DPO

The Fundamentals and Energy Implications of Bitcoin Mining

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DPO topics

Introductions and why bitcoin mining matters to the energy industry

What is cryptocurrency and mining?

Future of regulated generation portfolios

Appendix: Additional Info

Introductions and why bitcoin mining matters to the energy industry

DPO: An exclusive focus on power producers

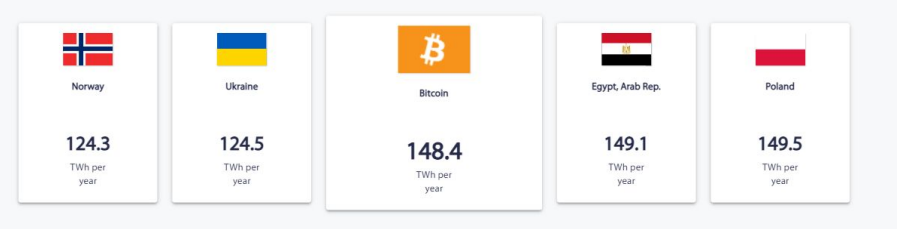
- DPO was formed in **February 2020.**
- The company is built around **helping the power and energy sector** use bitcoin mining for its own benefit.
- DPO does **all the work** associated with co-located bitcoin mining operations at power assets.
    - Pre-construction: Financial modeling, planning & advisory, financial structuring, strategy.
    - Construction: Procurement, project management, oversight of engineering, contractors, construction.
    - Operations: Load management, profitability maximization, maintenance, crypto wallets, hedging, liquidation.
- **Alignment of interests** is critical. DPO does not make money until our power partners make money.
- DPO's growing team currently includes **8 professionals** with past experience in renewable energy, utilities, private equity, project management and construction at firms such as **Goldman Sachs**, **Alliant Energy**, and **Fortress Investment Group**.
- DPO currently has **bitcoin mining operations** or contracts with 7 clients ranging from regional solar developers to multi-billion-dollar publicly-traded utilities.

As Seen In:

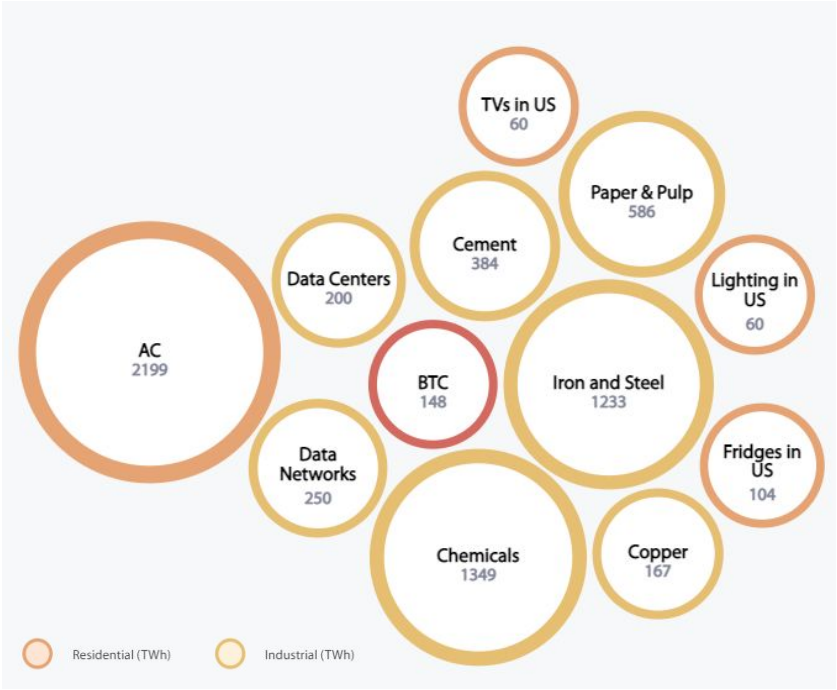
PEi Power Engineering International · The Economist · Bloomberg · Wood Mackenzie · Power Finance & Risk · Utility Dive · EnergyTech

Bitcoin mining is energy intensive

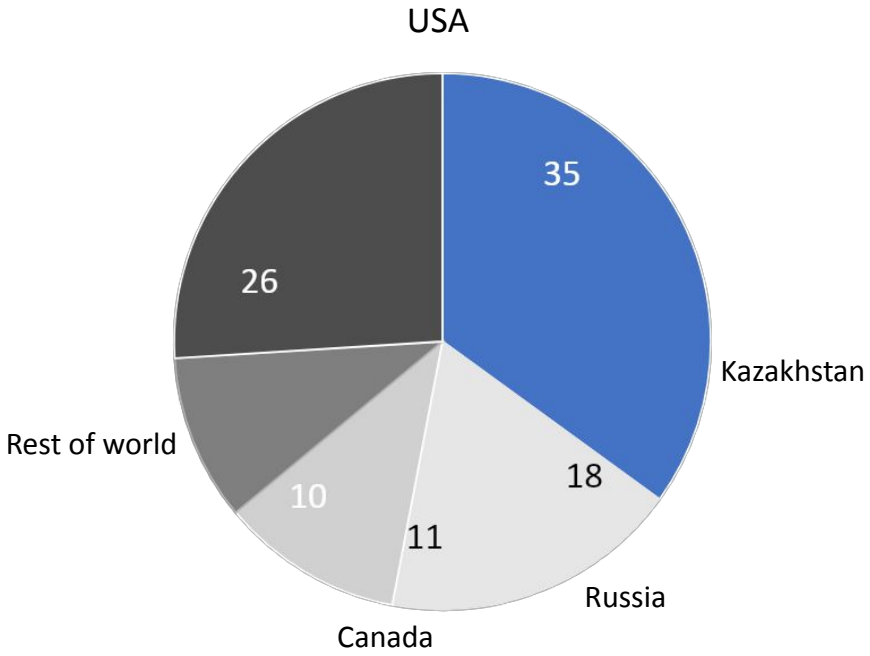
Country comparison for BTC electricity consumption, TWh



