UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2021

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number 001-36103

TECOGEN INC. (OTCQX:TGEN)

(Exact name of Registrant as specified in its charter)

Delaware	04-3536131
(State or Other Jurisdiction of Incorporation or Organization)	*(IRS Employer Identification No.)*

45 First Avenue
Waltham, Massachusetts 02451
(Address of Principal Executive Offices and Zip Code)

(781) 466-6402
(Registrant's telephone number, including area code)

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 ☒	Emerging Growth company ☐
Smaller reporting 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 ☒

As of November 3, 2021, 24,850,261 shares of common stock, $.001 par value per share, of the registrant were issued and outstanding.

QUARTERLY REPORT ON FORM 10-Q
FOR THE PERIOD ENDED SEPTEMBER 30, 2021
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References in this Form 10-Q to "we", "us", "our"', the "Company" and "Tecogen" refers to Tecogen Inc. and its consolidated subsidiaries, unless otherwise noted.

PART I - FINANCIAL INFORMATION
Item 1 - Financial Statements

CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

	September 30, 2021	December 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,351,231	$ 1,490,219
Accounts receivable, net	7,728,737	8,671,163
Unbilled revenue	3,842,282	4,267,249
Employee retention credit	1,276,021	—
Inventories, net	7,922,044	7,168,596
Prepaid and other current assets	572,783	597,144
Total current assets	24,693,098	22,194,371
Long-term assets:		
Property, plant and equipment, net	1,917,483	2,283,846
Right of use assets	2,019,166	1,632,574
Intangible assets, net	1,234,047	1,360,319
Goodwill	2,406,156	2,406,156
Other assets	210,800	196,387
TOTAL ASSETS	$ 32,480,750	$ 30,073,653
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Note payable	$ —	$ 837,861
Accounts payable	3,546,950	4,183,105
Accrued expenses	2,216,673	1,993,471
Deferred revenue	1,850,371	1,294,157
Lease obligations, current	628,950	506,514
Total current liabilities	8,242,944	8,815,108
Long-term liabilities:		
Note payable, net of current portion	—	1,036,339
Deferred revenue, net of current portion	250,981	115,329
Lease obligations, net of current portion	1,479,495	1,222,492
Deferred payroll tax liability, net of current portion	131,224	—
Unfavorable contract liability	1,348,892	1,617,051
Total liabilities	11,453,536	12,806,319
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Tecogen Inc. stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 24,850,261and 24,850,261 issued and outstanding at September 30, 2021 and December 31, 2020, respectively	24,850	24,850
Additional paid-in capital	56,965,083	56,814,428
Accumulated deficit	(35,896,586)	(39,529,621)
Total Tecogen Inc. stockholders' equity	21,093,347	17,309,657
Non-controlling interest	(66,133)	(42,323)
Total stockholders' equity	21,027,214	17,267,334
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 32,480,750	$ 30,073,653

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

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Three Months Ended	
	September 30, 2021	September 30, 2020
Revenues		
Products	$ 1,871,332	$ 2,705,422
Services	2,829,244	4,125,590
Energy production	315,292	368,695
Total revenues	5,015,868	7,199,707
Cost of sales		
Products	1,036,396	1,617,626
Services	1,467,019	2,597,729
Energy production	170,518	197,608
Total cost of sales	2,673,933	4,412,963
Gross profit	2,341,935	2,786,744
Operating expenses		
General and administrative	2,473,190	2,318,789
Selling	656,885	563,857
Research and development	122,031	111,253
Total operating expenses	3,252,106	2,993,899
Loss from operations	(910,171)	(207,155)
Other income (expense)		
Interest income and other income (expense), net	(4,798)	(12)
Interest expense	(3,855)	(4,845)
Gain on extinguishment of debt	1,885,655	—
Employee retention credit	562,253	—
Unrealized loss on investment securities	(37,497)	—
Total other income (expense), net	2,401,758	(4,857)
Income (loss) before provision for state income taxes	1,491,587	(212,012)
Provision for state income taxes	3,000	9,397
Consolidated net income (loss)	1,488,587	(221,409)
Income attributable to the non-controlling interest	(21,890)	(10,511)
Net income (loss) attributable to Tecogen Inc.	$ 1,466,697	$ (231,920)
Net income (loss) per share - basic	$ 0.06	$ (0.01)
Net income (loss) per share - diluted	$ 0.06	$ (0.01)
Weighted average shares outstanding - basic	24,850,261	24,850,261
Weighted average shares outstanding - diluted	25,154,905	24,850,261

