
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

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

HELIOGEN, INC.
(Name of Issuer)

Common Stock, \$0.0001 par value per share
(Title of Class of Securities)

42329W 105
(CUSIP Number)

Debbie Chen
General Counsel
Heliogen, Inc.
130 West Union Street
Pasadena, California 91103
Tel: 626-720-4530

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

May 23, 2022
(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 Section 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, as amended ("*Exchange 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).

1.	Names of Reporting Persons. William Gross	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input 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"/>	
6.	Citizenship or Place of Organization United States	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 9,055,602
	8.	Shared Voting Power 1,086,882
	9.	Sole Dispositive Power 9,055,602
	10.	Shared Dispositive Power 1,086,882
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 10,142,484 ⁽¹⁾	
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) 5.2% ⁽²⁾	
14.	Type of Reporting Person (See Instructions) IN	

¹ Represents 1,589,488 shares of common stock and 7,466,114 shares issuable for vested and exercisable options within 60 days of May 23, 2022, beneficially held by Mr. Gross. Also includes 1,086,882 shares of common stock held by Idealab Studio, LLC ("Idealab Studio"). The Gross Goodstein Living Trust, dated April 18, 2006 ("Gross Trust"), of which Mr. Gross and his wife are co-trustees, owns a majority of the class of securities entitled to elect two directors to Idealab Studio's board of managers. In addition, Mr. Gross is the chairman and chief executive officer of Idealab Studio. As a result of the foregoing, Mr. Gross may be deemed to beneficially own the securities held by Idealab Studio. Mr. Gross disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.

² This percentage is calculated based upon 189,127,092 shares of common stock outstanding as of May 23, 2022.

Item 1. Security and Issuer

- (a) This statement on Schedule 13D relates to the common stock, par value \$0.0001 per share ("**Common Stock**"), of Heliogen, Inc., a Delaware corporation (the "**Issuer**").
- (b) The principal executive offices of the Issuer are located at 130 W. Union Street, Pasadena, California.

Item 2. Identity and Background

- (a) William Gross
- (b) The business address of the Reporting Person is c/o Heliogen, Inc., 130 W. Union Street, Pasadena, California.
- (c) The Reporting Person is the Chief Executive Officer and Chairman of the Board of the Issuer.
- (d) During the last five years, the Reporting Person has not been convicted in any criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, the Reporting Person has not been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction resulting in such person being 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.

The Reporting Person acquired 1,589,488 shares of common stock of (the "**Merger Shares**") the Issuer pursuant to the Business Combination Agreement, dated July 6, 2021, (the "**Business Combination Agreement**"), by and among Athena Technology Acquisition Corp. ("**Athena**"), HeliMax Merger Sub Inc., a wholly owned subsidiary of Athena ("**Merger Sub**") and Heliogen, Inc. ("**Legacy Heliogen**") in exchange for Legacy Heliogen shares.

Pursuant to the terms of the Business Combination Agreement, a business combination of Legacy Heliogen and Athena was effected by the merger of Merger Sub with and into Legacy Heliogen, with Legacy Heliogen surviving as a wholly owned subsidiary of Athena (the "**Merger**"). In connection with the consummation of the Merger, Athena changed its name from Athena Technology Acquisition Corp. to Heliogen, Inc. and Legacy Heliogen changed its name from Heliogen, Inc. to Heliogen Holdings, Inc.

At the Effective Time of the Merger (the "**Effective Time**"), as a result of the Merger, each share of Legacy Heliogen capital stock that was then issued and outstanding was cancelled and converted into the right to receive 2.013 shares (the "**Exchange Ratio**") of the Issuer's common stock.

At the Effective Time, as a result of the Merger, (i) each option to purchase Legacy Heliogen capital stock that was outstanding and unexercised immediately prior to the Effective Time was assumed by the Company and converted into an option to purchase shares of the Company's common stock and (ii) each award of restricted stock units in respect of Legacy Heliogen common stock outstanding as of immediately prior to the Effective Time was assumed by the Company and converted into an award of restricted stock units in respect of shares of the Company's common stock.

Item 4.

Mr. Gross serves as the chief executive officer of the Issuer and as a member of the Issuer's board of directors and, in such capacities, may have influence over the corporate activities of the Issuer, including activities which may relate to items described in subparagraphs (a) through (j) of Item 4 of this Schedule 13D. The Reporting Person has acquired, and holds, the shares of Common Stock reported herein for investment purposes.

The Reporting Person may acquire additional securities of the Issuer, depending on market indicators and the business performance of the Issuer, but does not currently plan to purchase a number of shares that would result in a substantial change in the beneficial ownership of the Reporting Person or his ability to influence control of the Issuer.

