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

FORM 10-Q

(Mark One)

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2024

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____to _____

Commission File Number: 001-38598



BLOOM ENERGY CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**77-0565408**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
4353 North First Street, San Jose, California	**95134**
(Address of principal executive offices)	(Zip Code)

(408) 543-1500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Class A Common Stock, $0.0001 par value	BE	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The number of shares of the registrant's common stock outstanding as of November 4, 2024 was as follows:

Class A Common Stock, $0.0001 par value, 228,575,978 shares

Bloom Energy Corporation

Quarterly Report on Form 10-Q for the Three and Nine Months Ended September 30, 2024

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Unless the context otherwise requires, the terms "Company," "we," "us," "our," "Bloom," and "Bloom Energy," each refer to Bloom Energy Corporation and all of its subsidiaries.

PART I — FINANCIAL INFORMATION

ITEM 1 — FINANCIAL STATEMENTS

Bloom Energy Corporation
Condensed Consolidated Balance Sheets
(in thousands, except share data)
(unaudited)

	September 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents[1]	$ 495,677	$ 664,593
Restricted cash[1]	22,548	46,821
Accounts receivable, less allowance for credit losses of $119 as of September 30, 2024, and December 31, 2023[1, 2]	590,794	340,740
Contract assets[3]	121,074	41,366
Inventories[1]	584,484	502,515
Deferred cost of revenue[4]	40,648	45,984
Prepaid expenses and other current assets[1, 5]	47,663	51,148
Total current assets	1,902,888	1,693,167
Property, plant and equipment, net[1]	484,505	493,352
Operating lease right-of-use assets[1, 6]	133,143	139,732
Restricted cash[1]	30,926	33,764
Deferred cost of revenue	3,539	3,454
Other long-term assets[1, 7]	49,516	50,208
Total assets	$ 2,604,517	$ 2,413,677
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable[1, 8]	$ 124,272	$ 132,078
Accrued warranty[9]	15,009	19,326
Accrued expenses and other current liabilities[1, 10]	130,331	130,879
Deferred revenue and customer deposits[1, 11]	142,056	128,922
Operating lease liabilities[1, 12]	20,195	20,245
Financing obligations	20,921	38,972
Recourse debt	114,139	—
Total current liabilities	566,923	470,422
Deferred revenue and customer deposits[1, 13]	34,796	19,140
Operating lease liabilities[1, 14]	135,159	141,939
Financing obligations	390,539	405,824
Recourse debt	1,008,734	842,006
Non-recourse debt[1, 15]	4,563	4,627
Other long-term liabilities	8,811	9,049
Total liabilities	2,149,525	1,893,007
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock: $0.0001 par value; Class A shares — 600,000,000 shares and 600,000,000 shares authorized, and 228,509,625 shares and 224,717,533 shares issued and outstanding, and Class B shares — 470,092,742 shares and 600,000,000 shares authorized, and no shares issued and outstanding at September 30, 2024, and December 31, 2023, respectively	23	21
Additional paid-in capital	4,435,152	4,370,343
Accumulated other comprehensive loss	(1,818)	(1,687)
Accumulated deficit	(4,002,413)	(3,866,599)
Total stockholders' equity attributable to common stockholders	430,944	502,078
Noncontrolling interest	24,048	18,592
Total stockholders' equity	$ 454,992	$ 520,670
Total liabilities and stockholders' equity	$ 2,604,517	$ 2,413,677

[1] We have a variable interest entity related to a joint venture in the Republic of Korea (see Note 15 — *SK ecoplant Strategic Investment*), which represents a portion of the consolidated balances recorded within these financial statement line items.

[2] Including amounts from related parties of $349.5 million and $262.0 million as of September 30, 2024, and December 31, 2023, respectively.

[3] Including amounts from related parties of $0.8 million and $6.9 million as of September 30, 2024, and December 31, 2023, respectively.

[4] Including amounts from related parties of $0.9 million as of December 31, 2023. There were no amounts from related parties as of September 30, 2024.
[5] Including amounts from related parties of $1.1 million and $2.3 million as of September 30, 2024, and December 31, 2023, respectively.
[6] Including amounts from related parties of $1.7 million and $2.0 million as of September 30, 2024, and December 31, 2023, respectively.
[7] Including amounts from related parties of $9.1 million and $9.1 million as of September 30, 2024, and December 31, 2023, respectively.
[8] Including amounts from related parties of $0.1 million as of December 31, 2023. There were no amounts from related parties as of September 30, 2024.
[9] Including amounts from related parties of $2.8 million and $1.3 million as of September 30, 2024, and December 31, 2023, respectively.
[10] Including amounts from related parties of $7.6 million and $3.4 million as of September 30, 2024, and December 31, 2023, respectively.
[11] Including amounts from related parties of $7.1 million and $1.7 million as of September 30, 2024, and December 31, 2023, respectively.
[12] Including amounts from related parties of $0.5 million and $0.4 million as of September 30, 2024, and December 31, 2023, respectively.
[13] Including amounts from related parties of $6.3 million and $6.7 million as of September 30, 2024, and December 31, 2023, respectively.
[14] Including amounts from related parties of $1.2 million and $1.6 million as of September 30, 2024, and December 31, 2023, respectively.
[15] Including amounts from related parties of $4.6 million and $4.6 million as of September 30, 2024, and December 31, 2023, respectively.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Revenue:				
Product	$ 233,770	$ 304,976	$ 613,442	$ 713,427
Installation	32,052	21,916	86,229	66,762
Service	50,761	47,535	159,752	130,496
Electricity	13,816	25,841	42,040	65,869
Total revenue[1]	330,399	400,268	901,463	976,554
Cost of revenue:				
Product	155,124	182,832	432,213	457,591
Installation	35,688	25,902	95,339	77,881
Service	51,363	57,370	160,270	165,877
Electricity	9,490	139,378	28,310	169,802
Total cost of revenue[2]	251,665	405,482	716,132	871,151
Gross profit (loss)	78,734	(5,214)	185,331	105,403
Operating expenses:				
Research and development	36,315	35,126	109,164	122,309
Sales and marketing	14,667	20,002	46,167	73,935
General and administrative[3]	37,403	43,366	111,797	131,004
Total operating expenses	88,385	98,494	267,128	327,248
Loss from operations	(9,651)	(103,708)	(81,797)	(221,845)
Interest income	6,456	7,419	20,417	13,771
Interest expense[4]	(16,763)	(68,037)	(46,685)	(93,736)
Other income (expense), net	5,821	(1,577)	3,667	(3,660)
Loss on extinguishment of debt	—	(1,415)	(27,182)	(4,288)
Loss on revaluation of embedded derivatives	(386)	(114)	(316)	(1,213)
Loss before income taxes	(14,523)	(167,432)	(131,896)	(310,971)
Income tax provision	109	646	464	1,083
Net loss	(14,632)	(168,078)	(132,360)	(312,054)
Less: Net income (loss) attributable to noncontrolling interest	79	921	1,662	(5,427)
Net loss attributable to common stockholders	$ (14,711)	$ (168,999)	$ (134,022)	$ (306,627)
Net loss per share available to common stockholders, basic and diluted	$ (0.06)	$ (0.80)	$ (0.59)	$ (1.47)
Weighted average shares used to compute net loss per share available to common stockholders, basic and diluted	227,957	210,930	226,907	208,798

[1] Including related party revenue of $126.6 million and $335.6 million for the three and nine months ended September 30, 2024, respectively, and $125.7 million and $361.0 million for the three and nine months ended September 30, 2023, respectively.

[2] Including related party cost of revenue of $0.1 million for the nine months ended September 30, 2024. Related party cost of revenue for the three months ended September 30, 2024 was immaterial. There were no related party cost of revenue for the three and nine months ended September 30, 2023.

[3] Including related party general and administrative expenses of $0.2 million and $0.5 million for the three and nine months ended September 30, 2024. There were no related party general and administrative expenses for the three and nine months ended September 30, 2023.

[4] Including related party interest expense of $0.1 million and $0.2 million for the three and nine months ended September 30, 2024. There was no related party interest expense for the three and nine months ended September 30, 2023.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Comprehensive Loss
(in thousands)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Net loss	$ (14,632)	$ (168,078)	$ (132,360)	$ (312,054)
Other comprehensive income (loss), net of taxes:				
Foreign currency translation adjustment	1,155	(527)	(295)	(1,520)
Other comprehensive income (loss), net of taxes	1,155	(527)	(295)	(1,520)
Comprehensive loss	(13,477)	(168,605)	(132,655)	(313,574)
Less: Comprehensive income (loss) attributable to noncontrolling interest	751	719	1,498	(5,820)
Comprehensive loss attributable to common stockholders	$ (14,228)	$ (169,324)	$ (134,153)	$ (307,754)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Changes in Stockholders' Equity
(in thousands, except share data)
(unaudited)

	Three Months Ended September 30, 2024							
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Equity Attributable to Common Stockholders	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
Balances at June 30, 2024	227,556,594	$ 23	$ 4,413,233	$ (2,301)	$ (3,987,702)	$ 423,253	$ 23,297	$ 446,550
Issuance of restricted stock awards	504,414	—	—	—	—	—	—	—
ESPP purchase	417,267	—	4,047	—	—	4,047	—	4,047
Exercise of stock options	31,350	—	94	—	—	94	—	94
Stock-based compensation	—	—	17,778	—	—	17,778	—	17,778
Foreign currency translation adjustment	—	—	—	483	—	483	672	1,155
Net (loss) income	—	—	—	—	(14,711)	(14,711)	79	(14,632)
Balances at September 30, 2024	228,509,625	$ 23	$ 4,435,152	$ (1,818)	$ (4,002,413)	$ 430,944	$ 24,048	$ 454,992

	Three Months Ended September 30, 2023							
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Equity Attributable to Common Stockholders	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
Balances at June 30, 2023	209,181,382	$ 20	$ 4,011,900	$ (2,053)	$ (3,702,111)	$ 307,756	$ 38,479	$ 346,235
Issuance of restricted stock awards	637,728	—	—	—	—	—	—	—
ESPP purchase	426,170	—	5,607	—	—	5,607	—	5,607
Exercise of stock options	123,889	—	1,138	—	—	1,138	—	1,138
Stock-based compensation	—	—	19,469	—	—	19,469	—	19,469
Buyout of noncontrolling interest	—	—	11,482	—	—	11,482	(18,346)	(6,864)
Conversion of Series B redeemable convertible preferred stock	13,491,701	1	310,484	—	—	310,485	—	310,485
Distributions and payments to noncontrolling interest	—	—	—	—	—	—	(2,265)	(2,265)
Foreign currency translation adjustment	—	—	—	(325)	—	(325)	(202)	(527)
Net (loss) income	—	—	—	—	(168,999)	(168,999)	921	(168,078)
Balances at September 30, 2023	223,860,870	$ 21	$ 4,360,080	$ (2,378)	$ (3,871,110)	$ 486,613	$ 18,587	$ 505,200

	Nine Months Ended September 30, 2024							
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Equity Attributable to Common Stockholders	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
Balances at December 31, 2023	224,717,533	$ 21	$ 4,370,343	$ (1,687)	$ (3,866,599)	$ 502,078	$ 18,592	$ 520,670
Issuance of restricted stock awards	2,592,393	2	—	—	—	2	—	2
ESPP purchase	1,049,955	—	10,344	—	—	10,344	—	10,344
Exercise of stock options	149,744	—	770	—	—	770	—	770
Stock-based compensation	—	—	53,695	—	—	53,695	—	53,695
Contributions from noncontrolling interest	—	—	—	—	—	—	3,958	3,958
Accrued dividend	—	—	—	—	(1,620)	(1,620)	—	(1,620)
Legal reserve	—	—	—	—	147	147	—	147
Subsidiary liquidation	—	—	—	—	(319)	(319)	—	(319)
Foreign currency translation adjustment	—	—	—	(131)	—	(131)	(164)	(295)
Net (loss) income	—	—	—	—	(134,022)	(134,022)	1,662	(132,360)
Balances at September 30, 2024	228,509,625	$ 23	$ 4,435,152	$ (1,818)	$ (4,002,413)	$ 430,944	$ 24,048	$ 454,992

	Nine Months Ended September 30, 2023							
	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Equity Attributable to Common Stockholders	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount						
Balances at December 31, 2022	205,664,690	$ 20	$ 3,906,491	$ (1,251)	$ (3,564,483)	$ 340,777	$ 38,039	$ 378,816
Issuance of restricted stock awards	3,496,491	—	—	—	—	—	—	—
ESPP purchase	875,695	—	13,363	—	—	13,363	—	13,363
Exercise of stock options	332,293	—	2,640	—	—	2,640	—	2,640
Stock-based compensation	—	—	77,755	—	—	77,755	—	77,755
Derecognition of the pre-modification forward contract fair value	—	—	76,242	—	—	76,242	—	76,242
Equity component of Series B redeemable convertible preferred stock	—	—	16,145	—	—	16,145	—	16,145
Contributions from noncontrolling interest	—	—	—	—	—	—	6,979	6,979
Purchase of capped call related to convertible notes	—	—	(54,522)	—	—	(54,522)	—	(54,522)
Buyout of noncontrolling interest	—	—	11,482	—	—	11,482	(18,346)	(6,864)
Conversion of Series B redeemable convertible preferred stock	13,491,701	1	310,484	—	—	310,485	—	310,485
Distributions and payments to noncontrolling interest	—	—	—	—	—	—	(2,265)	(2,265)
Foreign currency translation adjustment	—	—	—	(1,127)	—	(1,127)	(393)	(1,520)
Net loss	—	—	—	—	(306,627)	(306,627)	(5,427)	(312,054)
Balances at September 30, 2023	223,860,870	$ 21	$ 4,360,080	$ (2,378)	$ (3,871,110)	$ 486,613	$ 18,587	$ 505,200

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Bloom Energy Corporation
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2024	**2023**
Cash flows from operating activities:		
Net loss	$ (132,360)	$ (312,054)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	39,165	50,283
Non-cash lease expense	27,106	24,540
(Gain) loss on disposal of property, plant and equipment	(32)	177
Revaluation of derivative contracts	316	1,213
Impairment of assets	—	130,111
Derecognition of loan commitment asset related to SK ecoplant Second Tranche Closing	—	52,792
Stock-based compensation expense	55,016	77,160
Amortization of debt issuance costs	4,936	3,300
Loss on extinguishment of debt	27,182	4,288
Gain on failed sale-and-leaseback transactions	(5,003)	—
Unrealized foreign currency exchange loss	58	3,029
Other	5	—
Changes in operating assets and liabilities:		
Accounts receivable[1]	(250,336)	(83,851)
Contract assets[2]	(79,708)	(97,148)
Inventories	(83,244)	(206,315)
Deferred cost of revenue[3]	5,205	(15,914)
Prepaid expenses and other current assets[4]	2,330	(20,849)
Other long-term assets[5]	691	13,634
Operating lease right-of-use assets and operating lease liabilities	(27,348)	(23,879)
Finance lease liabilities	493	907
Accounts payable[6]	(1,367)	(5,695)
Accrued warranty[7]	(4,317)	(795)
Accrued expenses and other current liabilities[8]	612	(30,937)
Deferred revenue and customer deposits[9]	28,790	(57,041)
Other long-term liabilities	(420)	(1,320)
Net cash used in operating activities	(392,230)	(494,364)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(47,746)	(67,485)
Proceeds from sale of property, plant and equipment	36	3
Net cash used in investing activities	(47,710)	(67,482)
Cash flows from financing activities:		
Proceeds from issuance of debt[10]	402,500	633,983
Payment of debt issuance costs	(12,761)	(19,539)
Repayment of debt	(140,990)	(191,390)
Proceeds from financing obligations	1,798	2,702
Repayment of financing obligations	(19,766)	(13,475)
Proceeds from issuance of common stock	11,116	16,003
Distributions and payments to noncontrolling interests	—	(2,265)
Proceeds from issuance of redeemable convertible preferred stock	—	310,957
Contributions from noncontrolling interest	3,958	6,979
Dividend paid	(1,468)	—
Buyout of noncontrolling interest	—	(6,864)
Purchase of capped call related to convertible notes	—	(54,522)
Other	—	(408)
Net cash provided by financing activities	244,387	682,161
Effect of exchange rate changes on cash, cash equivalent, and restricted cash	(474)	(985)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(196,027)	119,330
Cash, cash equivalents, and restricted cash:		
Beginning of period	745,178	518,366
End of period	$ 549,151	$ 637,696
Supplemental disclosure of cash flow information:		

Cash paid during the period for interest	$ 34,551	$ 32,741
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	27,160	23,684
Operating cash flows from finance leases	187	804
Cash paid during the period for income taxes	1,283	1,332
Non-cash investing and financing activities:		
Liabilities recorded for property, plant and equipment, net	$ 2,278	$ 5,702
Recognition of operating lease right-of-use asset during the year-to-date period	8,193	14,157
Recognition of finance lease right-of-use asset during the year-to-date period	493	907
Derecognition of financing obligations	21,387	—
Derecognition of the pre-modified forward contract fair value	—	76,242
Equity component of redeemable convertible preferred stock	—	16,145
Conversion of Series B redeemable convertible preferred stock	—	310,484

[1] Including changes in related party balances of $87.5 million and $243.6 million for the nine months ended September 30, 2024, and 2023, respectively.

[2] Including changes in related party balances of $6.1 million and $3.4 million for the nine months ended September 30, 2024, and 2023, respectively.

[3] Including changes in related party balances of $0.9 million and $23.4 million for the nine months ended September 30, 2024, and 2023, respectively.

[4] Including changes in related party balances of $1.2 million for the nine months ended September 30, 2024. There were no associated related party balances as of September 30, 2023.

[5] Including immaterial changes in related party balances for the nine months ended September 30, 2024. There were no associated related party balances as of September 30, 2023.