Energy intensive activities consumption comparison, TWh



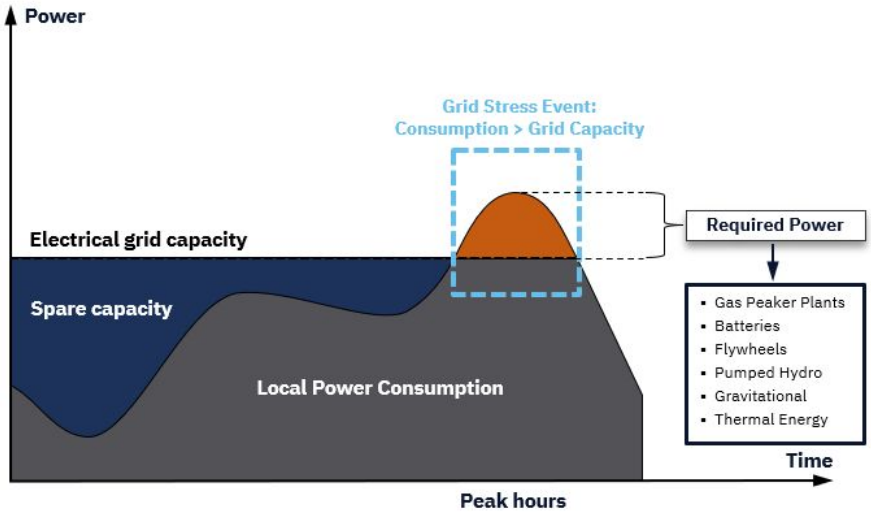
BTC mining share by country – 07/2021



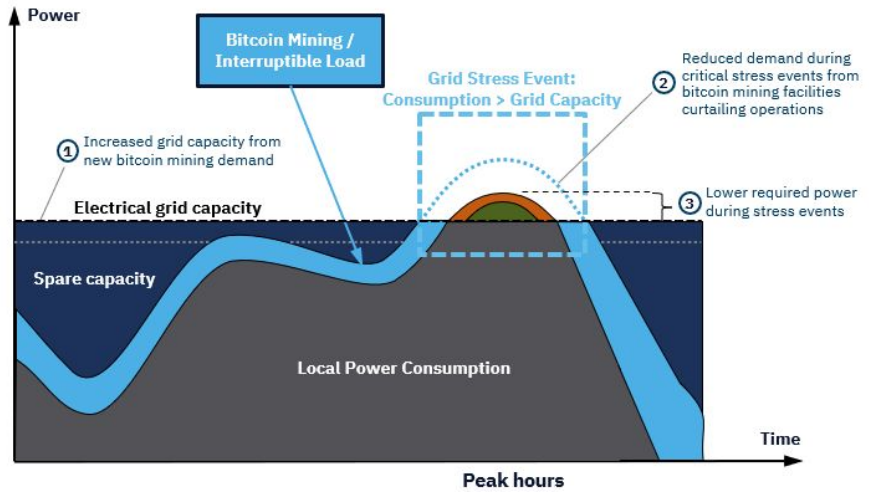
Source: Cambridge Bitcoin Electricit Consumption Index.

Bitcoin mining has grid benefits…

Illustrative Electrical Grid Supply/Demand: Without Bitcoin Mining



Illustrative Electrical Grid Supply/Demand: With Bitcoin Mining



- In the past, most bitcoin mining has taken place in China.
- Much of the power used in China was derived from coal, especially in the dry seasons.
- Bitcoin mining is now migrating to lower-cost power in regions with heavy renewable penetration and ESG investors are pushing for verified green Bitcoin to put on their balance sheets.
- The flexibility of bitcoin mining loads make them more viable in locations that are oversaturated with low-cost renewables or see high intraday volatility.

Risk of Bitcoin Mining

Risk	Description
Environmental	• Air, Land, Water, Noise
Regulatory/ Legal	• Federal, State, General
Financial	• Revenue, Expenses, Tax
Reputational	• Consumer, Investor, Public
Project	• Safety, Investor, Electric

How Bitcoin Mining Can Work with Other Technologies

- Bitcoin Mining, Battery Storage, and Green Hydrogen can be structured and utilized in various ways, depending on location and what energy headaches need to be solved (like curtailments).
- Each of these new technologies can work in concert with one another and are all a better alternative than curtailing generation when intermittent generation is outpacing load.

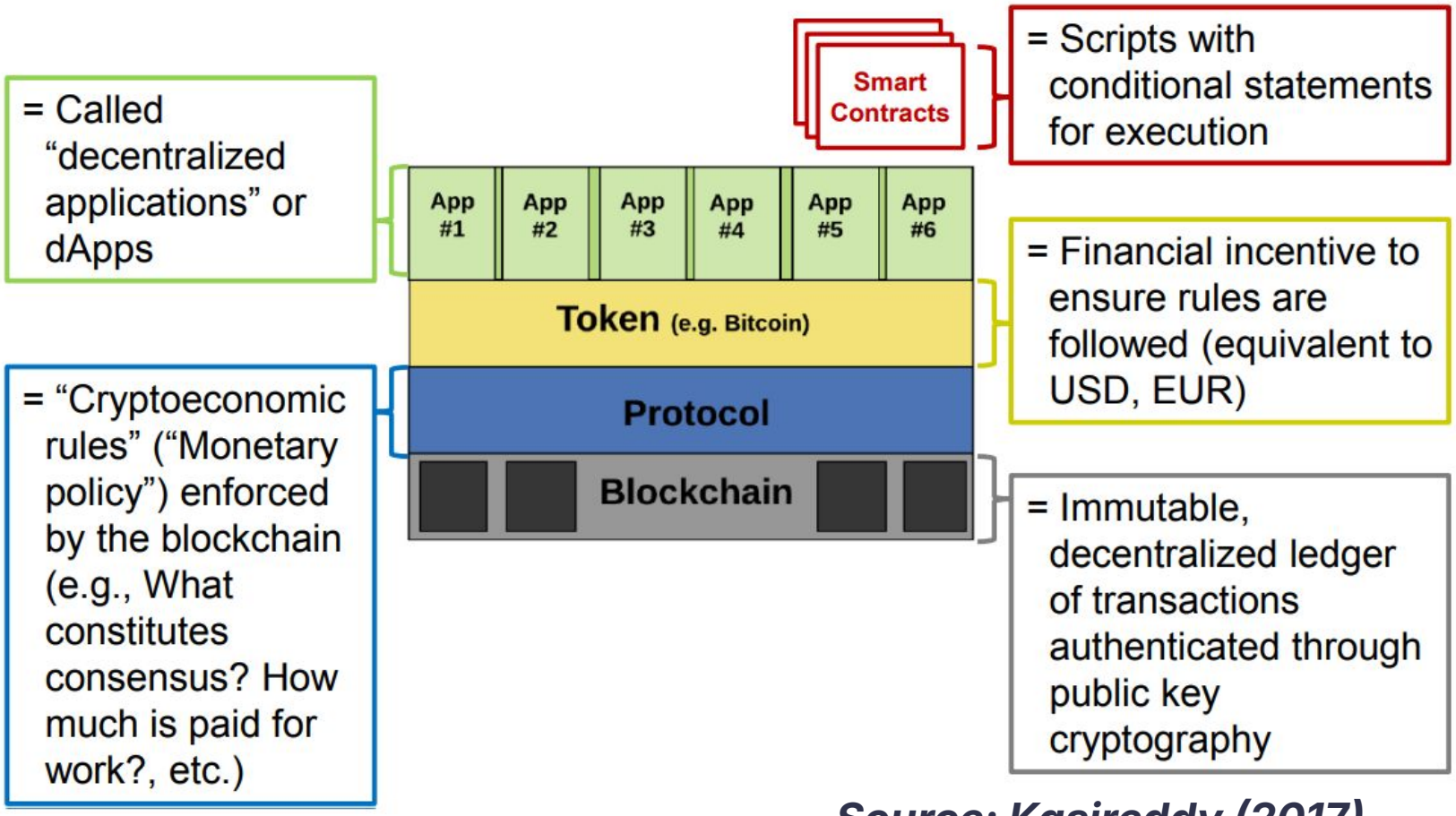
Behind-the-Meter Strategy

- Behind-the-Meter-Generation (BTMG) strategy is critical for the future of Bitcoin Mining
- BTMG Policy
  - Private-Use-Network (ERCOT/Texas)
  - Qualifying Facilities (Applies to all the US)

Policy	Description
Private-Use-Network	• Allows for BTMG to an affiliate or 3rd party offtaker • Allows for the avoidance of transmission and distribution charges • Production Tax Credits are available as long as it's sold to a 3rd party offtaker
Qualifying Facilities (Renewables)	• Allows for BTMG to an affiliate • Allows for the avoidance of transmission and distribution charges • Must be >= 1 MW • BTMG can be unlimited, but the max capacity can not be more than 80 MW for renewables (Note: fossil fuels can be unlimited and sold to a 3rd party)

What is cryptocurrency and mining?

