable for Bitcoin mining
 Expansion Potential	   	Long potential useful life mitigates secondary capex cycles, amplifying returns on reinvestment of hardware
 Other Opex	   	Miners are incentivized to have a light operating model as G&A expense spend weighs down returns
 Structure	  	The nature of the structure – temporary versus permanent – impacts durability and secondary capex cycles
 Site Climate	 	Humidity is the primary environmental operating concern, while heat and dust are considerations if not managed proactively
 Security	   	Both physical location access and custody of mined Bitcoins



Source: Cipher Mining management