[6] Including changes in related party balances of $0.1 million for the nine months ended September 30, 2024. There were no associated related party balances as of September 30, 2023.

[7] Including changes in related party balances of $1.5 million and $0.9 million for the nine months ended September 30, 2024, and 2023, respectively.

[8] Including changes in related party balances of $4.2 million and $5.7 million for the nine months ended September 30, 2024, and 2023, respectively.

[9] Including changes in related party balances of $4.9 million and $11.1 million for the nine months ended September 30, 2024, and 2023, respectively.

[10] Including changes in related party balances of $0.1 million for the nine months ended September 30, 2024. There were no associated related party balances as of September 30, 2023.

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

The unaudited condensed consolidated financial statements reflect all normal and recurring adjustments that are, in the opinion of management, necessary for a fair presentation of the results for the interim periods presented.

The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements, including the notes thereto, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Website references throughout this document are provided for convenience only, and the content on the referenced websites is not incorporated by reference into this report.

1. Nature of Business, Liquidity and Basis of Presentation

Nature of Business

For information on the nature of our business, see Part II, Item 8, Note 1 — *Nature of Business, Liquidity and Basis of Presentation, Nature of Business* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Liquidity

We have generally incurred operating losses and negative cash flows from operations since our inception. With the series of new debt offerings, debt extinguishments, and conversions to equity that we completed since 2021, we had $1,122.9 million and $4.6 million of total outstanding recourse and non-recourse debt, respectively, as of September 30, 2024, $114.1 million and $1,013.3 million of which was classified as short-term debt and long-term debt, respectively.

On May 29, 2024, we issued 3% Green Convertible Senior Notes (the "3% Green Notes due June 2029") in an aggregate principal amount of $402.5 million due June 2029, unless earlier repurchased, redeemed or converted, less the initial purchasers' discount of $12.1 million and other issuance costs of $0.7 million, resulting in net proceeds of $389.7 million. On May 29, 2024, we used approximately $141.8 million of the net proceeds from this issuance to repurchase $115.0 million, or 50%, of the outstanding principal amount of our 2.5% Green Convertible Senior Notes due August 2025 (the "2.5% Green Notes") in privately negotiated transactions. The repurchase amount equaled 122.6% of the principal amount repurchased, plus related accrued and unpaid interest. For additional information, please see Part I, Item 1, Note 7 — *Outstanding Loans and Security Agreements*.

Our future capital requirements depend on many factors, including our rate of revenue growth, the timing and extent of spending on research and development efforts and other business initiatives, the rate of growth in the volume of system builds and the need for additional working capital, the expansion of sales and marketing activities both in domestic and international markets, market acceptance of our products, our ability to secure financing for customer use of our products, the timing of installations and of inventory build in anticipation of future sales and installations, and overall economic conditions. In order to support and achieve our future growth plans, we may need or seek advantageously to obtain additional funding through equity or debt financing. Failure to obtain this financing on favorable terms or at all in future quarters may affect our financial position and results of operations, including our revenues and cash flows.

In the opinion of management, the combination of our existing cash and cash equivalents and expected timing of operating cash flows is expected to be sufficient to meet our operational and capital cash flow requirements and other cash flow needs for the next 12 months from the date of issuance of this Quarterly Report on Form 10-Q.

Inflation Reduction Act of 2022

On March 29, 2024, we received notification from the Internal Revenue Service (the "IRS") of the acceptance of our application for a Qualifying Advanced Energy Project Credit of up to $75.3 million. The application for qualifying advanced energy project credit allocation under Internal Revenue Code Section 48C(e) for the manufacturing facility in Fremont, California (the "Facility"), was submitted by Bloom on December 21, 2023. After a technical review of Bloom's Section 48C(e) application, the Department of Energy provided a recommendation to the IRS to grant a $75.3 million credit allocation for the Facility. The approval is subject to satisfaction of the underlying certification requirements, including the prevailing wage and apprenticeship requirements, within two years from the date of the application acceptance.

For information on the Inflation Reduction Act of 2022 (the "IRA") signed into law on August 16, 2022, and its impact on our business, see Part II, Item 8, Note 1 — *Nature of Business, Liquidity and Basis of Presentation, Inflation Reduction Act of 2022* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Basis of Presentation

We have prepared the unaudited condensed consolidated financial statements included herein pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ("SEC"), and as permitted by those rules, including all disclosures required by generally accepted accounting principles as applied in the United States ("U.S. GAAP"). Certain prior period amounts have been reclassified to conform to the current period presentation.

Principles of Consolidation

For information on the principles of consolidation, see Part II, Item 8, Note 1 — *Nature of Business, Liquidity and Basis of Presentation, Principles of Consolidation* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Use of Estimates

For information on the use of accounting estimates, see Part II, Item 8, Note 1 — *Nature of Business, Liquidity and Basis of Presentation, Use of Estimates* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Concentration of Risk

Geographic Risk — The majority of our revenue and long-lived assets are attributable to operations in the U.S. for all periods presented. In addition to shipments in the U.S., we also ship our products to other countries, primarily, the Republic of Korea, Japan, India, and Taiwan (collectively referred to as the "Asia Pacific region"). For the three and nine months ended September 30, 2024, total revenue in the U.S. was 52% and 60%, respectively, of our total revenue. For the three and nine months ended September 30, 2023, total revenue in the U.S. was 65% and 76%, respectively, of our total revenue.

Credit Risk — At September 30, 2024, two customers, the first of which is our related party (see Note 10 — *Related Party Transactions*), accounted for approximately 59% and 18% of accounts receivable, respectively. At December 31, 2023, one customer, that is our related party, accounted for approximately 74% of accounts receivable. To date, we have not experienced any credit losses.

Customer Risk — During the three months ended September 30, 2024, revenue from three customers, the first of which is our related party (see Note 10 — *Related Party Transactions*), accounted for approximately 38%, 20%, and 10% of our total revenue, respectively. During the nine months ended September 30, 2024, two customers, the first of which is our related party (see Note 10 — *Related Party Transactions*), represented approximately 37% and 21% of our total revenue, respectively.

During the three months ended September 30, 2023, revenue from two customers, the second of which is our related party (see Note 10 — *Related Party Transactions*), accounted for approximately 40% and 31% of our total revenue. During the nine months ended September 30, 2023, two customers, the first of which is our related party (see Note 10 — *Related Party Transactions*), represented approximately 36% and 24% of our total revenue.

2. Summary of Significant Accounting Policies

Refer to the accounting policies described in Part II, Item 8, Note 2 — *Summary of Significant Accounting Policies* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Accounting Guidance Not Yet Adopted

Refer to the accounting guidance not yet adopted described in Part II, Item 8, Note 2 — *Summary of Significant Accounting Policies — Accounting Guidance Not Yet Adopted* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023. Based on the Company's continued evaluation, we do not expect a material impact from new accounting guidance not yet adopted to our unaudited condensed consolidated financial statements.

Recent Accounting Pronouncements

There have been no significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements.

3. Revenue Recognition

Contract Balances

The following table provides information about accounts receivables, contract assets, customer deposits and deferred revenue from contracts with customers (in thousands):

	September 30, 2024	December 31, 2023
Accounts receivable	$ 590,794	$ 340,740
Contract assets	121,074	41,366
Customer deposits	121,507	75,734
Deferred revenue	55,345	72,328

The increase in accounts receivable of $250.1 million for the nine months ended September 30, 2024, was driven by the timing of transactions, increase in payment terms, and a change in customer mix. Refer to Note 1 — *Nature of Business, Liquidity and Basis of Presentation* for discussion of credit risk associated with our accounts receivable.

The increase in contract assets of $79.7 million for the nine months ended September 30, 2024, was driven by the timing of achieving billing milestones.

The increase in customer deposits of $45.8 million for the nine months ended September 30, 2024, was driven by receipt of new deposits, partially offset by certain deposits becoming non-refundable.

For details on nature and balance sheet classification of contract balances, refer to Part II, Item 8, Note 3 — *Revenue Recognition — Contract Balances* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Contract Assets

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Beginning balance	$ 90,388	$ 35,182	$ 41,366	$ 46,727
Transferred to accounts receivable from contract assets recognized at the beginning of the period	(17,193)	(8,284)	(28,926)	(31,968)
Revenue recognized and not billed as of the end of the period	47,879	116,977	108,634	129,116
Ending balance	$ 121,074	$ 143,875	$ 121,074	$ 143,875

Deferred Revenue

Deferred revenue activity during the three and nine months ended September 30, 2024, and 2023, consisted of the following (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Beginning balance	$ 55,965	$ 85,110	$ 72,328	$ 94,355
Additions	245,547	243,545	651,461	733,891
Revenue recognized	(246,167)	(261,042)	(668,444)	(760,633)
Ending balance	$ 55,345	$ 67,613	$ 55,345	$ 67,613

For details on deferred revenue, refer to Part II, Item 8, Note 3 — *Revenue Recognition — Deferred Revenue* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

We do not disclose the value of the unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

Disaggregated Revenue

We disaggregate revenue from contracts with customers into four revenue categories: product, installation, services and electricity (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Revenue from contracts with customers:				
Product revenue	$ 233,770	$ 304,976	$ 613,442	$ 713,427
Installation revenue	32,052	21,916	86,229	66,762
Services revenue	50,761	47,535	159,752	130,496
Electricity revenue	5,213	9,012	15,012	16,816
Total revenue from contracts with customers	321,796	383,439	874,435	927,501
Revenue from contracts that contain leases:				
Electricity revenue	8,603	16,829	27,028	49,053
Total revenue	$ 330,399	$ 400,268	$ 901,463	$ 976,554

4. Financial Instruments

Cash, Cash Equivalents, and Restricted Cash

The carrying values of cash, cash equivalents, and restricted cash approximate fair values and were as follows (in thousands):

	September 30, 2024	December 31, 2023
As Held:		
Cash	$ 82,492	$ 144,102
Money market funds	466,659	601,076
	$ 549,151	$ 745,178
As Reported:		
Cash and cash equivalents	$ 495,677	$ 664,593
Restricted cash	53,474	80,585
	$ 549,151	$ 745,178

Restricted cash consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Restricted cash, current	$ 22,548	$ 46,821
Restricted cash, non-current	30,926	33,764
	$ 53,474	$ 80,585

Factoring Arrangements

We sell certain customer trade receivables on a non-recourse basis under factoring arrangements with a financial institution. These transactions are accounted for as sales, and cash proceeds are included in net cash used in operating activities. We derecognized $81.9 million and $184.2 million of accounts receivable during the three and nine months ended September 30, 2024, respectively. We derecognized $108.0 million and $167.6 million of accounts receivable during the three and nine months ended September 30, 2023, respectively.

The cost of factoring such accounts receivable on our condensed consolidated statements of operations for the three and nine months ended September 30, 2024, was $1.6 million and $4.0 million, respectively. The cost of factoring such accounts receivable on our condensed consolidated statements of operations for the three and nine months ended September 30, 2023, was $2.0 million and $2.7 million, respectively. The cost of factoring is recorded in general and administrative expenses.

5. Fair Value

Our accounting policy for the fair value measurement of cash equivalents and embedded Escalation Protection Plan (“EPP”) derivatives is described in Part II, Item 8 Note 2 — *Summary of Significant Accounting Policies* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

The tables below set forth, by level, our financial assets and liabilities that are accounted for at fair value for the respective periods. The table does not include assets and liabilities that are measured at historical cost or any basis other than fair value (in thousands):

	Fair Value Measured at Reporting Date Using			
September 30, 2024	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 466,659	$ —	$ —	$ 466,659
	$ 466,659	$ —	$ —	$ 466,659
Liabilities				
Derivatives:				
Embedded EPP derivatives	$ —	$ —	$ 4,692	$ 4,692
	$ —	$ —	$ 4,692	$ 4,692

	Fair Value Measured at Reporting Date Using			
December 31, 2023	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets				
Cash equivalents:				
Money market funds	$ 601,076	$ —	$ —	$ 601,076
	$ 601,076	$ —	$ —	$ 601,076
Liabilities				
Derivatives:				
Embedded EPP derivatives	$ —	$ —	$ 4,376	$ 4,376
	$ —	$ —	$ 4,376	$ 4,376

Money Market Funds — Money market funds are valued using quoted market prices for identical securities and are therefore classified as Level 1 financial assets.

Embedded Escalation Protection Plan Derivative Liability in Sales Contracts — We estimate the fair value of the embedded EPP derivatives in certain sales contracts using a Monte Carlo simulation model, which considers various potential electricity price curves over the sales contracts' terms. We use historical grid prices and available forecasts of future electricity prices to estimate future electricity prices. We have classified these derivatives as a Level 3 financial liability.

The changes in the Level 3 financial liabilities during the nine months ended September 30, 2024, were as follows (in thousands):

	Embedded EPP Derivative Liability
Liabilities at December 31, 2023	$ 4,376
Changes in fair value	316
Liabilities at September 30, 2024	$ 4,692

For more details on EPP derivatives, refer to Part II, Item 8 Note 5 — *Fair Value* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Financial Assets and Liabilities Not Measured at Fair Value on a Recurring Basis

Debt Instruments — The term loans and convertible senior notes are based on rates currently offered for instruments with similar maturities and terms (Level 2). The following table presents the estimated fair values and carrying values of debt instruments (in thousands):

	September 30, 2024		December 31, 2023	
	Net Carrying Value	Fair Value	Net Carrying Value	Fair Value
Debt instruments				
Recourse:				
3% Green Convertible Senior Notes due June 2029	$ 390,602	$ 337,215	$ —	$ —
3% Green Convertible Senior Notes due June 2028	618,132	574,690	615,205	673,613
2.5% Green Convertible Senior Notes due August 2025	114,139	118,013	226,801	260,820
Non-recourse:				
4.6% Term Loan due October 2026	$ 3,042	$ 3,028	$ 3,085	$ 2,866
4.6% Term Loan due April 2026	1,521	1,563	1,542	1,479

All financial assets were measured at fair value on a recurring basis as of September 30, 2024, and December 31, 2023.

6. Balance Sheet Components

Inventories

The components of inventory consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Raw materials	$ 339,023	$ 270,414
Work-in-progress	105,207	50,632
Finished goods	140,254	181,469
	$ 584,484	$ 502,515

Inventory reserves were $17.3 million and $18.7 million as of September 30, 2024, and December 31, 2023, respectively.

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Prepaid managed services	$ 5,682	$ 5,636
Tax receivables	5,413	3,231
Prepaid hardware and software maintenance	4,123	5,202
Receivables from employees	4,028	6,538
Prepaid workers compensation	3,515	6,851
Advance income tax provision	2,819	2,557
Prepaid rent	1,815	1,232
Interest receivable	1,719	1,697
Prepaid deferred commissions	1,123	1,178
Deferred expenses	1,101	2,257
Deposits made	972	1,702
Other prepaid expenses and other current assets	15,353	13,067
	$ 47,663	$ 51,148

Property, Plant and Equipment, Net

Property, plant and equipment, net consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Energy Servers	$ 290,277	$ 309,770
Vehicles, machinery and equipment	199,541	174,549
Leasehold improvements	122,078	94,646
Construction-in-progress	84,170	104,650
Buildings	53,163	49,477
Computers, software and hardware	34,022	28,901
Furniture and fixtures	10,949	12,541
	794,200	774,534
Less: accumulated depreciation	(309,695)	(281,182)
	$ 484,505	$ 493,352

Depreciation expense related to property, plant and equipment was $13.3 million and $39.2 million for the three and nine months ended September 30, 2024, respectively. Depreciation expense related to property, plant and equipment for the three and nine months ended September 30, 2023, was $14.6 million and $50.3 million, respectively.

Depreciation expense for property, plant and equipment under operating leases by Power Purchase Agreement (“PPA”) entities was $3.7 million and $10.9 million for the three and nine months ended September 30, 2023, respectively. There was no depreciation expense for such assets for the three and nine months ended September 30, 2024.

Other Long-Term Assets

Other long-term assets consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Deferred commissions	$ 12,500	$ 9,373
Deferred expenses	9,064	9,069
Long-term lease receivable	6,241	7,335
Deposits made	3,157	3,157
Prepaid managed services	1,847	1,646
Deferred tax asset	1,377	1,385
Prepaid and other long-term assets	15,330	18,243
	$ 49,516	$ 50,208

Accrued Warranty and Product Performance Liabilities

Accrued warranty and product performance liabilities consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Product performance	$ 12,201	$ 18,066
Product warranty	2,808	1,260
	$ 15,009	$ 19,326

Changes in the product warranty and product performance liabilities were as follows (in thousands):

Balances at December 31, 2023	$ 19,326
Accrued warranty, net and product performance liabilities	14,466
Product performance expenditures during the period	(18,783)
Balances at September 30, 2024	$ 15,009

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	September 30, 2024	December 31, 2023
Compensation and benefits	$ 45,242	$ 47,901
General invoice and purchase order accruals	41,324	36,266
Interest payable	11,018	3,823
Sales tax liabilities	9,357	17,412
Sales-related liabilities	8,862	5,121
Accrued installation	3,471	4,939
Provision for income tax	2,754	3,374
Accrued legal expenses	2,306	1,359
Accrued consulting expenses	1,823	3,244
Finance lease liability	826	1,072
Accrued restructuring costs (Note 11)	481	3,793
Other	2,867	2,575
	$ 130,331	$ 130,879

7. Outstanding Loans and Security Agreements

The following is a summary of our debt as of September 30, 2024 (in thousands, except percentage data):

	Unpaid Principal Balance	Net Carrying Value			Interest Rate	Maturity Dates	Entity
		Current	Long-Term	Total			
3% Green Convertible Senior Notes due June 2029	$ 402,500	$ —	$ 390,602	$ 390,602	3.0%	June 2029	Company
3% Green Convertible Senior Notes due June 2028	632,500	—	618,132	618,132	3.0%	June 2028	Company
2.5% Green Convertible Senior Notes due August 2025	115,000	114,139	—	114,139	2.5%	August 2025	Company
Total recourse debt	1,150,000	114,139	1,008,734	1,122,873			
4.6% Term Loan due October 2026	3,042	—	3,042	3,042	4.6%	October 2026	Korean JV
4.6% Term Loan due April 2026	1,521	—	1,521	1,521	4.6%	April 2026	Korean JV
Total non-recourse debt	4,563	—	4,563	4,563			
Total debt	$ 1,154,563	$ 114,139	$ 1,013,297	$ 1,127,436			

The following is a summary of our debt as of December 31, 2023 (in thousands, except percentage data):

	Unpaid Principal Balance	Net Carrying Value			Interest Rate	Maturity Dates	Entity
		Current	Long-Term	Total			
3% Green Convertible Senior Notes due June 2028	$ 632,500	$ —	$ 615,205	$ 615,205	3.0%	June 2028	Company
2.5% Green Convertible Senior Notes due August 2025	230,000	—	226,801	226,801	2.5%	August 2025	Company
Total recourse debt	862,500	—	842,006	842,006			
4.6% Term Loan due October 2026	3,085	—	3,085	3,085	4.6%	October 2026	Korean JV
4.6% Term Loan due April 2026	1,542	—	1,542	1,542	4.6%	April 2026	Korean JV
Total non-recourse debt	4,627	—	4,627	4,627			
Total debt	$ 867,127	$ —	$ 846,633	$ 846,633			

Recourse debt refers to debt that we have an obligation to pay. Non-recourse debt refers to debt that is recourse to only our subsidiary, Bloom SK Fuel Cell, LLC, a joint venture in the Republic of Korea with SK ecoplant (the "Korean JV"). The differences between the unpaid principal balances and the net carrying values apply to deferred financing costs. We and our subsidiary were in compliance with all covenants as of September 30, 2024, and December 31, 2023.

