

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 quarter ended June 30, 2022

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

(State or other jurisdiction of incorporation or organization)

4353 North First Street, San Jose, California
(Address of principal executive offices)

77-0565408

(I.R.S. Employer Identification No.)

95134

(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 ⁽¹⁾	Trading Symbol	Name of each exchange on which registered
Class A Common Stock, \$0.0001 par value	BE	New York Stock Exchange

⁽¹⁾ Our Class B Common Stock is not registered but is convertible into shares of Class A Common Stock at the election of the holder.

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 August 1, 2022 was as follows:

Class A Common Stock, \$0.0001 par value, 163,294,503 shares

Class B Common Stock, \$0.0001 par value, 15,827,865 shares

Bloom Energy Corporation
Quarterly Report on Form 10-Q for the Three and Six Months Ended June 30, 2022
Table of Contents

	Page
PART I - FINANCIAL INFORMATION	
Item 1 - Financial Statements (unaudited)	<u>3</u>
Condensed Consolidated Balance Sheets	<u>3</u>
Condensed Consolidated Statements of Operations	<u>4</u>
Condensed Consolidated Statements of Comprehensive Loss	<u>5</u>
Condensed Consolidated Statements of Changes in Stockholders' Deficit	<u>6</u>
Condensed Consolidated Statements of Cash Flows	<u>8</u>
Notes to Unaudited Condensed Consolidated Financial Statements	<u>9</u>
Item 2 - Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>30</u>
Item 3 - Quantitative and Qualitative Disclosures About Market Risk	<u>45</u>
Item 4 - Controls and Procedures	<u>45</u>
PART II - OTHER INFORMATION	
Item 1 - Legal Proceedings	<u>46</u>
Item 1A - Risk Factors	<u>46</u>
Item 2 - Unregistered Sales of Equity Securities and Use of Proceeds	<u>46</u>
Item 3 - Defaults Upon Senior Securities	<u>46</u>
Item 4 - Mine Safety Disclosures	<u>46</u>
Item 5 - Other Information	<u>46</u>
Item 6 - Exhibits	<u>47</u>
Signatures	<u>48</u>

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

Part I

ITEM 1 - FINANCIAL STATEMENTS

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

	June 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents ¹	\$ 235,638	\$ 396,035
Restricted cash ¹	50,293	92,540
Accounts receivable less allowance for doubtful accounts of \$119 as of June 30, 2022 and December 31, 2021 ¹	77,972	87,789
Contract assets	33,374	25,201
Inventories	206,707	143,370
Deferred cost of revenue	30,110	25,040
Customer financing receivable ¹	—	5,784
Prepaid expenses and other current assets ¹	35,155	30,661
Total current assets	669,249	806,420
Property, plant and equipment, net ¹	628,759	604,106
Operating lease right-of-use assets	110,362	106,660
Customer financing receivable ¹	—	39,484
Restricted cash ¹	128,248	126,539
Deferred cost of revenue	5,310	1,289
Other long-term assets ¹	38,905	41,073
Total assets	\$ 1,580,833	\$ 1,725,571
Liabilities, redeemable convertible preferred stock, redeemable noncontrolling interest and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 134,020	\$ 72,967
Accrued warranty	9,319	11,746
Accrued expenses and other current liabilities ¹	101,204	114,138
Deferred revenue and customer deposits ¹	93,237	89,975
Operating lease liabilities	12,581	13,101
Financing obligations	16,159	14,721
Recourse debt	12,434	8,348
Non-recourse debt ¹	14,734	17,483
Total current liabilities	393,688	342,479
Deferred revenue and customer deposits ¹	76,890	90,310
Operating lease liabilities	118,291	106,187
Financing obligations	447,595	461,900
Recourse debt	278,538	283,483
Non-recourse debt ¹	183,555	217,416
Other long-term liabilities	18,646	16,772
Total liabilities	1,517,203	1,518,547
Commitments and contingencies (Note 13)		
Redeemable convertible preferred stock, Series A: — shares authorized and — shares and no shares issued and outstanding at June 30, 2022 and December 31, 2021, respectively.	208,551	208,551
Redeemable noncontrolling interest	—	300
Stockholders' deficit:		
Common stock: \$0.0001 par value; Class A shares - 600,000,000 shares authorized and 163,085,510 shares and 160,627,544 shares issued and outstanding and Class B shares - 600,000,000 shares authorized and 15,828,287 shares and 15,832,863 shares issued and outstanding at June 30, 2022 and December 31, 2021, respectively.	18	18
Additional paid-in capital	3,284,261	3,219,081
Accumulated other comprehensive loss	(1,000)	(350)
Accumulated deficit	(3,460,234)	(3,263,075)
Total deficit attributable to Class A and Class B common stockholders	(176,955)	(44,326)
Noncontrolling interest	32,034	42,499
Total stockholders' deficit	\$ (144,921)	\$ (1,827)
Total liabilities, redeemable convertible preferred stock, redeemable noncontrolling interest and stockholders' deficit	\$ 1,580,833	\$ 1,725,571

¹We have variable interest entities, which represent a portion of the consolidated balances recorded within these financial statement line items in the condensed consolidated balance sheets (see Note 11 - *Portfolio Financings*).

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue:				
Product	\$ 173,625	\$ 146,867	\$ 307,172	\$ 284,797
Installation	12,729	28,879	26,282	31,538
Service	38,426	35,707	73,665	72,124
Electricity	18,456	17,017	37,156	34,018
Total revenue	243,236	228,470	444,275	422,477
Cost of revenue:				
Product	129,419	108,891	235,161	196,185
Installation	16,730	36,515	29,503	41,140
Service	41,028	35,565	82,854	71,683
Electricity	58,029	10,155	70,790	21,474
Total cost of revenue	245,206	191,126	418,308	330,482
Gross (loss) profit	(1,970)	37,344	25,967	91,995
Operating expenses:				
Research and development	41,614	25,673	76,140	48,968
Sales and marketing	20,475	22,727	41,809	42,679
General and administrative	38,114	31,655	75,850	57,456
Total operating expenses	100,203	80,055	193,799	149,103
Loss from operations	(102,173)	(42,711)	(167,832)	(57,108)
Interest income	196	76	255	150
Interest expense	(13,814)	(14,553)	(27,901)	(29,284)
Loss on extinguishment of debt	(4,233)	—	(4,233)	—
Other (expense) income, net	(1,191)	22	(4,218)	(63)
Gain (loss) on revaluation of embedded derivatives	38	(942)	569	(1,460)
Loss before income taxes	(121,177)	(58,108)	(203,360)	(87,765)
Income tax (benefit) provision	(12)	313	552	437
Net loss	(121,165)	(58,421)	(203,912)	(88,202)
Less: Net loss attributable to noncontrolling interest	(2,365)	(4,536)	(6,453)	(9,424)
Net loss attributable to Class A and Class B common stockholders	\$ (118,800)	\$ (53,885)	(197,459)	(78,778)
Less: Net loss attributable to redeemable noncontrolling interest	—	(22)	(300)	(26)
Net loss before portion attributable to redeemable noncontrolling interest and noncontrolling interest	\$ (118,800)	\$ (53,863)	\$ (197,159)	\$ (78,752)
Net loss per share available to Class A and Class B common stockholders, basic and diluted	\$ (0.67)	\$ (0.31)	\$ (1.11)	\$ (0.46)
Weighted average shares used to compute net loss per share available to Class A and Class B common stockholders, basic and diluted	178,507	172,749	177,852	171,753

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net loss	\$ (121,165)	\$ (58,421)	\$ (203,912)	\$ (88,202)
Other comprehensive loss, net of taxes:				
Change in derivative instruments designated and qualifying as cash flow hedges	—	1,385	—	(3,268)
Foreign currency translation adjustment	(594)	4	(747)	(224)
Other comprehensive loss, net of taxes	(594)	1,389	(747)	(3,492)
Comprehensive loss	(121,759)	(57,032)	(204,659)	(91,694)
Less: Comprehensive loss attributable to noncontrolling interest	(2,462)	(5,919)	(6,550)	(6,265)
Comprehensive loss attributable to Class A and Class B common stockholders	\$ (119,297)	\$ (51,113)	\$ (198,109)	\$ (85,429)
Less: Comprehensive loss attributable to redeemable noncontrolling interest	—	(22)	(300)	(26)
Comprehensive loss after portion attributable to redeemable noncontrolling interest and noncontrolling interest	\$ (119,297)	\$ (51,091)	\$ (197,809)	\$ (85,403)

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

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

	Three Months Ended June 30, 2022							
	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total deficit attributable to Class A and Class B common stockholders	Noncontrolling Interest	Total Stockholders' Deficit
	Shares	Amount						
Balances at March 31, 2022	177,995,695	\$ 18	\$ 3,251,128	\$ (503)	\$ (3,341,434)	\$ (90,791)	\$ 36,035	\$ (54,756)
Issuance of restricted stock awards	824,702	—	—	—	—	—	—	—
Exercise of stock options	93,400	—	337	—	—	337	—	337
Stock-based compensation	—	—	32,796	—	—	32,796	—	32,796
Distributions and payments to noncontrolling interests	—	—	—	—	—	—	(1,539)	(1,539)
Foreign currency translation adjustment	—	—	—	(497)	—	(497)	(97)	(594)
Net loss ¹	—	—	—	—	(118,800)	(118,800)	(2,365)	(121,165)
Balances at June 30, 2022	178,913,797	\$ 18	\$ 3,284,261	\$ (1,000)	\$ (3,460,234)	\$ (176,955)	\$ 32,034	\$ (144,921)

¹There is no net loss attributable to redeemable noncontrolling interest.

Note: There was no redeemable noncontrolling interest as of March 31, 2022 and June 30, 2022.

	Three Months Ended June 30, 2021							
	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total deficit attributable to Class A and Class B common stockholders	Noncontrolling Interest	Total Stockholders' Deficit
	Shares	Amount						
Balances at March 31, 2021	172,099,453	\$ 17	\$ 3,129,687	\$ (126)	\$ (3,123,518)	\$ 6,060	\$ 57,986	\$ 64,046
Issuance of restricted stock awards	811,162	—	—	—	—	—	—	—
Exercise of stock options	491,545	—	7,715	—	—	7,715	—	7,715
Stock-based compensation	—	—	18,515	—	—	18,515	—	18,515
Change in effective portion of interest rate swap agreement	—	—	—	—	—	—	(1,385)	(1,385)
Distributions to noncontrolling interests	—	—	—	—	—	—	(882)	(882)
Foreign currency translation adjustment	—	—	—	2	—	2	2	4
Net loss ²	—	—	—	—	(53,863)	(53,863)	(4,536)	(58,399)
Balances at June 30, 2021	173,402,160	\$ 17	\$ 3,155,917	\$ (124)	\$ (3,177,381)	\$ (21,571)	\$ 51,185	\$ 29,614

²Excludes \$22 attributable to redeemable noncontrolling interest.

Note: Beginning redeemable noncontrolling interest of \$356 - net loss attributable to redeemable noncontrolling interest of \$22 = ending redeemable noncontrolling interest of \$334.

Six Months Ended June 30, 2022								
	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total deficit attributable to Class A and Class B common stockholders	Noncontrolling Interest	Total Stockholders' Deficit
	Shares	Amount						
Balances at December 31, 2021	176,460,407	\$ 18	\$ 3,219,081	\$ (350)	\$ (3,263,075)	\$ (44,326)	\$ 42,499	\$ (1,827)
Issuance of restricted stock awards	1,789,639	—	—	—	—	—	—	—
ESPP purchase	420,689	—	5,981	—	—	5,981	—	5,981
Exercise of stock options	243,062	—	1,317	—	—	1,317	—	1,317
Stock-based compensation	—	—	58,382	—	—	58,382	—	58,382
Distributions and payments to noncontrolling interests	—	—	(500)	—	—	(500)	(3,915)	(4,415)
Foreign currency translation adjustment	—	—	—	(650)	—	(650)	(97)	(747)
Net loss ³	—	—	—	—	(197,159)	(197,159)	(6,453)	(203,612)
Balances at June 30, 2022	178,913,797	\$ 18	\$ 3,284,261	\$ (1,000)	\$ (3,460,234)	\$ (176,955)	\$ 32,034	\$ (144,921)

³Excludes \$300 attributable to redeemable noncontrolling interest.

Note: Beginning redeemable noncontrolling interest of \$300 - net loss attributable to redeemable noncontrolling interest of \$300 = ending redeemable noncontrolling interest of Nil.

Six Months Ended June 30, 2021								
	Class A and Class B Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total deficit attributable to Class A and Class B common stockholders	Noncontrolling Interest	Total Stockholders' Deficit
	Shares	Amount						
Balances at December 31, 2020	168,002,726	\$ 17	\$ 3,182,753	\$ (9)	\$ (3,103,937)	\$ 78,824	\$ 62,195	\$ 141,019
Cumulative effect upon adoption of Accounting Standards Update 2020-06	—	—	(126,799)	—	5,308	(121,491)	—	(121,491)
Issuance of restricted stock awards	1,951,664	—	—	—	—	—	—	—
ESPP purchase	977,508	—	4,726	—	—	4,726	—	4,726
Exercise of stock options	2,470,262	—	60,942	—	—	60,942	—	60,942
Stock-based compensation	—	—	34,295	—	—	34,295	—	34,295
Change in effective portion of interest rate swap agreement	—	—	—	—	—	—	3,268	3,268
Distributions and payments to noncontrolling interests	—	—	—	—	—	—	(4,745)	(4,745)
Foreign currency translation adjustment	—	—	—	(115)	—	(115)	(109)	(224)
Net loss ⁴	—	—	—	—	(78,752)	(78,752)	(9,424)	(88,176)
Balances at June 30, 2021	173,402,160	\$ 17	\$ 3,155,917	\$ (124)	\$ (3,177,381)	\$ (21,571)	\$ 51,185	\$ 29,614

⁴Excludes \$26 attributable to redeemable noncontrolling interest.