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

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Nine Months Ended	
	September 30, 2021	**September 30, 2020**
Revenues		
Products	$ 6,439,981	$ 9,543,316
Services	9,438,702	11,658,263
Energy production	1,339,448	1,395,886
Total revenues	17,218,131	22,597,465
Cost of sales		
Products	3,601,408	5,640,965
Services	4,684,008	7,583,710
Energy production	796,933	887,888
Total cost of sales	9,082,349	14,112,563
Gross profit	8,135,782	8,484,902
Operating expenses		
General and administrative	7,365,495	7,645,729
Selling	1,747,959	2,022,027
Research and development	381,064	641,616
Total operating expenses	9,494,518	10,309,372
Loss from operations	(1,358,736)	(1,824,470)
Other income (expense)		
Interest and other income (expense), net	(7,127)	11,953
Interest expense	(13,583)	(121,084)
Gain on extinguishment of debt	3,773,014	—
Employee retention credit	1,276,021	—
Gain on sale of investment securities	6,046	—
Unrealized gain (loss) on investment securities	18,749	(98,403)
Total other income (expense), net	5,053,120	(207,534)
Income (loss) before provision for state income taxes	3,694,384	(2,032,004)
Provision for state income taxes	18,991	27,791
Consolidated net income (loss)	3,675,393	(2,059,795)
Income attributable to non-controlling interest	(42,358)	(28,400)
Net income (loss) attributable to Tecogen Inc.	$ 3,633,035	$ (2,088,195)
Net income (loss) per share - basic	$ 0.15	$ (0.08)
Net income (loss) per share - diluted	$ 0.14	$ (0.08)
Weighted average shares outstanding - basic	24,850,261	24,850,257
Weighted average shares outstanding - diluted	25,131,165	24,850,257

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

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Three and Nine Months Ended September 30,2021 and 2020
(unaudited)

Three months ended September 30, 2021	Common Stock Shares	Common Stock 0.001 Par Value	Additional Paid-In Capital	Accumulated Deficit	Non-controlling Interest	Total
Balance at June 30, 2021	24,850,261	$ 24,850	$ 56,908,194	$ (37,363,283)	$ (55,667)	$ 19,514,094
Stock based compensation expense	—	—	56,889	—	—	56,889
Distributions to non-controlling interest	—	—	—	—	(32,356)	(32,356)
Net income	—	—	—	1,466,697	21,890	1,488,587
Balance at September 30, 2021	24,850,261	$ 24,850	$ 56,965,083	$ (35,896,586)	$ (66,133)	$ 21,027,214

Nine months ended September 30, 2021	Common Stock Shares	Common Stock 0.001 Par Value	Additional Paid-In Capital	Accumulated Deficit	Non-controlling Interest	Total
Balance at December 31, 2020	24,850,261	$ 24,850	$ 56,814,428	$ (39,529,621)	$ (42,323)	$ 17,267,334
Stock based compensation expense	—	—	150,655	—	—	150,655
Distributions to non-controlling interest	—	—	—	—	(66,168)	(66,168)
Net income	—	—	—	3,633,035	42,358	3,675,393
Balance at September 30, 2021	24,850,261	$ 24,850	$ 56,965,083	$ (35,896,586)	$ (66,133)	$ 21,027,214