Recourse Debt Facilities

3% Green Convertible Senior Notes due June 2029

On May 29, 2024, we issued the 3% Green Notes due June 2029 in an aggregate principal amount of $402.5 million due on June 1, 2029, unless earlier repurchased, redeemed or converted, less an initial purchasers' discount of $12.1 million and other issuance costs of $0.7 million (together, the "Transaction Costs"), resulting in net proceeds of $389.7 million. The 3% Green Notes due June 2029 were issued pursuant to, and are governed by, an indenture (the "Indenture"), dated as of May 29, 2024, between us and U.S. Bank Trust Company, National Association, as Trustee, in private placements to qualified institutional buyers pursuant to Rule 144A of the Securities Act of 1933, as amended (the "Securities Act"). Pursuant to the purchase agreement among the Company and the representatives of the initial purchasers of the 3% Green Notes due June 2029, the Company granted the initial purchasers an option to purchase up to an additional $52.5 million aggregate principal amount of the 3% Green Notes due June 2029 (the "Greenshoe Option"). The 3% Green Notes due June 2029 issued on May 29, 2024, included $52.5 million aggregate principal amount pursuant to the full exercise by the initial purchasers of the Greenshoe Option.

The 3% Green Notes due June 2029 are senior, unsecured obligations accruing interest at a rate of 3% per annum, payable semi-annually in arrears on June 1 and December 1 of each year, beginning on December 1, 2024. We may not redeem the 3% Green Notes due June 2029 prior to June 7, 2027, subject to a partial redemption limitation. We may elect to redeem, at face value, all or any portion of the 3% Green Notes due June 2029 at any time, and from time to time, on or after June 7, 2027 and on or before the twenty-first scheduled trading day immediately before the maturity date, provided the share price for our Class A common stock exceeds 130% of the conversion price at redemption.

Before March 1, 2029, the noteholders have the right to convert their 3% Green Notes due June 2029 only upon the occurrence of certain events, including satisfaction of a condition relating to the closing price of our common stock (the "Closing Price Condition") or the trading price of the 3% Green Notes due June 2029 (the "Trading Price Condition"), a redemption event, or other specified corporate events. If the Closing Price Condition is met on at least 20 (whether or not consecutive) of the last 30 consecutive trading days in any calendar quarter, and only during such calendar quarter, the noteholders may convert their 3% Green Notes due June 2029 at any time during the immediately following quarter, commencing after the calendar quarter ending on September 30, 2024, subject to the partial redemption limitation. Subject to the Trading Price Condition, the noteholders may convert their 3% Green Notes due June 2029 during the five business days immediately after any five consecutive trading day period in which the trading price per $1,000 principal amount of the 3% Green Notes due June 2029, as determined following a request by a holder of the 3% Green Notes due June 2029, for each day of that period is less than 98% of the product of the closing price of our common stock and the then applicable conversion rate. From and after March 1, 2029, the noteholders may convert their 3% Green Notes due June 2029 at any time at their election until the close of business on the second scheduled trading day immediately before the maturity date. Should the noteholders

elect to convert their 3% Green Notes due June 2029, we may elect to settle the conversion by paying or delivering, as applicable, cash, shares of our Class A common stock, $0.0001 par value per share, or a combination thereof, at our election.

The initial conversion rate is 47.9795 shares of Class A common stock per $1,000 principal amount of notes, which represents an initial conversion price of approximately $20.84 per share of Class A common stock. The conversion rate and conversion price are subject to customary adjustments upon the occurrence of certain events. Also, we may increase the conversion rate at any time if our Board of Directors determines it is in the best interests of the Company or to avoid or diminish income tax to holders of common stock. In addition, if certain corporate events that constitute a Make-Whole Fundamental Change, as defined below, occur, then the conversion rate applicable to the conversion of the 3% Green Notes due June 2029 will, in certain circumstances, increase by up to 15.5932 shares of Class A common stock per $1,000 principal amount of notes for a specified period of time. At September 30, 2024, the maximum number of shares into which the 3% Green Notes due June 2029 could have been potentially converted if the conversion features were triggered was 25,588,011 shares of Class A common stock.

According to the Indenture, a Make-Whole Fundamental Change means (i) a Fundamental Change, that includes certain change-of-control events relating to us, certain business combination transactions involving us and certain delisting events with respect to our Class A common stock, or (ii) the sending of a redemption notice with respect to the 3% Green Notes due June 2029.

The 3% Green Notes due June 2029 contain certain customary provisions relating to the occurrence of Events of Default, as defined in the Indenture. If an Event of Default involving bankruptcy, insolvency or reorganization events with respect to us occurs, then the principal amount of, and all accrued and unpaid interest on, all of the 3% Green Notes due June 2029 then outstanding will immediately become due and payable without any further action or notice by any person. However, notwithstanding the foregoing, we may elect, at our option, that the sole remedy for an Event of Default relating to certain failures by us to comply with certain reporting covenants in the Indenture consists exclusively of the right of the noteholders to receive special interest on the 3% Green Notes due June 2029 for up to 180 days at a specified rate per annum not exceeding 0.5% on the principal amount of the 3% Green Notes due June 2029.

The Transaction Costs were recorded as debt issuance costs and represented a reduction to the 3% Green Notes due June 2029 on our condensed consolidated balance sheets and are amortized to interest expense at an effective interest rate of 3.8%.

Total interest expense recognized related to the 3% Green Notes due June 2029 for the three and nine months ended September 30, 2024, was $3.7 million and $5.0 million, respectively, and was comprised of contractual interest expense of $3.0 million and $4.1 million and amortization of the initial purchasers' discount and other issuance costs of $0.7 million and $0.9 million, respectively. We have not recognized any special interest expense related to the 3% Green Notes due June 2029 to date. The amount of unamortized debt issuance costs as of September 30, 2024, was $11.9 million.

Although the 3% Green Notes due June 2029 contain embedded conversion features, we account for the 3% Green Notes due June 2029 in its entirety as a liability. As of September 30, 2024, the net carrying value of the 3% Green Notes due June 2029 was classified as a long-term liability in our condensed consolidated balance sheets.

3% Green Convertible Senior Notes due June 2028 and Capped Call Transactions

Please refer to Part II, Item 8, Note 7 — *Outstanding Loans and Security Agreements* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, for discussion of our 3% Green Convertible Senior Notes due June 2028 (the "3% Green Notes due June 2028") and privately negotiated capped call transactions in connection with the pricing of the 3% Green Notes due June 2028.

The noteholders could not convert their 3% Green Notes due June 2028 during the quarter ended September 30, 2024, as the Closing Price Condition, as defined in the indenture, dated as of May 16, 2023, between us and U.S. Bank Trust Company, National Association, as trustee, was not met during the three months ended June 30, 2024, as per the indenture, dated as of May 16, 2023.

Total interest expense recognized related to the 3% Green Notes due June 2028 for the three and nine months ended September 30, 2024, was $5.7 million and $17.1 million, respectively, and was comprised of contractual interest expense of $4.7 million and $14.1 million and amortization of the initial purchasers' discount and other issuance costs of $1.0 million and $3.0 million, respectively.

Total interest expense recognized related to the 3% Green Notes due June 2028 for the three and nine months ended September 30, 2023, was $5.7 million and $8.7 million, respectively, and was comprised of contractual interest expense of $4.7 million and $7.2 million and amortization of the initial purchasers' discount and other issuance costs of $1.0 million and $1.5 million, respectively.

We have not recognized any special interest expense related to the 3% Green Notes due June 2028 to date.

The amount of unamortized debt issuance costs as of September 30, 2024, and December 31, 2023, was $14.3 million and $17.3 million, respectively.

2.5% Green Convertible Senior Notes due August 2025

Please refer to Part II, Item 8, Note 7 — *Outstanding Loans and Security Agreements* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, for discussion of our 2.5% Green Notes.

The noteholders could not convert their 2.5% Green Notes during the quarter ended September 30, 2024, as the Closing Price Condition, as defined in the indenture, dated as of August 11, 2020, between us and U.S. Bank National Association, as trustee, was not met during the three months ended June 30, 2024, as per the indenture, dated as of August 11, 2020.

On May 29, 2024, we used approximately $141.8 million of the net proceeds from the 3% Green Notes due June 2029 offering to repurchase $115.0 million of the outstanding principal amount of our 2.5% Green Notes in privately negotiated transactions. Half of the original principal balance, $115.0 million of the 2.5% Green Notes, was called and repurchased at 122.6% during the three months ended June 30, 2024. The 22.6% premium of $26.0 million and unpaid accrued interest of $0.8 million related to the repurchased amount were included in the final payment to the noteholders. As a result of partial repurchase of the 2.5% Green Notes, we recognized a loss on extinguishment of debt of $27.2 million.

Total interest expense recognized related to the 2.5% Green Notes for the three and nine months ended September 30, 2024, was $1.0 million and $4.5 million, respectively, and was comprised of contractual interest expense of $0.7 million and $3.3 million and amortization of issuance costs of $0.3 million and $1.2 million, respectively. The effective interest rate of the 2.5% Green Notes after partial repurchase was 3.3%.

Total interest expense recognized related to the 2.5% Green Notes for the three and nine months ended September 30, 2023, was $1.9 million and $5.8 million, respectively, and was comprised of contractual interest expense of $1.4 million and $4.3 million and amortization of issuance costs of $0.5 million and $1.5 million, respectively.

We have not recognized any special interest expense related to the 2.5% Green Notes to date.

The amount of unamortized debt issuance costs as of September 30, 2024, and December 31, 2023, was $0.8 million and $3.2 million, respectively.

As of September 30, 2024, and December 31, 2023, the net carrying value of the 2.5% Green Notes was classified as a short-term liability and as a long-term liability in our condensed consolidated balance sheets, respectively.

Non-recourse Debt Facilities

Please refer to Part II, Item 8, Note 7 — *Outstanding Loans and Security Agreements* in our Annual Form 10-K for the fiscal year ended December 31, 2023, for discussion of our non-recourse debt.

Repayment Schedule and Interest Expense

The following table presents details of our outstanding loan principal repayment schedule as of September 30, 2024 (in thousands):

Remainder of 2024	$ —
2025	115,000
2026	4,563
2027	—
2028	632,500
Thereafter	402,500
	$ 1,154,563

8. Leases

Facilities, Energy Servers, and Vehicles

For the three and nine months ended September 30, 2024, rent expense for all occupied facilities was $5.6 million and $16.8 million, respectively. For the three and nine months ended September 30, 2023, rent expense for all occupied facilities was $5.7 million and $17.0 million, respectively.

Operating and financing lease right-of-use assets and lease liabilities as of September 30, 2024, and December 31, 2023, were as follows (in thousands):

	September 30, 2024	December 31, 2023
Operating Leases:		
Operating lease right-of-use assets, net [1, 2]	$ 133,143	$ 139,732
Current operating lease liabilities	(20,195)	(20,245)
Non-current operating lease liabilities	(135,159)	(141,939)
Total operating lease liabilities	$ (155,354)	$ (162,184)
Finance Leases:		
Finance lease right-of-use assets, net [2, 3, 4]	$ 2,334	$ 2,708
Current finance lease liabilities[5]	(826)	(1,072)
Non-current finance lease liabilities[6]	(1,703)	(1,837)
Total finance lease liabilities	$ (2,529)	$ (2,909)
Total lease liabilities	$ (157,883)	$ (165,093)

[1] These assets primarily include leases for facilities, Energy Servers, and vehicles.

[2] Net of accumulated amortization.

[3] These assets primarily include leases for vehicles.

[4] Included in property, plant and equipment, net in the condensed consolidated balance sheets.

[5] Included in accrued expenses and other current liabilities in the condensed consolidated balance sheets.

[6] Included in other long-term liabilities in the condensed consolidated balance sheets.

The components of our lease costs for the three and nine months ended September 30, 2024, and 2023, were as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Operating lease costs	$ 9,048	$ 8,408	$ 26,990	$ 24,373
Financing lease costs:				
Amortization of right-of-use assets	120	294	611	689
Interest on lease liabilities	61	72	190	203
Total financing lease costs	181	366	801	892
Short-term lease costs	36	384	68	1,561
Total lease costs	$ 9,265	$ 9,158	$ 27,859	$ 26,826

Weighted average remaining lease terms and discount rates for our leases as of September 30, 2024, and December 31, 2023, were as follows:

	September 30, 2024	December 31, 2023
Weighted average remaining lease term:		
Operating leases	6.9 years	7.4 years
Finance leases	3.3 years	3.2 years
Weighted average discount rate:		
Operating leases	10.5 %	10.6 %
Finance leases	9.6 %	9.5 %

Future lease payments under lease agreements as of September 30, 2024, were as follows (in thousands):

	Operating Leases	Finance Leases
Remainder of 2024	$ 9,133	$ 295
2025	34,581	973
2026	34,474	754
2027	33,968	593
2028	27,985	264
2029	21,242	61
Thereafter	61,821	—
Total minimum lease payments	223,204	2,940
Less: amounts representing interest or imputed interest	(67,850)	(411)
Present value of lease liabilities	$ 155,354	$ 2,529

Managed Services Financing

For details on Managed Services Financing refer to Part I, Item 7, Section *Purchase and Financing Options,* sub-section *Managed Services Financing* and Part II, Item 8, Note 8 — *Leases* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

We recognized $2.3 million and $9.4 million of product revenue, and $2.2 million and $4.5 million of installation revenue from successful sale-and-leaseback transactions for the three and nine months ended September 30, 2024, respectively. The recognized operating lease expense from successful sale-and-leaseback transactions for the three and nine months ended September 30, 2024, was $3.2 million and $9.5 million, respectively.

We recognized $15.8 million of product revenue and $4.8 million of installation revenue from successful sale-and-leaseback transactions for the nine months ended September 30, 2023. There were no new successful sale-and-leaseback transactions during the three months ended September 30, 2023. The recognized operating lease expense from successful sale-and-leaseback transactions for the three and nine months ended September 30, 2023, was $2.6 million and $7.0 million, respectively.

Operating lease right-of-use assets from successful sale-and-leaseback transactions as of September 30, 2024, and December 31, 2023, was $49.1 million and $47.6 million, respectively. Operating lease liability from successful sale-and-leaseback transactions as of September 30, 2024, and December 31, 2023, was $52.2 million and $50.1 million, including long-term operating lease liability of $44.2 million and $43.7 million, respectively. Financing obligations from successful sale-and-leaseback transactions as of September 30, 2024, and December 31, 2023, was $11.5 million and $10.9 million, including long-term financing obligations of $9.4 million and $9.3 million, respectively.

At September 30, 2024, future lease payments under the Managed Services Agreements financing obligations were as follows (in thousands):

	Financing Obligations
Remainder of 2024	$ 10,527
2025	42,541
2026	38,277
2027	22,376
2028	12,474
Thereafter	26,965
Total minimum lease payments	153,160
Less: imputed interest	(76,889)
Present value of net minimum lease payments	76,271
Less: current financing obligations	(20,920)
Long-term financing obligations	$ 55,351

The total financing obligations, as reflected in our condensed consolidated balance sheets, were $411.5 million and $444.8 million as of September 30, 2024, and December 31, 2023, respectively. We expect the difference between these obligations and the principal obligations in the table above to be offset against the carrying value of the related Energy Servers at the end of the lease and the remainder recognized as either a gain or loss at that point. For the three and nine months ended September 30, 2024, we recognized a $5.0 million gain on failed sale-and-leaseback transactions in other income (expense), net on our condensed consolidated statements of operations. There were no such transactions during the three and nine months ended September 30, 2023.

9. Stock-Based Compensation and Employee Benefit Plans

Stock-Based Compensation Expense

The following table summarizes the components of stock-based compensation expense in the condensed consolidated statements of operations (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Cost of revenue	$ 3,778	$ 5,581	$ 11,702	$ 14,809
Research and development	5,313	5,585	16,405	21,673
Sales and marketing	2,684	3,015	8,044	15,089
General and administrative	5,282	7,383	19,189	28,025
	$ 17,057	$ 21,564	$ 55,340	$ 79,596

As of September 30, 2024, and December 31, 2023, we capitalized $10.2 million and $8.9 million of stock-based compensation cost, respectively, into inventory and deferred cost of goods sold.

