

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549**

**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. )\***

**ENERGY VAULT HOLDINGS, INC.**

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(Name of Issuer)

**Common Stock, par value \$0.0001 per share**

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(Title of Class of Securities)

**29280W109**

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(CUSIP Number)

**Taylor Frankel  
c/o Prime Movers Lab  
P.O. Box 12829  
Jackson, WY 83002  
307-203-5036**

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(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communication)

**February 11, 2022**

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(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. [ ]

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 240.13d-7 for other parties to whom copies are to be sent.

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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1	NAMES OF REPORTING PERSONS  Dakin Sloss	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (See Instructions)  OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) <input type="checkbox"/>  Not Applicable	
6	CITIZENSHIP OR PLACE OF ORGANIZATION  United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER  -0-
	8	SHARED VOTING POWER  7,552,864 <sup>(1)</sup>
	9	SOLE DISPOSITIVE POWER  -0-
	10	SHARED DISPOSITIVE POWER  7,552,864 <sup>(1)</sup>
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  7,552,864 <sup>(1)</sup>	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)  5.5%	
14	TYPE OF REPORTING PERSON (See Instructions)  IN	

<sup>1</sup> Includes (i) 6,217,287 shares held by Prime Movers Growth Fund I LP ("PML Growth"), (ii) 1,245,077 shares held by Energy Vault PML SPV 1 LP ("Energy Vault PML"), and (iii) 90,500 shares held by Prime Movers Lab Fund II LP ("PML Fund II"). Prime Movers Growth GP I LLC ("PML Growth GP") is the general partner of PML Growth, Prime Movers Lab GP II LLC ("PML GP II") is the general partner of Energy Vault PML, and Prime Movers Lab Fund GP II LLP ("PML Fund GP") is the general partner of PML Fund II. Dakin Sloss is the manager of PML Growth GP, PML GP II, and PML Fund GP and may be deemed to have or share beneficial ownership of the shares held by PML Growth, Energy Vault PML, and PML Fund II.

**SCHEDULE 13D**

**Item 1. Security and Issuer**

This Schedule 13D relates to common stock, \$0.0001 par value per share (the "Common Stock"), of Energy Vault Holdings, Inc., a Delaware corporation (the "Issuer"), formerly known as "Novus Capital Corporation II," whose principal executive offices are located at 4360 Park Terrace Drive, Suite 100, Westlake Village, California 93161.

**Item 2. Identity and Background**

- (a) This Schedule 13D is filed by Dakin Sloss (the "Reporting Person").
- (b) The principal business address of the Reporting Person is P.O. Box 12829, Jackson, WY, 83002.
- (c) The principal occupation of the Reporting Person is Founder and General Partner of Prime Movers Lab.
- (d) During the last five years, the Reporting Person has not been convicted in a criminal proceeding.
- (e) During the last five years, the Reporting Person was not a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws, or finding any violation with respect to such laws.
- (f) The Reporting Person is a citizen of the United States.

**Item 3. Source and Amount of Funds**

On February 11, 2022, PML Growth acquired 6,217,287 shares and Energy Vault PML acquired 1,245,077 shares of the Issuer's Common Stock in connection with the Issuer's business combination with Novus Capital Corporation II, a special purpose acquisition company (the "Merger"). On May 12, 2022, PML Fund II acquired 90,500 shares of the Issuer's Common Stock as a result of a pro rata distribution of Idealab Studio, LLC to its members for no consideration.

**Item 4. Purpose of the Transaction**

The Reporting Person acquired the Common Stock for investment purposes. The Reporting Person may, from time to time, purchase additional securities of the Issuer either in the open market or in privately negotiated transactions, depending upon the Reporting Person's evaluation of the Issuer's business, prospects, and financial condition, the market for such securities, other opportunities available to the Reporting Person, general economic conditions, stock market conditions and other factors. Depending upon the factors noted above, the Reporting Person may also decide to hold or dispose of all or part of his investment in the securities of the Issuer.

On August 30, 2022, the Reporting Person, as the Managing Member of the General Partner of each of Energy Vault PML and PML Fund II, entered into a Rule 10b5-1 Trading Plan with respect to each entity (the "10b5-1 Plans") pursuant to which the Reporting Person may sell Common Stock from time to time, subject to certain conditions and restrictions set forth in the 10b5-1 Plans. The sale of Common Stock under the 10b5-1 Plans is subject to minimum price parameters adopted by the Reporting Person, and there is no assurance that any Common Stock will be sold under the 10b5-1 Plans. No shares of Common Stock have been sold under the 10b5-1 Plans to date.