Note: Beginning redeemable noncontrolling interest of \$377 - distributions to redeemable noncontrolling interest of \$17 - net loss attributable to redeemable noncontrolling interest of \$26 = ending redeemable noncontrolling interest of \$334.

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

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

	Six Months Ended June 30,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (203,912)	\$ (88,202)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	30,697	26,808
Non-cash lease expense	8,800	4,520
Gain on sale of property, plant and equipment	(523)	—
Write-off of assets related to PPA IIIa	44,800	—
Revaluation of derivative liabilities	1,680	462
Stock-based compensation	57,774	36,343
Loss on extinguishment of debt	4,233	—
Amortization of warrants and debt issuance costs	1,651	1,900
Other	3,487	—
Changes in operating assets and liabilities:		
Accounts receivable	9,817	41,718
Contract assets	(8,173)	(15,311)
Inventories	(62,824)	(21,026)
Deferred cost of revenue	(8,995)	4,984
Customer financing receivable	2,510	2,636
Prepaid expenses and other assets	(5,813)	6,246
Operating lease right-of-use assets and operating lease liabilities	2,422	(5,140)
Finance lease liabilities	48	—
Accounts payable	51,982	29,449
Accrued expenses and other liabilities	(18,017)	(17,261)
Deferred revenue and customer deposits	(10,158)	(43,428)
Net cash used in operating activities	(98,514)	(35,302)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(44,728)	(34,460)
Net cash used in investing activities	(44,728)	(34,460)
Cash flows from financing activities:		
Repayment of debt of PPA IIIa	(30,212)	—
Repayment of debt	(10,729)	(7,838)
Debt make-whole payment related to PPA IIIa debt	(2,413)	—
Proceeds from financing obligations	—	7,123
Repayment of financing obligations	(16,475)	(6,387)
Distributions to redeemable noncontrolling interests	—	(17)
Distributions to noncontrolling interests	(4,415)	(4,745)
Proceeds from issuance of common stock	5,981	65,668
Proceeds from exercise of options	1,317	—
Net cash (used in) provided by financing activities	(56,946)	53,804
Effect of exchange rate changes on cash, cash equivalent and restricted cash	(747)	(224)
Net decrease in cash, cash equivalents and restricted cash	(200,935)	(16,182)
Cash, cash equivalents and restricted cash:		
Beginning of period	615,114	416,710
End of period	\$ 414,179	\$ 400,528
Supplemental disclosure of cash flow information:		
Cash paid during the period for interest	\$ 25,938	\$ 27,219
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	4,387	6,132
Operating cash flows from finance leases	462	259
Cash paid during the period for income taxes	982	185
Non-cash investing and financing activities:		
Transfer of customer financing receivable to property, plant and equipment, net	\$ 42,758	\$ —
Increase in recourse debt, non-current upon adoption of ASU 2020-06, net	\$ —	\$ 121,491
Liabilities recorded for property, plant and equipment, net	15,988	11
Recognition of operating lease right-of-use asset during the year-to-date period	11,192	40,762

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

Bloom Energy Corporation
Notes to Unaudited Condensed Consolidated Financial Statements

The unaudited interim financial statements reflects 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 interim financial statements should be read in conjunction with the audited Consolidated Financial Statements, including the notes thereto, included in our 2021 Annual Report on Form 10-K.

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, 2021.

We have not experienced any supply chain disruptions as a result of the invasion by the Russian Federation in Ukraine on February 24, 2022.

Liquidity

We have generally incurred operating losses and negative cash flows from operations since our inception. With the series of new debt offerings, debt extensions and conversions to equity that we completed during 2020 and 2021, we had \$291.0 million of total outstanding recourse debt as of June 30, 2022, \$278.5 million of which is classified as long-term debt. Our recourse debt scheduled repayments commenced in June 2022.

Our future capital requirements will 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 manufacturing space, the expansion of sales and marketing activities both in domestic and international markets, market acceptance of our product, our ability to secure financing for customer use of our Energy Servers, the timing of installations, and overall economic conditions including the impact of COVID-19 and inflationary pressure in the US on our ongoing and future operations. The rising interest rates in the US will adversely impact the cost of new capital deployment.

In the opinion of management, the combination of our existing cash and cash equivalents and 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.

Basis of Presentation

We have prepared the 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 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, 2021.

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, 2021.

Concentration of Risk

Geographic Risk - The majority of our revenue and long-lived assets are attributable to operations in the United States for all periods presented. In addition to shipments in the US, we also ship our Energy Servers to other countries, primarily to the Republic of Korea, Japan, and India (collectively, the "Asia Pacific region"). In the three and six months ended June 30, 2022, total revenue in the Asia Pacific region was 62% and 63%, respectively, of our total revenue. In the three and six months ended June 30, 2021, total revenue in the Asia Pacific region was 34% and 39%, respectively, of our total revenue.

Credit Risk - At June 30, 2022 and December 31, 2021, one customer accounted for approximately 56% and 60% of accounts receivable, respectively. To date, we have not experienced any credit losses.

Customer Risk - During the three months ended June 30, 2022, two customers represented approximately 57% and 16% of our total revenue, respectively. During the six months ended June 30, 2022, two customers represented approximately 45% and 15% of our total revenue, respectively.

During the three months ended June 30, 2021, revenue from three customers represented 31%, 26% and 12% of our total revenue, respectively. During the six months ended June 30, 2021, revenue from two customers represented 36% and 14% of our total revenue, respectively.

2. Summary of Significant Accounting Policies

Please 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, 2021.

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.

Accounting Guidance Not Yet Adopted

Contract Assets and Contract Liabilities Acquired in a Business Combination - In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers ("ASU 2021-08"), which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, *Revenue from Contracts with Customers*, as if it had originated the contracts. This approach differs from the current requirement to measure contract assets and contract liabilities acquired in a business combination at fair value. ASU 2021-08 will be effective for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2022. Early adoption is permitted. The adoption impact of ASU 2021-08 will depend on the magnitude of any future acquisitions. The standard will not impact acquired contract assets or liabilities from business combinations occurring prior to the adoption date.

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):

	June 30, 2022	December 31, 2021
Accounts receivable	\$ 77,972	\$ 87,788
Contract assets	33,374	25,201
Customer deposits	73,750	64,809
Deferred revenue	96,377	115,476

Contract assets and contract liabilities are reported in a net position on an individual contract basis at the end of each reporting period. Contract assets are classified as current in the condensed consolidated balance sheet when the Company expects to complete the related performance obligations and invoice the customers within one year of the balance sheet date, and as long-term when the Company expects to complete the related performance obligations and invoice the customers more than one year out from the balance sheet date. Contract liabilities are classified as current in the condensed consolidated balance sheet when the revenue recognition associated with the related customer payments and invoicing is expected to occur within one year of the balance sheet date and as long-term when the revenue recognition associated with the related customer payments and invoicing is expected to occur in more than one year from the balance sheet date.

Contract Assets

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Beginning balance	\$ 13,533	\$ 5,008	\$ 25,201	\$ 3,327
Transferred to accounts receivable from contract assets recognized at the beginning of the period	(1,387)	(556)	(15,963)	—
Revenue recognized and not billed as of the end of the period	21,228	14,186	24,136	15,311
Ending balance	\$ 33,374	\$ 18,638	\$ 33,374	\$ 18,638

Deferred Revenue

Deferred revenue activity, including deferred incentive revenue activity, during the three and six months ended June 30, 2022 and 2021 consisted of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Beginning balance	\$ 103,489	\$ 120,643	\$ 115,476	\$ 135,578
Additions	182,067	195,324	348,744	350,785
Revenue recognized	(189,179)	(199,712)	(367,843)	(370,108)
Ending balance	\$ 96,377	\$ 116,255	\$ 96,377	\$ 116,255

Disaggregated Revenue

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue from contracts with customers:				
Product revenue	\$ 173,625	\$ 146,867	\$ 307,172	\$ 284,797
Installation revenue	12,729	28,879	26,282	31,538
Services revenue	38,426	35,707	73,665	72,124
Electricity revenue	2,794	707	5,476	1,302
Total revenue from contract with customers	227,574	212,160	412,595	389,761
Revenue from contracts accounted for as leases:				
Electricity revenue	15,662	16,310	31,680	32,716
Total revenue	<u>\$ 243,236</u>	<u>\$ 228,470</u>	<u>\$ 444,275</u>	<u>\$ 422,477</u>

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):

	June 30, 2022	December 31, 2021
As Held:		
Cash	\$ 241,700	\$ 318,080
Money market funds	172,479	297,034
	<u>\$ 414,179</u>	<u>\$ 615,114</u>
As Reported:		
Cash and cash equivalents	\$ 235,638	\$ 396,035
Restricted cash	178,541	219,079
	<u>\$ 414,179</u>	<u>\$ 615,114</u>

Restricted cash consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Current:		
Restricted cash	\$ 48,563	\$ 89,462
Restricted cash related to PPA Entities ¹	1,730	3,078
	<u>\$ 50,293</u>	<u>\$ 92,540</u>
Non-current:		
Restricted cash	\$ 110,908	\$ 103,300
Restricted cash related to PPA Entities ¹	17,340	23,239
	<u>128,248</u>	<u>126,539</u>
	<u>\$ 178,541</u>	<u>\$ 219,079</u>

¹ We have VIEs that represent a portion of the consolidated balances recorded within the "restricted cash" and other financial statement line items in the condensed consolidated balance sheets (see Note 11 - *Portfolio Financings*). In addition, the restricted cash held in the PPA II and PPA IIIB entities as of June 30, 2022 includes \$41.1 million and \$1.2 million of current restricted cash, respectively, and \$42.9 million and \$6.7 million of non-current restricted cash, respectively. The restricted cash held in the PPA II and PPA IIIB entities as of December 31, 2021, includes \$41.7 million and \$1.2 million of current restricted cash, respectively, and \$57.7 million and \$6.7 million of non-current restricted cash, respectively. These entities are not considered VIEs.

Factoring Arrangements

We sell certain customer trade receivables on a non-recourse basis under factoring arrangements with our designated financial institution. These transactions are accounted for as sales and cash proceeds are included in cash used in operating activities. We derecognized \$90.9 million and \$116.3 million of accounts receivable as of June 30, 2022 and December 31, 2021, respectively, under these factoring arrangements. The costs of factoring such accounts receivable on our condensed consolidated statements of operations for the three and six months ended June 30, 2022 was \$0.9 million and \$1.2 million. The costs of factoring such accounts receivable on our condensed consolidated statements of operations for the three and six months ended June 30, 2021 were not material.

5. Fair Value

Our accounting policy for the fair value measurement of cash equivalents, natural gas fixed price forward contracts, 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, 2021.

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

The tables below set forth, by level, our financial assets 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):

June 30, 2022	Fair Value Measured at Reporting Date Using			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market funds	\$ 172,479	\$ —	\$ —	\$ 172,479
	<u>\$ 172,479</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 172,479</u>
Liabilities				
Derivatives:				
Option to acquire a variable number of shares of Class A Common Stock	\$ —	\$ 12,089	\$ —	\$ 12,089
Embedded EPP derivatives	—	—	5,892	5,892
	<u>\$ —</u>	<u>\$ 12,089</u>	<u>\$ 5,892</u>	<u>\$ 17,981</u>

December 31, 2021	Fair Value Measured at Reporting Date Using			
	Level 1	Level 2	Level 3	Total
Assets				
Cash equivalents:				
Money market funds	\$ 297,034	\$ —	\$ —	\$ 297,034
	<u>\$ 297,034</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 297,034</u>
Liabilities				
Derivatives:				
Option to acquire a variable number of shares of Class A Common Stock	\$ —	\$ 13,200	\$ —	\$ 13,200
Embedded EPP derivatives	—	—	6,461	6,461
	<u>\$ —</u>	<u>\$ 13,200</u>	<u>\$ 6,461</u>	<u>\$ 19,661</u>

We revalued the Option to its fair value as of June 30, 2022, which is included in other (expense) income, net in our condensed consolidated statements of operations. The fair value of the Option is reflected in accrued expenses and other current liabilities in our condensed consolidated balance sheets.

For the three months ended June 30, 2022 and 2021, we recorded the fair value of the embedded EPP derivatives and recognized an unrealized immaterial gain and an unrealized loss of \$0.9 million, respectively, in (loss) gain on revaluation of embedded derivatives on our condensed consolidated statements of operations.

For the six months ended June 30, 2022 and 2021, we recorded the fair value of the embedded EPP derivatives and recognized an unrealized gain of \$0.6 million and an unrealized loss of \$1.5 million, respectively, in gain (loss) on revaluation of embedded derivatives on our condensed consolidated statements of operations.

The changes in the Level 3 financial liabilities during the six months ended June 30, 2022 were as follows (in thousands):

	Embedded EPP Derivative Liability
Liabilities at December 31, 2021	\$ 6,461
Changes in fair value	(569)
Liabilities at June 30, 2022	<u>\$ 5,892</u>

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

Customer Receivables and Debt Instruments - The fair value for customer financing receivables is based on a discounted cash flow model, whereby the fair value approximates the present value of the receivables (Level 3). The senior secured notes, term loans and convertible notes are based on rates currently offered for instruments with similar maturities and terms (Level 3). The following table presents the estimated fair values and carrying values of customer receivables and debt instruments (in thousands):

	June 30, 2022		December 31, 2021	
	Net Carrying Value	Fair Value	Net Carrying Value	Fair Value
Customer receivables				
Customer financing receivable	\$ —	\$ —	\$ 45,269	\$ 38,334
Debt instruments				
Recourse:				
10.25% Senior Secured Notes due March 2027	67,124	64,775	68,968	72,573
2.5% Green Convertible Senior Notes due August 2025	223,848	289,271	222,863	356,822
Non-recourse:				
7.5% Term Loan due September 2028 (Note 7)	—	—	29,006	35,669
6.07% Senior Secured Notes due March 2030	71,060	73,691	73,262	83,251
3.04% Senior Secured Notes due June 2031	127,229	120,481	132,631	137,983

6. Balance Sheet Components

Inventories

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

	June 30, 2022	December 31, 2021
Raw materials	\$ 118,881	\$ 80,809
Finished goods	47,108	30,668
Work-in-progress	40,718	31,893
	<u>\$ 206,707</u>	<u>\$ 143,370</u>

The inventory reserves were \$16.5 million and \$13.9 million as of June 30, 2022 and December 31, 2021, respectively.

