UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of May 2025

Commission File Number: 001-40370

BITFARMS LTD.

(Translation of registrant's name into English)

110 Yonge Street, Suite 1601, Toronto, Ontario, Canada M5C 1T4

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F □ Form 40-F ⊠

DOCUMENTS INCLUDED AS PART OF THIS FORM 6-K

On May 1, 2025, the Registrant filed with the Canadian Securities Regulatory Authorities on the System for Electronic Data Analysis and Retrieval + (SEDAR +) a press release, a copy of which is attached hereto as Exhibit 99.1. Exhibit 99.1 is hereby incorporated by reference into the Registration Statement of Bitfarms Ltd. on Form F-10 (File No. 333-272989), as amended or supplemented. On May 6, 2025, the Registrant filed with the Canadian Securities Regulatory Authorities on SEDAR + a press release, a copy of which is attached hereto as Exhibit 99.2, which is incorporated herein by reference.

See the Exhibits listed below.

Exhibits

Exhibit No.	Description
00 1	Press release dated May 1, 2025
99.1 99.2	Press release dated May 6, 2025

SIGNATURE

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.

BITFARMS LTD.

By: /s/ Ben Gagnon

Name: Ben Gagnon

Title: Chief Executive Officer

Date: May 6, 2025



Bitfarms Provides April 2025 Production and Operations Update

- New private debt facility with a division of Macquarie Group for up to \$300 million to fund initial HPC project development at Panther Creek, validating the attractiveness of Bitfarms' potential HPC data center development pipeline-

--Operational hashrate of 19.5 EHuM and fleet efficiency of 19 w/TH-

This news release constitutes a "designated news release" for the purposes of the Company's second amended and restated prospectus supplement dated December 17, 2024, to its short form base shelf prospectus dated November 10, 2023.

Toronto, Ontario (May 1, 2025) - Bitfarms Ltd. (NASDAQ/TSX: BITF), a global energy and compute infrastructure company, today issued its latest monthly production report. All financial references are in U.S. dollars.

CEO Ben Gagnon stated, "In April, we secured an attractive financing facility for up to \$300 million with a division of Macquarie Group, one of the world's largest and most reputable infrastructure investors. These funds will be used solely to fund HPC data center development at our Panther Creek location. Panther Creek has the scale, location, power availability, and fiber connectivity that we expect will attract notable HPC counterparties. This site also has the quickest energization timeline of our three PA sites, and we are already working on the Site Map Plans, development timelines and renderings needed in order to begin to build out the powered land.

"We are confident this partnership will not only accelerate our buildout at Panther Creek, but also open doors to future opportunities with Macquarie as we look to scale our project and potentially expand to other sites within our portfolio. Amidst the surging AI revolution and the growing demand for power and infrastructure, this financing arrives at a pivotal time. We believe the analyses provided by our strategic partners, ASG and WWT, along with Macquarie's due diligence and industry expertise, validate our HPC opportunity thesis at Panther Creek, strengthen our HPC pipeline and strategy, and position Bitfarms as a market leader in sourcing and developing large-scale, high-quality HPC data center projects.

"Our Bitcoin business is strong, and we remain bullish on mining economics with our newly upgraded mining fleet. We have no need nor plans for a large miner purchase in 2025 or 2026, enabling us to focus our efforts on developing U.S. energy and HPC infrastructure, which we believe will create lasting shareholder value."

April 2025 Select Operating Highlights

Key Performance Indicators		March 2025 (proforma)
Total BTC earned	268	280
Month End Operating EHuM	19.5	19.5
BTC/Avg. EH/s	16	17
Average Operating EHuM	17.2	16.4
Energized Capacity (MW)	461	461
Watts/Terahash Efficiency (w/TH)	19	19

- · 19.5 EHuM operational at April 30, 2025.
- · 17.2 EHuM average operational, up 5% M/M.
- · 16 BTC/average EHuM, 6% lower M/M.
- 268 BTC earned, 4% lower M/M.
- 8.9 BTC earned daily on average, equal to ~\$837,000 per day based on a BTC price of \$94,000 at April 30, 2025.

April 2025 Financial Update

· Treasury of 1,005 BTC, down from 1,140 BTC last month and representing \$94 million based on the Bitcoin price of \$94,000 at April 30, 2025.

About Bitfarms Ltd.