Stock Option and Stock Award Activity

Stock Options

The following table summarizes the stock option activity under our stock plans during the reporting period:

	Outstanding Options			
	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Life (Years)	Aggregate Intrinsic Value
				(in thousands)
Balances at December 31, 2023	7,247,624	$ 20.93	3.8	$ 19,446
Granted	1,355,348	9.96		
Exercised	(149,744)	5.29		
Expired	(764,033)	27.00		
Balances at September 30, 2024	7,689,195	18.68	4.3	11,206
Vested and expected to vest at September 30, 2024	7,357,371	19.10	4.1	10,781
Exercisable at September 30, 2024	6,353,847	$ 20.52	3.2	$ 9,726

During the three and nine months ended September 30, 2024, we recognized $0.9 million and $2.1 million of stock-based compensation costs for stock options, respectively. During the three and nine months ended September 30, 2023, we recognized $0.1 million and $0.3 million of stock-based compensation costs for stock options, respectively.

During the three and nine months ended September 30, 2024, we granted 180,000 and 1,355,348 stock options, respectively, including 180,000 and 955,000 stock options granted in the third and the first quarter of fiscal year 2024, respectively, to certain executives to purchase shares of common stock that contain certain performance-based vesting criteria related to corporate milestones (the “performance-based stock options”). The performance-based stock options were granted “at-the-money” and have a term of 10 years. The performance-based stock options vest based over a four-year or a three-year requisite service period. We did not grant stock options in the three and nine months ended September 30, 2023.

The fair value of each performance-based stock option is estimated on the date of grant using the Black-Scholes valuation model. Recognition of stock-based compensation expense associated with these performance-based stock options commences when the performance condition is considered probable of achievement, using management’s best estimates, which consider the inherent risk and uncertainty regarding the future outcomes of the milestones. Forfeitures of the performance-based stock options are recognized as they occur.

We used the following weighted-average assumptions in applying the Black-Scholes valuation model for determination of the stock options valuation:

Risk-free interest rate	3.7% - 4.4%
Expected term (years)	6
Expected dividend yield	—
Expected volatility	95.3% - 97.1%

During the three and nine months ended September 30, 2024, the intrinsic value of stock options exercised was $0.1 million and $0.8 million, respectively. During the three and nine months ended September 30, 2023, the intrinsic value of stock options exercised was $1.1 million and $2.6 million, respectively.

As of September 30, 2024, and December 31, 2023, we had unrecognized compensation costs related to unvested stock options of $8.1 million and $0.1 million, respectively. This cost is expected to be recognized over the remaining weighted-average period of 2.4 years and 0.3 years, respectively. Cash received from stock options exercised totaled $0.1 million and $0.8 million for the three and nine months ended September 30, 2024, respectively. Cash received from stock options exercised totaled $1.1 million and $2.6 million for the three and nine months ended September 30, 2023, respectively.

Stock Awards

A summary of our stock awards activity and related information is as follows:

	Number of Awards Outstanding	Weighted Average Grant Date Fair Value
Unvested Balance at December 31, 2023	9,889,341	$ 18.25
Granted	4,952,586	10.05
Vested	(2,592,393)	19.71
Forfeited	(1,418,278)	19.12
Unvested Balance at September 30, 2024	10,831,256	$ 14.04

Stock Awards — The estimated fair value of restricted stock units ("RSUs") and performance stock units ("PSUs") is based on the fair value of our Class A common stock on the date of grant. For the three and nine months ended September 30, 2024, we recognized $13.4 million and $46.8 million of stock-based compensation costs for stock awards, respectively. For the three and nine months ended September 30, 2023, we recognized $19.3 million and $65.0 million of stock-based compensation costs for stock awards, respectively.

As of September 30, 2024, and December 31, 2023, we had $99.1 million and $113.5 million of unrecognized stock-based compensation expense related to unvested stock awards, expected to be recognized over a weighted average period of 2.1 years and 2.0 years, respectively.

Executive Awards

On March 1, 2024, the Company granted RSUs, PSUs, time-based and performance-based stock option awards to certain executive staff; on May 6, 2024, the Company granted RSUs and PSUs to new executive hires, including our new Chief Financial Officer; and on August 29, 2024, the Company granted additional performance-based stock option awards to our Chief Commercial Officer (collectively, the "2024 Executive Awards"), pursuant to the 2018 Equity Incentive Plan.

The RSUs have time-based vesting schedules that range from two to four years, and started vesting on February 15, 2024 (May 15, 2024, for new hires).

The time-based stock options started vesting on February 15, 2024, and shall vest over three years. The PSUs have vesting schedules that range from one to three years. The performance-based stock options have vesting schedules that range from three to four years. Both the PSUs and the performance-based stock options have a threshold target for a vesting of 50% of the number of awards, a target for 100% of earned awards and a potential of 150% of granted awards earned, for each of the performance periods.

The PSUs and performance-based stock options will vest based on a combination of time and achievement against performance metrics targets assuming continued employment and service through each vesting date. Stock-based compensation costs associated with the 2024 Executive Awards are recognized over the service period as we evaluate the probability of the achievement of the performance conditions. As of September 30, 2024, the unamortized compensation expense for the RSUs, the PSUs, the time-based and the performance-based stock options per the 2024 Executive Awards was $14.7 million.

For details on the 2023, 2022, and 2021 Executive Awards refer to Part II, Item 8, Note 9 — *Stock-Based Compensation and Employee Benefit Plans* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

As of September 30, 2024, and December 31, 2023, the unamortized compensation expense for the RSUs and PSUs per the 2023 Executive Awards was $2.1 million and $7.0 million, respectively.

As of September 30, 2024, and December 31, 2023, the unamortized compensation expense for the RSUs and PSUs per the 2022 Executive Awards was $1.4 million and $6.2 million, respectively.

As of September 30, 2024, and December 31, 2023, the unamortized compensation expense for the RSUs and PSUs per the 2021 Executive Awards was $4.7 million and $8.2 million.

The following table presents the stock activity and the total number of shares available for grant under our stock plans:

	Plan Shares Available for Grant
Balances at December 31, 2023	32,877,906
Added to plan	9,674,114
Granted	(6,018,048)
Cancelled/Forfeited	1,892,425
Expired	(624,136)
Balances at September 30, 2024	37,802,261

2018 Employee Stock Purchase Plan

For details on the 2018 Employee Stock Purchase Plan (the "2018 ESPP"), refer to Part II, Item 8, Note 9 — *Stock-Based Compensation and Employee Benefit Plans* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

During the three and nine months ended September 30, 2024, we recognized $2.7 million and $4.0 million of stock-based compensation costs for the 2018 ESPP, respectively. During the three and nine months ended September 30, 2023, we recognized $0.1 million and $12.5 million of stock-based compensation costs for the 2018 ESPP, respectively.

During the three and nine months ended September 30, 2024, we issued 417,467 and 1,049,955 shares, respectively. During the three and nine months ended September 30, 2023, we issued 426,170 and 875,695 shares, respectively. We added 2,418,528 and 2,239,563 shares to the 2018 ESPP for the nine months ended September 30, 2024, and 2023, respectively. We did not add any shares to the 2018 ESPP for the three months ended September 30, 2024, and 2023. There were 16,573,157 and 15,204,584 shares available for issuance as of September 30, 2024, and December 31, 2023, respectively.

As of September 30, 2024, and December 31, 2023, we had $7.9 million and $8.8 million of unrecognized stock-based compensation costs, expected to be recognized over a weighted average period of 1.1 years and 0.8 years, respectively.

10. Related Party Transactions

There have been no changes in related party relationships during the nine months ended September 30, 2024. For information on our related party transactions, see Part II, Item 8, Note 12 — *Related Party Transactions* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Our operations include the following related party transactions (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Total revenue from related parties[1]	$ 126,627	$ 125,676	$ 335,641	$ 360,981
Cost of product revenue[2]	48	—	122	—
General and administrative expenses[3]	164	—	525	—
Interest expense[4]	51	—	153	—

[1] Includes revenue from (a) Korean JV and (b) SK ecoplant, which became a related party on September 23, 2023; however we had transactions with SK ecoplant in prior periods.

[2] Includes expenses billed by SK ecoplant to Korean JV for headcount support services.

[3] Includes rent expenses per operating lease agreements entered between Korean JV and SK ecoplant and miscellaneous expenses billed by SK ecoplant to Korean JV.

[4] Interest expense per two term loans entered between Korean JV and SK ecoplant in fiscal year 2023.

Below is the summary of outstanding related party balances as of September 30, 2024, and December 31, 2023 (in thousands):

	September 30, 2024	December 31, 2023
Accounts receivable	$ 349,502	$ 262,031
Contract assets	796	6,872
Deferred cost of revenue, current	—	875
Prepaid expenses and other current assets	1,101	2,257
Operating lease right-of-use assets[1]	1,674	2,031
Other long-term assets	9,064	9,069
Accounts payable	—	77
Accrued warranty	2,779	1,260
Accrued expenses and other current liabilities	7,624	3,427
Deferred revenue and customer deposits, current	7,064	1,707
Operating lease liabilities, current[1]	480	440
Deferred revenue and customer deposits, non-current	6,290	6,709
Operating lease liabilities, non-current[1]	1,228	1,617
Non-recourse debt[2]	4,563	4,627

[1] Balances relate to operating leases entered between Korean JV and SK ecoplant.

[2] Represents the total balance of two term loans entered between Korean JV and SK ecoplant in fiscal year 2023.

11. Restructuring

In September 2023, as a result of a review of current strategic priorities and resource allocation, we approved the restructuring plan intended to realign our operational focus to support our multi-year growth, scale the business, and improve our cost structure and operating margins. Please refer to Part II, Item 8, Note 12 — *Restructuring* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, for details.

For the nine months ended September 30, 2024, the impact from the restructuring on our condensed consolidated statements of operations was not material. We expect to incur $4.0 million in restructuring costs in subsequent quarters, out of

which we expect $3.5 million will relate to relocation costs and $0.5 million will relate to other restructuring costs. However, the actual timing and amount of costs associated with these restructuring actions may differ from our current expectations and estimates and such differences may be material.

The following table presents our current liability as accrued for restructuring charges on our condensed consolidated balance sheets. The table sets forth an analysis of the components of the restructuring charges and payments made against the accrual for the nine months ended September 30, 2024 (in thousands):

	Nine Months Ended September 30, 2024			
	Facility Closure	Severance	Other	Total
Balance at December 31, 2023	$ 2,577	$ 464	$ 752	$ 3,793
Restructuring accrual (release)	(35)	(385)	293	(127)
Payments	(2,529)	(79)	(577)	(3,185)
Balance at September 30, 2024	$ 13	$ —	$ 468	$ 481

At September 30, 2024, and December 31, 2023, facility closure costs, severance, and other restructuring costs were included in accrued expenses and other current liabilities in our condensed consolidated balance sheets.

12. Commitments and Contingencies

Commitments

Purchase Commitments with Suppliers and Contract Manufacturers — In order to reduce manufacturing lead-times for an adequate supply of inventories, we have agreements with our component suppliers and contract manufacturers to allow long lead-time component inventory procurement based on a rolling production forecast. We are contractually obligated to purchase long lead-time component inventory procured by certain manufacturers in accordance with our forecasts. We can generally give notice of order cancellation at least 90 days prior to the delivery date. However, we occasionally issue purchase orders to our component suppliers and third-party manufacturers that are not cancellable. As of September 30, 2024, and December 31, 2023, we had no material open purchase orders with our component suppliers and third-party manufacturers that are expected to be realized within more than a 12-month period and are not cancellable.

Performance Guarantees — We guarantee the performance of the Energy Servers at certain levels of output and efficiency to our customers over the contractual term. We monitor the need for any accruals arising from such guaranties, which are calculated as the difference between committed and actual power output or between natural gas consumption at warranted efficiency levels and actual consumption, multiplied by the contractual rates with the customer. Amounts payable under these guaranties are accrued in periods when the guaranties are not met and are recorded as service revenue in the condensed consolidated statements of operations. We paid $1.9 million and $18.8 million for the three and nine months ended September 30, 2024, respectively, for such performance guarantees. For the three and nine months ended September 30, 2023, we paid $4.5 million and $24.4 million, respectively, for such performance guarantees.

Letters of Credit — In 2019, pursuant to the PPA II upgrade of the Energy Servers, we agreed to indemnify our financing partner for losses that may be incurred in the event of certain regulatory, legal or legislative developments and established a cash-collateralized letter of credit facility for this purpose. As of September 30, 2024, and December 31, 2023, the balance of this cash-collateralized letter of credit was $20.5 million and $40.4 million, respectively.

In addition, we have other outstanding letters of credit issued to our customers and other counterparties in the U.S. and international locations under different performance and financial obligations. These letters of credit are collateralized through cash deposited in the controlled bank accounts with the issuing banks and are classified as restricted cash in our condensed consolidated balance sheets. As of September 30, 2024, and December 31, 2023, the balances of the cash-collateralized letters of credit issued to our customers and other counterparties in the U.S. and international locations were $25.6 million and $32.6 million, respectively.

Pledged Funds — In 2019, pursuant to the PPA IIIb upgrade of the Energy Servers, we established a restricted cash fund

of $20.0 million, which had been pledged for a seven-year period to secure our operations and maintenance obligations with respect to the totality of our obligations to the financier. All or a portion of such funds would be released if we meet certain credit rating and/or market capitalization milestones prior to the end of the pledge period. If we do not meet the required criteria within the first five-year period, the funds would still be released to us over the following two years as long as the Energy Servers continue to perform in compliance with our warranty obligations. As of September 30, 2024, and December 31, 2023, the balance of the restricted cash fund was $7.4 million and $7.6 million, respectively.

Contingencies

Indemnification Agreements — We enter into standard indemnification agreements with our customers and certain other business partners in the ordinary course of business. Our exposure under these agreements is unknown because it involves future claims that may be made against us but have not yet been made. To date, we have not paid any claims or been required to defend any action related to our indemnification obligations. However, we may record charges

in the future as a result of these indemnification obligations.

Investment Tax Credits — Our Energy Servers are eligible for federal Investment Tax Credits (the "ITC") that accrued to qualified property under Internal Revenue Code Section 48 when placed into service. However, the ITC program has operational criteria that extend for five years. If the energy property is disposed of or otherwise ceases to be qualified investment credit property before the close of the five-year recapture period is fulfilled, it could result in a partial reduction of the incentives.

Legal Matters — We are involved in various legal proceedings that arise in the ordinary course of business. We review all legal matters at least quarterly and assess whether an accrual for loss contingencies needs to be recorded. We record an accrual for loss contingencies when management believes that it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Legal matters are subject to uncertainties and are inherently unpredictable, so the actual liability in any such matter may be materially different from our estimates. If an unfavorable resolution were to occur, there exists the possibility of a material adverse impact on our consolidated financial condition, results of operations or cash flows for the period in which the resolution occurs or in future periods.

In June 2021, we filed a petition for writ of mandate and a complaint for declaratory and injunctive relief in the Santa Clara Superior Court against the City of Santa Clara for failure to issue building permits for two of our customer installations and asking the court to require the City of Santa Clara to process and issue the building permits. In October 2021, we filed an amended petition and complaint that asserts additional constitutional and tort claims based on the City's failure to timely issue the Energy Server permits. On April 21, 2023, the parties executed a settlement agreement which allows our two pending customer installations to proceed under building permits and requires the City of Santa Clara to amend its zoning code so that future installations of Bloom Energy Servers in Santa Clara require only building permits.

In February 2022, Plansee SE/Global Tungsten & Powders Corp. ("Plansee/GTP"), a former supplier, filed a request for expedited arbitration with the World Intellectual Property Organization Arbitration and Mediation Center in Geneva Switzerland ("WIPO"), for various claims allegedly in relation to an Intellectual Property and Confidential Disclosure Agreement between Plansee/GTP and Bloom Energy Corporation. Plansee/GTP's statement of claims includes allegations of infringement of U.S. Patent Nos. 8,802,328, 8,753,785 and 9,434,003. On April 3, 2022, we filed a complaint against Plansee/GTP in the Eastern District of Texas to address the dispute between Plansee/GTP and Bloom Energy Corporation in a proper forum before a U.S. Federal District Court. Our complaint seeks the correction of inventorship of U.S. Patent Nos. 8,802,328, 8,753,785 and 9,434,003 (the "Patents-in-Suit"); declaratory judgment of invalidity, unenforceability, and non-infringement of the Patents-in-Suit; and declaratory judgment of no misappropriation. Further, our complaint seeks to recover damages we have suffered in relation to Plansee/GTP's business dealings that, as alleged, constitute acts of unfair competition, tortious interference contract, breach of contract, violations of the Racketeer Influenced and Corrupt Organizations (RICO) Act and violations of the Clayton Antitrust Act. On June 9, 2022, Plansee/GTP filed a motion to dismiss the complaint filed in the Eastern District of Texas and compel arbitration (or alternatively to stay). We filed our opposition on June 30, 2022, Plansee/GTP filed its reply on July 14, 2022, and we filed our sur-reply on July 22, 2022. On February 9, 2023, Magistrate Judge Payne issued a report and recommendation to stay the district court action pending an arbitrability determination by the arbitrator for each claim.

On February 23, 2023, we filed an amended complaint adding additional causes of action and filed objections to the Magistrate's report and recommendation. On April 26, 2023, Judge Gilstrap overruled our objections to the Magistrate's report and recommendation and stayed the district court action pending arbitrability determinations by the arbitrator in the WIPO proceeding. The arbitration had been held in abeyance awaiting the decision of the Eastern District of Texas. A hearing by the

arbitrator in WIPO on arbitrability took place on June 27, 2023. On October 2, 2023, the arbitrator in the WIPO proceeding issued a ruling concluding that all the parties' claims were arbitrable. On November 18, 2023, the arbitrator bifurcated the arbitration into a first phase that will focus on Bloom's claims directed to improper inventorship of the Patents-in-Suit and Bloom's defective product claims. Briefing on the first phase will take place throughout 2024 with a potential evidentiary hearing to be scheduled in 2025. We are unable to predict the ultimate outcome of the arbitration at this time.