Prepaid Expenses and Other Current Assets

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

	June 30, 2022	December 31, 2021
Receivables from employees	\$ 8,399	\$ 5,463
Prepaid hardware and software maintenance	3,171	3,494
Tax receivables	2,998	1,518
Prepaid managed services	1,742	2,480
Deposits made	1,420	817
Prepaid workers compensation	1,090	5,330
Prepaid deferred commissions	642	724
State incentive receivable	203	427
Other prepaid expenses and other current assets	15,490	10,408
	<u>\$ 35,155</u>	<u>\$ 30,661</u>

Property, Plant and Equipment, Net

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

	June 30, 2022	December 31, 2021
Energy Servers	\$ 669,606	\$ 674,799
Machinery and equipment	125,371	110,600
Construction-in-progress	69,227	43,544
Leasehold improvements	65,572	52,936
Building	49,240	48,934
Computers, software and hardware	23,423	21,276
Furniture and fixtures	8,770	8,607
	<u>1,011,209</u>	<u>960,696</u>
Less: accumulated depreciation	<u>(382,450)</u>	<u>(356,590)</u>
	<u>\$ 628,759</u>	<u>\$ 604,106</u>

Depreciation expense related to property, plant and equipment for the three and six months ended June 30, 2022 was \$16.3 million and \$30.7 million, respectively. Depreciation expense related to property, plant and equipment for the three and six months ended June 30, 2021 was \$13.4 million and \$26.8 million, respectively.

Property, plant and equipment under operating leases by the PPA Entities was \$362.0 million and \$368.0 million and accumulated depreciation for these assets was \$148.0 million and \$139.4 million as of June 30, 2022 and December 31, 2021, respectively. Depreciation expense for these assets was \$5.6 million and \$11.5 million for the three and six months ended June 30, 2022, respectively. Depreciation expense for these assets was \$5.9 million and \$11.7 million for the three and six months ended June 30, 2021, respectively.

PPA IIIa Upgrade

In June 2022, we started a project to replace 9.8 megawatts of second-generation Energy Servers (the "old Energy Servers") at PPA IIIa Investment Company and Operating Company ("PPA IIIa") with current generation Energy Servers (the "new Energy Servers") (the "PPA IIIa Upgrade", the "PPA IIIa Repowering"). The replacement was ongoing as of June 30, 2022. See Note 11 - *Portfolio Financing* for additional information.

Change in Estimate

In June 2022, due to the replacement of old Energy Servers as part of the PPA IIIa Repowering, we revised the expected useful life of the old Energy Servers. As a result, the expected useful life of old Energy Servers decreased from 15 years to approximately 0.5 years. We recognized accelerated depreciation of \$0.2 million in electricity cost of revenue on the revised carrying amount of the old Energy Servers after impairment loss in our condensed consolidated statements of operations. There is no effect from this change in accounting estimate on future periods.

Other Long-Term Assets

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

	June 30, 2022	December 31, 2021
Prepaid insurance	\$ 8,490	\$ 9,534
Long-term lease receivable	8,126	7,953
Deferred commissions	7,369	7,569
Prepaid managed services	2,693	3,010
Deposits made	2,319	1,923
Deferred tax asset	908	954
Investments in subsidiaries	—	1,819
Prepaid and other long-term assets	9,000	8,311
	<u>\$ 38,905</u>	<u>\$ 41,073</u>

Accrued Expenses and Other Current Liabilities

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

	June 30, 2022	December 31, 2021
Compensation and benefits	\$ 35,114	\$ 38,222
Option to acquire a variable number of shares of Class A Common Stock	12,089	13,200
Sales-related liabilities	7,482	6,040
Accrued legal expenses	5,397	1,765
Accrued installation	3,888	13,968
Current portion of derivative liabilities	2,959	6,059
Accrued consulting expenses	2,264	1,731
Interest payable	2,156	2,159
Sales tax liabilities	1,103	1,491
Other	28,752	29,503
	<u>\$ 101,204</u>	<u>\$ 114,138</u>

7. Outstanding Loans and Security Agreements

The following is a summary of our debt as of June 30, 2022 (in thousands, except percentage data):

	Unpaid Principal Balance	Net Carrying Value			Interest Rate	Maturity Dates	Entity	Recourse
		Current	Long- Term	Total				
10.25% Senior Secured Notes due March 2027	\$ 67,980	\$ 12,434	\$ 54,690	\$ 67,124	10.25%	March 2027	Company	Yes
2.5% Green Convertible Senior Notes due August 2025	230,000	—	223,848	223,848	2.5%	August 2025	Company	Yes
Total recourse debt	297,980	12,434	278,538	290,972				
3.04% Senior Secured Notes due June 30, 2031	129,061	9,643	117,586	127,229	3.04%	June 2031	PPA V	No
6.07% Senior Secured Notes due March 2030	71,687	5,091	65,969	71,060	6.07%	March 2030	PPA IV	No
Total non-recourse debt	200,748	14,734	183,555	198,289				
Total debt	\$ 498,728	\$ 27,168	\$ 462,093	\$ 489,261				

The following is a summary of our debt as of December 31, 2021 (in thousands, except percentage data):

	Unpaid Principal Balance	Net Carrying Value			Interest Rate	Maturity Dates	Entity	Recourse
		Current	Long- Term	Total				
10.25% Senior Secured Notes due March 2027	\$ 70,000	\$ 8,348	\$ 60,620	\$ 68,968	10.25%	March 2027	Company	Yes
2.5% Green Convertible Senior Notes due August 2025	230,000	—	222,863	222,863	2.5%	August 2025	Company	Yes
Total recourse debt	300,000	8,348	283,483	291,831				
3.04% Senior Secured Notes due June 30, 2031	134,644	9,376	123,255	132,631	3.04%	June 2031	PPA V	No
7.5% Term Loan due September 2028	31,070	3,436	25,570	29,006	7.5%	September 2028	PPA IIIa	No
6.07% Senior Secured Notes due March 2030	73,955	4,671	68,591	73,262	6.07%	March 2030	PPA IV	No
Total non-recourse debt	239,669	17,483	217,416	234,899				
Total debt	\$ 539,669	\$ 25,831	\$ 500,899	\$ 526,730				

We and all of our subsidiaries were in compliance with all financial covenants as of June 30, 2022 and December 31, 2021.

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, 2021 for discussion of our 10.25% *Senior Secured Notes due March 2027* and 2.5% *Green Convertible Senior Notes due August 2025*.

Interest expense on the Green Notes for the three and six months ended June 30, 2022 was \$2.0 million and \$3.9 million, respectively, including amortization of issuance costs of \$0.5 million and \$1.0 million, respectively. Interest expense on the Green Notes for the three and six months ended June 30, 2021 was \$1.9 million and \$3.9 million, respectively, including amortization of issuance costs of \$0.5 million and \$1.0 million, respectively.

Non-recourse Debt Facilities

Please refer to Note 7 - *Outstanding Loans and Security Agreements* in our Annual Form 10-K for the fiscal year ended December 31, 2021 for discussion of our non-recourse debt

Both note purchase and credit agreements require us to maintain a debt service reserve, the balances of which are presented below (in millions):

	June 30, 2022	December 31, 2021
3.04% Senior Secured Notes due June 30, 2031	\$ 8.0	\$ 8.0
7.5% Term Loan due September 2028	—	3.6
6.07% Senior Secured Notes due March 2030	9.3	9.1

These debt service balances are included as part of long-term restricted cash in the condensed consolidated balance sheets. Both notes and the loan are secured by assets of respective PPAs.

7.5% Term Loan due September 2028 - On June 14, 2022, as part of the PPA IIIa Upgrade, we paid off the outstanding balance and related accrued interest of \$30.2 million and \$0.4 million, respectively, and recognized a loss on extinguishment of debt of \$4.2 million. The debt service reserve of \$3.6 million was reclassified from restricted cash to cash and cash equivalents as of June 30, 2022.

Repayment Schedule and Interest Expense

The following table presents details of our outstanding loan principal repayment schedule as of June 30, 2022 (in thousands):

Remainder of 2022	\$ 12,524
2023	28,503
2024	31,872
2025	265,494
2026	39,078
Thereafter	121,257
	<u>\$ 498,728</u>

Interest expense of \$13.8 million and \$14.6 million for the three months ended June 30, 2022 and 2021, respectively, was recorded in interest expense on the condensed consolidated statements of operations. Interest expense of \$27.9 million and \$29.3 million for the six months ended June 30, 2022 and 2021, respectively, was recorded in interest expense on the condensed consolidated statements of operations. We did not incur any interest expense - related parties during the three and six months ended June 30, 2022 and 2021.

8. Derivative Financial Instruments

Cash Flow Hedges

As of December 31, 2021, we had settled our interest rate swaps, which had been designated as cash flow hedges. There were no cash flow hedges as of June 30, 2022. The changes in fair value of the interest rate swaps designated as cash flow hedges and the amounts recognized in accumulated other comprehensive loss and in earnings were as follows during the three and six months ended June 30, 2022 and 2021 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Beginning balance	\$ —	\$ 11,301	\$ —	\$ 15,989
Loss (gain) recognized in other comprehensive loss	—	1,880	—	(2,284)
Amounts reclassified from other comprehensive loss to earnings	—	(495)	—	(984)
Net loss (gain) recognized in other comprehensive loss	—	1,385	—	(3,268)
Gain recognized in earnings	—	(35)	—	(70)
Ending balance	\$ —	\$ 12,651	\$ —	\$ 12,651

Embedded EPP Derivatives in Sales Contracts

For information on embedded EPP Derivatives in sales contracts, see Part II, Item 8, Note 8 - *Derivative Financial Instruments* in our Annual Report on form 10-K for the fiscal year ended December 31, 2021.

9. Leases

Facilities, Energy Servers, and Vehicles

For the three and six months ended June 30, 2022, rent expense for all occupied facilities was \$4.7 million and \$9.2 million, respectively. For the three and six months ended June 30, 2021, rent expense for all occupied facilities was \$3.8 million and \$7.0 million, respectively.

Operating and finance lease right-of-use assets and lease liabilities for facilities, Energy Servers, and vehicles as of June 30, 2022 and December 31, 2021 were as follows (in thousands):

	June 30, 2022	December 31, 2021
Operating Leases:		
Operating lease right-of-use assets, net ^{1, 2}	\$ 110,362	\$ 106,660
Current operating lease liabilities	(12,581)	(13,101)
Non-current operating lease liabilities	(118,291)	(106,187)
Total operating lease liabilities	\$ (130,872)	\$ (119,288)
Finance Leases:		
Finance lease right-of-use assets, net ^{2, 3, 4}	\$ 2,614	\$ 2,944
Current finance lease liabilities	(924)	(863)
Non-current finance lease liabilities	(1,876)	(2,157)
Total finance lease liabilities	\$ (2,800)	\$ (3,020)
Total lease liabilities	\$ (133,672)	\$ (122,308)

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 sheet.

The components of our facilities, Energy Servers, and vehicles' lease costs for the three and six months ended June 30, 2022 and 2021 were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating lease costs	\$ 6,049	\$ 3,743	\$ 11,885	\$ 6,757
Finance lease costs:				
Amortization of finance lease right-of-use assets	263	174	521	881
Interest expense for finance lease liabilities	52	46	105	244
Total finance lease costs	315	220	626	1,125
Short-term lease costs	167	169	241	341
Total lease costs	\$ 6,531	\$ 4,132	\$ 12,752	\$ 8,223

Weighted average remaining lease terms and discount rates for our facilities, Energy Servers and vehicles as of June 30, 2022 and December 31, 2021 were as follows:

	June 30, 2022	December 31, 2021
Weighted average remaining lease term:		
Operating leases	9.2 years	8.9 years
Finance leases	3.3 years	3.5 years
Weighted average discount rate:		
Operating leases	9.8 %	9.6 %
Finance leases	7.7 %	7.6 %

Future lease payments under lease agreements for our facilities, Energy Servers and vehicles as of June 30, 2022 were as follows (in thousands):

	Operating Leases	Finance Leases
Remainder of 2022	\$ 9,456	\$ 509
2023	19,496	1,013
2024	18,007	840
2025	18,246	369
2026	17,853	139
Thereafter	76,434	32
Total minimum lease payments	159,492	2,902
Less: amounts representing interest or imputed interest	(28,620)	(102)
Present value of lease liabilities	<u>\$ 130,872</u>	<u>\$ 2,800</u>

Managed Services and Portfolio Financings Through PPA Entities

At June 30, 2022, future lease payments under the Managed Services Agreements financing obligations were as follows (in thousands):

	Financing Obligations
Remainder of 2022	\$ 21,687
2023	44,041
2024	41,967
2025	40,939
2026	36,339
Thereafter	55,427
Total minimum lease payments	240,400
Less: imputed interest	(134,902)
Present value of net minimum lease payments	105,498
Less: current financing obligations	(16,159)
Long-term financing obligations	\$ 89,339

The long-term financing obligations, as reflected in our condensed consolidated balance sheets, were \$447.6 million and \$461.9 million as of June 30, 2022 and December 31, 2021, respectively. The difference between these obligations and the principal obligations in the table above will be offset against the carrying value of the related Energy Servers at the end of the lease and the remainder recognized as a gain at that point.