Three months ended September 30, 2020	Common Stock Shares	Common Stock 0.001 Par Value	Additional Paid-In Capital	Accumulated Deficit	Non-controlling Interest	Total
Balance at June 30, 2020	24,850,261	$ 24,850	$ 56,704,412	$ (35,235,389)	$ 80,076	$ 21,573,949
Stock issuance costs	—	—	(1,149)	—	—	(1,149)
Stock based compensation expense	—	—	50,582	—	—	50,582
Distributions to non-controlling interest	—	—	—	—	(18,670)	(18,670)
Net income (loss)	—	—	—	(231,920)	10,511	(221,409)
Balance at September 30, 2020	24,850,261	$ 24,850	$ 56,753,845	$ (35,467,309)	$ 71,917	$ 21,383,303

Nine months ended September 30, 2020	Common Stock Shares	Common Stock 0.001 Par Value	Additional Paid-In Capital	Accumulated Deficit	Non-controlling Interest	Total
Balance at December 31, 2019	24,849,261	$ 24,849	$ 56,622,285	$ (33,379,114)	$ 85,257	$ 23,353,277
Stock issuance costs	1,000	1	1,199	—	—	1,200
Stock based compensation expense	—	—	(1,951)	—	—	(1,951)
Stock based compensation expense	—	—	132,312	—	—	132,312
Distributions to non-controlling interest	—	—	—	—	(41,740)	(41,740)
Net income (loss)	—	—	—	(2,088,195)	28,400	(2,059,795)
Balance at September 30, 2020	24,850,261	$ 24,850	$ 56,753,845	$ (35,467,309)	$ 71,917	$ 21,383,303

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

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Nine Months Ended	
	September 30, 2021	**September 30, 2020**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Consolidated net income (loss)	$ 3,675,393	$ (2,059,795)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization, net	357,636	293,941
Gain on extinguishment of debt	(3,773,014)	—
Employee retention credit	(1,276,021)	—
Stock-based compensation	150,655	132,312
Provision for doubtful accounts	52,000	—
Gain on disposal of assets	(9,787)	—
Gain on sale of investment securities	(6,046)	—
Unrealized (gain) loss on investment securities	(18,749)	98,403
Abandonment of intangible assets	7,400	179,944
Non-cash interest expense	—	51,190
Changes in operating assets and liabilities, net of effects of acquisitions:		
(Increase) decrease in:		
Accounts receivable	890,374	5,683,941
Unbilled revenue	424,967	51,389
Inventory	(753,447)	(737,570)
Prepaid expenses and other current assets	24,361	117,109
Other assets	(387,847)	532,293
Increase (decrease) in:		
Accounts payable	(636,156)	(1,455,881)
Accrued expenses and other current liabilities	378,970	145,848
Deferred revenue	691,867	(1,619,696)
Other liabilities	379,440	—
Net cash provided by operating activities	171,996	1,413,428
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(84,160)	(59,952)
Proceeds from the sale of investment securities	11,637	—
Purchases of intangible assets	(56,349)	(123,252)
Proceeds from sale of assets	9,787	—
Payment of stock issuance costs	—	(1,951)
Distributions to non-controlling interest	(66,168)	(41,740)
Net cash used in investing activities	(185,253)	(226,895)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from note payable	1,874,269	1,874,200
Payments on revolving line of credit, net	—	(2,452,329)
Proceeds from the exercise of stock options	—	1,200
Net cash provided by (used in) financing activities	1,874,269	(576,929)
Change in cash and cash equivalents	1,861,012	609,604
Cash and cash equivalents, beginning of the period	1,490,219	877,676
Cash and cash equivalents, end of the period	$ 3,351,231	$ 1,487,280
Supplemental disclosures of cash flows information:		
Cash paid for interest	$ —	$ 62,007
Cash paid for taxes	$ 18,991	$ 27,791

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

Note 1. Description of Business and Basis of Presentation

Description of Business

Tecogen Inc., or we, our or us, produces commercial and industrial engine-driven, combined heat and power (CHP) products that reduce energy costs, decrease greenhouse gas emissions and alleviate congestion on the national power grid. Our products supply electric power or mechanical power for cooling, while heat from the engine is recovered and purposefully used at a facility. We also install, own, operate and maintain complete energy systems and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates.

The majority of our customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast.

Our common stock is quoted on OTC Markets Group, Inc.'s OTCQX Best Market tier and trades under the symbol "TGEN."

