
**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 October 2021

Commission File Number: 001-40370

BITFARMS LTD.

(Exact Name of Registrant as Specified in Its Charter)

18 King Street East, Suite 902, Toronto, Ontario, Canada M5C 1C4
(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

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

INCORPORATION BY REFERENCE

On October 7, 2021, the Registrant filed with the Canadian Securities Regulatory Authorities on the System for Electronic Data Analysis and Retrieval (SEDAR) a material change report that includes a copy of a press release, a copy of which is attached hereto as Exhibit 99.1, and which is incorporated by reference to the Company's Registration Statement on Form F-10 (File No. 333-258788).

Exhibits

| Exhibit No. | Description |
|-------------|-------------|
|-------------|-------------|

| | |
|------|--|
| 99.1 | Material Change Report dated October 7, 2021 |
|------|--|

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/ L. Geoffrey Morphy
Name: L. Geoffrey Morphy
Title: President

Date: October 7, 2021

**FORM 51-102F3
MATERIAL CHANGE REPORT**

Item 1 Name and Address of Company

Bitfarms Ltd. (“Bitfarms” or the “Company”)
18 King Street East, Suite 902
Toronto, Ontario M5C 1C4

Item 2 Date of Material Change

October 7, 2021.

Item 3 News Release

The press release attached as Schedule “A” was released on October 7, 2021 by a newswire company in Canada.

Item 4 Summary of Material Change

The material change is described in the press release attached as Schedule “A”.

Item 5 Full Description of Material Change

The material change is described in the press release attached as Schedule “A”.

Item 6 Reliance of subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Nicolas Bonta
Executive Chairman & Director
Bitfarms Ltd.
nbonta@bitfarms.com

Item 9 Date of Report

October 7, 2021.



Bitfarms Signs Contracts and Commenced Construction of a 210-Megawatt Facility

- New facility in Argentina greatly expands global Bitcoin mining production at a substantially lower cost -

This news release constitutes a "designated news release" for the purposes of the Company's prospectus supplement dated August 16, 2021 to its short form base shelf prospectus dated August 12, 2021.

Toronto, Ontario and Brossard, Québec (October 7, 2021) - Bitfarms Ltd. (NASDAQ: BTF // TSXV: BTF), a global Bitcoin mining company, signed engineering, procurement and construction (EPC) contracts and commenced construction of a production facility in Argentina. As previously announced in April 2021, the new facility is expected to add up to 210 megawatts (MW) of infrastructure capacity in 2022 at a contracted rate of US 2.2 cents per kilowatt hour with electricity provided by a private power company.

"Our new high-production facility in Argentina, which is expected to accommodate over 55,000 miners upon completion, will greatly expand our capacity and global footprint. Combined with the expansion in Quebec, Canada and our planned build-out in Paraguay, we are positioned to achieve our corporate target of 8 exahash per second by year-end 2022," said Emiliano Grodzki, CEO of Bitfarms. "The Argentina facility is planned to produce Bitcoin using power at the attractive rate of just US 2.2 cents per kilowatt hour, substantially reducing our already low cost of mining Bitcoin. Leveraging our expertise and corporate infrastructure, as well as that of our highly respected construction partners, is part of our strategy to grow faster and more efficiently by mining Bitcoin with improved profit margins."

Proyectos y Obras Americanas S.A. (“PROA”), which has been engaged to provide engineering, procurement, and construction services for the Argentina facility, has specialized in utility-grade electrical infrastructure and civil construction for almost 60 years. Its relevant expertise includes the design and construction of electrical interconnections, high voltage electrical lines, and transformers needed for operations of the size of the planned Argentina facility. In addition to PROA, Bitfarms has also engaged Dreicon S.A. as an independent engineering firm to oversee construction, quality control and project milestones for the company’s projected buildout schedule.

The New Argentina Facility

Bitfarms’ new production facility will be housed in four warehouse-style buildings inside the gates of a private power company. In light of reduced demand in the rural location where the power company is located, in April 2021 the parties signed a mutually beneficial eight-year, 210 MW power purchase agreement to power the facility. To date, most of the engineering design and development work is complete and site preparation has already begun.

The facility in Argentina is expected to accommodate over 55,000 miners, including many of the 48,000 latest-generation MicroBT miners the company purchased in early 2021. This adds to the approximately 21,500 miners currently online at Bitfarms.