Portfolio Financings through PPA Entities

The components of our aggregate net investment in sales-type leases under our Portfolio Financings through PPA entities consisted of the following (in thousands):

	June 30, 2022	December 31, 2021
Lease payment receivables, net ¹	\$ —	\$ 44,378
Estimated residual value of leased assets (unguaranteed)	—	890
Net investment in sales-type leases	—	45,268
Less: current portion	—	(5,784)
Non-current portion of net investment in sales-type leases	\$ —	\$ 39,484

¹ Net of current estimated credit losses of approximately \$0.1 million as of December 31, 2021.

As of June 30, 2022, there was no net investment in sales-type leases as a result of PPA IIIa Repowering. Please refer to Note 11 - *Portfolio Financing* for details.

As of June 30, 2022, future estimated operating minimum lease payments we expect to receive from Portfolio Financing arrangements through PPA Entities were as follows (in thousands):

	Operating Leases
Remainder of 2022	\$ 20,237
2023	43,620
2024	45,571
2025	46,609
2026	47,757
Thereafter	213,233
Total minimum lease payments	<u>\$ 417,027</u>

10. Stock-Based Compensation Expense 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 June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Cost of revenue	\$ 4,767	\$ 3,804	\$ 8,627	\$ 6,803
Research and development	13,213	5,291	20,295	10,199
Sales and marketing	4,805	4,010	9,580	8,095
General and administrative	9,814	6,028	20,405	11,246
	<u>\$ 32,599</u>	<u>\$ 19,133</u>	<u>\$ 58,907</u>	<u>\$ 36,343</u>

Stock Option Activity

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, 2021	10,737,295	\$ 21.23	5.2	\$ 60,304
Exercised	(243,062)	5.33		
Forfeited	(29,134)	8.27		
Expired	(226,635)	30.41		
Balances at June 30, 2022	<u>10,238,464</u>	21.44	4.7	32,857
Vested and expected to vest at June 30, 2022	<u>10,206,941</u>	21.49	4.7	32,567
Exercisable at June 30, 2022	<u>9,093,852</u>	\$ 22.86	4.4	24,841

Stock Options - During the three and six months ended June 30, 2022, we recognized \$3.4 million and \$5.5 million of stock-based compensation expense for stock options, respectively. During the three and six months ended June 30, 2021, we recognized \$3.4 million and \$7.3 million of stock-based compensation expense for stock options, respectively. We did not grant options in the three and six months ended June 30, 2022 and 2021.

As of June 30, 2022 and December 31, 2021, we had unrecognized compensation expense related to unvested stock options of \$2.0 million and \$6.2 million, respectively. This expense is expected to be recognized over the remaining weighted-average period of 0.4 years and 0.9 years, respectively. Cash received from stock options exercised totaled \$1.3 million and \$60.9 million for the six months ended June 30, 2022 and 2021, respectively.

Stock Award Activity

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, 2021	8,367,664	\$ 20.52
Granted	4,440,721	19.12
Vested	(1,789,639)	17.53
Forfeited	(427,022)	22.70
Unvested Balance at June 30, 2022	<u>10,591,724</u>	<u>19.70</u>

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. During the three and six months ended June 30, 2022, we recognized \$25.0 million and \$46.0 million of stock-based compensation expense for stock awards, respectively. During the three and six months ended June 30, 2021, we recognized \$14.1 million and \$24.8 million of stock-based compensation expense for stock awards, respectively.

As of June 30, 2022 and December 31, 2021, we had \$172.3 million and \$114.9 million of unrecognized stock-based compensation expense related to unvested stock awards, expected to be recognized over a weighted average period of 2.2 years and 2.3 years, respectively.

The following table presents the stock activity for the six months ended June 30, 2022 and the total number of shares available for grant under our stock plans as of June 30, 2022:

	Plan Shares Available for Grant
Balances at December 31, 2021	24,146,784
Added to plan	8,384,460
Granted	(4,507,452)
Cancelled/Forfeited	602,506
Expired	(211,521)
Balances at June 30, 2022	<u>28,414,777</u>

2018 Employee Stock Purchase Plan

During the six months ended June 30, 2022 and 2021, we recognized \$6.9 million and \$2.2 million of stock-based compensation expense for the 2018 Employee Stock Purchase Plan, respectively. We issued 420,689 and 977,508 shares in the six months ended June 30, 2022 and 2021, respectively. During the six months ended June 30, 2022 and 2021, we added an additional 2,055,792 shares and 1,902,572 shares, respectively. There were 4,179,771 shares and 3,512,465 shares available for issuance as of June 30, 2022 and 2021, respectively.

As of June 30, 2022 and December 31, 2021, we had \$6.4 million and \$9.8 million of unrecognized stock-based compensation expense, expected to be recognized over a weighted average period of 1.2 years and 0.5 years, respectively.

11. Portfolio Financings

Overview

We have developed various financing options that enable customers' use of the Energy Servers through third-party ownership financing arrangements. For additional information on these financing options, see our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

PPA IIIa Repowering of Energy Servers

PPA IIIa was established in 2012 and we, through a special purpose subsidiary (the "Project Company"), had previously entered into certain agreements for the purpose of developing, financing, owning, operating, maintaining and managing a portfolio of 9.8 megawatts of Energy Servers.

On March 31, 2022, we entered into a Membership Interest Purchase Agreement where we bought out the equity interest of the third-party investor, wherein the PPA IIIa became wholly owned by us (the "Buyout").

Following the Buyout and prior to June 14, 2022, we repaid all outstanding debt of the Project Company of \$30.6 million, and recognized loss on extinguishment of debt in an amount of \$4.2 million, which includes the write-off of the debt discount related to warrants of \$1.8 million and a make-whole payment of \$2.4 million associated with the debt extinguishment. Refer to Note 7 - *Outstanding Loans and Security Agreements, Non-recourse Debt Facilities* section.

On June 14, 2022, we sold our 100% interest in the Project Company to Generate C&I Warehouse, LLC ("Generate") through a Membership Interest Purchase Agreement ("MIPA"). Simultaneously, we entered into an agreement with the Project Company to upgrade the old 9.8 megawatts of Energy Servers (the "old Energy Servers") by replacing them with a newer generation of Energy Servers ("new Energy Servers") and providing related installation services, which was financed by Generate (the "EPC Agreement"). The old Energy Servers will be removed prior to installing the new Energy Servers, whereby upon completion of installation the old Energy Servers will be returned to Bloom. We also amended and restated our operations and maintenance agreement with the Project Company to cover all new Energy Servers and old Energy Servers prior to their upgrade ("the O&M Agreement"). The operations and maintenance fees under the O&M Agreement are paid on a fixed dollar per kilowatt basis.

Certain power purchase agreements within the PPA IIIa portfolio were classified as sales-type leases under ASC 840, while some were classified as operating leases. The Company elected the practical expedient package with the adoption of ASC 842, which allowed the Company to carry forward the lease classification upon adoption of ASC 842 on January 1, 2020. The leases were modified prior to the sale of the PPA IIIa to Generate. Such modified leases were reassessed and determined to not be leases under ASC 842 because customers have no control over the identified assets. Accordingly, on the date of modification, the customer financing receivables were derecognized and recognized as property, plant, and equipment ("PPA IIIa PP&E").

Due to our repurchase option on the old Energy Servers, the Company concluded there was no transfer of control of the old Energy Servers upon sale of the membership interest to Generate. Accordingly, the Company continued to recognize the old Energy Servers, despite the legal ownership of such assets under the MIPA. Upon reclassification of the lease assets to PP&E, the Company assessed the recorded assets for impairment. The carrying amount of the PPA IIIa PP&E was determined to be not recoverable as the net undiscounted cash flows are less than the carrying amounts for PPA IIIa PP&E. Therefore, we recognized the asset impairment charge as electricity cost, consistent with depreciation expense classification for property, plant and equipment under leases.

The PPA IIIa Upgrade was in progress as of June 30, 2022 and resulted in the following summarized impacts on our condensed consolidated balance sheet as of June 30, 2022: (i) cash and cash equivalents decreased by \$6.4 million mainly due to \$30.6 million for the repayment of outstanding debt, offset by \$26.6 million cash receipts from the sale of new Energy Servers to the Project Company, (ii) both customer financing receivables, current and non-current, and property plant and equipment, net decreased by \$5.9 million, \$36.9 million and \$2.2 million, respectively, due to the impairment of \$44.8 million and accelerated depreciation of \$0.2 million of the existing old Energy Servers (we revised the expected useful life of the old Energy Servers from 15 years to approximately 0.5 years which resulted in recognized accelerated depreciation of \$0.2 million in electricity cost of revenue (refer to Note 6)), (iii) contract assets increased by \$17.0 million, (iv) inventories and deferred cost of revenue decreased by \$16.7 million, and (v) other liabilities increased by \$7.4 million. Impacts on our condensed consolidated statements of operations for the three and six months ended June 30, 2022 are summarized as follows: (i) net product and installation revenue recognized of \$36.9 million and \$1.1 million, respectively, as a result of the sale of new Energy Servers; (ii) cost of electricity revenue of \$45.0 million including the write-off of old Energy Servers of \$44.8 million, accelerated depreciation of \$0.2 million prior to the completion of installation; (iii) cost of product and installation revenue of

\$15.9 million and \$0.8 million, respectively, due to the sale of new Energy Servers sale; and (iv) \$4.2 million of loss on extinguishment of debt.

Impacts on our condensed consolidated statements of cash flows for the six months ended June 30, 2022 are summarized as follows: net cash used in financing activities increased by \$32.6 million due to the repayment of debt of \$30.2 million and cash fee of \$2.4 million associated with debt extinguishment.

PPA Entities' Aggregate Assets and Liabilities

Generally, the assets of an operating company owned by an investment company can be used to settle only the operating company obligations, and the operating company creditors do not have recourse to us. The following are the aggregate carrying values of our VIEs' assets and liabilities in our condensed consolidated balance sheets, after eliminations of intercompany transactions and balances, including as of June 30, 2022 each of the PPA Entities in the PPA IV transaction and the PPA V transaction, and as of December 31, 2021 each of the PPA Entities in the PPA IIIa transaction, the PPA IV transaction and the PPA V transaction (in thousands):

	June 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,575	\$ 1,541
Restricted cash	1,729	3,078
Accounts receivable	3,664	5,112
Customer financing receivable	—	5,784
Prepaid expenses and other current assets	806	3,071
Total current assets	7,774	18,586
Property, plant and equipment, net	213,999	228,546
Customer financing receivable	—	39,484
Restricted cash	17,340	23,239
Other long-term assets	2,119	2,362
Total assets	<u>\$ 241,232</u>	<u>\$ 312,217</u>
Liabilities		
Current liabilities:		
Accrued expenses and other current liabilities	\$ 108	\$ 194
Deferred revenue and customer deposits	662	662
Non-recourse debt	14,734	17,483
Total current liabilities	15,504	18,339
Deferred revenue and customer deposits	5,082	5,410
Non-recourse debt	183,555	217,417
Total liabilities	<u>\$ 204,141</u>	<u>\$ 241,166</u>

We consolidated each PPA Entity as VIEs in the PPA IV transaction and the PPA V transaction, as we remain the minority shareholder in each of these transactions but have determined that we are the primary beneficiary of these VIEs. These PPA Entities contain debt that is non-recourse to us and own Energy Server assets for which we do not have title.

12. Related Party Transactions

There have been no changes in related party relationships during the three and six months ended June 30, 2022. For information on our related parties, 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, 2021.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Total revenue from related parties	\$ 10,233	\$ 4,124	\$ 17,699	\$ 4,894

Below is the summary of outstanding related party balances as of June 30, 2022 and December 31, 2021 (in millions):

	June 30, 2022	December 31, 2021
Accounts receivable	\$ 5.7	\$ 4.4

We had no debt or convertible notes from investors considered to be related parties as of June 30, 2022 and December 31, 2021.

13. Commitments and Contingencies

Commitments

Purchase Commitments with Suppliers and Contract Manufacturers - As of June 30, 2022, we had a commitment with NetJets to purchase a fractional interest in one of its jets, which is to be used for corporate travel purposes, in the amount of approximately \$3.4 million. The jet is expected to be completed by July of 2023. As of December 31, 2021, we had no material open purchase orders with our component suppliers and third-party manufacturers that are not cancellable.

Portfolio Financings Performance Guarantees - We guarantee the performance of Energy Servers at certain levels of output and efficiency to customers over the contractual term. We paid \$0.7 million and \$0.1 million for the six months ended June 30, 2022 and 2021, respectively.

Letters of Credit - In 2019, pursuant to the PPA II upgrade of Energy Servers, we agreed to indemnify our financing partner for losses that may be incurred in the event of certain regulatory, legal or legislative development and established a cash-collateralized letter of credit facility for this purpose. There were no letters of credit or pledged funds associated with the PPA IIIa Upgrade. As of June 30, 2022, the balance of this cash-collateralized letter of credit was \$84.0 million, of which \$41.1 million and \$42.9 million is recognized as short-term and long-term restricted cash, respectively. As of December 31, 2021, the balance of this cash-collateralized letter of credit was \$99.4 million, of which \$41.7 million and \$57.7 million is recognized as short-term and long-term restricted cash, respectively.

Pledged Funds - In 2019, pursuant to the PPA IIIb refinancing and energy servers upgrade program, we pledged \$20.0 million for a seven-year period to secure our operations and maintenance obligations with respect to the totality of our obligations to the financier. We categorized the \$20.0 million as restricted cash on our condensed consolidated balance sheet. It was agreed 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 June 30, 2022 and December 31, 2021, the balance of the long-term restricted cash was \$6.7 million and \$6.7 million.

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.