On May 18, 2017, the Company acquired 100% of the outstanding common stock of American DG Energy Inc., formerly a related entity, in a stock-for-stock merger.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments considered necessary for a fair presentation have been included. Operating results for the nine months ended September 30, 2021 are not necessarily indicative of the results that may be expected for the year ending December 31, 2021.

The condensed consolidated balance sheet at December 31, 2020 has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

For further information, refer to the consolidated financial statements and footnotes thereto included in Tecogen's Annual Report on Form 10-K for the year ended December 31, 2020.

The accompanying unaudited condensed consolidated financial statements include our accounts and the accounts of entities in which we have a controlling financial interest. Those entities include our wholly-owned subsidiaries American DG Energy Inc., Tecogen CHP Solutions, Inc., and a joint venture, American DG New York, LLC, in which American DG Energy Inc. holds a 51% interest. Investments in partnerships and companies in which we do not have a controlling financial interest but where we have significant influence are accounted for under the equity method. Any intercompany transactions have been eliminated in consolidation.

Our operations are comprised of two business segments. Our Products and Services segment designs, manufactures and sells industrial and commercial cogeneration systems as described above. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

Reclassification

Certain prior period amounts have been reclassified to conform with current year presentation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Income Taxes

The provisions for income taxes in the accompanying unaudited consolidated statements of operations differ from that which would be expected by applying the federal statutory tax rate primarily due to losses for which no benefit is recognized.

Employee Retention Credit

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was signed into law providing numerous tax provisions and other stimulus measures, including an employee retention credit ("ERC"), which is a refundable tax credit against certain employment taxes. The Taxpayer Certainty and Disaster Tax Relief Act of 2020 and the American Rescue Plan Act of 2021 extended and expanded the availability of the ERC.

Section 2301(c)(2)(B) of the CARES Act permits an employer to use an alternative quarter to calculate gross receipts and the employer may determine if the decline in gross receipt tests is met for a calendar quarter in 2021 by comparing its gross receipts for the immediately preceding calendar quarter with those for the corresponding calendar quarter in 2019. Accordingly, for the first quarter of 2021, we elected to use our gross receipts for the fourth calendar quarter of 2020 compared to our gross receipts for the fourth calendar quarter of 2019. As a result of our election to use an alternative quarter, we qualified for the ERC in the first, second and third quarters of 2021 because our gross receipts decreased by more than 20% from the first, second and third quarters of 2019. As a result of averaging100 or fewer full-time employees in 2019, all wages paid to employees in the first, second and third quarters of 2021 were eligible for the ERC.

Accounting Standards Codification 105, "Generally Accepted Accounting Principles," describes the decision-making framework when no guidance exists in US GAAP for a particular transaction. Specifically, ASC 105-10-05-2 instructs companies to look for guidance for a similar transaction within US GAAP and apply that guidance by analogy. As such, forms of government assistance, such as the ERC, provided to business entities would not be within the scope of ASC 958, but it may be applied by analogy under ASC 105-10-05-2. We accounted for the Employee Retention Credit as a government grant in accordance with Accounting Standards Update 2013-06, *Not-for-Profit Entities (Topic 958) ("ASU 2013-06")* by analogy under ASC 105-10-05-2. Under this standard, government grants are recognized when the conditions or conditions on which they depend are substantially met. The conditions for recognition of the ERC include, but are not limited to:

- An entity has been adversely affected by the COVID-19 pandemic
- We have not used qualifying payroll for both the Paycheck Protection Program and the ERC
- We incurred payroll costs to retain employees
- The process for filing for the credit is an administrative task and not a barrier to receiving the credits

During the three and nine months ended September 30, 2021, we recorded ERC benefits of $562,253 and $1,276,021, respectively in other income (expense), net in our condensed consolidated statements of operations. A current receivable in the amount of $1,276,021 is included in our condensed consolidated balance sheet as of September 30, 2021.

Note 2. Revenue

Revenue is recognized when performance obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of our products, services and energy production. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services or energy to customers.