The information contained in Item 3 of this Schedule 13D is incorporated herein by reference.

In addition, Zia Huque, a General Partner of Prime Movers Lab, LLC, serves as one of Issuer's directors.

Except as described in this Schedule 13D, the Reporting Person does not have any present plans or proposals that relate to or would result in any of the actions described in clauses (a) through (j) of Item 4 of Schedule 13D. The Reporting Person reserves the right to formulate plans and/or proposals and to take such actions with respect to his investment in the Issuer, including any or all of the actions set forth in clauses (a) through (j) of Item 4 of Schedule 13D.

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## Item 5. Interest in Securities of the Issuer

- (a) The aggregate percentage of shares of the Common Stock reported to be beneficially owned by the Reporting Person is determined in accordance with the rules of the Securities and Exchange Commission (the "Commission") and is based on 137,043,121 shares of Common Stock of the Issuer outstanding as of August 3, 2022, as reported in the Quarterly Report on Form 10-Q filed by the Issuer with the Commission on August 8, 2022.
- (b) The information in paragraph (a) and the cover pages to this Schedule 13D are incorporated herein by reference.
- (c) The Reporting Person has not effected any transactions in the Common Stock in the past 60 days.
- (d) Additionally, the members of the general partners of PML Growth GP, Energy Vault PML, and PML Fund II and the general and limited partners of PML Growth GP, Energy Vault PML, and PML Fund II have a right to receive a portion of the proceeds of any sales the shares of Common Stock. No other person is known to the Reporting Person to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock covered by this Schedule 13D.
- (e) Not applicable.

## Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

*Lock-Up Agreements* – In connection with the closing of the Merger (the "Closing"), PML Growth, Energy Vault PML, and Idealab Studio, LLC and certain other stockholders of the Issuer agreed, subject to certain exceptions, not to (i) sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option to purchase or otherwise dispose of or agree to dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Exchange Act, and the rules and regulations of the SEC promulgated thereunder, the Common Stock acquired in the Merger (the "Lock-up Shares"), (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of the Lock-up Shares, whether any such transaction is to be settled by delivery of such securities, in cash or otherwise, or (iii) publicly announce any intention to effect any transaction specified in clause (i) or (ii). The Lock-Up Period shall terminate upon the earlier of (i) with respect to 50% of the Lock-Up Shares, 180 days after the Closing and (ii) with respect to the remaining 50% of the Lock-Up Shares, 365 days after the Closing.

This summary is qualified by the actual terms of the Form of Lock-Up Agreement, a copy of which is attached as an exhibit hereto.

*Amended and Restated Registration Rights Agreement* – In connection with the Closing of the Merger, PML Growth, Energy Vault PML, and certain other stockholders of the Issuers entered into an Amended and Restated Registration Rights Agreement (the "Registration Rights Agreement") no later than (i) 30 calendar days after the Closing and (ii) 20 business days after the Closing, the Issuer would file with the Commission a registration statement registering the resale of the securities acquired in the Merger, and use commercially reasonable efforts to have such registration statement declared effective as soon as practicable after the filing thereof. Such registration statement was declared effective on May 6, 2022.

This summary is qualified by the actual terms of the Registration Rights Agreement, a copy of which is filed as an exhibit hereto.

*10b5-1 Plans* - On August 30, 2022, the Reporting Person, as the Managing Member of the General Partner of each of Energy Vault PML and PML Fund II, entered into a Rule 10b5-1 Trading Plan with respect to each entity (the "10b5-1 Plans") pursuant to which the Reporting Person may sell Common Stock from time to time, subject to certain conditions and restrictions set forth in the 10b5-1 Plans. The sale of Common Stock under the 10b5-1 Plans is subject to minimum price parameters adopted by the Reporting Person, and there is no assurance that any Common Stock will be sold under the 10b5-1 Plans. No shares of Common Stock have been sold under the 10b5-1 Plans to date.

## Item 7. Material to be Filed as Exhibits.

Exhibit No.	Name
1.	Form of Lock-Up Agreement (incorporated by reference to the Issuer's Current Report on Form 8-K, filed with the Commission on February 14, 2022).
2.	Amended and Restated Registration Rights Agreement, by and among the Company and certain stockholders and equityholders of the Company (incorporated by reference to the Issuer's Current Report on Form 8-K, filed with the Commission on February 14, 2022).

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## SIGNATURES

After reasonable inquiry and to the best of its knowledge and belief, the undersigned hereby certify that the information set forth in this statement is true, complete and correct.

Date: September 2, 2022

By: /s/ Dakin Sloss  
Name: Dakin Sloss