Delaware Economic Development Authority - In March 2012, we entered into an agreement with the Delaware Economic Development Authority to provide a grant of \$16.5 million to us as an incentive to establish a new manufacturing facility in Delaware and to provide employment for full time workers at the facility over a certain period of time. As of June 30, 2022 and December 31, 2021, we have recorded \$9.5 million and \$9.5 million and in other long-term liabilities, respectively, for potential future repayments of this grant.

Investment Tax Credits - For information on ITCs, see Part II, Item 8, Note 13 - *Commitments and Contingencies* on our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

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 matters 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 on future periods.

In July 2018, two former executives of Advanced Equities, Inc., Keith Daubenspeck and Dwight Badger, filed a statement of claim with the American Arbitration Association in Santa Clara, CA, against us, Kleiner Perkins, Caufield & Byers, LLC ("KPCB"), New Enterprise Associates, LLC ("NEA") and affiliated entities of both KPCB and NEA seeking to compel arbitration and alleging a breach of a confidential agreement executed between the parties on June 27, 2014 (the "Confidential Agreement"). On May 7, 2019, KPCB and NEA were dismissed with prejudice. On June 15, 2019, a second amended statement of claim was filed against us alleging securities fraud, fraudulent inducement, a breach of the Confidential Agreement, and violation of the California unfair competition law. On July 16, 2019, we filed our answering statement and affirmative defenses. On September 27, 2019, we filed a motion to dismiss the statement of claim. On March 24, 2020, the Tribunal denied our motion to dismiss in part, and ordered that claimant's relief is limited to rescission of the Confidential Agreement or remedies consistent with rescission, and not expectation damages. On September 14, 2020, the Tribunal issued an interim order dismissing the claimant's remaining claims and requesting further briefing on the issue of prevailing party. On November 10, 2020, the Tribunal issued an order declaring us the prevailing party and requesting a motion for award of attorney's fees. On March 17, 2021, we received the final award for attorneys fees and costs. On March 26, 2021, we filed a petition in the Northern District of California to confirm the award. Messrs. Badger and Daubenspeck have taken the position that the award should be vacated, including on the ground that one of the arbitrators made insufficient disclosures or was biased against them. The Northern District of California rejected the arguments made by Messrs. Badger and Daubenspeck and on September 8, 2021, issued an order granting our petition to confirm the award, and entered judgment in our favor for the attorneys fees and costs awarded by the Tribunal. On October 1, 2021, Mr. Badger and Mr. Daubenspeck filed a notice of appeal with the United States Court of Appeal for the Ninth Circuit. On July 25, 2022, the parties filed a stipulated motion to voluntarily dismiss the appeal with prejudice pursuant to a confidential settlement agreement entered into by the parties on June 24, 2022. On July 29, 2022, the United States Court of Appeal for the Ninth Circuit dismissed the appeal pursuant to the stipulation of the parties.

In June 2019, Messrs. Daubenspeck and Badger filed a complaint against our Chief Executive Officer ("CEO") and our former Chief Financial Officer ("CFO") in the United States District Court for the Northern District of Illinois asserting nearly identical claims as those in the pending arbitration discussed above. The lawsuit was stayed pending the outcome of the arbitration. The stay was lifted on October 20, 2020. On March 19, 2021, we filed a motion to dismiss the case on several grounds. On May 3, 2021, plaintiffs filed a motion to stay the lawsuit pending the outcome of the petition to confirm the arbitration award in the Northern District of California. On July 25, 2022, the parties filed a stipulated motion to voluntarily dismiss the lawsuit with prejudice pursuant to a confidential settlement agreement entered by the parties on June 24, 2022. On July 26, 2022, the court dismissed the action with prejudice.

In March 2019, the Lincolnshire Police Pension Fund filed a class action complaint in the Superior Court of the State of California, County of Santa Clara, against us, certain members of our senior management, certain of our directors and the underwriters in our July 25, 2018 IPO alleging violations under Sections 11 and 15 of the Securities Act of 1933, as amended (the "Securities Act"), for alleged misleading statements or omissions in our Registration Statement on Form S-1 filed with the SEC in connection with the IPO. Two related class action cases were subsequently filed in the Santa Clara County Superior Court against the same defendants containing the same allegations; Rodriguez vs Bloom Energy et al. was filed on April 22, 2019 and Evans vs Bloom Energy et al. was filed on May 7, 2019. These cases have been consolidated. Plaintiffs' consolidated amended complaint was filed with the court on September 12, 2019. On October 4, 2019, defendants moved to stay the lawsuit pending the federal district court action discussed below. On December 7, 2019, the Superior Court issued an order staying the action through resolution of the parallel federal litigation mentioned below. We believe the complaint to be without merit and we intend to defend this action vigorously. We are unable to estimate any range of reasonably possible losses.

In May 2019, Elissa Roberts filed a class action complaint in the federal district court for the Northern District of California against us, certain members of our senior management team, and certain of our directors alleging violations under Section 11 and 15 of the Securities Act for alleged misleading statements or omissions in our Registration Statement on Form S-1 filed with the SEC in connection with the IPO. On September 3, 2019, the court appointed a lead plaintiff and lead plaintiffs' counsel. On November 4, 2019, plaintiffs filed an amended complaint adding the underwriters in the IPO and our auditor as defendants for the Section 11 claim, as well as adding claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") against us, and certain members of our senior management team. The amended complaint alleged a class period for all claims from the time of our IPO until September 16, 2019. On April 21, 2020, plaintiffs filed a second amended complaint, which continued to make the same claims and added allegations pertaining to the restatement and, as to claims under the Exchange Act, extended the putative class period through February 12, 2020. On July 1, 2020, we and the other defendants filed a motion to dismiss the second amended complaint. On September 29, 2021, the court entered an order dismissing with leave to amend (1) five of seven statements or groups of statements alleged to violate Sections 11 and 15 of the Securities Act and (2) all allegations under the Exchange Act. All allegations against our auditors were also dismissed. Plaintiffs elected not to amend the complaint and instead on October 22, 2021 filed a motion for entry of final judgment in favor of our auditors so that plaintiffs could appeal the dismissal of those claims. The court denied that motion on December 1, 2021 and in response plaintiffs have filed a motion asking the court to certify an interlocutory appeal as to the accounting claims. The court denied plaintiff's motion on April 14, 2022. Separately, the claims for violation of Sections 11 and 15 of the Securities Act that were not dismissed by the court are proceeding to discovery. A case schedule has been set, with a trial scheduled for December 2023. We believe the claims to be without merit and we intend to defend this action vigorously. We are unable to predict the outcome of this litigation at this time and accordingly are not able to estimate any range of reasonably possible losses.

In September 2019, we received a books and records demand from purported stockholder Dennis Jacob ("Jacob Demand"). The Jacob Demand cites allegations from the September 17, 2019 report prepared by admitted short seller Hindenburg Research. In November 2019, we received a substantially similar books and records demand from the same law firm on behalf of purported stockholder Michael Bolouri ("Bolouri Demand") and, together with the Jacob Demand, the "Demands"). On January 13, 2020, Messrs. Jacob and Bolouri filed a complaint in the Delaware Court of Chancery to enforce the Demands in the matter styled *Jacob, et al. v. Bloom Energy Corp.*, C.A. No. 2020-0023-JRS. On March 9, 2020, Messrs. Jacob and Bolouri filed an amended complaint in the Delaware Court of Chancery to add allegations regarding the restatement. The court held a one-day trial on December 7, 2020. On February 25, 2021, the Delaware Court of Chancery issued a decision rejecting the Bolouri Demand but granting in part the Jacob Demand allowing limited access to certain books and records pertaining to the allegations made in the Hindenburg Research Report. On March 29, 2021, the Court of Chancery entered a Final Order and Judgment regarding the required production of documents. On April 28, 2021, we produced documents to Mr. Jacob responsive to the Final Order and Judgment. We are unable to estimate any range of reasonably possible losses.

In March 2020, Francisco Sanchez filed a class action complaint in Santa Clara County Superior Court against us alleging certain wage and hour

violations under the California Labor Code and Industrial Welfare Commission Wage Orders and that we engaged in unfair business practices under the California Business and Professions Code, and in July 2020 he amended his complaint to add claims under the California Labor Code Private Attorneys General Act ("PAGA"). On November 30, 2020, we filed a motion to compel arbitration and the motion was to be heard on March 5, 2021. On February 24, 2021, Mr. Sanchez dismissed the individual and class action claims without prejudice, leaving one cause of action for enforcement of the Private Attorney Generals Act. In April 2021, an amended complaint reflecting these changes was filed with the Santa Clara Superior Court. The parties attended a mediation on January 10, 2022, and agreed in principle to resolve the PAGA and individual claims for approximately \$1.0 million. The parties executed a written agreement in late May 2022. The agreement was approved by the Court in compliance with PAGA on July 1, 2022.

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. Discovery has commenced and we are aggressively pursuing all claims. On February 4, 2022, the City of Santa Clara filed a Demurrer seeking to dismiss all of the Company's claims. The trial judge rejected the Demurrer on all claims except one, and allowed Bloom leave to amend that claim. The second amended petition was filed on July 1, 2022. The next Status Conference with the judge is scheduled for September 1, 2022. If we are unable to secure building permits for these customer installations in a timely fashion, our customers will terminate their contracts with us and select another energy provider. In addition, if we are no longer able to install our Energy Servers in Santa Clara under building permits, we may not be able to secure future customer bookings for installation in the City of Santa Clara.

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, 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 hawse 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 and compel arbitration (or alternatively to stay). We filed our opposition on June 30, 2022, Plansee/GTP's filed its reply on July 14, 2022 and we filed our sur-reply on July 22, 2022. Given that the cases are still in their early stages, we are unable to predict the ultimate outcome of the arbitration and district court action at this time, and accordingly are not able to estimate a range of reasonably possible losses.

14. Income Taxes

For the three and six months ended June 30, 2022, we recorded an income tax benefit and income tax provision of \$12 thousand and \$0.6 million, respectively, on pre-tax losses of \$121.2 million and \$203.4 million for effective tax rates of 0.01% and (0.3)%, respectively. For the three and six months ended June 30, 2021, we recorded income tax provisions of \$0.3 million and \$0.4 million on pre-tax losses of \$58.1 million and \$87.8 million for effective tax rates of (0.5)% and (0.5)%, respectively.

The effective tax rate for the three and six months ended June 30, 2022 and 2021 is lower than the statutory federal tax rate primarily due to a full valuation allowance against U.S. deferred tax assets.

15. 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 six months presented as their inclusion would have been antidilutive (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Convertible notes	14,187	14,187	14,187	14,187
Redeemable convertible preferred stock	11,000	—	11,000	—
Stock options and awards	4,655	6,403	4,894	15,028
	<u>29,842</u>	<u>20,590</u>	<u>30,081</u>	<u>29,215</u>

16. Subsequent Events

There have been no subsequent events that occurred during the period subsequent to the date of these condensed consolidated financial statements that would require adjustment to our disclosure in the 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, services, business strategies, impact of COVID-19, our expanded strategic partnership with SK ecoplant, operations, supply chain (including any direct or indirect effects from the Russia-Ukraine conflict), new markets, government incentive programs, growth of the hydrogen market and the sufficiency of our cash and our liquidity. Forward-looking statements can also be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "targets," "forecasts," "will," "would," "could," "can," "may" 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 and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" included in Part II, Item 1A of this Quarterly Report on Form 10-Q and in our other filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed on February 25, 2022. Such forward-looking statements speak only as of the date of this report. We disclaim any obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements. You should review these risk factors for a more complete understanding of the risks associated with an investment in our securities. The following discussion and analysis should be read in conjunction with our 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 United States, 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 significantly higher efficiencies than traditional, combustion-based resources. In addition, our same solid oxide platform that powers our fuel cells can be used to create hydrogen, which is increasingly recognized as a critically important tool necessary for the full decarbonization of the energy economy. Our enterprise customers include some of the largest multinational corporations in the world. We also have strong relationships with some of the largest utility companies in the United States and the Republic of Korea.

At Bloom Energy, we look forward to a net-zero future. Our technology is designed to help enable this future in order to deliver reliable, low-carbon, electricity in a world facing unacceptable levels of power disruptions. Our resilient platform has kept electricity available for our customers through hurricanes, earthquakes, typhoons, forest fires, extreme heat and grid failures. Unlike traditional combustion power generation, our platform is community-friendly and designed to significantly reduce emissions of criteria air pollutants. We have made tremendous progress making renewable fuel production a reality through our biogas, hydrogen and electrolyzer programs, and we believe that we are well-positioned as a core platform and fixture in the new energy paradigm to help organizations and communities achieve their net-zero objectives.

We market and sell our Energy Servers directly and through indirect channels to our customers both in the United states and abroad. In order to appeal to the largest variety of customers, we have developed a number of financing options to enable customers' use of our Energy Servers on a pay-as-you-go model, made available through third-party ownership financing arrangements. For information about our different financing options, see Part II Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations - Purchase and Financing Options* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Our typical target commercial or industrial customer has historically been either an investment-grade entity or a customer with investment-grade attributes such as size, assets and revenue, liquidity, geographically diverse operations and general financial stability. We have also expanded our product and financing options to the below-investment-grade customer

and have also expanded internationally to target customers with deployments on a wholesale grid. Given that our customers are typically large institutions with multi-level decision making processes, we generally experience a lengthy sales process.

Strategic Investment

On October 23, 2021, we entered into the SPA with SK ecoplant in connection with a strategic partnership. Pursuant to the SPA, on December 29, 2021, we sold to SK ecoplant 10 million shares of zero coupon, non-voting redeemable convertible Series A preferred stock in us, par value \$0.0001 per share ("RCPS"), at a purchase price of \$25.50 per share for an aggregate purchase price of \$255 million (the "Initial Investment").