“With five mining facilities up and running in Quebec, Canada, we are building on our proven design, technology expertise and implementation track record, with our sixth, and largest, planned farm in Argentina,” concluded Grodzki. “The management and technology teams are working closely together on this strategic expansion, and several key Argentine hires have already been made.”

Learn more about Bitfarms’ development partners Proyectos y Obras Americanas S.A. (“PROA”) at www.proasa.com.ar/ and Dreicon S.A. at www.dreiconsa.com/.

About Bitfarms Ltd.

Founded in 2017, Bitfarms is a Bitcoin mining company, running vertically integrated mining operations with onsite technical repair, proprietary data analytics and Company- owned electrical engineering and installation services to deliver high operational performance and uptime.

Having demonstrated rapid growth and stellar operations, Bitfarms became the first Bitcoin mining company to complete its long form prospectus with the Ontario Securities Commission and started trading on the TSX-V in July 2019. On February 24, 2021, Bitfarms was honoured to be announced as a Rising Star by the TSX-V. On June 21, 2021, Bitfarms started trading on the Nasdaq Stock Market.

Bitfarms has a diversified production platform with five industrial scale facilities located in Québec. Each Canadian facility is over 99% powered with environmentally friendly hydro power and secured with long-term power contracts. Bitfarms is currently the only publicly traded pure-play mining company audited by a Big Four audit firm.

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

Website: www.bitfarms.com

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

https://twitter.com/Bitfarms_io

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

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

Cautionary Statement

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 TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange), Nasdaq, or any other securities exchange or regulatory authority accepts responsibility for the adequacy or accuracy of this release.

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. The information in this release regarding expectations in respect to its expansion plans, anticipated mining capacity and receipt of new miners, investor relation services, and about other future plans and objectives of the Company are forward-looking information. Other forward-looking information includes, but is not limited to, information concerning: the intentions, plans and future actions of the Company, as well as Bitfarms' ability to successfully mine digital currency, revenue increasing as currently anticipated, the ability to profitably liquidate current and future digital currency inventory, volatility of network difficulty and digital currency prices and the potential resulting significant negative impact on the Company's operations, the construction and operation of expanded blockchain infrastructure as currently planned, and the regulatory environment for cryptocurrency in the applicable jurisdictions.

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", "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 and are intended to identify forward-looking information.

This forward-looking information is based on assumptions and estimates of management of the Company 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 the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, risks relating to: the global economic climate; dilution; the Company's limited operating history; future capital needs and uncertainty of additional financing including the Company's ability to utilize the Company's at-the-market offering (the "ATM Program") and the prices at which the Company may sell Common Shares in the ATM Program as well as capital market conditions in general; the competitive nature of the industry; currency exchange risks; the need for the Company to manage its planned growth and expansion; the effects of product development and need for continued technology change; protection of proprietary rights; the effect of government regulation and compliance on the Company and the industry; network security risks; the ability of the Company to maintain properly working systems; reliance on key personnel; global economic and financial market deterioration impeding access to capital or increasing the cost of capital; dilution in relation to the ATM Program and from other equity issuances; and volatile securities markets impacting security pricing unrelated to operating performance. In addition, particular factors that could impact future results of the business of Bitfarms include, but are not limited to: the construction and operation of blockchain infrastructure may not occur as currently planned, or at all; expansion may not materialize as currently anticipated, or at all; the digital currency market; the ability to successfully mine digital currency; revenue may not increase as currently anticipated, or at all; 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 ability to complete current and future financings, any regulations or laws that will prevent Bitfarms from operating its business; historical prices of digital currencies and the ability to mine digital currencies that will be consistent with historical prices; an inability to predict and counteract the effects of COVID-19 on the business of the Company, including but not limited to the effects of COVID-19 on the price of digital currencies, capital market conditions, restriction on labour and international travel and supply chains; 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 the Company's filings on www.SEDAR.com including the annual information form for the year ended December 31, 2020, filed on April 7, 2021. The Company has also assumed that no significant events occur outside of Bitfarms' normal course of business. Although the Company 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. 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 forward-looking information. The Company undertakes no obligation to revise or update any forward-looking information other than as required by law.

Investor Relations:

LHA Investor Relations

+1 415 433 3777

Investors@bitfarms.com

US Media:

YAP Global

Mia Grodsky, Account Manager

mia@yapglobal.com

Québec Media:

Ryan Affaires publiques

Valérie Pomerleau, Public Affairs and Communications

valerie@ryanap.com