Shipping and handling fees billed to customers in a sales transaction are recorded in revenue and shipping and handling costs incurred are recorded in cost of sales. We have elected to exclude from revenue any value add sales and other taxes which we collect concurrent with revenue-producing activities. These accounting policy elections are consistent with the manner in which we historically recorded shipping and handling fees and value-added taxes. Incremental costs incurred by us to obtain a contract with a customer are negligible, if any, and are expensed ratably in proportion to the related revenue recognized.

Disaggregated Revenue

In general, our business segmentation is aligned according to the nature and economic characteristics of our products and customer relationships and provides meaningful disaggregation of each business segment's results of operations.

The following table further disaggregates our revenue by major source by segment for the three and nine months ended September 30, 2021 and 2020.

	Three Months Ended September 30, 2021		
	Products and Services	**Energy Production**	**Total**
Products	$ 1,871,332	$ —	$ 1,871,332
Installation services	63,076	—	63,076
Maintenance services	2,766,168	—	2,766,168
Energy production	—	315,292	315,292
Total revenue	$ 4,700,576	$ 315,292	$ 5,015,868

	Nine Months Ended September 30, 2021		
	Products and Services	**Energy Production**	**Total**
Products	$ 6,439,981	$ —	$ 6,439,981
Installation services	825,325	—	825,325
Maintenance services	8,613,377	—	8,613,377
Energy production	—	1,339,448	1,339,448
Total revenue	$ 15,878,683	$ 1,339,448	$ 17,218,131

	Three Months Ended September 30, 2020		
	Products and Services	**Energy Production**	**Total**
Products	$ 2,705,422	$ —	$ 2,705,422
Installation services	1,513,686	—	1,513,686
Maintenance services	2,611,904	—	2,611,904
Energy production	—	368,695	368,695
Total revenue	$ 6,831,012	$ 368,695	$ 7,199,707

	Nine Months Ended September 30, 2020		
	Products and Services	**Energy Production**	**Total**
Products	$ 9,543,316	$ —	$ 9,543,316
Installation services	4,125,191	—	4,125,191
Maintenance services	7,533,072	—	7,533,072
Energy production	—	1,395,886	1,395,886
Total revenue	$ 21,201,579	$ 1,395,886	$ 22,597,465

Product and Services Segment

Products. Our Product revenues include cogeneration systems that supply electricity and hot water, chillers that provide air-conditioning and hot water and engineered accessories, which consist of ancillary products and parts necessary to install a cogeneration unit including integration into the customers' existing electrical and mechanical systems. Prior to January 1, 2021, engineered accessories revenue and cost of sales had been reported in our financial statements under Installation Services. Engineered accessories revenue and cost of sales from prior periods have been reclassified to conform with the current year presentation. We refer to the package of engineered accessories and engineering and design services necessary for the customers' installation of a cogeneration unit as light installation services.

We transfer control and generally recognize a sale when we ship a product from our manufacturing facility at which point the customer takes ownership of the product. Payment terms on product sales are generally 30 days.

We recognize revenue in certain circumstances before delivery to the customer has occurred (commonly referred to as bill and hold transactions). We recognize revenue related to such transactions once, among other things, the customer has made a written fixed commitment to purchase the product(s) under normal billing and credit terms, the customer has requested the product(s) be held for future delivery as scheduled and designated by them, risk of ownership has been assumed by the customer, and the product(s) are tagged as sold and segregated for storage awaiting further direction from the customer. Due to the infrequent nature and duration of bill and hold arrangements, the value associated with custodial storage services is deemed immaterial in the context of the contract and in total, and accordingly, none of the transaction price is allocated to such service.

Depending on the product and terms of the arrangement, we may defer the recognition of a portion of the transaction price received because we have to satisfy a future obligation (e.g., product start-up service). Amounts allocated to product start-up services are recognized as revenue when the start-up service has been completed. We use an observable selling price to determine standalone selling prices where available and either a combination of an adjusted market assessment approach, an expected cost plus a margin approach, and/or a residual approach to determine the standalone selling prices for separate performance obligations as a basis for allocating contract consideration when an observable selling price is not available. Amounts received but not recognized pending completion of performance are recognized as contract liabilities and are recorded as deferred revenue along with deposits by customers.