Founded in 2017, Bitfarms is a global energy and compute infrastructure company that develops, owns, and operates vertically integrated HPC and Bitcoin mining data centers. Bitfarms currently has 15 operating Bitcoin data centers situated in four countries: the United States, Canada, Argentina and Paraguay.

Powered primarily by environmentally friendly hydro-electric and long-term power contracts, Bitfarms is committed to using sustainable and often underutilized energy infrastructure.

To learn more about Bitfarms' events, developments, and online communities:

www.bitfarms.com

https://www.facebook.com/bitfarms/

 $https://x.com/Bitfarms_io$

https://www.instagram.com/bitfarms/

https://www.linkedin.com/company/bitfarms/

Glossary of Terms

- · Y/Y or M/M = year over year or month over month
- · BTC or BTC/day = Bitcoin or Bitcoin per day
- · EH or EH/s = Exahash or exahash per second
- · EHuM = Exahash Under Management, which includes Bitfarms' proprietary hashrate and hashrate being hosted by Bitfarms for third-party hosting clients
- MW or MWh = Megawatts or megawatt hour
- GW or GWh= Gigawatts or gigawatt hour
- w/TH = Watts/Terahash efficiency (includes cost of powering supplementary equipment)
- · HPC/AI = High Performance Computing / Artificial Intelligence
- · Energized capacity= Power available

Forward-Looking Statements

This news release contains certain "forward-looking information" and "forward-looking statements" (collectively, "forward-looking information") that are based on expectations, estimates and projections as at the date of this news release and are covered by safe harbors under Canadian and United States securities laws. The statements and information in this release regarding the North American energy and compute infrastructure strategy, opportunities relating to the potential of the Company's data centers for HPC/AI opportunities, the potential to deploy the proceeds of the Macquarie Group financing facility at the Panther Creek location, the merits and ability to secure long-term contracts associated with HPC/AI customers, the success of the Company's HPC/AI strategy in general and its ability to capitalize on growing demand for AI computing while securing predictable cash flows and revenue diversification, the Company's energy pipeline and its anticipated megawatt growth, the Company's ability to drive greater shareholder value, projected growth, target hashrate, and other statements regarding future growth, plans and objectives of the Company are forward-looking information.

Any statements that involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "prospects", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information.