13. Income Taxes

For the three and nine months ended September 30, 2024, we recorded an income tax provisions of $0.1 million and $0.5 million on pre-tax losses of $14.5 million and $131.9 million for effective tax rates of (0.8)% and (0.4)%, respectively. For the three and nine months ended September 30, 2023, we recorded an income tax provisions of $0.6 million and $1.1 million, respectively, on pre-tax losses of $167.4 million and $311.0 million for effective tax rates of (0.4)% and (0.3)%, respectively.

The effective tax rate for the three and nine months ended September 30, 2024, and 2023, is lower than the statutory federal tax rate primarily due to a full valuation allowance against U.S. deferred tax assets.

14. Net Loss per Share Available to Common Stockholders

Please refer to the condensed consolidated statements of operations for computation of our net loss per share available to common stockholders, basic and diluted.

The following common stock equivalents (in thousands) were excluded from the computation of our net loss per share available to common stockholders, diluted, for the three and nine months presented as their inclusion would have been antidilutive (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023

Convertible notes	59,955	47,736	53,357	31,146
Redeemable convertible preferred stock	—	12,319	—	13,096
Stock options and awards	2,764	3,352	3,084	4,880
	62,719	63,407	56,441	49,122

15. SK ecoplant Strategic Investment

In September 2023, we entered into the Amended and Restated Joint Venture Agreement (the "JVA") and the Share Purchase Agreement (together, the "Amended JV Agreements") with SK ecoplant which allowed SK ecoplant to increase its share of the voting rights in the Korean JV to 60% and increased the scope of assembly done by the joint venture facility in the Republic of Korea to full assembly.

In January 2024, SK ecoplant increased its capital contribution to Korean JV by $3.9 million, which increased its voting rights in the Korean JV to 60%. However, as of September 30, 2024, we continue to consolidate the Korean JV in our financial statements as we remain a primary beneficiary of this joint venture.

The following are the aggregate carrying values of the Korean JV's assets and liabilities in our condensed consolidated balance sheets, after eliminations of intercompany transactions and balances, as of September 30, 2024, and December 31, 2023 (in thousands):

	September 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 8,981	$ 3,003
Accounts receivable	19,100	19,567
Inventories	8,364	8,156
Prepaid expenses and other current assets	2,433	644
Total current assets	38,878	31,370
Property and equipment, net	1,969	2,519
Operating lease right-of-use assets	1,786	2,138
Other long-term assets	45	46
Total assets	$ 42,678	$ 36,073
Liabilities		
Current liabilities:		
Accounts payable	$ 3,861	$ 3,480
Accrued expenses and other current liabilities	2,856	2,347
Operating lease liabilities	480	440
Total current liabilities	7,197	6,267
Operating lease liabilities	1,228	1,617
Non-recourse debt	4,563	4,627
Total liabilities	$ 12,988	$ 12,511

For a description of the strategic investment with SK ecoplant Co., Ltd. ("SK ecoplant", formerly known as SK Engineering & Construction Co., Ltd.), a subsidiary of the SK Group, please refer to Part II, Item 8, Note 17 — *SK ecoplant Strategic Investment* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

16. Subsequent Events

There have been no subsequent events that occurred during the period subsequent to the date of these unaudited condensed consolidated financial statements that would require adjustment to our disclosure in the unaudited condensed consolidated financial statements as presented.

ITEM 2 — MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current expectations, estimates, and projections about our industry, management's beliefs, and certain assumptions made by management. For example, forward-looking statements include, but are not limited to, our expectations regarding our products and services, including our aim to provide resilient products, business strategies, including capital expenditures to expand production capacity and sources of funding for capital expenditures, our expanded strategic partnership with SK ecoplant, operations, supply chain (including any direct or indirect effects from the Russia-Ukraine war, armed conflict in the Middle East, or geopolitical developments in China), new markets, government incentive programs including the scheduled expiration of the Investment Tax Credit at the end of 2024, impact of the Inflation Reduction Act of 2022 (the "IRA") and transferability of tax credits on our business and the financing market for installations of our products, impact of new foreign tax rules on our financial statements, growth of the hydrogen market, sufficiency of our cash and our liquidity, the potential to engage in equity or debt financing transactions, future capital requirements and use of proceeds, our commitments or contingencies, and statements under "Key Macro Trends." All statements contained in this Quarterly Report on Form 10-Q other than statements of historical fact are forward-looking statements. Forward-looking statements may be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "designs," "plans," "predicts," "targets," "forecasts," "will," "would," "could," "can," "may," "aim," "potential," "mission," "commit" and similar terms. These statements are based on the beliefs and assumptions of our management based on information currently available to management at the time they are made. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results, outcomes and the timing of certain events to differ materially from future results or outcomes expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those factors discussed in the section titled "Risk Factors" included in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, and in our other filings with the U.S. Securities and Exchange Commission ("SEC"). You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. Such forward-looking statements speak only as of the date of this report. We disclaim any obligation to update any forward-looking statements made in this Quarterly Report on Form 10-Q to reflect events or circumstances after the date of this report or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. The following discussion and analysis should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto included elsewhere in this Quarterly Report on Form 10-Q.

Overview

Description of Bloom Energy

Our mission is to make clean, reliable energy affordable for everyone in the world. We created the first large-scale, commercially viable solid oxide fuel-cell based power generation platform that empowers businesses, essential services, critical infrastructure and communities to responsibly take charge of their energy.

Our technology, invented in the U.S., is one of the most advanced electricity and hydrogen producing technologies on the market today. Our fuel-flexible Bloom Energy Servers can use biogas, hydrogen, natural gas, or a blend of fuels to create resilient, sustainable and cost-predictable power at higher efficiency levels than traditional, combustion-based resources. Our enterprise customers include some of the largest multinational corporations in the world. We also have relationships with some of the largest utility companies in the U.S. and the Republic of Korea, with a growing presence in various international markets. The solid oxide platform that powers our fuel cells can be used to create hydrogen with our Bloom Electrolyzer, and hydrogen is increasingly recognized as a critically important decarbonization tool in the energy transition.

We continue to innovate our products to offer energy solutions to our customers. In February 2024, we announced our Be Flexible™ offering which introduced load following capabilities to enable customers and utilities to meet variable electricity load and demand. Our Bloom Energy Servers allow us to provide energy solutions for customers, as our products are designed to work with existing carbon capture utilization and storage ("CCUS") and combined heat and power ("CHP") technologies. CCUS can mitigate emissions from natural gas as the Energy Server generates a relatively pure stream of CO_2 that can be used or sequestered. CHP allows the exhaust heat generated by the Energy Server to be channeled and made available for use, further increasing the efficiency of the system.

For further information about Bloom Energy, see Part II, Item 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations, Overview — Description of Bloom Energy* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Energy Market Conditions

The global energy transition to a zero-carbon environment has created new challenges and opportunities for utilities, suppliers of energy solutions, and customers. Shifts and uncertainty in market and regulatory dynamics and corporate and governmental policies are currently impacting the selling process and extending sales cycles and timelines for our products. Increasing electricity rates, decreasing energy reliability, and delays in the development of transmission infrastructure and grid interconnection have led to increased customer interest in our power solutions. At the same time, natural gas supply and pricing concerns due to geopolitical stresses and resulting market changes as well as increasing focus on sustainability targets have led to increased caution from potential customers. Increasing demand for power has forced utilities, states and countries to revisit less clean sources of baseload and intermediate power, which our technology is designed to replace, in an attempt to ensure energy reliability. This supply and demand mismatch globally has threatened energy's security, reliability, availability, and increased its cost.

Bloom enables customers to address these energy market challenges by offering fuel flexible solutions that are designed to provide cost predictable, resilient, and reliable energy in a timely fashion. As customers and utilities navigate the energy transition and evolving landscape, the ability of our power solutions to fit their economic, regulatory, and policy needs depends on a number of factors, including natural gas availability and pricing, electrical interconnection needs and availability, redundant back up power requirements, cost requirements, and sustainability profiles. Even in those situations where the time to power from the utility is measured in years because of the need to build out energy transmission infrastructure, these factors still may impact a customer's buying decision.

Many data center customers and other large power users have signed exclusivity arrangements with their utilities, and this often creates a more complicated dynamic for them to move to a behind-the-meter solution. The rising cost of natural gas, increases in gas distribution rates, limited availability of natural gas supply, as well as disruptions to the world's gas markets, has increased the cost of our power solutions for customers and, in certain cases where there is a lack of fuel supply, a complete inability to operate the systems. In the U.S., the lack or slow development of pipeline infrastructure is impacting the timing of customers being able to take advantage of our power solution opportunities. In certain jurisdictions in the U.S. and Europe, natural gas bans prevent the use of our power solutions unless alternative fuels are available.

In addition, many of our potential data center and industrial customers are pursuing greenfield opportunities where the development cycle is long and laden with permitting requirements, and the uncertainty of these factors is leading to a more difficult customer decision-making process and longer sales cycles. Data center greenfield projects require significant investments in real estate, facility costs, and technology, among other elements, in addition to the investment in our power solutions, and the timing and sequencing of those investments is largely outside of our control.

Key Macro Trends

Increases in Demand for Power, Driven by Data Centers and Artificial Intelligence (AI)

Demand for power has continued to significantly outpace available power generation supply from the grid, with the need for power becoming more acute in 2024. The transition towards the electrification of everything, including in a wide range of commercial and consumer products, has strained aging and unreliable power grids across the globe. The expanding use of AI has led to the expansion of existing data centers and plans for new greenfield data centers. The resulting increase in demand for power from Al-related companies has further reduced available supply from the grid and has led non-AI-related companies to consider on-site distributed power, including Bloom Energy Servers, to meet their power needs.

Time to Power Increases as Power Demand/Supply Mismatch Grows

In part because of the increases in demand for power, time to power has increased for companies seeking to connect new projects to the grid. According to the Lawrence Berkeley National Lab, U.S. interconnection queue delays have experienced significant growth, with a forty percent year over year increase in 2022. The typical project interconnection process for large scale projects grew to five years in 2022 compared to three years in 2015 and two years in 2008. Bloom Energy Servers can be configured as fully-islanded, microgrid solutions that are not interconnected to the grid, which can often provide a customer power in months instead of years. Our fully-islanded microgrid solutions can provide power on-site, without the need for costly transmission and distribution systems required by electrical grids. We are seeing greater interest in fully-islanded microgrid solutions among data center customers because of these interconnection-related delays. If a customer desires back up power or a "grid parallel" solution in combination with the Bloom microgrid, required interconnection studies and lengthy interconnection queues remain, eroding the time to power value proposition.

Impact of Climate Change and Sustainability Goals

The impacts of climate change, including more severe and unpredictable weather events, have placed further strain on aging utility grids and led to periods of power outages for those reliant on the grid. In addition, the recognition of the threat of climate change has led companies and governments to set ambitious emissions goals to reduce their carbon footprints. These emissions goals are expected to be difficult to meet using currently available renewable energy technologies such as wind and solar power. As the world transitions to lower-carbon energy sources, natural gas has been increasingly recognized as a necessary bridge fuel. Using natural gas, Bloom Energy Server can produce electricity efficiently without combustion. CCUS and CHP can further improve efficiency and lower carbon emissions of using Bloom Energy Servers compared to marginal generation resources on the grid.

Increasingly, customers want a zero-carbon solution for power, and, although our power solutions are designed to run on biofuels or hydrogen (in addition to natural gas) and help our customers achieve their sustainability goals, these fuels continue to have very limited availability and, for most customers, are not yet economical. This customer desire for zero-carbon solutions today, combined with the current lack of availability of zero-carbon fuels, is adversely impacting our power solution selling opportunities.

Other Factors Affecting our Performance

Delayed Project

In the fourth quarter of 2022, we entered into a Power Purchase Agreement ("PPA") contract for the sale of electricity to a customer for three greenfield sites that were at various stages of development (the "Project"). The first site was expected to be operational with power by the third quarter of 2024. We sold 73 megawatts of the Energy Servers to a distributor with the expectation that the distributor would support installation on the Project and install the Energy Servers at the three Project sites. For site specific reasons, in the first quarter of 2024, the end customer decided not to deploy the Energy Servers at the originally selected sites and is looking at alternative sites for deployment. In the interim, the end customer has commenced payments under the PPA and has agreed to continue such payments for the earlier of the full term of the PPA or deployment of the Energy Servers. We will continue to assist the distributor in its efforts to deploy the Energy Servers at the alternative installation sites selected by the end customer. Notwithstanding this, depending on the length of the installation delay, the distributor may decide to reduce future orders or cancel existing orders until the Energy Servers are deployed, and either action could materially and adversely affect our product revenue and the timing of the associated cash flows in 2024.

Shifting Regulatory Environment

In 2023, the South Korean government moved to a new, government-run bidding process for fuel cell purchases, which has impacted and may continue to impact demand for our power solutions. In the U.S., absent Congressional action, the Investment Tax Credit ("ITC") for fuel cells running on a non-zero carbon fuel is currently scheduled to expire at the end of fiscal year 2024. To date, Congress has not renewed the ITC. Because 2024 is a presidential election year in the U.S., it is possible Congress may be unable to achieve an extension of the ITC for commercial fuel cell purchasers this year. If the ITC is not extended for fuel cells, U.S. bookings, revenue and gross margins could be materially impacted. In 2024, the expiration of the ITC could increase demand for ITC-compliant sales of our Energy Servers due to customer desire to secure ITC for their projects through safe harboring. However, if our customers or project-level investors prove reluctant to make sufficient cash outlays in 2024 for purchases of Energy Servers for future projects, our sales could be negatively impacted. The Inflation Reduction Act of 2022 ("IRA") established a new clean electricity production credit and a clean electricity investment credit. There is considerable uncertainty around whether, or the conditions under which, such credits will be available for transactions involving our Energy Servers. In addition, delays in adoption of Renewable Fuel Standard regulations in the U.S. for the use of biogas to generate electricity for electric vehicles, along with minimal governmental focus on utilization of biogas outside of use by methane-fueled vehicles, have created uncertainty in prospects for broader biogas availability for industrial uses, including our power solutions. In addition, in most jurisdictions, air permits and various land use permits are required for installation of our solutions over a certain amount of megawatts, and generally the length of time to obtain these permits increased, while the level of certainty of issuance has decreased and if issued, the cost of compliance requirements can be cost prohibitive. We have experienced a reluctance in certain states to issue permits for gas generation equipment. Even if issued, states may require a blend of costly renewable fuels or other measures to advance climate goals. In Ireland, which is a large data center market, a directive from the Minister of the Department of the Environment, Climate and Communications to restrict grid connections to data centers and other large power users, along with a halt in high-pressure gas installations has delayed our selling activities.

Working with Utilities

The imbalance between power demand and supply has contributed to utilities seeking alternative sources of power to supply to their end customers. Utilities have been unable to meet this demand through the deployment of renewable sources of energy such as solar and wind power. Bloom Energy Servers can be installed at the utility's point of distribution or directly on the customer's site. The energy produced by Bloom Energy Servers can be utilized by utilities to provide power to a specific customer or customers or may be used by customers generally. Increasing the supply of available power can allow utilities to encourage end customers to remain in their current locations rather than relocating to areas where power is more available.

Hydrogen Market Developments

The significant governmental interest, investment, and stimulation of clean hydrogen in the U.S., Europe and in many other regions across the globe have not yet had significant impacts on the supply of hydrogen. To date, while the number of proposed hydrogen production projects has grown rapidly, only a small fraction has reached the final investment decision stage, and an even smaller fraction have been deployed. In addition, the infrastructure needed to transport hydrogen, whether through pipelines or maritime or land-based tankers, is currently only sufficient for existing uses, and has not begun to be significantly extended for anticipated future uses, with hydrogen blending and other approaches remaining at pilot stages. It remains unclear whether regulators in some jurisdictions will allow hydrogen to be introduced into gas distribution systems, which could limit our customers' ability to transport hydrogen from the point of production to the point of consumption. Additionally, U.S. Treasury Department rules surrounding the use of market-based renewable energy could make it more difficult for hydrogen projects to acquire energy needed to access the Production Tax Credit.

Lengthening Sales Cycles

Many of the factors discussed above have lengthened the selling cycles for our products and we have experienced delays in our anticipated bookings as a result. Our revenue, margins, and cash flow in any given year are largely dependent on bookings during the prior year. Historically, the majority of our bookings have occurred in the second half of the year, with a significant portion occurring in the fourth quarter. That trend did not continue to the same degree in 2023. If a substantial portion of our anticipated bookings continue to be delayed, our future revenue, margins and cash flow could be materially adversely impacted.

Supply Chain Constraints

We continue to see effects from global supply chain tightness due to the current inflationary environment, war in Ukraine, and trade tensions between the U.S. and China. We are not aware of, and do not expect any significant direct impact on our business or supply chain from the armed conflict in Israel and neighboring areas. While we have not experienced any significant component shortages to date, we are facing pressures from inflation. These dynamics could worsen as a result of continued geopolitical instability or escalation of current military conflicts or trade tensions. We are also reliant on third party providers of storage equipment, infrastructure equipment and pipelines, and other materials and technologies that work with our products to provide an energy solution for customers. In the event we are unable to mitigate the impacts of delays and/or price increases in raw materials and components, it could delay the manufacturing and installation of, and increase the costs of, our products, which would adversely impact our cash flows and results of operations, including our revenues and gross margin. We expect these supply chain challenges to continue in the short term.