Installation Services. We provide installation services typically including all necessary engineering and design, labor, subcontract labor and service to install a cogeneration unit including integration into the customers' existing electrical and mechanical systems.

Under complete turnkey installation service contracts revenue is recognized over time using the percentage-of-completion method determined on a cost to cost basis. Our performance obligation under such contracts is satisfied progressively over time as enhancements are made to customer owned and controlled properties. We measure progress towards satisfaction of the performance obligation based on an cost-based input method which we believe appropriately measures and is the most accurate depiction of the transfer of products and services to the customer under these contracts. When the financial metrics of a contract indicate a loss, our policy is to record the entire expected loss as soon as it is known. Contract costs and profit recognized to date under the percentage-of-completion method in excess of billings are recognized as contract assets and are recorded as unbilled revenue. Billings in excess of contract costs and profit are recognized as contract liabilities and are recorded as deferred revenue. Generally billings under complete turnkey installation contracts are made when contractually determined milestones of progress have been achieved, with payment terms generally being 30 days.

Maintenance Services. Maintenance services are provided under either long-term maintenance contracts or time and material maintenance contracts. Revenue under time and material maintenance contracts is recognized when the maintenance service is completed. Revenue under long-term maintenance contracts is recognized either ratably over the term of the contract where the contract price is fixed or when the periodic maintenance activities are completed where the invoiced cost to the customer is based on run hours or kilowatts produced in a given period. We use an output method to measure progress towards completion of our performance obligation which results in the recognition of revenue on the basis of a direct measurement of the value to the customer of the services transferred to date relative to the remaining services promised under the contract. We use the practical expedient at ASC 606-10-55-18 of recognizing revenue in an amount equal to the amount we have the right to invoice the customer under the contract. Payment terms for maintenance services are generally 30 days.

Energy Production Segment

Energy Production. Revenue from energy contracts is recognized when electricity, heat, hot and/or chilled water is produced by our owned on-site cogeneration systems. Each month we invoice the customer and recognize revenue for the various forms of energy delivered, based on actual meter readings which capture the quantity of the various forms of energy delivered in a given month, under a contractually defined formula which takes into account the current month's cost of energy from the local power utility.

As the various forms of energy delivered by us under energy production contracts are simultaneously delivered and consumed by the customer, our performance obligation under these contracts is considered to be satisfied over time. We use an output method to measure progress towards completion of our performance obligation which results in the recognition of revenue on the basis of a direct measurement of the value to the customer of the services transferred to date relative to the remaining services promised under the contract. We use the practical expedient at ASC 606-10-55-18 of recognizing revenue in an amount equal to the amount that we have the right to invoice the customer under the contract. Payment terms on invoices under these contracts are generally 30 days.

Contract Balances

The timing of revenue recognition, billings and cash collections result in billed accounts receivable, unbilled revenue (contract assets) and deferred revenue, consisting of customer deposits and billings in excess of revenue recognized (contract liabilities) on the condensed consolidated balance sheets.

Revenue recognized during the nine months ended September 30, 2021 that was included in unbilled revenue at the end of the period was approximately $1.0 million. Approximately $0.7 million was billed in this period that had been recognized as revenue in previous periods.

Revenue recognized during the nine months ended September 30, 2021 that was included in deferred revenue at the beginning of the period was approximately $1.2 million.

Remaining Performance Obligations

Remaining performance obligations related to ASC 606 represent the aggregate transaction price allocated to performance obligations with an original contract term of greater than one year, excluding certain maintenance contracts and all energy production contracts where a direct measurement of the value to the customer is used as a method of measuring progress towards completion of our performance obligation. Exclusion of these remaining performance obligations is due in part to the inability to quantify values based on unknown future levels of delivery and in some cases rates used to invoice customers. Remaining performance obligations therefore consist of unsatisfied or partially satisfied performance obligations related to fixed price maintenance contracts and installation contracts.

As of September 30, 2021, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately $2.1 million. We expect to recognize revenue of approximately 92.4% of the remaining performance obligations over the next 24 months, 88.1% recognized in the first 12 months and 4.3% recognized over the subsequent 12 months, and the remainder recognized thereafter.