Simultaneous with the execution of the SPA, we and SK ecoplant executed an amendment to the Joint Venture Agreement ("JVA"), an amendment and restatement to our Preferred Distribution Agreement ("PDA Restatement") and a new Commercial Cooperation Agreement regarding initiatives pertaining to the hydrogen market and general market expansion for the Bloom Energy Server and Bloom Energy Electrolyzer.

Certain Factors Affecting our Performance

Manufacturing and Labor Market Constraints

We are experiencing impacts from the ongoing labor shortage and continue to face challenges in hiring for our manufacturing facilities, which is exacerbated by absences for any employees who are recovering from or have been exposed to COVID-19. While we continue to dedicate resources to supporting our capacity expansion efforts, we are experiencing difficulties with hiring and retention, particularly for our new manufacturing facility in Fremont, California. In addition, the current inflationary environment has led to rising wages and labor rates and increased competition for labor. To date, we have been able to mitigate any impact to production through a contingent workforce and other measures. In the event we are unable to mitigate the impacts of these challenges, it could delay the manufacturing and installation of our Energy Servers and we may be unable to meet customer demand, which would adversely impact our cash flows and results of operations, including revenue and gross margin. We expect the hiring and retention challenges arising from the labor shortages to continue for the foreseeable future.

Supply Chain Constraints

We continue to see effects from the global supply chain disruptions and are experiencing supply chain challenges and logistics constraints. While we have not experienced any component shortages to date, we are facing pressures from longer lead times, shipping and freight delays, and increased costs of raw materials. In addition, the current inflationary environment and conflict in Ukraine has led to an increase in the price of components and raw materials. In the event we are unable to mitigate the impacts of delays and/or price increases in raw materials, components and freight, it could delay the manufacturing and installation of our Energy Servers and increase the cost of our Energy Server, which would adversely impact our cash flows and results of operations, including revenue and gross margin. We expect these supply chain challenges and logistics constraints to continue for the foreseeable future.

For additional information on our manufacturing and supply chain matters, see Part I Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

COVID-19 Pandemic

We continue to monitor and adjust as appropriate our operations in response to the COVID-19 pandemic. We maintain protocols to minimize the risk of COVID-19 transmission within our facilities, including enhanced cleaning and masking if required by the local authorities, as well as providing testing for all employees. We will continue to follow CDC and local guidelines when notified of possible exposures. The full extent of the ongoing impact of the COVID-19 pandemic on our business remains uncertain due to a variety of factors, including for example, the duration and severity of the pandemic, new variants of the virus, the distribution, effectiveness and public acceptance of vaccines, and any other ongoing and future actions taken to in response to the pandemic. For more information regarding the risks posed to our company by the COVID-19 pandemic, refer to Part I, Item 1A, *Risk Factors – Risks Related to Our Products and Manufacturing – Our business has been and continues to be adversely affected by the COVID-19 pandemic* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Our Energy Server Product runs on a variety of fuels, including natural gas. The rising cost of natural gas increases the cost of our product to the end customer. To date, the potential impact of this on customer demand has been offset by the customer needs for resiliency and time to power that our Energy Server provides.

Liquidity and Capital Resources

While we improved our liquidity in 2021, we increased our working capital spend in the first half of 2022. We have entered into new leases to maintain sufficient manufacturing facilities to meet anticipated demand in 2022 and beyond, including new product line expansion. In addition, we also increased our working capital spend and resources to enhance our marketing efforts and to expand into new geographies both domestically and internationally.

As of June 30, 2022, we had cash and cash equivalents of \$235.6 million. Our cash and cash equivalents consist of highly liquid investments with maturities of three months or less, including money market funds. We maintain these balances with high credit quality counterparties, continually monitor the amount of credit exposure to any one issuer and diversify our investments in order to minimize our credit risk.

As of June 30, 2022, we had \$291.0 million of total outstanding recourse debt, \$198.3 million of non-recourse debt and \$18.6 million of other long-term liabilities. For a complete description of our outstanding debt, please see Note 7 - *Outstanding Loans and Security Agreements* in Part I, Item 1, *Financial Statements (unaudited)*.

The combination of our existing cash and cash equivalents 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 to satisfy our near-term or future cash needs, we may require additional capital from equity or debt financings to fund our operations, in particular, our manufacturing capacity, product development and market expansion requirements, to timely respond to competitive market pressures or strategic opportunities, or otherwise. We may, from time to time, engage in a variety of financing transactions for such purposes, including factoring our accounts receivable. We may not be able to secure timely additional financing on favorable terms, or at all. The terms of any additional financings may place limits on our financial and operating flexibility. 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 will 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 manufacturing space, 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 Energy Servers, the timing of installations, and overall economic conditions including the impact of COVID-19 on our ongoing and future operations. In order to support and achieve our future growth plans, we may need or seek advantageously to obtain additional funding through an equity or debt financing. Failure to obtain this financing or financing in future quarters may affect our results of operations, including revenue and cash flows.

As of June 30, 2022, the current portion of our total debt is \$27.2 million, of which \$14.7 million is outstanding non-recourse debt.

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

	Six Months Ended June 30,	
	2022	2021
Net cash (used in) provided by :		
Operating activities	\$ (98,514)	\$ (35,302)
Investing activities	(44,728)	(34,460)
Financing activities	(56,946)	53,804

Net cash provided by (used in) our PPA Entities, which are incorporated into the condensed consolidated statements of cash flows, was as follows (in thousands):

	Six Months Ended June 30,	
	2022	2021
PPA Entities ¹		
Net cash provided by PPA operating activities	\$ 92,085	\$ 12,669
Net cash provided by (used in) PPA financing activities	(99,297)	(13,462)

¹ The PPA Entities' operating and financing cash flows are a subset of our consolidated cash flows and represent the stand-alone cash flows prepared in accordance with U.S. GAAP. Operating activities consist principally of cash used to run the operations of the PPA Entities, the purchase of Energy Servers from us and principal reductions in loan balances. Financing activities consist primarily of changes in debt carried by our PPAs, and payments from and distributions to noncontrolling partnership interests. We believe this presentation of net cash provided by (used in) PPA activities is useful to provide the reader with the impact to consolidated cash flows of the PPA Entities in which we have only a minority interest.

Operating Activities

Our operating activities have consisted of net loss adjusted for certain non-cash items plus changes in our operating assets and liabilities or working capital. The increase in cash used in operating activities during the six months ended June 30, 2022 as compared to the prior year period was primarily the result of an increase in our net loss and a decrease in our net working capital of \$47.2 million in the six months ended June 30, 2022 due to the timing of revenue transactions and corresponding collections, the increase in inventory levels to support future demand, and the timing of payments to vendors.

Investing Activities

Our investing activities have consisted of capital expenditures that include investment to increase our production capacity. We expect to continue such activities as our business grows. Cash used in investing activities of \$44.7 million during the six months ended June 30, 2022 was primarily the result of expenditures on tenant improvements for a newly leased engineering building in Fremont, California. We expect to continue to make capital expenditures over the next few quarters to prepare our new manufacturing facility in Fremont, California for production, 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

Historically, our financing activities have consisted of borrowings and repayments of debt, proceeds and repayments of financing obligations, distributions paid to noncontrolling interests, and the proceeds from the issuance of our common stock. Net cash used in financing activities during the six months ended June 30, 2022 was \$56.9 million, an increase of \$110.8 million compared to the prior year period, primarily due to the repayment of debt related to PPA IIIa of \$30.2 million and other debt of 10.7 million, and repayment of financing obligations of \$16.5 million, partially offset by proceeds from issuance of common stock of \$6.0 million.

We believe we have the sufficient capital to run our business over the next 12 months, including the completion of the build out of our manufacturing facilities. Our working capital was strengthened with the initial investment by SK ecoplant. In addition, we may still enter the equity or debt market as needed to support the expansion of our business. Please refer to Note 7 - *Outstanding Loans and Security Agreements* in Part 1, Item 1, *Financial Statements (unaudited)*; and Part I, Item 1A, *Risk Factors - Risks Related to Our Liquidity - Our substantial indebtedness, and restrictions imposed by the agreements governing our and our PPA Entities' outstanding indebtedness, may limit our financial and operating activities and may adversely affect our ability to incur additional debt to fund future needs, and We may not be able to generate sufficient cash to meet our debt service obligations*, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 for more information regarding the terms of and risks associated with our debt.

Purchase and Financing Options

For information on purchase and financing options, see the *Purchasing and Financing Options* section in Part I, Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

International Channel Partners

There were no significant changes in our international channel partners during the three and six months ended June 30, 2022. For information on international channel partners, see the *International Channel Partners* section in Part I, Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Community Distributed Generation Programs

We have entered into sales, installation, operations and maintenance agreements with three developers for the deployment of our Energy Servers pursuant to the New York CDG program for a total of 441 systems. As of June 30, 2022, we have recognized revenue associated with 271 systems. We continue to believe that these types of subscriber-based programs could be a source of future revenue and will continue to look to generate sales through these programs in the future.

For further information on Community Distributed Generation Programs, see the *Community Distributed Generation Programs* section in Part I, Item 7 - *Management's Discussion and Analysis of Financial Condition and Results of Operations* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Key Operating Metrics - Comparison of the Three and Six Months Ended June 30, 2022 and 2021

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 of our Annual Report on Form 10-K for the year ended December 31, 2021 under the subheading “Key Operation Metrics”.

Purchase Options

The portion of acceptances attributable to each purchase option in the three and six months ended June 30, 2022 and 2021 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Direct Purchase	100 %	99 %	100 %	99 %
Managed Services	— %	1 %	— %	1 %

The portion of revenue attributable to each purchase option in the three and six months ended June 30, 2022 and 2021 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Direct Purchase	89 %	89 %	88 %	89 %
Traditional Lease	1 %	1 %	1 %	1 %
Managed Services	6 %	5 %	6 %	5 %
Bloom Electrons	4 %	5 %	5 %	5 %

Product Acceptances

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2022	2021	Amount	%	2022	2021	Amount	%
Product accepted during the period (in 100 kilowatt systems)	471	433	38	8.8 %	846	791	55	7.0 %

Product accepted increased approximately 38 systems, or 8.8%, for the three months ended June 30, 2022 compared to the three months ended June 30, 2021. Acceptance volume increased as demand increased for the Bloom Energy servers.

Product accepted increased approximately 55 systems, or 7.0%, for the six months ended June 30, 2022 compared to the six months ended June 30, 2021. Acceptance volume increased as demand increased for the Bloom Energy servers.

Megawatts accepted, net, increased approximately 183 megawatts, or 28.3%, for the six months ended June 30, 2022 compared to the three months ended June 30, 2021. Acceptances achieved increased from June 30, 2021 to June 30, 2022 were added to our installed base and therefore, increased our megawatts accepted, net, from 647 megawatts to 830 megawatts.

Costs Related to Our Products

Total product related costs for the three and six months ended June 30, 2022 and 2021 was as follows:

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2022	2021	Amount	%	2022	2021	Amount	%
Product costs of product accepted in the period	\$2,462/kW	\$2,369/kW	\$93/kW	3.9 %	\$2,506/kW	\$2,330/kW	\$176/kW	7.6 %
Period costs of manufacturing related expenses not included in product costs (in thousands)	\$ 13,489	\$ 6,450	\$7,039	109.1 %	\$ 23,176	\$ 11,879	\$11,297	95.1 %
Installation costs on product accepted in the period	\$355/kW	\$844/kW	\$-489/kW	(57.9)%	\$349/kW	\$520/kW	\$-171/kW	(32.9)%

Product costs of product accepted increased approximately \$93 per kilowatt, or 3.9%, for the three months ended June 30, 2022 compared to the three months ended June 30, 2021. This increase in cost is primarily driven by some of the cost pressures seen in the external environment with commodity pricing and logistics increasing significantly from one year ago. Our ongoing cost reduction efforts to reduce material costs, labor and overhead through improved automation of our manufacturing facilities, our better facility utilization and our ongoing material cost reduction programs with our vendors continued but were offset by the temporary increases in cost that we experienced.

Product costs of product accepted increased approximately \$176 per kilowatt, or 7.6%, for the six months ended June 30, 2022 compared to the six months ended June 30, 2021. This increase in cost is primarily driven by some of the cost pressures seen in the external environment with commodity pricing and logistics increasing significantly from one year ago. Our ongoing cost reduction efforts to reduce material costs, labor and overhead through improved automation of our manufacturing facilities, our better facility utilization and our ongoing material cost reduction programs with our vendors continued but were offset by the temporary increases in cost that we experienced.

Period costs of manufacturing related expenses increased approximately \$7.0 million, or 109.1%, for the three months ended June 30, 2022 compared to the three months ended June 30, 2021. Our period costs of manufacturing related expenses increased primarily as a result of costs incurred to support capacity expansion efforts which will be brought online in future periods.

Period costs of manufacturing related expenses increased approximately \$11.3 million, or 95.1%, for the six months ended June 30, 2022 compared to the six months ended June 30, 2021. Our period costs of manufacturing related expenses increased primarily as a result of costs incurred to support capacity expansion efforts which will be brought online in future periods.

Installation costs on product accepted decreased approximately \$489 per kilowatt, or 57.9%, for the three months ended June 30, 2022 as compared to the three months ended June 30, 2021. This decrease in cost is primarily driven by the change in the mix of sites requiring Bloom installation and changes in installation process. Each customer site is different and installation costs can vary due to a number of factors, including site complexity, size, location of gas, etc. As such, installation on a per kilowatt basis can vary significantly from period-to-period. In addition, some customers do their own installation for which we have little to no installation cost.

Installation costs on product accepted decreased approximately \$171 per kilowatt, or 32.9%, for the six months ended June 30, 2022 as compared to the six months ended June 30, 2021. This increase in cost is primarily driven by the change in the mix of sites requiring Bloom installation. Each customer site is different and installation costs can vary due to a number of factors, including site complexity, size, location of gas, etc. As such, installation on a per kilowatt basis can vary significantly from period-to-period. In addition, some customers do their own installation for which we have little to no installation cost.