Installations and Maintenance of Energy Servers

In the third quarter of 2024, our installation projects experienced some delays relating to, among other things, permitting, utility delays, and access to customer facilities. However, these delays did not significantly impact our revenue. If we are delayed in or unable to perform maintenance, our previously installed Energy Servers would likely experience adverse performance impacts, including reduced output and/or efficiency, which could result in warranty and/or guaranty claims by our customers. As we seek larger projects with sophisticated counterparties, customers have sought to impose more stringent performance requirements on us. If we experience a significant increase of product failure in the future, our service expense may increase and we may fail to achieve the performance commitments to our customers, which could result in warranty and/or guaranty claims. Additionally, product failure and service costs may increase as we initially deploy new applications for our Energy Server, including Be Flexible load following, CCUS, and CHP. Further, due to the nature of our Energy Servers, if we are unable to replace worn parts in accordance with our standard maintenance schedule, we may incur higher costs in the future. During the nine months ended September 30, 2024, we experienced no significant delays in servicing our Energy Servers.

For information on other factors affecting our performance, including:

- *Customer Financing Constraints, and*

- *Manufacturing and Labor Market Constraints,*

see Part II, Item 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations, Overview — Certain Factors Affecting our Performance* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Strategic Investment

For information on the strategic investment with SK ecoplant Co., Ltd. ("SK ecoplant", formerly known as SK Engineering & Construction Co., Ltd.), a subsidiary of the SK Group, see Part II, Item 8, Note 1 — *Nature of Business, Liquidity and Basis of Presentation, Liquidity* section and Note 17 — *SK ecoplant Strategic Investment* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

On March 27, 2024, Bloom, Bloom SK Fuel Cell, LLC, a joint venture in the Republic of Korea with SK ecoplant (the "Korean JV"), and SK ecoplant entered into the Third Amendment to the Amended and Restated Preferred Distribution Agreement, as amended (the "Third ARPDA"). The Third ARPDA adds SK Eternix Co., Ltd., as an additional distributor of Bloom products and ancillary equipment in the Republic of Korea.

Sustainability

In April 2024, we released our 2023 Sustainability Report, Transforming Energy for the Digital Age (the "Sustainability Report"), using generally accepted sustainability frameworks and standards, including alignment with Sustainability Accounting Standards Board standards and the Task Force on Climate-related Financial Disclosures recommendations. In addition, the Sustainability Report also utilized certain Global Reporting Initiative standards and was mapped against the United Nations Sustainable Development Goals. We plan to issue a sustainability report on an annual basis.

The Sustainability Report can be found on our website at *https://www.bloomenergy.com/sustainibility*. Website references throughout this document are provided for convenience only, and the content on the referenced websites is not incorporated by reference into this report.

For information about our sustainability initiatives, see Part II, Item 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations, Overview — Environmental, Social and Governance ("ESG")* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Inflation Reduction Act of 2022

On March 29, 2024, we received notification from the Internal Revenue Service (the "IRS") of the acceptance of our application for a Qualifying Advanced Energy Project Credit of up to $75.3 million. The application for qualifying advanced energy project credit allocation under Internal Revenue Code Section 48C(e) for the manufacturing facility in Fremont, California (the "Facility"), was submitted by Bloom on December 21, 2023. After a technical review of Bloom's Section 48C(e) application, the Department of Energy provided a recommendation to the IRS to grant a $75.3 million credit allocation for the Facility. The approval is subject to satisfaction of the underlying certification requirements, including the prevailing wage and apprenticeship requirements, within two years from the date of the application acceptance.

For information on the IRA, which was signed into law on August 16, 2022, and its impact on our business, see Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations, Inflation Reduction Act of 2022* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Liquidity and Capital Resources

We raised cash and supplemented liquidity by issuing the 3% Green Convertible Senior Notes due June 2029 (the "3% Green Notes due June 2029") in the second quarter of 2024, as well as through financing activities with SK ecoplant in the first quarter of 2023 and issuing the 3% Green Convertible Senior Notes due June 2028 (the "3% Green Notes due June 2028") in the second quarter of 2023. We expanded our warehouse space in Delaware and California to store more inventory to meet the anticipated increase in demand. If this increase in demand does not materialize to the degree we anticipated, our liquidity and financial condition may be adversely impacted.

On May 29, 2024, we issued the 3% Green Notes due June 2029 in an aggregate principal amount of $402.5 million due June 2029, unless earlier repurchased, redeemed or converted, less the initial purchasers' discount of $12.1 million and other issuance costs of $0.7 million, resulting in net proceeds of $389.7 million. On May 29, 2024, we used approximately $141.8 million of the net proceeds from this issuance to repurchase $115.0 million, or 50%, of the outstanding principal amount

of our 2.5% Green Convertible Senior Notes due August 2025 (the "2.5% Green Notes") in privately negotiated transactions. The repurchase amount equaled 122.6% of the principal amount repurchased plus related accrued and unpaid interest.

For further information on issuance of 3% Green Notes due June 2029 and partial repurchase of our 2.5% Green Notes, please see Part I, Item 1, Note 7 — *Outstanding Loans and Security Agreements*.

As of September 30, 2024, we had cash and cash equivalents of $495.7 million. Our cash and cash equivalents consist of highly liquid investments with maturities of three months or less, including money market funds of $466.7 million. We seek to maintain these balances with high credit quality counterparties, regularly monitor the amount of our credit exposure to any one issuer and diversify our investments in order to minimize our exposure.

As of September 30, 2024, we had $1,122.9 million of recourse debt, $4.6 million of non-recourse debt, and $8.8 million of other long-term liabilities. As of September 30, 2024, $114.1 million and $1,013.3 million of our debt was classified as short-term and long-term, respectively. For a complete description of our outstanding debt, please see Part I, Item 1, Note 7 — *Outstanding Loans and Security Agreements*.

The combination of our cash and cash equivalents and cash flow to be generated by our operations is expected to be sufficient to meet our anticipated cash flow needs for at least the next 12 months. If these sources of cash are insufficient or are not received in a timely manner to satisfy our near-term or future cash needs, we may require additional capital from equity or debt financings to fund our operations, our manufacturing capacity, product development, and market expansion requirements and to timely respond to competitive market pressures or strategic opportunities, among other things. We may, from time to time, engage in a variety of financing transactions for such purposes, including factoring our accounts receivable. During the nine months ended September 30, 2024, we factored $184.2 million of accounts receivable. However, we may not be able to secure timely additional financing on favorable terms, or at all. The terms of any additional financing may place limits on our financial and operating flexibility. Although currently we do not have any floating-rate notes on our balance sheet, rising interest rates may increase our overall cost of capital. If we raise additional funds through further issuances of equity or equity-linked securities, our existing stockholders could suffer dilution in their percentage ownership of us, and any new securities we issue could have rights, preferences, and privileges senior to those of holders of our common stock.

Our future capital requirements depend on many factors, including our rate of revenue growth, the timing and extent of spending on research and development efforts and other business initiatives, the rate of growth in the volume of system builds and the need for additional working capital, the expansion of sales and marketing activities both in domestic and international markets, market acceptance of our products, our ability to secure financing for customer use of our products, the timing of installations and of inventory build in anticipation of future sales and installations, and overall economic conditions. In order to support and achieve our future growth plans, we may need or seek advantageously to obtain additional funding through equity or debt financing. Failure to obtain this financing in future quarters may affect our results of operations, including our revenues and cash flows.

A summary of our consolidated sources and uses of cash, cash equivalents, and restricted cash was as follows (in thousands):

	Nine Months Ended September 30,	
	2024	**2023**
Net cash (used in) provided by:		
Operating activities	$ (392,230)	$ (494,364)
Investing activities	(47,710)	(67,482)
Financing activities	244,387	682,161

Operating Activities

Our operating activities consisted of net loss adjusted for certain non-cash items plus changes in our operating assets and liabilities or working capital. Net cash used in operating activities for the nine months ended September 30, 2024 related primarily to the changes in our working capital of $398.5 million predominantly due to (1) an increase in accounts receivable and contract assets by $250.3 million and $79.7 million, respectively, triggered by the timing of revenue transactions, corresponding collections and billing milestones, (2) an increase in inventory levels by $83.2 million to support future demand, and (3) the timing of payments to vendors.

Net cash used in operating activities during the nine months ended September 30, 2024, was $392.2 million, an improvement of $102.1 million compared to the prior year period. The change in cash used in operating activities during the nine months ended September 30, 2024, as compared to the prior year period, was primarily driven by an increase of $166.5 million attributable to accounts receivable, partially offset by decreases of $123.1 million, $85.8 million, and $31.5 million attributable to inventories, deferred revenue and customer deposits, and accrued expenses and other current liabilities, respectively.

Investing Activities

Our investing activities have consisted of capital expenditures, including investments to increase our production capacity. Cash used in investing activities during the nine months ended September 30, 2024, was $47.7 million, a decrease of $19.8 million compared to the prior year period, and was primarily due to the decrease in expenditures on tenant improvements for a newly leased engineering and manufacturing building in Fremont, California, which opened in July 2022. We expect to continue to make capital investments over the next few quarters to expand production capacity at our new manufacturing facility in Fremont, California, which includes the purchase of new equipment and other tenant improvements. We intend to fund these capital expenditures from cash on hand as well as cash flow to be generated from operations. We may also evaluate and arrange equipment lease financing to fund these capital expenditures.

Financing Activities

Our financing activities consist of borrowings and repayments of debt, proceeds and repayments of financing obligations, distributions paid to noncontrolling interests, contributions from noncontrolling interests, payments of dividends, proceeds from the issuances of our common stock, and other financing activities. Net cash provided by financing activities during the nine months ended September 30, 2024 was $244.4 million, a decrease of $437.8 million compared to the prior year period, predominantly due to (1) a decrease in the proceeds from issuance of redeemable convertible preferred stock of $310.6 million, net of paid issuance costs of $0.4 million, as a result of the SK ecoplant Second Tranche Closing in the nine months ended September 30, 2023 (please refer to Part II, Item 8, Note 17 — *SK ecoplant Strategic Investment* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023), and (2) a decrease in proceeds from the issuance of debt by $231.5 million. The decrease was partially offset by (1) the purchase in fiscal year 2023 of the capped call of $54.5 million related to the 3% Green Notes due June 2028 issued in the second quarter of fiscal year 2023, and (2) a decrease in the repayment of debt by $50.4 million.

Net cash provided by financing activities for the nine months ended September 30, 2024, consisted of (1) the proceeds from issuance of the 3% Green Notes due June 2029 of $402.5 million, (2) the proceeds from issuance of common stock of $11.1 million, (3) the contribution from a noncontrolling interest of $4.0 million, (4) the proceeds from financing obligations of $1.8 million, (5) the partial repurchase of the 2.5% Green Notes of $141.0 million, (6) the repayment of financing obligations of $19.8 million, (7) the repayment of debt issuance costs of $12.8 million pertaining to the 3% Green Notes due June 2029, and (8) a dividend payment of $1.5 million. Our working capital was strengthened by the issuance of the 3% Green Notes due June 2029 and 3% Green Notes due June 2028 in May 2024 and May 2023, respectively, as well as financing activities with SK ecoplant in the first quarter of 2023, but we may still enter the equity or debt market as needed to support the expansion of our business. Please refer to Part I, Item 1, Note 7 — *Outstanding Loans and Security Agreements* of this Quarterly Report on Form 10-Q and Part I, Item 1A, *Risk Factors — Risks Related to Our Liquidity — Our indebtedness, and restrictions imposed by the agreements governing our outstanding indebtedness, may limit our financial and operating activities and may adversely affect our ability to incur additional debt to fund future needs* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 for more information regarding the terms of and risks associated with our debt.

Purchase and Financing Options

For information about our purchase and financing options, see Part II, Item 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations, Purchase and Financing Options* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Purchase Alternatives

Our customers have several purchase alternatives for our Energy Servers. The portion of total revenue attributable to each purchase option in the three and nine months ended September 30, 2024, and 2023 was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Direct purchase (including third-party PPAs and international channels)	94 %	94 %	93 %	90 %
Traditional Lease	— %	— %	— %	1 %
Managed Services	6 %	4 %	7 %	7 %
Portfolio Financings	— %	2 %	— %	2 %

The portion of acceptances attributable to each purchase alternative in the three and nine months ended September 30, 2024, and 2023 was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2024	2023	2024	2023
Direct purchase (including third-party PPAs and international channels)	99 %	100 %	99 %	98 %
Managed services	1 %	— %	1 %	2 %

Performance Guarantees

As of September 30, 2024, we had incurred no liabilities due to failure to repair or replace Energy Servers pursuant to any performance warranties made under operations and maintenance agreements ("O&M Agreements").

For O&M Agreements that are subject to renewal, our future service revenue from such agreements are subject to our obligations to make payments for underperformance against the performance guaranties, which are capped at an aggregate total of approximately $583.4 million (including $456.1 million related to portfolio financing entities and $127.3 million related to all other transactions, and include payments for both low output and low efficiency) and our aggregate remaining potential payment related to these underperformance obligations was approximately $491.1 million as of September 30, 2024. For the nine months ended September 30, 2024, we made performance guarantee payments of $18.8 million.

International Channel Partners

There were no significant changes in our international channel partners during the nine months ended September 30, 2024. For information on international channel partners, see Part II, Item 7 — *Management's Discussion and Analysis of Financial Condition and Results of Operations, International Channel Partners* section in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Key Operating Metrics

For a description of the key operating metrics, we use to evaluate business activity, to measure performance, to develop financial forecasts and to make strategic decisions, see Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations, Key Operating Metrics* section in our Annual Report on Form 10-K for the year ended December 31, 2023.

Product Acceptances

The product and megawatt acceptances in the three and nine months ended September 30, 2024, and 2023 were as follows:

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
Product accepted	737	813	(76)	(9.3)%	1,888	1,931	(43)	(2.2)%
Megawatts accepted, net	74	81	(7)	(9.3)%	189	193	(4)	(2.2)%

Product accepted decreased approximately by 76 systems, or 9.3%, for the three months ended September 30, 2024, as compared to the prior year period, which is equivalent to 7 megawatts. Acceptance volume decrease was driven by the repowering of 2015 ESA Project Company, LLC ("PPA V"), which was sold in the third quarter of fiscal year 2023.

Product accepted decreased approximately by 43 systems, or 2.2%, for the nine months ended September 30, 2024, as compared to the prior year period, which is equivalent to 4 megawatts. Acceptance volume decrease was driven by (1) the repowering of PPA V, which was sold in the third quarter of fiscal year 2023, and (2) the effect of a large transaction in the first and the second quarter of fiscal year 2023 that did not repeat in fiscal year 2024.

The increase in acceptances of 189 megawatts achieved for the nine months ended September 30, 2024, was added to our installed base and, therefore, increased our total megawatts accepted, net, from 1,241 megawatts as of December 31, 2023, to 1,430 megawatts as of September 30, 2024.

Costs Related to Our Products

Total product related costs for the three and nine months ended September 30, 2024, and 2023 was as follows:

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
Product costs of product accepted in the period	$1,982/kW	$2,040/kW	$(58)/kW	(2.8)%	$2,071/kW	$2,126/kW	$(55)/kW	(2.6)%
Period costs of manufacturing related expenses not included in product costs (in thousands)	$ 9,000	$ 17,057	$ (8,057)	(47.2)%	$ 41,355	$ 46,961	$ (5,606)	(11.9)%
Installation costs on product accepted in the period	$484/kW	$319/kW	$165/kW	51.7 %	$505/kW	$403/kW	$102/kW	25.3 %

Product costs of product accepted decreased by $58 per kilowatt, or 2.8%, and by $55 per kilowatt, or 2.6%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The decrease in costs was primarily driven by our continued efforts to reduce material costs, implement cost reduction programs with our vendors, improved processes, automation at our manufacturing facilities, and reduced labor and overhead costs through restructuring programs executed in fiscal year 2023. The decrease was partially offset by changes in the mix of the solutions delivered.

Period costs of manufacturing related expenses decreased by $8.1 million, or 47.2%, and by $5.6 million, or 11.9%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. Our period costs of manufacturing-related expenses decreased primarily as a result of ongoing cost reduction efforts and manufacturing efficiencies.

Installation costs on product accepted increased by $165 per kilowatt, or 51.7%, and by $102 per kilowatt, or 25.3%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. Each customer site is unique, and installation costs can vary due to a number of factors, including site complexity, size, and location of gas, among other factors. As such, installation on a per kilowatt basis can vary significantly from period to period. For the three and nine months ended September 30, 2024, this increase in cost was primarily driven by the change in the mix of sites requiring Bloom installation.

Our Business Evolution and Key Operating Metrics

We are in the process of re-evaluating the key operating metrics we have historically used to measure our operating performance, and we expect this re-evaluation to be completed by the time we file our Annual Report on Form 10-K for the fiscal year ended December 31, 2024.

We are increasingly transitioning from selling our Energy Server as a standalone product to offering energy and hydrogen solutions to our customers. This trend is occurring across our offerings, as we find ways to deliver additional value to customers. We are solving critical problems for our customers and bringing new technologies to the market. This requires us to expand the scope of what is delivered beyond our conventional "electricity-only" solution to electricity, heat, carbon capture, storage, and molecules solutions. As a result of these developments, our Energy Server product (electricity-only power module) cost is becoming a widely varying fraction of the overall value of the energy solution we provide, and trends in costs and selling prices per kilowatt are less representative of our overall business performance. In management's view, this trend will only continue to get stronger in the future. Specific highlights of our business evolution to offering energy and hydrogen solutions include:

- *Time to power.* Customers are looking for energy solutions that can enable their business in a timely manner. In order to speed up installation and quickly get sites powered, we are now shipping solutions that are pre-packaged Energy Servers mounted on pre-fabricated skids in the factory. This minimizes the sitework that is needed and allows us to deploy the solution quickly, giving the customer a faster path to power. This effort requires more factory costs, but it reduces installation costs and increases value delivered to the customer.