Note 3. Income (loss) Per Common Share

Basic and diluted income (loss) per share for the three and nine months ended September 30, 2021 and 2020, respectively, were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Numerator:				
Net income (loss) available to stockholders	$ 1,466,697	$ (231,920)	$ 3,633,035	$ (2,088,195)
Denominator:				
Weighted average shares outstanding - Basic	24,850,261	24,850,261	24,850,261	24,850,257
Effect of dilutive securities:				
Stock options	304,644	—	280,904	—
Weighted average shares outstanding - Diluted	25,154,905	24,850,261	25,131,165	24,850,257
Basic income (loss) per share	$ 0.06	$ (0.01)	$ 0.15	$ (0.08)
Diluted income (loss) per share	$ 0.06	$ (0.01)	$ 0.14	$ (0.08)
Anti-dilutive shares underlying stock options outstanding	777,296	2,536,664	777,296	2,555,097

Note 4. Inventories, net

Inventories at September 30, 2021 and December 31, 2020 consisted of the following:

	September 30, 2021	December 31, 2020
Raw materials	$ 6,587,524	$ 6,227,591
Less: reserves	(381,000)	(381,000)
Raw materials, net	$ 6,206,524	$ 5,846,591
Work-in-process	716,026	329,702
Finished goods	999,494	992,303
Total inventories, net	$ 7,922,044	$ 7,168,596

Note 5. Property, Plant and Equipment, net

Property, plant and equipment at September 30, 2021 and December 31, 2020 consisted of the following:

	Estimated Useful Life (in Years)	September 30, 2021	December 31, 2020
Energy systems	1 - 15 years	$ 3,556,488	$ 3,526,514
Machinery and equipment	5 - 7 years	1,484,790	1,448,024
Furniture and fixtures	5 years	193,698	193,698
Computer software	3 - 5 years	192,865	192,865
Leasehold improvements	*	450,791	450,792
		5,878,632	5,811,893
Less - accumulated depreciation and amortization		(3,961,149)	(3,528,047)
		$ 1,917,483	$ 2,283,846

* Lesser of estimated useful life of asset or lease term

Depreciation and amortization expense on property and equipment for the three and nine months ended September 30, 2021 and 2020 was $144,181 and $450,195 and $175,869 and $527,886, respectively.

Note 6. Intangible Assets and Liabilities Other Than Goodwill

As of September 30, 2021 and December 31, 2020 we had the following amounts related to intangible assets and liabilities other than goodwill:

	September 30, 2021			December 31, 2020		
Intangible assets	**Cost**	**Accumulated Amortization**	**Total**	**Cost**	**Accumulated Amortization**	**Total**
Product certifications	$ 765,850	$ (519,083)	$ 246,767	$ 726,159	$ (478,357)	$ 247,802
Patents	864,273	(291,664)	572,609	855,014	(220,764)	634,250
Developed technology	240,000	(136,000)	104,000	240,000	(124,000)	116,000
Trademarks	26,896	—	26,896	26,896	—	26,896
In Process R&D	263,936	(18,853)	245,083	263,936	—	263,936
Favorable contract asset	384,465	(345,773)	38,692	384,465	(313,030)	71,435
	$ 2,545,420	$ (1,311,373)	$ 1,234,047	$ 2,496,470	$ (1,136,151)	$ 1,360,319
Intangible liability						
Unfavorable contract liability	$ 2,534,818	$ (1,185,926)	$ 1,348,892	$ 2,534,818	$ (917,767)	$ 1,617,051

The aggregate amortization expense related to intangible assets and liabilities exclusive of contract related intangibles for the three and nine months ended September 30, 2021 and 2020 was $51,229 and $145,306 and $21,564 and $64,692 respectively. The net credit to cost of sales related to the amortization of contract related intangible assets and liabilities for the nine months ended September 30, 2021 and 2020 was $79,570 and $238,192 and $98,053 and $301,414, respectively. During the nine months ended September 30, 2021 and 2020, we abandoned certain patent applications amounting to $7,400 and $179,944, respectively, and recorded an abandonment charge in general and administrative expenses in each respective period.