Results of Operations

A discussion regarding the comparison of our financial condition and results of operations for the three and six months ended June 30, 2022 and 2021 is presented below.

Revenue

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2022	2021	Amount	%	2022	2021	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Product	\$ 173,625	\$ 146,867	\$ 26,758	18.2 %	\$ 307,172	\$ 284,797	\$ 22,375	7.9 %
Installation	12,729	28,879	(16,150)	(55.9)%	26,282	31,538	(5,256)	(16.7)%
Service	38,426	35,707	2,719	7.6 %	73,665	72,124	1,541	2.1 %
Electricity	18,456	17,017	1,439	8.5 %	37,156	34,018	3,138	9.2 %
Total revenue	\$ 243,236	\$ 228,470	\$ 14,766	6.5 %	\$ 444,275	\$ 422,477	\$ 21,798	5.2 %

Total Revenue

Total revenue increased by \$14.8 million, or 6.5%, for the three months ended June 30, 2022 as compared to the prior year period. This increase was driven by a \$26.8 million increase in product revenue, a \$2.7 million increase in service revenue and a \$1.4 million increase in electricity revenue, offset by a \$16.2 million decrease in installation revenue.

Total revenue increased by \$21.8 million, or 5.2%, for the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily driven by a \$22.4 million increase in product revenue, a \$1.5 million increase in service revenue and a \$3.1 million increase in electricity revenue, offset by a \$5.3 million decrease in installation revenue.

Product Revenue

Product revenue increased by \$26.8 million, or 18.2%, for the three months ended June 30, 2022 as compared to the prior year period. The product revenue increase was driven primarily by an 8.8% increase in product acceptances resulting from expansion in existing markets and revenue recognized from the PPA IIIa Upgrade of \$36.9 million.

Product revenue increased by \$22.4 million, or 7.9%, for the six months ended June 30, 2022 as compared to the prior year period. The product revenue increase was driven primarily by a 7.0% increase in product acceptances resulting from expansion in existing markets and revenue recognized from the PPA IIIa Upgrade of \$36.9 million.

Installation Revenue

Installation revenue decreased by \$16.2 million, or 55.9%, for the three months ended June 30, 2022 as compared to the prior year period. This decrease in installation revenue was driven by the change in mix of product acceptances requiring installations by us, as fewer sites had installation costs in the three months ended June 30, 2022, offset by the revenue recognized from the PPA IIIa Upgrade of \$1.1 million.

Installation revenue decreased by \$5.3 million, or 16.7%, for the six months ended June 30, 2022 as compared to the prior year period. This decrease in installation revenue was driven by the change in mix of product acceptances requiring installations by us, as fewer sites had installation costs in the six months ended June 30, 2022, offset by the revenue recognized from the PPA IIIa Upgrade of \$1.1 million.

Service Revenue

Service revenue increased by \$2.7 million, or 7.6%, for the three months ended June 30, 2022 as compared to the prior year period. This increase was primarily due to the increase in the renewal of existing service contracts. We expect our service revenue to grow in the future.

Service revenue increased by \$1.5 million, or 2.1%, for the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily due to the increase in new acceptances and renewal of existing service contracts,

partially offset by delays in execution of long-term service agreements and the impact of product performance guarantees. We expect our service revenue to grow in the future.

Electricity Revenue

Electricity revenue increased by \$1.4 million, or 8.5%, for the three months ended June 30, 2022 as compared to the prior year period due to the increase in installed units as a result of the increase in Managed Services transactions recorded in the second half of fiscal year 2021.

Electricity revenue increased by \$3.1 million, or 9.2%, for the six months ended June 30, 2022 as compared to the prior year period due to the increase in installed units as a result of the increase in Managed Services transactions recorded in the second half of fiscal year 2021.

Cost of Revenue

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2022	2021	Amount	%	2022	2021	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Product	\$ 129,419	\$ 108,891	\$ 20,528	18.9 %	\$ 235,161	\$ 196,185	\$ 38,976	19.9 %
Installation	16,730	36,515	(19,785)	(54.2)%	29,503	41,140	(11,637)	(28.3)%
Service	41,028	35,565	5,463	15.4 %	82,854	71,683	11,171	15.6 %
Electricity	58,029	10,155	47,874	471.4 %	70,790	21,474	49,316	229.7 %
Total cost of revenue	<u>\$ 245,206</u>	<u>\$ 191,126</u>	<u>\$ 54,080</u>	<u>28.3 %</u>	<u>\$ 418,308</u>	<u>\$ 330,482</u>	<u>\$ 87,826</u>	<u>26.6 %</u>

Total Cost of Revenue

Total cost of revenue increased by \$54.1 million, or 28.3%, for the three months ended June 30, 2022 as compared to the prior year period primarily driven by a \$47.9 million increase in cost of electricity revenue, a \$20.5 million increase in cost of product revenue, and a \$5.5 million increase in cost of service revenue, offset by a \$19.8 million decrease in costs of installation revenue. The increase was primarily driven by the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods. This increase was partially offset by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Total cost of revenue increased by \$87.8 million, or 26.6%, for the six months ended June 30, 2022 as compared to the prior year period primarily driven by a \$49.3 million increase in cost of electricity revenue, a \$39.0 million increase in cost of product revenue, an \$11.2 million increase in cost of service revenue, offset by a \$11.6 million decrease in costs of installation revenue. The increase was primarily driven by the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods. This increase was partially offset by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Cost of Product Revenue

Cost of product revenue increased by \$20.5 million, or 18.9%, for the three months ended June 30, 2022 as compared to the prior year period. The cost of product revenue increase was in line with the increase in product revenue and was driven primarily by a 8.8% increase in product acceptances, the sale new Energy Servers of \$15.9 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred in support of upcoming capacity expansion efforts which will be brought online in future periods. This increase was partially offset by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Cost of product revenue increased by \$39.0 million, or 19.9%, for the six months ended June 30, 2022 as compared to the prior year period. The cost of product revenue increase was driven primarily by a 7.0% increase in product acceptances, the sale of new Energy Servers of \$15.9 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred in support of upcoming capacity expansion efforts which will be brought online in future periods. This increase was partially offset by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Cost of Installation Revenue

Cost of installation revenue decreased by \$19.8 million, or 54.2%, for the three months ended June 30, 2022 as compared to the prior year period. This decrease was driven by the change in mix of product acceptances requiring Bloom Energy installations, as fewer sites had installation costs in the three months ended June 30, 2022.

Cost of installation revenue decreased by \$11.6 million, or 28.3%, for the six months ended June 30, 2022 as compared to the prior year period. This decrease was driven by the change in mix of product acceptances requiring Bloom Energy installations, as fewer sites had installation costs in the six months ended June 30, 2022.

Cost of Service Revenue

Cost of service revenue increased by \$5.5 million, or 15.4%, for the three months ended June 30, 2022 as compared to the prior year period. This increase was primarily due to the 8.8% increase in acceptances plus the maintenance contract renewals associated with the increase in our fleet of Energy Servers, partially offset by the significant improvements in power module life, cost reductions and our actions to proactively manage fleet optimizations.

Cost of service revenue increased by \$11.2 million, or 15.6%, for the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily due to the 7.0% increase in acceptances plus the maintenance contract renewals associated with the increase in our fleet of Energy Servers, partially offset by the significant improvements in power module life, cost reductions and our actions to proactively manage fleet optimizations.

Cost of Electricity Revenue

Cost of electricity revenue increased by \$47.9 million, or 471.4%, for the three months ended June 30, 2022 as compared to the prior year period, primarily due to the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade and the increase in installed units driven by Managed Services transactions recorded in the second half of fiscal year 2021.

Cost of electricity revenue increased by \$49.3 million, or 229.7%, for the six months ended June 30, 2022 as compared to the prior year period, primarily due to the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade and an increase in installed units driven by Managed Services transactions recorded in the second half of fiscal year 2021.

Gross Profit (Loss) and Gross Margin

	Three Months Ended June 30,			Six Months Ended June 30,		
	2022	2021	Change	2022	2021	Change
	(dollars in thousands)					
Gross profit (loss):						
Product	\$ 44,206	\$ 37,976	\$ 6,230	\$ 72,011	\$ 88,612	\$ (16,601)
Installation	(4,001)	(7,636)	3,635	(3,221)	(9,602)	6,381
Service	(2,602)	142	(2,744)	(9,189)	441	(9,630)
Electricity	(39,573)	6,862	(46,435)	(33,634)	12,544	(46,178)
Total gross (loss) profit	<u>\$ (1,970)</u>	<u>\$ 37,344</u>	<u>\$ (39,314)</u>	<u>\$ 25,967</u>	<u>\$ 91,995</u>	<u>\$ (66,028)</u>
Gross margin:						
Product	25 %	26 %		23 %	31 %	
Installation	(31)%	(26)%		(12)%	(30)%	
Service	(7)%	— %		(12)%	1 %	
Electricity	(214)%	40 %		(91)%	37 %	
Total gross margin	<u>(1)%</u>	<u>16 %</u>		<u>6 %</u>	<u>22 %</u>	

Total Gross (Loss) Profit

Gross profit decreased by \$39.3 million in the three months ended June 30, 2022 as compared to the prior year period which was primarily driven by the \$46.4 million decrease in electricity gross profit primarily due to the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods. This decrease was partially offset by the \$6.2 million increase in product gross profit, driven by an 8.8% increase in acceptances, recognized revenue of \$36.9 million from the sale of new Energy Servers as a result of PPA IIIa Upgrade, offset by the increase in the respective cost of product revenue of \$15.9 million, and our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Gross profit decreased by \$66.0 million in the six months ended June 30, 2022 as compared to the prior year period which was primarily driven by the \$46.2 million decrease in electricity gross profit primarily due to the write-off of old Energy Servers of \$44.8 million as a result of the PPA IIIa Upgrade; the \$16.6 million decrease in product gross profit due to a 7.0% increase in product acceptances, the cost of sale of new Energy Servers of \$15.9 million as a result of the PPA IIIa Upgrade, offset by respective product revenue recognized of \$36.9 million; the \$9.6 million decrease in service gross profit due to a 7.0% increase in acceptances plus the maintenance contract renewals associated with the increase in our fleet of Energy Servers; increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods. This decrease was partially offset by our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Product Gross Profit

Product gross profit increased by \$6.2 million in the three months ended June 30, 2022 as compared to the prior year period. The increase is primarily driven by an 8.8% increase in product acceptances, revenue recognized from the PPA IIIa Upgrade of \$36.9 million, and our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities, partially offset by the cost of sale of new Energy Servers of \$15.9 million as a result of the PPA IIIa Upgrade, increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods.

Product gross profit decreased by \$16.6 million in the six months ended June 30, 2022 as compared to the prior year period. The decrease is primarily driven by increased freight charges and other supply chain-related pricing pressures and costs incurred to support capacity expansion efforts which will be brought online in future periods. This decrease was partially offset by a 7.0% increase in product acceptances, revenue recognized from the PPA IIIa Upgrade of \$36.9 million and our ongoing cost reduction efforts to reduce material costs in conjunction with our suppliers and our reduction in labor and overhead costs through increased volume, improved processes and automation at our manufacturing facilities.

Installation Gross Loss

Installation gross loss improved by \$3.6 million in the three months ended June 30, 2022 as compared to the prior year period driven by the change in site mix and other site related factors such as site complexity, size, local ordinance requirements and location of the utility interconnect.

Installation gross loss improved by \$6.4 million in the six months ended June 30, 2022 as compared to the prior year period driven by the change in site mix and other site related factors such as site complexity, size, local ordinance requirements and location of the utility interconnect.

Service Gross (Loss) Profit

Service gross loss worsened by \$2.7 million in the three months ended June 30, 2022 as compared to the prior year period. This was primarily due to unfavorable timing of long-term service agreement and the impact of product performance guarantees offset by improvements in power module life, cost reductions and our actions to proactively manage fleet optimizations.

Service gross loss worsened by \$9.6 million in the six months ended June 30, 2022 as compared to the prior year period. This was primarily due to unfavorable timing of long-term service agreement and the impact of product performance guarantees offset by improvements in power module life, cost reductions and our actions to proactively manage fleet optimizations.

Electricity Gross (Loss) Profit

Electricity gross profit decreased by \$46.4 million in the three months ended June 30, 2022 as compared to the prior year period mainly due to the write-off of old Energy Servers from the PPA IIIa Upgrade of \$44.8 million partially offset by the increase in Managed Services transactions recorded in the second half of fiscal year 2021.

Electricity gross profit decreased by \$46.2 million in the six months ended June 30, 2022 as compared to the prior year period mainly due to the write-off of old Energy Servers from the PPA IIIa Upgrade of \$44.8 million partially offset by the increase in Managed Services transactions recorded in the second half of fiscal year 2021.

Operating Expenses

	Three Months Ended June 30,				Six Months Ended June 30,			
			Change				Change	
	2022	2021	Amount	%	2022	2021	Amount	%
	(dollars in thousands)				(dollars in thousands)			
Research and development	\$ 41,614	\$ 25,673	\$ 15,941	62.1 %	\$ 76,140	\$ 48,968	\$ 27,172	55.5 %
Sales and marketing	20,475	22,727	(2,252)	(9.9)%	41,809	42,679	(870)	(2.0)%
General and administrative	38,114	31,655	6,459	20.4 %	75,850	57,456	18,394	32.0 %
Total operating expenses	\$ 100,203	\$ 80,055	\$ 20,148	25.2 %	\$ 193,799	\$ 149,103	\$ 44,696	30.0 %

Total Operating Expenses

Total operating expenses increased by \$20.1 million in the three months ended June 30, 2022 as compared to the prior year period. This increase was primarily attributable to our continued investment in R&D capabilities to support our technology roadmap and our investment in business development, partially offset by the decrease in outside services.