The crypto technology stack



Source: Kasireddy (2017)

Decentralized cryptocurrency relies on mining to validate transactions

How Is Cryptocurrency "Mined"?

TRANSACTIONS
People who want to buy or sell crypto submit their orders to the network.

BLOCK FORMATION
These pending orders are grouped into small chunks called "blocks".

MINER COMPETITION
Each block contains the chunk of pending transactions, and also a cryptographic puzzle. **Computers compete to solve the block's puzzle first.**

VALIDATION
Once one computer (aka "miner") solves the puzzle first, the other miners validate her work.

LEDGER ADDITION
Once 51% of miners validate and agree that the block winner's work was valid, the completed transactions are added to the blockchain ledger.

REWARDS
If the block gets added to the blockchain ledger, the miner who solved the block is **rewarded** with some newly minted coins.

This is not an intuitive concept, but is important for understanding **crypto mining profitability**. Essentially, the puzzle is a game of probabilities (like the lottery). The more tickets you have, the better your chances are of winning. In this case, the "tickets" equate to the number of computers you have, or more specifically the **amount of power that your computers ("miners") contribute to the network** relative to your peers. If your miners contribute more to the network than your competitors' do, then you will win the crypto lottery more times than them, so your revenues will be higher.

The current reward for solving a Bitcoin block is **6.25 BTC (~$375K).** This is where most revenues come from for crypto miners.

Source: Jefferies

Revenue

$$\frac{\text{Company Hash Rate}}{\text{Network Hash Rate}} \times \text{Price of BTC} \times (\textbf{6.25 BTC Block Reward} + \text{Transaction Fees}) \times \textbf{52,560 Blocks/Year}$$

Minus **Costs**

ASIC Miners + Electric & Hosting + Corporate Expenses

Equals Mining **Profits**

	BTC Price ($USD)	YoY Growth	Network Hash Rate (TH/s)	YoY Growth	Total Mining Rewards + Fees ($USD)	YoY Growth
2011	$6		6		$17,527,179	
2012	$8	41%	16	167%	$22,081,409	26%
2013	$180	2043%	1,410	8713%	$285,664,045	1194%
2014	$530	194%	140,000	9829%	$779,816,706	173%
2015	$270	-49%	403,000	188%	$366,969,442	-53%
2016	$560	107%	1,520,000	277%	$592,430,020	61%
2017	$3,900	596%	6,260,000	312%	$2,756,444,824	365%
2018	$7,600	95%	36,300,000	480%	$5,214,967,094	89%
2019	$7,300	-4%	66,700,000	84%	$4,963,338,686	-5%
2020	$11,000	51%	120,000,000	80%	$5,049,021,852	2%
2021E	$47,800	335%	146,000,000	22%	$15,714,760,109	211%
2022E	$58,900	23%	236,000,000	62%	$19,391,420,235	23%
2023E	$73,500	25%	367,000,000	56%	$24,222,266,775	25%
2024E	$93,200	27%	516,000,000	41%	$19,290,037,380	-20%
2025E	$122,800	32%	802,000,000	55%	$20,352,313,260	6%
2026E	$155,300	26%	1,244,000,000	55%	$25,764,223,410	27%
2027E	$193,700	25%	1,863,000,000	50%	$32,166,587,115	25%
'15-'21 CAGR		137%		167%		87%
'21-'27 CAGR		26%		53%		13%

Source: Blockchain.com, Jefferies

Bitcoin relies on an energy-intensive process called Proof-of-Work

Method	Description	Coins & (Market Cap)
Proof-of-Work (PoW)	• Everyone offering computing power to the blockchain is tasked with solving the same mathematical problem to validate a transaction • Whoever successfully first solves the problem is rewarded with a fixed amount of new coins and a small transaction fee • The chance to solve the problem increases if a person increases its share of total system computing power	• Bitcoin ($429bn) • Dodgecoin ($9bn)
Proof-of-Stake (PoS) and Other	• Proof-of-Stake and stable coins are other types of crypto that use a different mechanism to process transactions and maintain network security • Security, different function, goals and do not depend on energy as a primary source; however the lack of energy as an underpinning makes them less secure.	• Ethereum ($211bn) • Solana ($20bn) • Cardano ($17bn)

Future of regulated generation portfolios

How Bitcoin Mining Can Lower Customer Bills

- Bitcoin mining in regulated states can lower ratepayers bills and help stabilize the grid.

- In the MISO market, for example, utilities are compensated for capacity in their generation portfolios based on Planning Reserve Margin Requirements:
  - 1GW of natural gas generation = 1GW of capacity
  - 2GW of solar generation = 1GW of capacity
  - 6.7GW of wind generation = 1GW of capacity

- In addition to renewables natural variability, they are also often concentrated in areas with good resource availability resulting in significant localized overgeneration and/or meaningful curtailments.

- Bitcoin mining can be a profitable off-take in many of these situations to make these dynamics easier to navigate.

In a regulated utilities strategy:

1. All economic benefits are credited back to the customer to reduce energy bills.

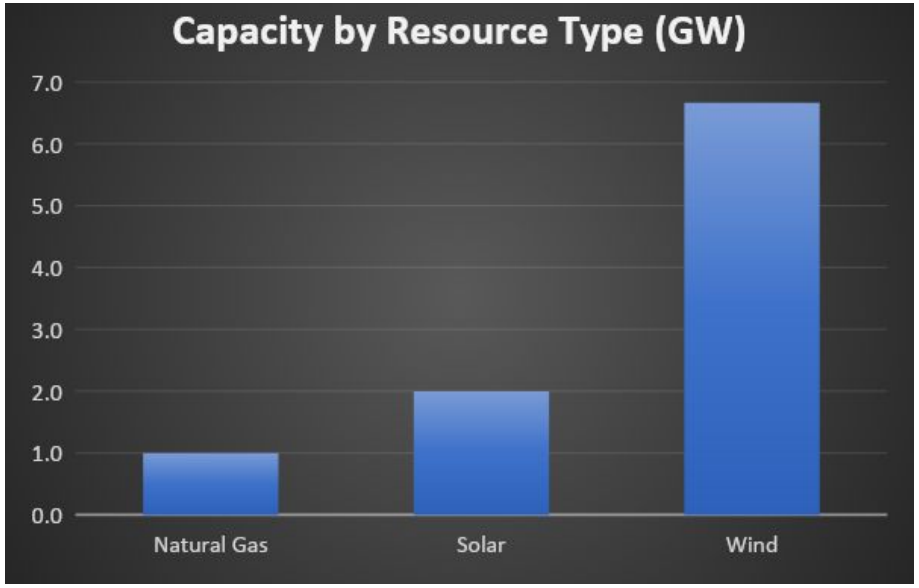
2. Bitcoin is only mined after all retail, commercial, and industrial load is served.
   - Customers are the reason why regulated utilities get to put incremental generation in their portfolio but after all customer load is served reliably, the remaining energy should be used to help lower customer bills and stabilize the grid through opportunities like Bitcoin mining.