- *Power Density solutions.* We have improved our power density for certain customer sites by factory building pre-packaged stackable Energy Servers. This increases costs and requires us to add more hardware at the factory but delivers more value to customers who have space constraints.

- *Bloom Electrolyzer.* In addition to our energy solutions, we have begun offering hydrogen solutions that feature our Bloom Electrolyzer. The Bloom Electrolyzer is designed to provide scalable and cost-effective hydrogen solutions based on the same solid oxide platform as our Energy Servers. The Bloom Electrolyzer produces hydrogen rather than electricity, and a kilowatt measure attributable to an electrolyzer is not equivalent to a kilowatt measure attributable to a solid oxide fuel cell. Costs of solutions designed to produce hydrogen could vary widely depending on project specifics.

- *Combined heat and power.* The CHP solution allows customers to take advantage of waste heat, boosting the efficiency and economic return of the project. The CHP solution, however, requires significant infrastructure to deliver the waste heat from the Energy Server to the customer. This infrastructure cost is additive to reported product costs but allows us to deliver more value to customers. Moreover, a kilowatt of heat does not have the same cost or value as a kilowatt of electricity. We optimize our solutions depending on the relevant project requirements, and as a result our cost structure can vary widely depending on the solution provided.

- *Carbon Capture solutions.* Our technology is well-suited to carbon capture when running on natural gas, the exhaust is a concentrated stream of CO_2 relative to other energy generation technologies. This means our solution requires less energy and hardware to separate out the CO_2 for capture and sequestration. However, this does require additional infrastructure onsite to separate the CO_2 from the rest of the exhaust and to condition it appropriately for the application. This infrastructure cost is additive to reported product costs but allows us to deliver more value to customers by delivering low carbon power.

- *Microgrid solutions.* As the reliability of the electrical grid becomes more challenging in multiple geographies, many of our customers desire to rely primarily or solely on Bloom solutions, in the form of grid-connected or islanded microgrids. The cost of the ancillary equipment associated with establishing a microgrid is significant, and thus further skews cost metrics measured on a per kilowatt basis.

As our business has evolved to meet the energy needs of the market, 'product accepted' is less relevant as an operating metric for our business due to the nature of the complexity in the solutions offered. For example, a solution offered to a customer who wants islanded power, which creates additional reliability, would carry additional costs due to the microgrids and other ancillary equipment needed to provide the solution. Similarly, a customer utilizing our Be Flexible™ solution would need ancillary equipment such as storage. These factors can distort the cost or revenue per kilowatt metrics.

Results of Operations

A discussion regarding the comparison of our financial condition and results of operations for the three and nine months ended September 30, 2024, and 2023 is presented below.

Revenue

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Product	$ 233,770	$ 304,976	$ (71,206)	(23.3)%	$ 613,442	$ 713,427	$ (99,985)	(14.0)%
Installation	32,052	21,916	10,136	46.2 %	86,229	66,762	19,467	29.2 %
Service	50,761	47,535	3,226	6.8 %	159,752	130,496	29,256	22.4 %
Electricity	13,816	25,841	(12,025)	(46.5)%	42,040	65,869	(23,829)	(36.2)%
Total revenue	$ 330,399	$ 400,268	$ (69,869)	(17.5)%	$ 901,463	$ 976,554	$ (75,091)	(7.7)%

PPA V Repowering

On August 25, 2023, we sold PPA V and simultaneously entered into a repowering agreement to upgrade the old Energy Servers by replacing them with the new Energy Servers and to provide related installation services. This transaction had a material impact on our financial results for the three and nine months ended September 30, 2023 (see Part II, Item 8, Note 10 — *Portfolio Financings* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023) but did not repeat in the three and nine months ended September 30, 2024.

Total Revenue

Total revenue decreased by $69.9 million, or 17.5%, for the three months ended September 30, 2024, as compared to the prior year period. This decrease was driven by a $71.2 million decrease in product revenue, and a $12.0 million decrease in electricity revenue, partially offset by a $10.1 million increase in installation revenue, and a $3.2 million increase in service revenue.

Total revenue decreased by $75.1 million, or 7.7%, for the nine months ended September 30, 2024, as compared to the prior year period. This decrease was driven by a $100.0 million decrease in product revenue, and a $23.8 million decrease in electricity revenue, partially offset by a $29.3 million increase in service revenue, and a $19.5 million increase in installation revenue.

Product Revenue

Product revenue decreased by $71.2 million, or 23.3%, for the three months ended September 30, 2024, as compared to the prior year period. This decrease was primarily due to lower volume and pricing resulting from the PPA V repowering, which commenced in the third quarter of fiscal year 2023. Pricing to the end customer is dependent on various factors, including geographical location of the site and the solution delivered.

Product revenue decreased by $100.0 million, or 14.0%, for the nine months ended September 30, 2024, as compared to the prior year period. This decrease was primarily due to lower volume and pricing resulting from the PPA V repowering, which commenced in the third quarter of fiscal year 2023, and a large transaction in the first and second quarters of fiscal year 2023 that did not repeat in fiscal year 2024. Pricing to the end customer is dependent on various factors, including geographical location of the site and the solution delivered.

Installation Revenue

Installation revenue increased by $10.1 million, or 46.2%, and by $19.5 million, or 29.2%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The increase for each period was primarily driven by the timing of achieving key project milestones on sites requiring installations by us in the three and nine months ended September 30, 2024.

Service Revenue

Service revenue increased by $3.2 million, or 6.8%, and by $29.3 million, or 22.4%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The increase for each period was primarily driven by (1) a $1.4 million and a $19.8 million increase in revenue from maintenance contracts associated with our fleet of Energy Servers, and (2) a decrease of $2.3 million and $10.1 million in product performance guarantees that resulted from a one-time accrual release of $1.1 million from change in estimate and improved fleet performance, respectively. The overall increase was partially offset by the timing of revenue recognition on certain contracts.

Electricity Revenue

Electricity revenue includes both revenue from contracts with customers and revenue from contracts that contain leases.

Electricity revenue decreased by $12.0 million, or 46.5%, and by $23.8 million, or 36.2%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The decrease for each period was predominantly due to the decrease in installed units, primarily driven by the PPA V repowering, which commenced in the third quarter of fiscal year 2023.

Cost of Revenue

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Product	$ 155,124	$ 182,832	$ (27,708)	(15.2)%	$ 432,213	$ 457,591	$ (25,378)	(5.5)%
Installation	35,688	25,902	9,786	37.8 %	95,339	77,881	17,458	22.4 %
Service	51,363	57,370	(6,007)	(10.5)%	160,270	165,877	(5,607)	(3.4)%
Electricity	9,490	139,378	(129,888)	(93.2)%	28,310	169,802	(141,492)	(83.3)%
Total cost of revenue	$ 251,665	$ 405,482	$ (153,817)	(37.9)%	$ 716,132	$ 871,151	$ (155,019)	(17.8)%

Total Cost of Revenue

Total cost of revenue decreased by $153.8 million, or 37.9%, for the three months ended September 30, 2024, as compared to the prior year period. The decrease was driven by a $129.9 million decrease in cost of electricity revenue, a $27.7 million decrease in cost of product revenue, and a $6.0 million decrease in cost of service revenue, partially offset by a $9.8 million increase in costs of installation revenue.

Total cost of revenue decreased by $155.0 million, or 17.8%, for the nine months ended September 30, 2024, as compared to the prior year period. The decrease was driven by a $141.5 million decrease in cost of electricity revenue, a $25.4 million decrease in cost of product revenue, and a $5.6 million decrease in cost of service revenue, partially offset by a $17.5 million increase in costs of installation revenue.

Cost of Product Revenue

Cost of product revenue decreased by $27.7 million, or 15.2%, for the three months ended September 30, 2024, as compared to the prior year period. The decrease in cost of product revenue was primarily due to (1) lower volume resulting from the PPA V repowering of $62.6 million, which commenced in the third quarter of fiscal year 2023, (2) our ongoing efforts to reduce material costs, (3) reduced labor and overhead costs through restructuring programs executed in fiscal year 2023, and (4) improved processes and automation at our manufacturing facilities. The decrease was partially offset by the one-off release of $3.1 million of grant liability recognized against payroll related costs incurred in the third quarter of fiscal year 2023.

Cost of product revenue decreased by $25.4 million, or 5.5%, for the nine months ended September 30, 2024, as compared to the prior year period. The decrease in cost of product revenue was primarily due to (1) (i) lower volume resulting from the PPA V repowering of $62.6 million, which commenced in the third quarter of fiscal year 2023, and (ii) the effect of a large transaction in the first and second quarters of fiscal year 2023 that did not repeat in fiscal year 2024, (2) our ongoing efforts to reduce material costs, (3) reduced labor and overhead costs through restructuring programs executed in fiscal year 2023, and (4) improved processes and automation at our manufacturing facilities. The decrease was partially offset by the one-

off release of $3.1 million of grant liability recognized against payroll related costs incurred in the third quarter of fiscal year 2023.

Cost of Installation Revenue

Cost of installation revenue increased by $9.8 million, or 37.8%, and by $17.5 million, or 22.4%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The increase for each period was primarily driven by the timing of achieving key project milestones on sites requiring installations by us in the three and nine months ended September 30, 2024. Each customer site is unique and installation costs can vary due to a number of factors, including site complexity, size, and location of gas, among other factors.

Cost of Service Revenue

Cost of service revenue decreased by $6.0 million, or 10.5%, for the three months ended September 30, 2024, as compared to the prior year period. This decrease was primarily due to (1) a decrease in the deployment of field replacement units, contributing a decrease of $4.8 million, (2) repair and overhaul cost reductions of $4.0 million, and (3) our cost reduction efforts to proactively manage fleet optimizations. The decrease was partially offset by an increase in maintenance material and labor and overhead costs of $3.3 million.

Cost of service revenue decreased by $5.6 million, or 3.4%, for the nine months ended September 30, 2024, as compared to the prior year period. This decrease was primarily due to (1) repair and overhaul cost reductions of $10.1 million, and (2) our cost reduction efforts to proactively manage fleet optimizations. The decrease was partially offset by an increase in maintenance material and labor and overhead costs of $8.7 million.

Cost of Electricity Revenue

Cost of electricity revenue includes both cost of revenue from contracts with customers and cost of revenue from contracts that contain leases.

Cost of electricity revenue decreased by $129.9 million, or 93.2%, and by $141.5 million, or 83.3%, for the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. This decrease was predominantly due to a decrease in installed units, driven primarily by a $123.7 million impairment of the Energy Servers as a result of the PPA V repowering, which commenced in the third quarter of fiscal year 2023.

Gross Profit (Loss) and Gross Margin

	Three Months Ended September 30,		Change	Nine Months Ended September 30,		Change
	2024	2023		2024	2023	
	(dollars in thousands)					
Gross profit (loss):						
Product	$ 78,646	$ 122,144	$ (43,498)	$ 181,229	$ 255,836	$ (74,607)
Installation	(3,636)	(3,986)	350	(9,110)	(11,119)	2,009
Service	(602)	(9,835)	9,233	(518)	(35,381)	34,863
Electricity	4,326	(113,537)	117,863	13,730	(103,933)	117,663
Total gross profit (loss)	$ 78,734	$ (5,214)	$ 83,948	$ 185,331	$ 105,403	$ 79,928
Gross margin:						
Product	34 %	40 %		30 %	36 %	
Installation	(11)%	(18)%		(11)%	(17)%	
Service	(1)%	(21)%		0 %	(27)%	
Electricity	31 %	(439)%		33 %	(158)%	
Total gross margin	24 %	(1)%		21 %	11 %	

Total Gross Profit (Loss)

Total gross profit (loss) improved by $83.9 million in the three months ended September 30, 2024, as compared to the

prior year period. This change was predominantly driven by (1) a $117.9 million improvement of electricity gross profit (loss), primarily due to a $123.7 million impairment charge that resulted from the PPA V repowering, which commenced in the third quarter of fiscal year 2023, and (2) a $9.2 million improvement in service gross loss, due to our efforts to proactively manage fleet optimizations, and our ongoing efforts to reduce product costs. Total gross profit (loss) improvement was partially offset by a $43.5 million decrease in product gross profit, predominantly driven by lower pricing and volume attributable to the PPA V repowering, which commenced in the third quarter of fiscal year 2023.

Total gross profit increased by $79.9 million in the nine months ended September 30, 2024, as compared to the prior year period. This increase was predominantly driven by (1) a $117.7 million improvement of electricity gross profit (loss), primarily due to a $123.7 million impairment charge that resulted from the PPA V repowering, which commenced in the third quarter of fiscal year 2023, (2) a $34.9 million improvement in service gross loss, due to our efforts to proactively manage fleet optimizations, and our ongoing efforts to reduce product costs. and (3) a $2.0 million improvement in installation gross loss. The increase was partially offset by a $74.6 million decrease in product gross profit, predominantly driven by lower pricing and volume attributable to the PPA V repowering, which commenced in the third quarter of fiscal year 2023, and a large transaction in the first and second quarters of fiscal year 2023 that did not repeat in fiscal year 2024.

Product Gross Profit

Product gross profit decreased by $43.5 million in the three months ended September 30, 2024, as compared to the prior year period. The decrease was primarily driven by (1) lower pricing and volume attributable to the PPA V repowering, which commenced in the third quarter of fiscal year 2023, contributing a decrease of $89.0 million, and (2) the one-off release of $3.1 million of grant liability recognized against payroll related costs incurred in the third quarter of fiscal year 2023. The overall decrease was partially offset by (1) reduced labor and overhead costs through restructuring programs executed in fiscal year 2023, and (2) improved processes and automation at our manufacturing facilities.

Product gross profit decreased by $74.6 million in the nine months ended September 30, 2024, as compared to the prior year period. The decrease was primarily driven by (1) lower pricing and volume attributable to the PPA V repowering, which commenced in the third quarter of fiscal year 2023, contributing a decrease of $89.0 million, and (ii) the effect of a large transaction in the first and second quarters of fiscal year 2023 that did not repeat in fiscal year 2024, and (2) the one-off release of $3.1 million of grant liability recognized against payroll related costs incurred in the third quarter of fiscal year 2023. The overall decrease was partially offset by (1) reduced labor and overhead costs through restructuring programs executed in fiscal year 2023, and (2) improved processes and automation at our manufacturing facilities.

Installation Gross Loss

Installation gross loss improved by $0.4 million and $2.0 million in the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The change for each period was primarily driven by (1) the timing of achieving key project milestones on sites requiring installations by us in the three and nine months ended September 30, 2024, and (2) other site related factors such as site complexity, size, local ordinance requirements, and location of the utility interconnect.

Service Gross Loss

Service gross loss improved by $9.2 million in the three months ended September 30, 2024, as compared to the prior year period. This was primarily due to (1) a decrease in the deployment of field replacement units, contributing a decrease of $4.8 million, (2) repair and overhaul cost reductions of $4.0 million, (3) a decrease of $2.3 million in product performance guarantees that resulted from improved fleet performance, (4) a $1.4 million increase in revenue from maintenance contracts associated with our fleet of Energy Servers, and (5) our cost reduction efforts to proactively manage fleet optimizations. The improvement was partially offset by an increase in maintenance material and labor and overhead costs of $3.3 million.

Service gross loss improved by $34.9 million in the nine months ended September 30, 2024, as compared to the prior year period. This was primarily driven by (1) a $19.8 million increase in revenue from maintenance contracts associated with our fleet of Energy Servers, (2) a decrease of $10.1 million in product performance guarantees that resulted from improved fleet performance, (3) repair and overhaul cost reductions of $10.1 million, and (4) our cost reduction efforts to proactively manage fleet optimizations. The improvement was partially offset by an increase in maintenance material and labor and overhead costs of $8.7 million.

Electricity Gross (Loss) Profit

Electricity gross (loss) profit improved by $117.9 million and $117.7 million in the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The improvement for each period was predominantly driven by a $123.7 million impairment charge as a result of the PPA V repowering, which commenced in the third quarter of fiscal year 2023.

Operating Expenses

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Research and development	$ 36,315	$ 35,126	$ 1,189	3.4 %	$ 109,164	$ 122,309	$ (13,145)	(10.7)%
Sales and marketing	14,667	20,002	(5,335)	(26.7)%	46,167	73,935	(27,768)	(37.6)%
General and administrative	37,403	43,366	(5,963)	(13.8)%	111,797	131,004	(19,207)	(14.7)%
Total operating expenses	$ 88,385	$ 98,494	$ (10,109)	(10.3)%	$ 267,128	$ 327,248	$ (60,120)	(18.4)%

Total Operating Expenses

Total operating expenses decreased by $10.1 million in the three months ended September 30, 2024, as compared to the prior year period. This decrease was primarily attributable to (1) a decrease in office expenses of $6.6 million, (2) a decrease in employee compensation and benefits of $2.5 million, predominantly as a consequence of the restructuring efforts in the second half of fiscal year 2023, as well as the voluntary resignation of certain of our executives in the second half of fiscal year 2023, partially offset by an increase in employee compensation for executive new hires, (3) a decrease in consulting, advisory and other professional services costs of $2.3 million, and (4) a decrease in consumable laboratory supplies and other laboratory related costs of $0.9 million. The overall decrease was partially offset by (1) an increase in depreciation expenses of $0.8 million, and (2) an increase in other operating expenses of $0.8 million.

Total operating expenses decreased by $60.1 million in the nine months ended September 30, 2024, as compared to the prior year period. This decrease was primarily attributable to (1) a decrease in employee compensation and benefits of $34.1 million, predominantly as a consequence of the restructuring efforts in the second half of fiscal year 2023, as well as the voluntary resignation of certain of our executives in the second half of fiscal year 2023, partially offset by an increase in employee compensation for executive new hires, (2) a decrease in consulting, advisory and other professional services costs of $14.1 million, (3) a decrease in consumable laboratory supplies and other laboratory related costs of $9.0 million, (4) a decrease in office expenses of $5.3 million, and (5) a decrease in facility costs of $3.6 million, primarily due to reduction in rent and utility costs. The overall decrease was partially offset by an increase in (1) depreciation expenses of $3.1 million, (2) computer equipment maintenance expenses of $2.0 million, and (3) other operating expenses of $1.3 million.