Total operating expenses increased by \$44.7 million in the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily attributable to our continued investment in R&D capabilities to support our technology roadmap and our investment in business development, partially offset by the decrease in outside services.

Research and Development

Research and development expenses increased by \$15.9 million in the three months ended June 30, 2022 as compared to the prior year period. This increase was primarily driven by increases in employee compensation and benefits to expand our employee base in order to support our technology roadmap, including our hydrogen, electrolyzer, carbon capture, marine and biogas solutions, along with an increase in manufacturing-related expense.

Research and development expenses increased by \$27.2 million in the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily driven by increases in employee compensation and benefits to expand our employee base in order to support our technology roadmap, including our hydrogen, electrolyzer, carbon capture, marine and biogas solutions, along with an increase in manufacturing-related expense.

Sales and Marketing

Sales and marketing expenses decreased by \$2.3 million in the three months ended June 30, 2022 as compared to the prior year period. This decrease was primarily driven by the decrease in outside services, partially offset by increases in employee compensation and benefits to expand our U.S. and international sales force, as well as increased investment in brand and product management.

Sales and marketing expenses decreased by \$0.9 million in the six months ended June 30, 2022 as compared to the prior year period. This decrease was primarily driven by the decrease in outside services, partially offset by increases in employee compensation and benefits to expand our U.S. and international sales force, as well as increased investment in brand and product management.

General and Administrative

General and administrative expenses increased by \$6.5 million in the three months ended June 30, 2022 as compared to the prior year period. This increase was primarily driven by increases in employee compensation and benefits, partially offset by the decrease in outside services.

General and administrative expenses increased by \$18.4 million in the six months ended June 30, 2022 as compared to the prior year period. This increase was primarily driven by increases in employee compensation and benefits.

Stock-Based Compensation

	Three Months Ended June 30,				Six Months Ended June 30,			
	2022	2021	Change		2022	2021	Change	
			Amount	%			Amount	%
	(dollars in thousands)				(dollars in thousands)			
Cost of revenue	\$ 4,767	\$ 3,804	\$ 963	25.3 %	\$ 8,627	\$ 6,803	\$ 1,824	26.8 %
Research and development	13,213	5,291	7,922	149.7 %	20,295	10,199	10,096	99.0 %
Sales and marketing	4,805	4,010	795	19.8 %	9,580	8,095	1,485	18.3 %
General and administrative	9,814	6,028	3,786	62.8 %	20,405	11,246	9,159	81.4 %
Total stock-based compensation	\$ 32,599	\$ 19,133	\$ 13,466	70.4 %	\$ 58,907	\$ 36,343	\$ 22,564	62.1 %

Total stock-based compensation for the three months ended June 30, 2022 compared to the prior year period increased by \$13.5 million primarily driven by the efforts to expand our employee base across all of the Company's functions.

Total stock-based compensation for the six months ended June 30, 2022 compared to the prior year period increased by \$22.6 million primarily driven by the efforts to expand our employee base across all of the Company's functions.

Other Income and Expense

	Three Months Ended June 30,				Six Months Ended June 30,			
	2022	2021	Change		2022	2021	Change	
			(in thousands)				(in thousands)	
Interest income	\$ 196	\$ 76	\$ 120		\$ 255	\$ 150	\$ 105	
Interest expense	(13,814)	(14,553)	739		(27,901)	(29,284)	1,383	
Other (expense) income, net	(1,191)	22	(1,213)		(4,218)	(63)	(4,155)	
Loss on extinguishment of debt	(4,233)	—	(4,233)		(4,233)	—	(4,233)	
Gain (loss) on revaluation of embedded derivatives	38	(942)	980		569	(1,460)	2,029	
Total	\$ (19,004)	\$ (15,397)	\$ (3,607)		\$ (35,528)	\$ (30,657)	\$ (4,871)	

Interest Income

Interest income is derived from investment earnings on our cash balances primarily from money market funds. Change in interest income for the three and six months ended June 30, 2022 as compared to the prior year period was immaterial.

Interest Expense

Interest expense is from our debt held by third parties.

Interest expense for the three months ended June 30, 2022 as compared to the prior year period decreased by \$0.7 million. This decrease was primarily due to lower interest expense as a result of our repayment of the 7.5% Term Loan due September 2028 and refinancing our notes at a lower interest rate.

Interest expense for the six months ended June 30, 2022 as compared to the prior year period decreased by \$1.4 million. This decrease was primarily due to lower interest expense as a result of our repayment of the 7.5% Term Loan due September 2028 and refinancing our notes at a lower interest rate.

Other (Expense) Income, net

Other (expense) income, net is primarily derived from investments in joint ventures, the impact of foreign currency translation, and adjustments to fair value for derivatives.

Other income (expense), net for the three months ended June 30, 2022 as compared to the prior year period decrease by \$1.2 million primarily as a result of the loss on remeasurement of our equity investment in the Bloom Energy Japan joint venture and loss on foreign currency translation, partially offset by a gain on the revaluation of the Option to purchase Class A common stock.

Other income (expense), net for the six months ended June 30, 2022 as compared to the prior year period decreased by \$4.2 million primarily as a result of the loss on remeasurement of our equity investment in the Bloom Energy Japan joint venture, loss on foreign currency translation, and loss on the revaluation of the Option to purchase Class A common stock.

Loss on Extinguishment of Debt

Loss on extinguishment of debt for the three and six months ended June 30, 2022 was \$4.2 million, which was recognized as a result of repayment of 7.5% Term Loan due September 2028 as part of the PPA IIIa Upgrade.

Gain (Loss) on Revaluation of Embedded Derivatives

Gain (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 months ended June 30, 2022 as compared to the prior year period increased by \$1.0 million due to the change in fair value of our embedded EPP derivatives in our sales contracts

Loss on revaluation of embedded derivatives for the six months ended June 30, 2022 as compared to the prior year period increased by \$2.0 million due to the change in fair value of our embedded EPP derivatives in our sales contracts.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Three Months Ended June 30,		Change		Six Months Ended June 30,		Change	
	2022	2021	Amount	%	2022	2021	Amount	%
(dollars in thousands)								
Net loss attributable to noncontrolling interests	\$ (2,365)	\$ (4,536)	\$ (2,171)	(47.9)%	\$ (6,453)	\$ (9,424)	\$ (2,971)	(31.5)%
Net loss attributable to redeemable noncontrolling interest	\$ —	\$ (22)	\$ (22)	(100.0)%	\$ (300)	\$ (26)	\$ 274	1,053.8 %

Net 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, such as the flip structure of the PPA Entities.

Net loss attributable to noncontrolling interests for the three months ended June 30, 2022 as compared to the prior year period changed by \$2.2 million due to decreased losses in our PPA Entities, which are allocated to our noncontrolling interests.

Net loss attributable to noncontrolling interests for the six months ended June 30, 2022 as compared to the prior year period changed by \$3.0 million due to decreased losses in our PPA Entities, which are allocated to our noncontrolling interests.

Changes in net loss attributable to redeemable noncontrolling interest for the three and six months ended June 30, 2022 and 2021 were immaterial.

Off-Balance Sheet Arrangements

We include in our condensed consolidated financial statements all assets and liabilities and results of operations of our PPA Entities that we have entered into and over which we have substantial control. For additional information, see Part II, Item 8, Note 11 - *Portfolio Financings* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

We have not entered into any other transactions that have generated relationships with unconsolidated entities or financial partnerships or special purpose entities. Accordingly, as of June 30, 2022 and 2021 we had no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

The 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 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 audited results of operations, which we have prepared in accordance with U.S. GAAP. In preparing these 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:

- Discussion of Earliest Year of Changes in Financial Condition and Results of Operations;
- Revenue Recognition;
- Leases: Incremental Borrowing Rate;
- Valuation of Escalator Protection Plan Agreements ("EPP");
- Valuation of Certain Financial Instruments and Customer Financing Receivables;
- Valuation of Assets and Liabilities of the SK ecoplant Strategic Investment;
- Incremental Borrowing Rate ("IBR") by Lease Class;
- Stock-Based Compensation;
- Income Taxes;
- Principles of Consolidation; and
- Allocation of Profits and Losses of Consolidated Entities to Noncontrolling Interests and Redeemable Noncontrolling Interests.

Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Part II, Item 7 of our Annual Report on Form 10-K for our fiscal year ended December 31, 2021 provides a more complete discussion of our critical accounting policies and estimates. During the six months ended June 30, 2022, 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 six months ended June 30, 2022. 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, 2021 for a more complete discussion of the market risks we consider.

ITEM 4 - CONTROLS AND PROCEDURES

During the six months ended June 30, 2022, there were no changes in our internal controls over financial reporting, which were identified in connection with management's evaluation required by paragraph (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.

As of June 30, 2022 based on evaluation of the effectiveness of our disclosure controls and procedures performed by our Chief Executive Officer and Chief Financial Officer (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) it was concluded that our disclosure controls and procedures were effective.

For further information on controls and procedures, see Part II, Item 9A - *Controls and Procedures* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

Part II

ITEM 1 - LEGAL PROCEEDINGS

We are, and from time to time we may become, involved in legal proceedings or be subject to claims arising in the ordinary course of our business. For a discussion of legal proceedings, see Part II, Item 8 *Note 13 - Commitments and Contingencies* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and Part I, Item 1 Note 13 - *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, 2021.

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

Not applicable.

ITEM 6 - EXHIBITS

Exhibit Number		Description	Incorporated by Reference			
			Form	File No.	Exhibit	Filing Date
3.1		Certificate of Amendment to the Restated Certificate of Incorporation of Bloom Energy Corporation				Filed herewith
10.1		Amended and Restated 2018 Employee Stock Purchase Plan	8-K	001-38598	10.1	5/16/2022
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	**	Certification 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				Filed 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)				

† Portions of this exhibit are redacted as permitted under Regulation S-K, Rule 601.

** 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: August 9, 2022

By: /s/ KR Sridhar

KR Sridhar

Founder, President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 9, 2022

By: /s/ Gregory Cameron

Gregory Cameron

Executive Vice President and
Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATE OF AMENDMENT TO THE
RESTATED CERTIFICATE OF INCORPORATION OF
BLOOM ENERGY CORPORATION**

Bloom Energy Corporation (the “**Company**”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify that:

1. The name of the Company is Bloom Energy Corporation. The Company was originally incorporated under the name of Ion America Corporation. The original Certificate of Incorporation of the Company was filed with the Secretary of State of the State of Delaware on January 18, 2001.

2. This Certificate of Amendment to the Restated Certificate of Incorporation of the Company (the “**Restated Certificate of Incorporation**”) was duly authorized and adopted by the Company’s Board of Directors and stockholders in accordance with Section 242 of the DGCL and amends provisions of the Company’s Restated Certificate of Incorporation.

3. The amendments to the existing Restated Certificate of Incorporation being effected hereby are to:

a) amend and restate in its entirety Section 1.1 of Article IV of the Restated Certificate of Incorporation to read as follows:

“**1.1.** The total number of shares of all classes of stock that the Company has authority to issue is 1,220,000,000 shares, consisting of three classes: 600,000,000 shares of Class A Common Stock, \$0.0001 par value per share (“**Class A Common Stock**”), 600,000,000 shares of Class B Common Stock, \$0.0001 par value per share (“**Class B Common Stock**,” and together with the Class A Common Stock, the “**Common Stock**”), and 20,000,000 shares of Preferred Stock, \$0.0001 par value per share (the “**Preferred Stock**”).”

b) amend and restate in its entirety Article XI of the Restated Certificate of Incorporation to read as follows:

“**1. Forum.** Unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Company; (b) any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any director, officer, or other employee or agent of the Company to the Company or the Company’s stockholders; (c) any action asserting a claim against the Company arising pursuant to any provision of the General Corporation Law, this Restated Certificate of Incorporation or the Bylaws of the Company (as either may be amended from time to time); (d) any action to interpret, apply, enforce or determine the validity of this Restated Certificate of Incorporation or the Bylaws of the Company; or (e) any action asserting a claim governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring or holding any interest in any security of the Company shall be deemed to have notice of and to have consented to the provisions of this paragraph.

Subject to the foregoing paragraph, unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring or holding any interest in any security of the Corporation shall be deemed to have notice of and consented to the provisions of this paragraph.

2. Enforceability. If any provision of this Article XI shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provision in any other circumstance and of the remaining provisions of this Article XI (including, without limitation, each portion of any sentence of this Article XI containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities or circumstances shall not in any way be affected or impaired thereby.”

4. This Certificate of Amendment to the Restated Certificate of Incorporation shall be effective immediately upon filing with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, the Company has caused this Certificate of Amendment to the Restated Certificate of Incorporation to be signed by its Executive Vice President, General Counsel and Secretary as of the 31st day of May 2022.

BLOOM ENERGY CORPORATION,
a Delaware corporation

By: /s/ Shawn M. Soderberg
Name: Shawn M. Soderberg
Title: Executive Vice President, General Counsel and
Secretary

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 June 30, 2022 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: August 9, 2022

By: /s/ KR Sridhar

KR Sridhar
President and Chief Executive Officer
(Principal Executive Officer)

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, Gregory Cameron, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter period ended June 30, 2022 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: August 9, 2022

By: /s/ Gregory Cameron

Gregory Cameron
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

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 June 30, 2022 of Bloom Energy Corporation (the “Company”) as filed with the Securities and Exchange Commission on the date hereof (the “Report”):

I, KR Sridhar, President and Chief Executive 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: August 9, 2022

By: /s/ KR Sridhar

KR Sridhar
President and Chief Executive Officer
(Principal Executive Officer)

I, Gregory Cameron, Executive Vice President and 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: August 9, 2022

By: /s/ Gregory Cameron

Gregory Cameron
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)