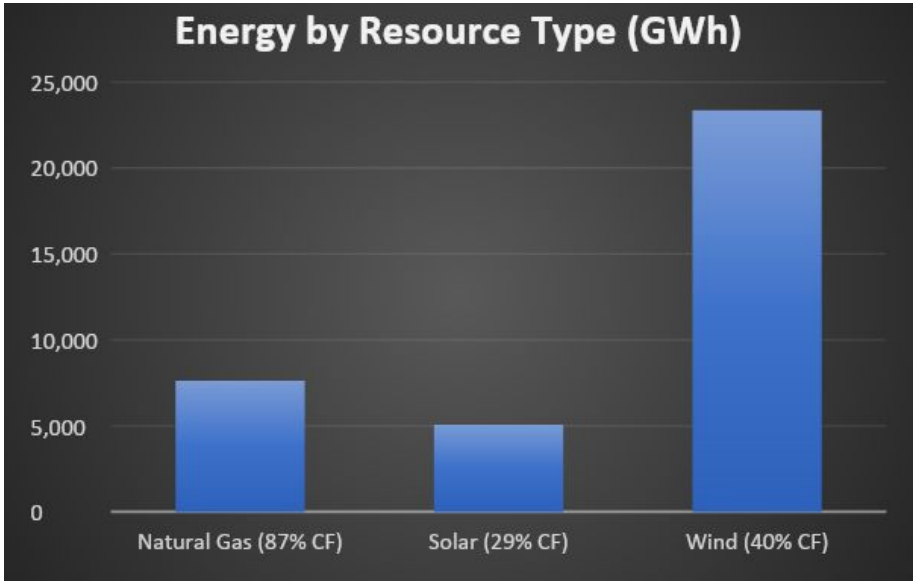
3. Utilizing specific ESG-minded mining strategies can further reduce customers' bills through the capture of "green" energy value in the crypto markets.

4. DPO's strategy for regulated utilities is straightforward: do what you do best, let us come in and optimize the rest.

How the Future of Generation Portfolios will Look

Generation Needs by a Regulated Utility to Serve 1 GW of PRMR by Generation Type in MISO

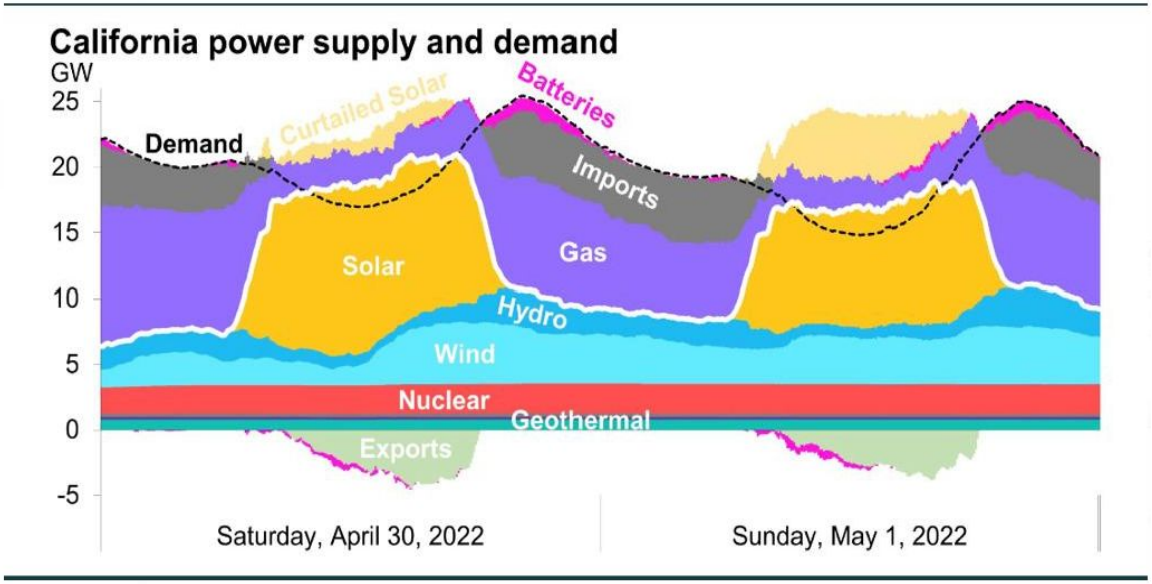




Capacity Factor (CF) Source: EIA - 2022 Levelized Costs of New Generation Resources in the Annual Energy
MISO UCAP Source by Generation Type: MISO
PRMR: Planning Reserve Margin Requirements = Peak Load Grossed Up for Losses and Reserves
Charts Above: Do Not Account for Losses and Reserves and is for Illustrative Purposes Only

Optimizing Generation Portfolios with Crypto Mining

- Intermediate resources like wind and solar tend to bring a significant amount of curtailments
- DPO's regulated utilities model would attach a substantially smaller bitcoin mine relative to the nameplate of the generation asset. It is used as an optimization tool to solve energy headaches like curtailments.
- Using the CAISO image below as an example, instead of curtailing solar during the day and selling wind at a discount when demand is low, DPO would optimize that excess generation with bitcoin mining. All economic benefits can be credited back to the ratepayer.



CAISO Curtailed 2.2 TWh of Energy in the 1st Seven Months of 2022

Thank you!

Appendix: Additional Info

Considerations

- Operating Dynamics:
  - Power usage metering and remote monitoring
  - Tracking of PTC opportunity costs and other offtake requirements
  - Curtailment of operations for demand response (i.e. capture higher wholesale grid prices)
    - Off-the-shelf software modified with custom DPO programming integrations allows maximum operating flexibility
  - Hourly profit margin analysis and opportunity cost comparison
  - Liquidation vs custody strategy

- DPO Model Assumptions: Beware Lofty Projections from Other Miners
  - Continued near-term growth of network hash rate and difficulty
  - Very conservative scenario with regard to the 2024 halving
  - No leverage to boost returns (which is available)
  - Modest rate of BTC spot price growth, well below historical performance

- Hedging and Risk Reduction Options:
  - Selling forward production via CME futures contract
  - Execute recurring structured block trades for daily production with DPO partners specializing in institutional-scale crypto trading
  - Structure ASIC acquisitions over time to dollar-cost-average entry into scaled position
  - Share equity risk with PE/Infrastructure partners