Research and Development

Research and development expenses increased by $1.2 million in the three months ended September 30, 2024, as compared to the prior year period. This increase was primarily driven by (1) an increase in employee compensation and benefits of $0.7 million, and (2) an increase in other research and development expenses of $1.0 million. The overall increase was partially offset by a decrease in consumable laboratory supplies and other laboratory related costs of $0.8 million as a result of our cost reduction efforts initiated in fiscal year 2023.

Research and development expenses decreased by $13.1 million in the nine months ended September 30, 2024, as compared to the prior year period. This overall decrease was primarily driven by (1) a decrease in consumable laboratory supplies and other laboratory related costs of $8.8 million as a result of our cost reduction efforts initiated in fiscal year 2023, and (2) a decrease in employee compensation and benefits of $6.1 million, predominantly as a consequence of the restructuring efforts in the second half of fiscal year 2023. The decrease was partially offset by an increase in depreciation and amortization expenses and other research and development expenses of $0.4 million and $1.6 million, respectively.

Sales and Marketing

Sales and marketing expenses decreased by $5.3 million and $27.8 million in the three and nine months ended September 30, 2024, respectively, as compared to the prior year period. The decrease in the three and nine months ended

September 30, 2024, was primarily driven by (1) a decrease in employee compensation and benefits of $2.5 million and $17.6 million, respectively, predominantly as a consequence of the restructuring efforts in the second half of fiscal year 2023, as well as the voluntary resignation of our Executive Vice President and Chief Business Development and Marketing Officer on September 1, 2023, and (2) a decrease in consulting, advisory and other professional services costs of $2.6 million and $8.2 million, respectively, as a result of our cost reduction efforts initiated in fiscal year 2023.

General and Administrative

General and administrative expenses decreased by $6.0 million in the three months ended September 30, 2024, as compared to the prior year period. This decrease was primarily driven by (1) a decrease in office expenses of $6.5 million, and (2) a decrease in employee compensation and benefits of $0.7 million, primarily as a consequence of the restructuring efforts in the second half of fiscal year 2023, as well as the voluntary resignation of certain of our executives in the second half of fiscal 2023, offset by an increase in employee compensation for executive new hires. The overall decrease was partially offset by an increase in depreciation expenses of $0.7 million.

General and administrative expenses decreased by $19.2 million in the nine months ended September 30, 2024, as compared to the prior year period. This decrease was primarily driven by (1) a decrease in employee compensation and benefits of $10.4 million, predominantly as a consequence of the restructuring efforts in the second half of fiscal year 2023, as well as the voluntary resignation of certain of our executives in the second half of fiscal 2023, partially offset by an increase in employee compensation for executive new hires, (2) a decrease in consulting, advisory and other professional services costs of $5.5 million as a result of our cost reduction efforts initiated in fiscal year 2023, (3) a decrease in office expenses of $5.0 million, and (4) a decrease in facility costs of $3.4 million, primarily due to reduction in rent and utility costs. The overall decrease was partially offset by an increase in depreciation expenses of $2.7 million, computer equipment maintenance expenses of $2.1 million, and other operating expenses of $0.4 million.

Stock-Based Compensation

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Cost of revenue	$ 3,778	$ 5,581	$ (1,803)	(32.3)%	$ 11,702	$ 14,809	$ (3,107)	(21.0)%
Research and development	5,313	5,585	(272)	(4.9)%	16,405	21,673	(5,268)	(24.3)%
Sales and marketing	2,684	3,015	(331)	(11.0)%	8,044	15,089	(7,045)	(46.7)%
General and administrative	5,282	7,383	(2,101)	(28.5)%	19,189	28,025	(8,836)	(31.5)%
Total stock-based compensation	$ 17,057	$ 21,564	$ (4,507)	(20.9)%	$ 55,340	$ 79,596	$ (24,256)	(30.5)%

Total stock-based compensation for the three months ended September 30, 2024, decreased by $4.5 million as compared to the prior year period, and the decrease was predominantly related to a decrease in stock-based compensation related to PSUs and RSUs of $5.9 million, partially offset by an increase of stock-based compensation costs related to the 2018 ESPP of $2.6 million, and an increase of stock-based compensation costs related to stock option awards of $0.8 million. The decrease was primarily driven by (1) the separation of full-time employees holding equity awards as a result of the restructuring in the second half of fiscal year 2023, (2) the change in the mix of award types, (3) a change in PSUs and performance-based stock option awards metrics achievement percentage based on approved short-term and long-term forecasts, and (4) the voluntary resignation of certain executives holding equity awards in fiscal 2023 and the third quarter of fiscal year 2024. The decrease was partially offset by (1) stock-based compensation expense related to awards granted to new executive hires, and (2) an increase in contributions to 2018 ESPP.

Total stock-based compensation for the nine months ended September 30, 2024, decreased by $24.3 million as compared to the prior year period, and the decrease was predominantly related to a decrease in stock-based compensation related to PSUs and RSUs of $18.2 million and a decrease of stock-based compensation costs related to the 2018 ESPP of $8.5 million, partially offset by an increase of stock-based compensation costs related to stock options of $1.8 million. The decrease was primarily driven by (1) the separation of full-time employees holding equity awards as a result of the restructuring in the second half of fiscal year 2023, (2) the change in the mix of award types, (3) a change in PSUs and performance-based stock option awards metrics achievement percentage based on approved short-term and long-term forecasts, (4) a decrease in contributions to 2018 ESPP, (5) the voluntary resignation of certain executives in fiscal years 2023 and 2024, and (6) the voluntary resignation of the

former CFO holding equity awards in June 2024. The decrease was partially offset by (1) stock-based compensation expenses related to granted RSUs, PSUs and the stock option awards (the "2024 Executive Awards") in March, May and August 2024, and (2) stock-based compensation expense related to granted awards to new executive hires.

Other Income and Expense

	Three Months Ended September 30,		Change	Nine Months Ended September 30,		Change
	2024	2023		2024	2023	
	(in thousands)					
Interest income	$ 6,456	$ 7,419	$ (963)	$ 20,417	$ 13,771	$ 6,646
Interest expense	(16,763)	(68,037)	51,274	(46,685)	(93,736)	47,051
Other income (expense), net	5,821	(1,577)	7,398	3,667	(3,660)	7,327
Loss on extinguishment of debt	—	(1,415)	1,415	(27,182)	(4,288)	(22,894)
Gain on revaluation of embedded derivatives	(386)	(114)	(272)	(316)	(1,213)	897
Total other income and expense	$ (4,872)	$ (63,724)	$ 58,852	$ (50,099)	$ (89,126)	$ 39,027

Interest Income

Interest income is derived from investment earnings on our cash balances, primarily from money market funds. The (decrease)/increase in interest income of $(1.0) million and $6.6 million for the three and nine months ended September 30, 2024, respectively, was primarily due to a (decrease)/increase in average cash balance in our money market funds for the respective period, as compared to the prior year period.

Interest Expense

Interest expense for the three months ended September 30, 2024, decreased by $51.3 million, as compared to the prior year period. The decrease was primarily due to the repayment of the 3.04% Senior Secured Notes due June 2031, on August 24, 2023, and the partial repurchase of the 2.5% Green Notes, on May 29, 2024. The decrease was partially offset by an increase in interest expense related to the 3% Green Notes due June 2029, issued on May 29, 2024.

Interest expense for the nine months ended September 30, 2024, decreased by $47.1 million, as compared to the prior year period. The decrease was primarily as a result of the redemption on June 1, 2023, of the 10.25% Senior Secured Notes due March 2027, the repayment of the 3.04% Senior Secured Notes due June 2031, on August 24, 2023, and the partial repurchase of the 2.5% Green Notes, on May 29, 2024. The decrease was partially offset by an increase in interest expense related to the 3% Green Notes due June 2028, and the 3% Green Notes due June 2029, issued on May 16, 2023, and May 29, 2024, respectively.

Other Income (Expense), net

Other income (expense), net is primarily derived from gain on failed sale-and-leaseback transactions and foreign currency transactions. Other income (expense), net for the three and nine months ended September 30, 2024, improved by $7.4 million and $7.3 million, respectively, as compared to the prior year period, primarily as a result of a $5.0 million gain on failed sale-and-leaseback transactions for each period and foreign currency transactions of $2.5 million and $2.1 million, respectively.

Loss on Extinguishment of Debt

Loss on extinguishment of debt for the nine months ended September 30, 2024, was $27.2 million, which was recognized as a result of partial repurchase on May 29, 2024 of the 2.5% Green Notes, and consisted of repayment of the 22.6% premium of $26.0 million and the write off of $1.2 million in debt issuance costs. There was no loss on extinguishment of debt for the three months ended September 30, 2024.

Loss on extinguishment of debt for the three months ended September 30, 2023, was $1.4 million, which was recognized as a result of the repayment of 3.04% Senior Secured Notes due June 2031, on August 24, 2023, as part of the PPA V repowering, and comprised in its entirety of debt issuance costs derecognition. Loss on extinguishment of debt for the nine months ended September 30, 2023 was $4.3 million, which was recognized as a result of the redemption of the 10.25% Senior Secured Notes due March 2027, on June 1, 2023, and the repayment of the 3.04% Senior Secured Notes due June 2031, on August 24, 2023, as part of the PPA V repowering, and included the repayment of the 4% premium upon redemption of the 10.25% Senior Secured Notes due March 2027, of $2.3 million and derecognition of debt issuance costs of $2.0 million.

Loss on Revaluation of Embedded Derivatives

Loss on revaluation of embedded derivatives is derived from the change in fair value of our sales contracts of embedded EPP derivatives valued using historical grid prices and available forecasts of future electricity prices to estimate future electricity prices. Loss on revaluation of embedded derivatives for the three and nine months ended September 30, 2024, as compared to the prior year period, was immaterial.

Income Tax Provision

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)							
Income tax provision	$ 109	$ 646	$ (537)	(83.1)%	$ 464	$ 1,083	$ (619)	(57.2)%

Income tax provision consists primarily of income taxes in foreign jurisdictions in which we conduct business. We maintain a full valuation allowance for domestic deferred tax assets, including net operating loss and certain tax credit carryforwards. The income tax provision for the three and nine months ended September 30, 2024, decreased by $0.5 million and $0.6 million, respectively, as compared to the prior year period. The changes were primarily due to fluctuations in the effective tax rates on income earned by international entities.

Net Income (Loss) Attributable to Noncontrolling Interests

	Three Months Ended September 30,		Change		Nine Months Ended September 30,		Change	
	2024	2023	Amount	%	2024	2023	Amount	%
	(dollars in thousands)							
Net income (loss) attributable to noncontrolling interest	$ 79	$ 921	$ (842)	(91.4)%	$ 1,662	$ (5,427)	$ 7,089	130.6 %

Net income (loss) attributable to noncontrolling interests is the result of allocating profits and losses to noncontrolling interests under the hypothetical liquidation at book value ("HLBV") method. HLBV is a balance sheet-oriented approach for applying the equity method of accounting when there is a complex structure.

Net income attributable to noncontrolling interests for the three months ended September 30, 2024, as compared to the prior year period, decreased by $0.8 million due to a $1.9 million decrease in income related to Korean JV, which is allocated to our noncontrolling interest, partially offset by a $1.0 million decrease in losses attributable to PPA V, which was sold in the third quarter of fiscal year 2023.

Net income attributable to noncontrolling interests for the nine months ended September 30, 2024, as compared to the prior year period, improved by $7.1 million due to a $6.9 million decrease in losses attributable to PPA V, which was sold in the third quarter of fiscal year 2023, and a $0.2 million increase in income related to Korean JV, which is allocated to our noncontrolling interest.

Critical Accounting Policies and Estimates

The unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles as applied in the United States ("U.S. GAAP"). The preparation of the unaudited condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. Our discussion and analysis of our financial results under Results of Operations above are based on our results of operations, which we have prepared in accordance with U.S. GAAP. In preparing these unaudited condensed consolidated financial statements, we make assumptions, judgments and estimates that can affect the reported amounts of assets, liabilities, revenues and expenses, and net income. On an ongoing basis, we base our estimates on historical experience, as appropriate, and on various other assumptions that we believe to be reasonable under the circumstances. Changes in the accounting estimates are representative of estimation uncertainty and are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these

estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected. We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating the consolidated financial condition and results of operations.

The accounting policies that most frequently require us to make assumptions, judgments and estimates, and therefore are critical to understanding our results of operations, include:

- Revenue Recognition;
- Valuation of Assets and Liabilities of the SK ecoplant Strategic Investment;
- Income Taxes; and
- Principles of Consolidation.

Part II, Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operation* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, provides a more complete discussion of our critical accounting policies and estimates. During the nine months ended September 30, 2024, there were no significant changes to our critical accounting policies and estimates.

ITEM 3 — QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There were no significant changes to our quantitative and qualitative disclosures about market risk during the nine months ended September 30, 2024. Please refer to Part II, Item 7A, *Quantitative and Qualitative Disclosures about Market Risk* included in our Annual Report on Form 10-K for our fiscal year ended December 31, 2023, for a more complete discussion of the market risks we consider.

ITEM 4 — CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports that we file or submit under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer (our Principal Executive Officer) and Chief Financial Officer (our Principal Financial Officer) as appropriate, to allow for timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of September 30, 2024. Based on such an evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of September 30, 2024, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

During the three months ended September 30, 2024, there were no changes in our internal control over financial reporting, which were identified in connection with management's evaluation required by paragraphs (d) of Rules 13a-15 and 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

For further information on inherent limitations on effectiveness of internal controls and management's report on internal control over financial reporting, see Part II, Item 9A, *Controls and Procedures* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

PART II — OTHER INFORMATION

ITEM 1 — LEGAL PROCEEDINGS

We are, and from time to time we may become, involved in legal proceedings or subject to claims arising in the ordinary course of our business. For a discussion of our legal proceedings, see Part I, Item 1, Note 12 — *Commitments and Contingencies*. We are not presently a party to any other legal proceedings that in the opinion of our management and if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows.

ITEM 1A — RISK FACTORS

There were no material changes in risk factors as disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

ITEM 2 — UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None.

ITEM 3 — DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4 — MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5 — OTHER INFORMATION

Rule 10b5-1 Trading Arrangements

During the fiscal quarter ended September 30, 2024, no director or Section 16 officer adopted or terminated any Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (in each case as defined under SEC rules).

ITEM 6 — EXHIBITS

			Incorporated by Reference			
Exhibit Number		**Description**	**Form**	**File No.**	**Exhibit**	**Filing Date**
3.1		Restated Certificate of Incorporation	10-Q	001-38598	3.1	9/7/2018
3.2		Certificate of Amendment to the Restated Certificate of Incorporation of Bloom Energy Corporation	10-Q	001-38598	3.1	8/9/2022
3.3		Certificate of Amendment to the Certificate of Designation of Series B Redeemable Convertible Preferred Stock	8-K	001-38598	3.1	4/18/2023
3.4		Certificate of Withdrawal of Certificate of Designation of Series A Redeemable Convertible Preferred Stock	10-Q	001-38598	3.3	5/9/2023
3.5		Certificate of Retirement for Class B Common Stock	10-Q	001-38598	3.2	11/8/2023
3.6		Certificate of Elimination of Certificate of Designations of Series B Convertible Preferred Stock	10-Q	001-38598	3.3	11/8/2023
3.7		Amended and Restated Bylaws, as effective August 7, 2024	10-Q	001-38598	3.8	8/8/2024
31.1		Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				Filed herewith
31.2		Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities and Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				Filed herewith
32.1	*	Certifications of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				Furnished herewith
101.INS		XBRL Instance Document- the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document				Filed herewith
101.SCH		Inline XBRL Taxonomy Extension Schema Document				Filed herewith
101.CAL		Inline XBRL Taxonomy Extension Calculation Linkbase Document				Filed herewith
101.DEF		Inline XBRL Taxonomy Extension Definition Linkbase Document				Filed herewith
101.LAB		Inline XBRL Taxonomy Extension Label Linkbase Document				Filed herewith
101.PRE		Inline XBRL Taxonomy Extension Presentation Linkbase Document				Filed herewith
104		Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)				

* The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

BLOOM ENERGY CORPORATION

Date: November 7, 2024

By: /s/ KR Sridhar
KR Sridhar
Founder, Chief Executive Officer, Chairman and Director
(Principal Executive Officer)

Date: November 7, 2024

By: /s/ Daniel Berenbaum
Daniel Berenbaum
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 31.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER

PURSUANT TO RULE 13a-14(a) AND RULE 15d-14(a)

OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,

AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, KR Sridhar, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter period ended September 30, 2024 of Bloom Energy Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2024

By: /s/ KR Sridhar

KR Sridhar

President and Chief Executive Officer

(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATIONS OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) AND RULE 15d-14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Daniel Berenbaum, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter period ended September 30, 2024 of Bloom Energy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2024

By: /s/ Daniel Berenbaum
Daniel Berenbaum
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF
THE SARBANES-OXLEY ACT OF 2002

The following certifications are hereby made in connection with the Quarterly Report on Form 10-Q for the quarter period ended September 30, 2024 of Bloom Energy Corporation (the "Company") as filed with the Securities and Exchange Commission on the date hereof (the "Report"):

I, KR Sridhar, Founder, Chief Executive Officer, Chairman and Director, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

ate: November 7, 2024

By: /s/ KR Sridhar
KR Sridhar
Founder, Chief Executive Officer, Chairman and Director
(Principal Executive Officer)

I, Daniel Berenbaum, Chief Financial Officer, hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2024

By: /s/ Daniel Berenbaum
Daniel Berenbaum
Chief Financial Officer
(Principal Financial and Accounting Officer)