Other than as described in the preceding paragraph and Item 6 below, and except that the Reporting Person may, from time to time or at any time, subject to market conditions and other factors, purchase additional shares of Common Stock in the open market, in privately negotiated transactions or otherwise, or sell at any time all or a portion of the shares of Common Stock now owned or hereafter acquired by him to one or more purchasers or pursuant to a trading plan adopted pursuant to Rule 10b5-1 of the Exchange Act as of the date of this Schedule 13D, the Reporting Person does not have any present plans which relate to or would result in:

- (a) the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;
- (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;
- (c) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;
- (d) any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) any material change in the present capitalization or dividend policy of the Issuer;
- (f) any other material change in the Issuer's business or corporate structure including but not limited to, if the Issuer is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940;
- (g) changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;
- (h) causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or
- (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

- (a) The Reporting Person beneficially owns 10,142,484 shares of Common Stock of the Issuer, which represents 5.2% of the Issuer's Common Stock outstanding as of May 23, 2022, based on 189,127,092 shares of the Issuer's Common Stock outstanding as reported the Issuer's Registration Statement on Form S-1, Post Effective Amendment No. 2 with the SEC on May 27, 2022.
- (b) The Reporting Person has sole power to vote or direct the vote, and dispose or direct the disposition, of all of the shares of Common Stock that he beneficially holds except for 1,086,882 shares of Common Stock with respect to which the Reporting Person shares voting and dispositive power with Idealab Studio.
- (c) Except as described in this Schedule 13D, the Reporting Person has not engaged in any transactions in the Issuer's Common Stock in the past sixty days.
- (d) To the knowledge of the Reporting Person, no other person has 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 beneficially owned by the Reporting Person.
- (e) Not applicable.

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

In November 2021, the Reporting Person entered into an employment agreement (the “**Employment Agreement**”) with the Issuer. The Employment Agreement provides that, unless provided otherwise, any equity award granted to the Reporting Person under our 2013 Plan or 2021 Plan (collectively, the “**Plans**”) that is subject to time-based vesting, to the extent such award is assumed, continued, or substituted by the surviving corporation in connection with a “change in control” (as defined in the Plans), and the Reporting Person continues to provide services to the Issuer or the successor corporation, will accelerate and become fully vested and exercisable in the event of a “qualifying termination” (as defined in the Employment Agreement, including a termination without “cause” or resignation for “good reason” and execution of a release of claims) that occurs within 12 months following the change in control. Upon a qualifying termination that does not occur within 12 months following a change in control, under the Employment Agreement, the Reporting Person will be eligible for accelerated vesting of his time-based equity awards that would have vested, had he remained in continuous service for an additional 12 months after the termination date.

Registration Rights and Lock-up Agreement

On December 30, 2021 (the “**Closing Date**”), certain stockholders and certain officers and directors of the Issuer, including the Reporting Person (together, the “**Registration Rights Holders**”), entered into that certain Registration Rights and Lock-up Agreement (the “**Registration Rights Agreement**”), pursuant to which the Registrations Rights Holders agreed to be contractually restricted from selling or transferring their shares of the Issuer’s Common Stock for a period of 180 days after the Closing Date (the “**Lock-Up Period**”), with 50%, 25% and 25% of such shares subject to earlier release if the closing stock price for the Common Stock equals or exceeds \$12.00 per share, \$13.50 per share and \$17.00 per share, respectively, for any 20 trading days within any 30-trading day period. Pursuant to the Registration Rights Agreement, subject to certain requirements and customary conditions, including with regard to the number of demand rights that may be exercised and compliance with the Lock-Up Period, the Registration Rights Holders may demand at any time or from time to time, that the Issuer files a registration statement to register certain shares of Common Stock held by such Registration Rights Holders or to conduct an underwritten offering. The Registration Rights also provides the Registration Rights Holders with “piggy-back” registration rights, subject to certain requirements and customary conditions.

The foregoing descriptions of the Employment Agreement, and Registration Rights Agreement do not purport to be complete, and are qualified in their entirety by reference to the text of such agreements (or the forms thereof). Such agreements (or the forms thereof) are attached hereto as exhibits and are incorporated by reference herein. Other than as described in this Schedule 13D, to the knowledge of the Reporting Person, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the Reporting Person and any person with respect to any securities of the Issuer.

Item 7. Material to be Filed as Exhibits

	Description	Incorporated by Reference			
		Schedule / Form	File No.	Exhibit	Filing Date
A.	Executive Employment Agreement, dated November 19, 2021, by and between William T. “Bill” Gross and Heliogen, Inc.	S-4/A	333-258606	10.15	11/19/2021
B.	Registration Rights and Lock-Up Agreement	8-K	001-40209	10.5	1/6/2022

SIGNATURE

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

Dated: May 31, 2022

/s/ William Gross

WILLIAM GROSS

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative (other than an executive officer or general partner of the filing person), evidence of the representative's authority to sign on behalf of such person shall be filed with the statement: provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

**Attention: Intentional misstatements or omissions of fact
constitute Federal criminal violations (See 18 U.S.C. 1001)**