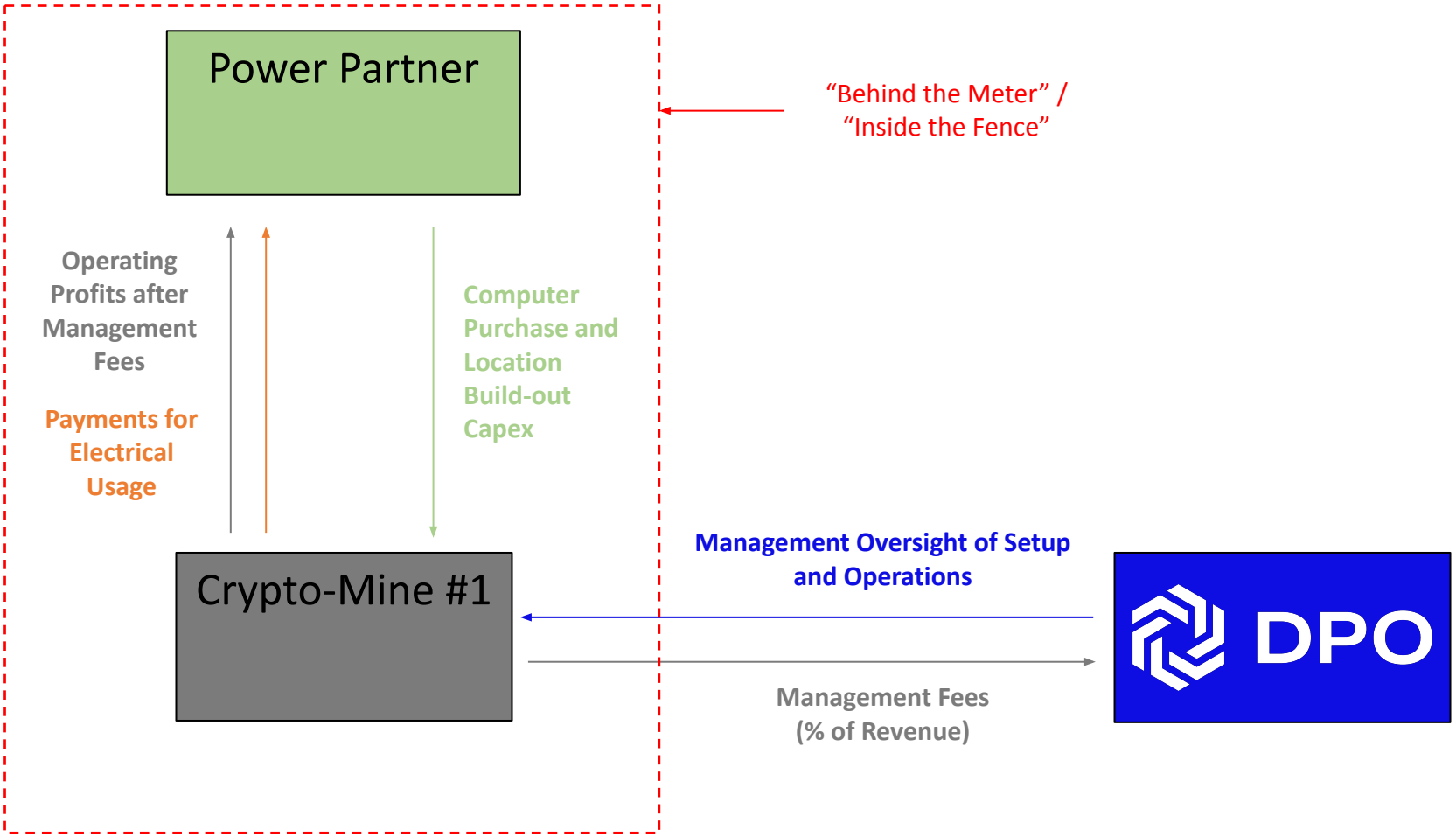
- Procurement & Build-Out Considerations:
  - Partner and DPO are well suited to evaluate and purchase transformers and other long-lead-time electrical infrastructure
  - ASIC purchases can be structured directly with the manufacturers and other intermediaries within the time horizons
  - Pricing discounts on ASICs are available, but most discounting is a factor of delivery date rather than scale…i.e. later delivery is cheaper because you lose out on highly-profitable, lower-risk near-term production

DPO gets you more value for your power

We are built around one strategy: helping the power industry most effectively use cryptocurrency mining for their own benefit. Adding cryptocurrency mining to a power generation asset can capture over $80 / MWh of net profit over the life of the equipment.

- Alignment of Interests: DPO's core strategy is to enter into contracts that provide 100% alignment of interest between DPO and its clients. We only seek to make money when our clients make money, and we take risk when our clients take risk.
- Power and Utility Focus: DPO is built exclusively around partnering with companies in the power and utility space. We understand the unique concerns of renewable developers, IPPs, co-ops, and public utilities. We also understand that power companies are the future of cryptocurrency mining and will benefit from learning about it now.
- Institutional Experience: DPO's founders and employees are veterans of major investment banks, private equity firms, public utilities, and manufacturing firms. We understand what it takes to provide white-glove service to institutional clients.
- Flexibility: We do not seek to impose our preferred business plan or deployment type on our clients. Rather, we view each partnership as a unique opportunity to evaluate all relevant factors and recommend a path forward that is most appropriate for the client. We can work from very small (pilot) operations to data center-scale 100MW+ deployments.
- Impartial Third Party: We do not tie ourselves to any given vendor, manufacturer or service provider. Even our strategic investors, including NYDIG, expect that we canvas the market for each deployment and recommend the services that are the best fit for that client.
- Transparency: We want our clients to have the opportunity to become experts on cryptocurrency mining. Much of our job is to teach everything we know, and build trust throughout the process. We pride ourselves on institutional-grade reporting, with as much detail and analysis as our partners care to review.
- Expertise: Our team of experts come from diverse backgrounds ranging from public utilities to bitcoin mining to high-spec data center and medical facility buildouts. Given our recent capital raise, we continue to add expertise and grow the team.
- Financing Partnerships: Given our client-focused strategy, we do not seek to own cryptocurrency mining operations. Instead, we work to connect the most attractive capital provider with the right project. In many cases, the equity comes from the client itself. In others, DPO works through its network of investors who want to invest in energy assets paired with cryptocurrency mining and introduces them to the project. Our founders' 15 years of experience in investment banking, private equity and hedge funds are unique benefit to our clients.

Standard DPO structure



Flexibility and scalability

A variety of solutions, sizes, and options to suit your needs asset-by-asset and site-by-site.

Product Name	Picture	Energy Scope	$k / MW (ASICs not included)	Container Lead Time (Weeks)	Infrastructure Lead Time (Weeks)	Site Infrastructure Notes
Digital Power Pilot		20-40 kW	N/A	8	0-8	+ Discreet deployment
Digital Power Optimizer		100-900 kW	$350k	8-12	0-52	+ Flexible footprint + Flexible power range
Digital Power Array		1-50 MW	$300k	12-52	12-52	+ Relocatable +/- Scales horizontally + Ramp-up during construction phase
Digital Power Warehouse		50 MW +	-10% of array option	52+	Site-specific project planning	+ Brownfield Project Option + Scales vertically and horizontally

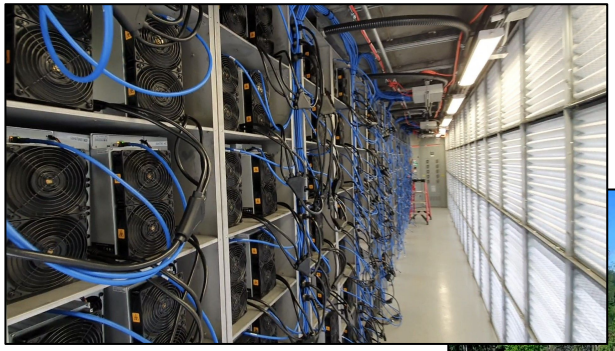
Next steps

DPO Pilot: 20kW

- 100% free to Potential Partners
- Temporary deployment reduces regulatory friction
- Five state-of-the-art mining ASICs operated for three months
- 100% transparency and clear reporting
- Potential Partners keeps all USD (or BTC) revenue produced during the pilot
- 90-day planning and deployment timeline
- Self-contained data network is totally segregated from Potential Partners infrastructure resulting in no IT risk
- Requires ~10’ x 20’ footprint to allow for airflow
- Can be deployed inside existing structure without the custom container if desired.
- Requires ~20kW at 240 or 277VAC power