This forward-looking information is based on assumptions and estimates of management of Bitfarms at the time they were made, and involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of Bitfarms to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors, risks and uncertainties include, among others: an inability to apply the Company's data centers to HPC/AI opportunities on a profitable basis; a failure to secure long-term contracts associated with HPC/AI customers on terms which are economic or at all; the construction and operation of new facilities may not occur as currently planned, or at all; expansion of existing facilities may not materialize as currently anticipated, or at all; an inability to satisfy the Panther Creek location related milestones which are conditions to loan drawdowns under the Macquarie Group financing facility; an inability to deploy the proceeds of the Macquarie Group financing facility to generate positive returns at the Panther Creek location; new miners may not perform up to expectations; revenue may not increase as currently anticipated, or at all; the ongoing ability to successfully mine digital currency is not assured; failure of the equipment upgrades to be installed and operated as planned; the availability of additional power may not occur as currently planned, or at all; expansion may not materialize as currently anticipated, or at all; the power purchase agreements and economics thereof may not be as advantageous as expected; potential environmental cost and regulatory penalties due to the operation of the former Stronghold plants which entail environmental risk and certain additional risk factors particular to the former business and operations of Stronghold including, land reclamation requirements may be burdensome and expensive, changes in tax credits related to coal refuse power generation could have a material adverse effect on the business, financial condition, results of operations and future development efforts, competition in power markets may have a material adverse effect on the results of operations, cash flows and the market value of the assets, the business is subject to substantial energy regulation and may be adversely affected by legislative or regulatory changes, as well as liability under, or any future inability to comply with, existing or future energy regulations or requirements, the operations are subject to a number of risks arising out of the threat of climate change, and environmental laws, energy transitions policies and initiatives and regulations relating to emissions and coal residue management, which could result in increased operating and capital costs and reduce the extent of business activities, operation of power generation facilities involves significant risks and hazards customary to the power industry that could have a material adverse effect on our revenues and results of operations, and there may not have adequate insurance to cover these risks and hazards, employees, contractors, customers and the general public may be exposed to a risk of injury due to the nature of the operations, limited experience with carbon capture programs and initiatives and dependence on third-parties, including consultants, contractors and suppliers to develop and advance carbon capture programs and initiatives, and failure to properly manage these relationships, or the failure of these consultants, contractors and suppliers to perform as expected, could have a material adverse effect on the business, prospects or operations; the digital currency market; the ability to successfully mine digital currency; it may not be possible to profitably liquidate the current digital currency inventory, or at all; a decline in digital currency prices may have a significant negative impact on operations; an increase in network difficulty may have a significant negative impact on operations; the volatility of digital currency prices; the anticipated growth and sustainability of hydroelectricity for the purposes of cryptocurrency mining in the applicable jurisdictions; the inability to maintain reliable and economical sources of power to operate cryptocurrency mining assets; the risks of an increase in electricity costs, cost of natural gas, changes in currency exchange rates, energy curtailment or regulatory changes in the energy regimes in the jurisdictions in which Bitfarms operates and the potential adverse impact on profitability; future capital needs and the ability to complete current and future financings, including Bitfarms' ability to utilize an at-the-market offering program ("ATM Program") and the prices at which securities may be sold in such ATM Program, as well as capital market conditions in general; share dilution resulting from an ATM Program and from other equity issuances; the risks of debt leverage and the ability to service and eventually repay the Macquarie Group financing facility; volatile securities markets impacting security pricing unrelated to operating performance; the risk that a material weakness in internal control over financial reporting could result in a misstatement of financial position that may lead to a material misstatement of the annual or interim consolidated financial statements if not prevented or detected on a timely basis; risks related to the Company ceasing to qualify as an "emerging growth company"; risks related to unsolicited investor interest, takeover proposals, shareholder activism or proxy contests relating to the election of directors; historical prices of digital currencies and the ability to mine digital currencies that will be consistent with historical prices; and the adoption or expansion of any regulation or law that will prevent Bitfarms from operating its business, or make it more costly to do so. For further information concerning these and other risks and uncertainties, refer to Bitfarms' filings on www.sedarplus.ca (which are also available on the website of the U.S. Securities and Exchange Commission (the "SEC") at www.sec.gov), including the management's discussion & analysis for the year-ended December 31, 2024 Although Bitfarms has attempted to identify important factors that could cause actual results to differ materially from those expressed in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended, including factors that are currently unknown to or deemed immaterial by Bitfarms. There can be no assurance that such statements will prove to be accurate as actual results, and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on any forwardlooking information. Bitfarms does not undertake any obligation to revise or update any forward-looking information other than as required by law. Trading in the securities of the Company should be considered highly speculative. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein. Neither the Toronto Stock Exchange, Nasdaq, or any other securities exchange or regulatory authority accepts responsibility for the adequacy or accuracy of this release.

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Media Contact:

Bitfarms

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Bitfarms Announces Participation in Upcoming Investor and Industry Conferences

Toronto, Ontario (May 6, 2025) - Bitfarms Ltd. (NASDAQ/TSX: BITF), a global energy and compute infrastructure company, today announced its participation in several upcoming investor and industry conferences.

Event Details:

Event: Consensus 2025 Date: May 14-16, 2025 Location: Toronto, Ontario

Bitfarms Speakers: Ben Gagnon (CEO), Jeff Lucas (CFO), Alex Brammer (SVP, Mining Operations), Rachel Silverstein (General Counsel, North

America)

Panel Information: https://investor.bitfarms.com/events/event-details/consensus-2025

Event: AIM Summit London Date: May 19-20, 2025 Location: London

Bitfarms Participants: Ben Gagnon (CEO), Jeff Lucas (CFO), Tracy Krumme (SVP, IR & Comms)

Panel Information: https://investor.bitfarms.com/events/event-details/aim-summit-london

Event: BTC 2025 Date: May 27-29, 2025 Location: Las Vegas, NV

Bitfarms Speakers: Ben Gagnon (CEO), Jeff Lucas (CFO), Alex Brammer (SVP, Mining Operations), Rachel Silverstein (General Counsel, North

America), Tracy Krumme (SVP, IR & Comms)

Panel Information: https://investor.bitfarms.com/events/event-details/btc-las-vegas

For additional information or to schedule 1x1 meetings at any of the above conferences, please reach out to investors@bitfarms.com.

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