Site Selection: *“Point to where it hurts”*

- Areas of excess curtailment
- Inadequate/delayed interconnection agreement
- Transmission congestion
- Wind asset repowering
- New solar and wind developments
- Areas with generally low grid prices (i.e. low opportunity cost)



Project summary

Initial 4-Year Investment Period

Total Gross Revenue (4yr Investment Period)	**$3,122,301**	**Details & Assumptions (4yr Investment Period):**	
Less: Total Electricity Costs @ $37.50/MWh	($1,249,155)	Partner / Sponsor Upfront Investment	$1,161,774
Less: Employee Costs (@2,500/MW/month)	($120,000)	Mining Computers (ASICs) Purchased	323
Less: Internet & Software Expense (@$600/MW/month)	($28,800)	Mining Computer Type	Bitmain S19j Pro
Less: Recurring Maintenance (@$2,500/MW/month)	($120,000)	ASIC & Equipment Ending Recovery Value	$279,032
Less: Insurance Costs (@$692/MW/month)	($33,194)		
Total Operating Profit (aka EBITDAM)	**$1,571,153**	Average Daily Up-Time Percentage	95%
Less: Total DPO Management Fee	($312,230)	Total Bitcoin Mined	110.4
Total Pre-Tax FCF (aka EBITDA)	**$1,258,923**	Total Electricity Utilized (MWh)	33,311
		Average MWh / Bitcoin	302
Average Monthly Revenue	$65,048		
Average Monthly EBITDAM	$32,732	Beginning Bitcoin Spot Price	$21,000
Average Monthly EBITDA	$26,228	Assumed Ending Bitcoin Spot Price	$40,688
Gross Revenue / MWh	**$94**	% Appreciation	94%
EBITDA / MWh	**$38**	Average Realized BTC Sale Price	$28,282
Initial Project IRR (48 months)	**15.1%**	Beginning Implied Network Difficulty	243,804
Initial Project Net Profit Dollars (48 months)	**$376,181**	Assumed Implied Ending Network Difficulty	721,984
Initial Project MOIC (48 months)	**1.3x**	% Increase	196%

NOTE: Follow-on investments may reuse infrastructure and thus produce a higher IRR on the second deployment of computers. Computers can also be sold and replaced at any time, incrasing the IRR and overall multiple.

Project returns

323-Unit Operation (~1.00 MW)	Period End:	11/30/2022	2/28/2023	5/31/2023	8/31/2023	11/30/2023	2/29/2024	5/31/2024	8/31/2024	11/30/2024	2/28/2025	5/31/2025	8/31/2025	11/30/2025	2/28/2026	5/31/2026	8/31/2026	11/30/2026
	Days:	91	90	92	92	91	91	92	92	91	90	92	92	91	90	92	92	91
	Quarter #	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
REVENUE:																		
Mining Units In Operation			323	323	323	323	323	323	323	323	323	323	323	323	323	323	323	323
Bitcoin Mined per Period			11.0	11.0	10.8	10.3	9.9	9.6	5.8	5.5	5.2	5.1	4.9	4.6	4.4	4.3	4.1	3.9
Total Realized Value per Coin			$22,131	$23,037	$23,973	$24,939	$25,941	$26,999	$28,096	$29,229	$30,399	$31,644	$32,929	$34,257	$35,629	$37,087	$38,594	$40,151
Total Mining Revenue			**$243,294**	**$253,272**	**$257,892**	**$257,972**	**$257,442**	**$259,727**	**$161,992**	**$159,901**	**$157,819**	**$160,988**	**$160,654**	**$158,579**	**$156,515**	**$159,658**	**$159,326**	**$157,269**
YoY Growth %			*NA*	*NA*	*NA*	*NA*	*6%*	*3%*	*-37%*	*-38%*	*-39%*	*-38%*	*-1%*	*-1%*	*-1%*	*-1%*	*-1%*	*-1%*
OPERATING COSTS:																		
Electricity Cost @ $37.50 per MWh			($76,950)	($78,660)	($78,660)	($77,805)	($77,805)	($78,660)	($78,660)	($77,805)	($76,950)	($78,660)	($78,660)	($77,805)	($76,950)	($78,660)	($78,660)	($77,805)
Employee Cost			($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)
Internet & Software Cost			($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)	($1,800)
Recurring Maintenance Cost			($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)	($7,500)
Insurance Cost			($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)	($2,075)
Total Operating Costs:			**($95,825)**	**($97,535)**	**($97,535)**	**($96,680)**	**($96,680)**	**($97,535)**	**($97,535)**	**($96,680)**	**($95,825)**	**($97,535)**	**($97,535)**	**($96,680)**	**($95,825)**	**($97,535)**	**($97,535)**	**($96,680)**
EBITDAM			**$147,469**	**$155,737**	**$160,357**	**$161,293**	**$160,762**	**$162,193**	**$64,458**	**$63,221**	**$61,995**	**$63,454**	**$63,119**	**$61,900**	**$60,691**	**$62,124**	**$61,792**	**$60,589**
Margin			*61%*	*61%*	*62%*	*63%*	*62%*	*62%*	*40%*	*40%*	*39%*	*39%*	*39%*	*39%*	*39%*	*39%*	*39%*	*39%*
DPO Management Fee			($24,329)	($25,327)	($25,789)	($25,797)	($25,744)	($25,973)	($16,199)	($15,990)	($15,782)	($16,099)	($16,065)	($15,858)	($15,652)	($15,966)	($15,933)	($15,727)
Pre-Tax FCF			**$123,140**	**$130,410**	**$134,568**	**$135,495**	**$135,018**	**$136,220**	**$48,258**	**$47,231**	**$46,213**	**$47,355**	**$47,054**	**$46,042**	**$45,039**	**$46,158**	**$45,859**	**$44,863**
Margin			*51%*	*51%*	*52%*	*53%*	*52%*	*52%*	*30%*	*30%*	*29%*	*29%*	*29%*	*29%*	*29%*	*29%*	*29%*	*29%*

1MW Cash Flows Summary (Runoff w/o Reinvestment)	Period End:	11/30/2022	2/28/2023	5/31/2023	8/31/2023	11/30/2023	2/29/2024	5/31/2024	8/31/2024	11/30/2024	2/28/2025	5/31/2025	8/31/2025	11/30/2025	2/28/2026	5/31/2026	8/31/2026	11/30/2026
	Quarter #	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Computer Equipment Purchase (100% upon Order)		($806,452)																
Containers to House Computers		($200,000)																
Other Installation and Setup Costs		($100,000)																
Sub-Total Capital Cost		**($1,106,452)**																
Contingency (5%)		($55,323)																
Total Capital Cost / Exit Recovery		**($1,161,774)**															**Residual Value**	**$279,032**
Net Cash Flows[1]		**($1,161,774)**	**$123,140**	**$130,410**	**$134,568**	**$135,495**	**$135,018**	**$136,220**	**$48,258**	**$47,231**	**$46,213**	**$47,355**	**$47,054**	**$46,042**	**$45,039**	**$46,158**	**$45,859**	**$323,895**
Cumulative Cash Flows (breakeven analysis)		($1,161,774)	($1,038,634)	($908,224)	($773,656)	($638,161)	($503,143)	($366,923)	($318,664)	($271,433)	($225,221)	($177,866)	($130,812)	($84,770)	($39,731)	$6,427	$52,286	$376,181
Cumulative MOIC		N/A	0.1x	0.2x	0.3x	0.5x	0.6x	0.7x	0.7x	0.8x	0.8x	0.8x	0.9x	0.9x	1.0x	1.0x	1.0x	1.3x

Runoff XIRR (Monthly Cash Flow Profile)	**15.1%**
Runoff Total Profit $	**$376,181**
Runoff MOIC	**1.3x**

Breakeven occurs in Month 42

[1] *Unit level analysis assumes no tax and no corporate-level operating costs.*

Bitcoin price & network difficulty scenario analysis

Bitcoin mining profitability is dependent on both BTC spot price as well as network difficulty (which is driven by volume of competing ASICs). The sensitivity table below shows likely outcomes given certain levels of BTC spot price growth and certain levels of network difficulty growth.

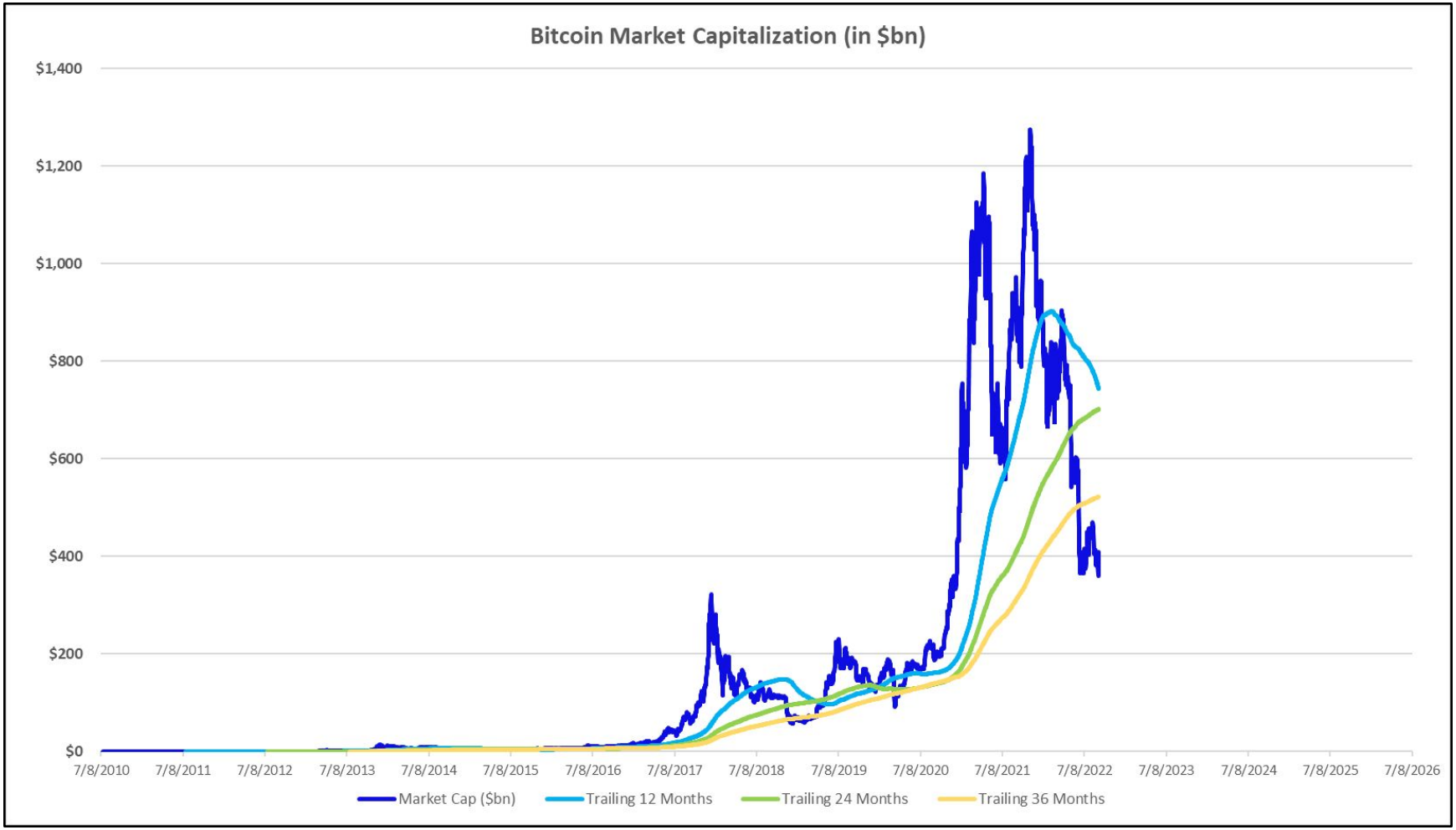
Scenarios involving higher BTC spot price growth are also likely to result in higher network difficulty growth. Scenarios involving lower BTC spot price growth are likely to result in muted network difficulty growth.

- **It is highly unlikely for network difficulty to grow significantly in scenarios where BTC spot price is flat or lower. The scenarios below reflect a realistic illustration of how each of these variables may change if BTC spot price moves higher or lower.**

Initial 4-Year Investment Period

	Unlevered				
	Base Case	Flat BTC	BTC Down	BTC Up	Trailing 3-year Bitcoin Spot Price & Hashrate Growth
Starting BTC Price	$21,000	$21,000	$21,000	$21,000	$21,000
Average BTC Price	$30,320	$21,000	$16,246	$46,087	$66,718
Average Network Hashrate (AKA Difficulty)	263,634	206,256	196,263	336,587	424,028
Total Upfront Equity	$1,161,774	$1,161,774	$1,161,774	$1,161,774	$1,161,774
Power Price / MWh	$37.50	$37.50	$37.50	$37.50	$37.50
% Uptime	95.0%	95.0%	95.0%	95.0%	95.0%
Average Revenue / MWh	$94	$84	$71	$109	$123
Average EBITDA / MWh	$38	$29	$17	$52	$64
IRR	**15.1%**	**4.0%**	**-14.6%**	**33.1%**	**49.5%**
Multiple	**1.3x**	**1.1x**	**0.7x**	**1.7x**	**2.1x**

Bitcoin is a $400 billion industry that is totally dependent on energy

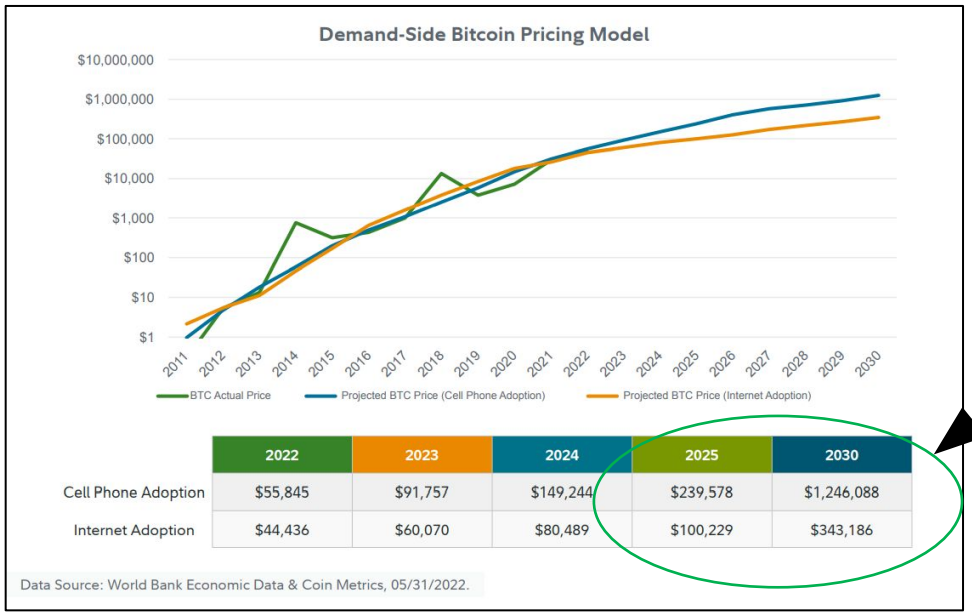


Assumptions impacting bitcoin mining returns are all interrelated

Because one variable's movement offsets others, risk and volatility is automatically dampened.

	IF: BTC Spot Prices Change	Then: ASIC Prices	Then: Network Hashrate & Difficulty	Then: Operating Uptime	Then: Financing Costs		Resulting Returns
Bull Market	↑	↑	↑	↑	↓	=	↑
Bear Market	↓	↓	↓	↓	↑	=	↓
Perceived Primary Risk	↓	FLAT (Wrong!)	FLAT	↓	↑	=	↓↓
Actual Outcome	↓	↓ (Right!)	↓	↓	↑	=	↓

How much is a bitcoin worth? Fidelity provides an updated framework..

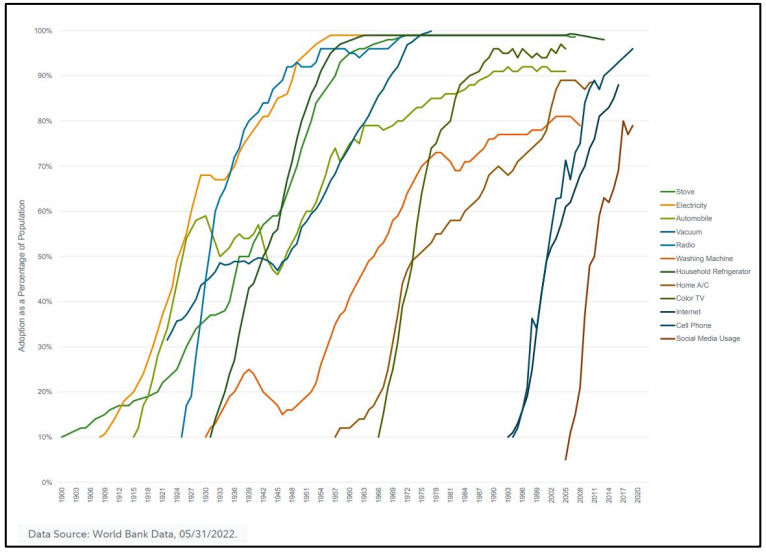


	2022	2023	2024	2025	2030
Cell Phone Adoption	$55,845	$91,757	$149,244	$239,578	$1,246,088
Internet Adoption	$44,436	$60,070	$80,489	$100,229	$343,186

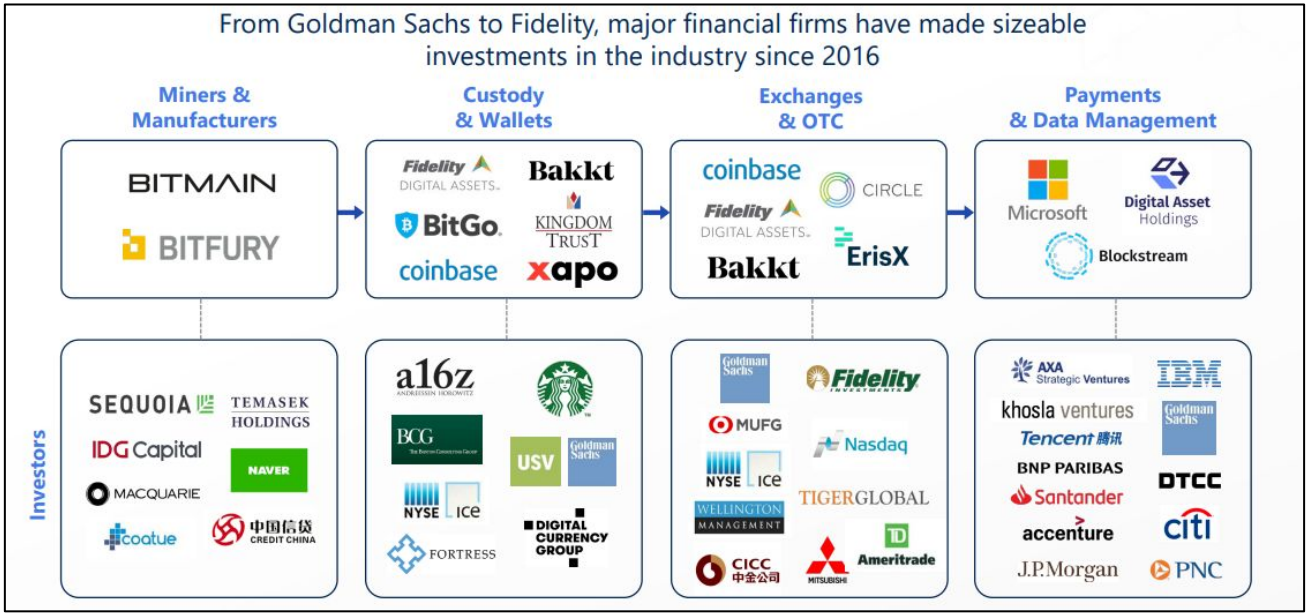
Data Source: World Bank Economic Data & Coin Metrics, 05/31/2022.

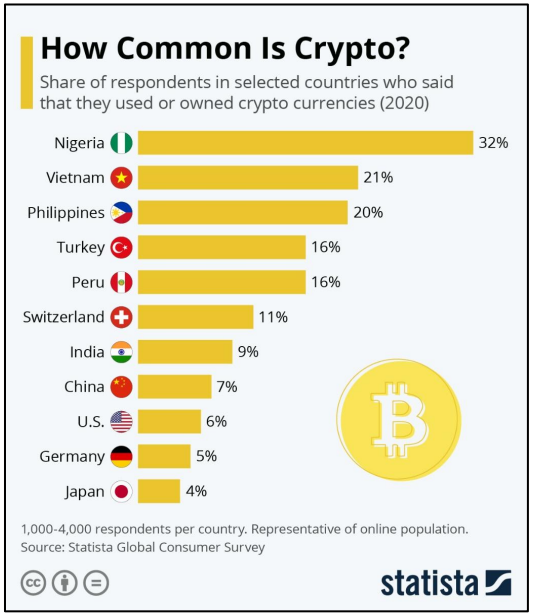
Bitcoin's spot price ***could*** reach $100,000+ in the next 3 years ***if*** it follows internet adoption rates, and over $200,000 if it paces cell phone adoption.

Other adoption curves are more drawn out, meaning it could take longer, but there is little doubt we are still early in adoption of this bitcoin and blockchain technology.



Cryptocurrency is here to stay





"Goldman Sachs Makes Its First Bitcoin-Backed Loan"

- CoinDesk, April 2022

"Federally Chartered Banks and Thrifts May Provide Custody Services for Crypto"

- Office of the Comptroller of the Currency, US Dept of Treasury, July 2020