Favorable/Unfavorable Contract Assets and Liabilities

The favorable contract asset and unfavorable contract liability in the foregoing table represent the estimated fair value of American DG Energy's customer contracts (both positive for favorable contracts and negative for unfavorable contracts) which were acquired by us in May 2017.

Amortization of intangibles including contract related amounts is calculated using the straight-line method over the remaining useful life or contract term. Aggregate future amortization over the next five years and thereafter as of September 30, 2021 is estimated to be as follows:

	Non-contract Related Intangibles	Contract Related Intangibles	Total
Year 1	$ 204,679	$ (323,761)	$ (119,082)
Year 2	199,576	(269,825)	(70,249)
Year 3	182,373	(217,757)	(35,384)
Year 4	173,803	(151,920)	21,883
Year 5	169,787	(90,035)	79,752
Thereafter	254,896	(273,557)	(18,661)
Total	$ 1,185,114	(1,326,855)	$ (141,741)

Note 7. Sale of Energy Producing Assets and Goodwill Impairment

During the first quarter of 2019 we recognized two individual sales of energy producing assets, for a total of eight power purchase agreements, including the associated energy production contracts for total consideration of $7 million.

In connection with these assets sales, we entered into agreements with the purchaser to maintain and operate the assets over the remaining periods of the associated energy production contracts (through August 2033 and January 2034, respectively) in exchange for monthly maintenance and operating fees. These agreements contain provisions whereby we have guaranteed to the purchaser a minimum level or threshold of cash flows from the associated energy production contracts. Actual results are compared to the minimum threshold bi-annually and we are contractually obligated to reimburse any shortfall to the purchaser. To the extent actual cash flow results exceed the minimum threshold, we are entitled to fifty percent of such excess under the agreements.

The foregoing agreements also contain provisions whereby we have agreed to make whole the purchaser in the event the counterparty to the energy production contract(s) defaults on or otherwise terminates before the stated expiration of the energy production contract. Should we be required to make whole the purchaser under such provisions, we would be entitled to seek recovery from the counterparty to the energy production contract(s) under a similar provision contained in those contracts in respect of early termination.

We are also responsible under the agreements for site decommissioning costs, if any, in excess of certain threshold amounts by site. Decommissioning of site assets is performed when, if and as requested by the counterparty to the energy production contract upon termination of the energy production contract.

Note 8. Leases

Our leases principally consist of operating leases related to our corporate office, field offices, and our research, manufacturing and storage facilities.

At inception, we determine if an arrangement contains a lease and whether that lease meets the classification criteria of a finance or operating lease. Some of our lease agreements contain lease components (e.g. minimum rent payments) and non-lease components (e.g. maintenance, labor charges, etc.). We account for each component separately based on the estimated standalone price of each component.

Operating leases are included in Right-of-use assets, Lease obligations, current and Lease obligations, long term on the condensed consolidated balance sheets. These assets and liabilities are recognized at the commencement date based on the present value of remaining lease payments over the lease term and using an incremental borrowing rate consistent with the lease terms or implicit rates, when readily determinable. For those leases where it is reasonably certain at the commencement date that we will exercise the option to extend the lease, then the lease term will include the lease extension term. Short-term operating leases, which have an initial term of 12 months or less, are not recorded on the balance sheet.

Lease expense for operating leases, which principally consist of fixed payments for base rent, is recognized on a straight-line basis over the lease term. Lease expense for the three and nine months ended September 30, 2021 and 2020 was $197,651 and $591,867 and $179,042 and $565,180, respectively.

Supplemental information related to leases for the nine months ended September 30, 2021 was as follows:

Cash paid for amounts included in the measurement of operating lease liabilities	$	534,073
Weighted-average remaining lease term - operating leases		4.1 years
Weighted-average discount rate - operating leases		6 %

Future minimum lease commitments under non-cancellable operating leases as of September 30, 2021 were as follows:

		Operating Leases
Year 1	$	181,566
Year 2		733,693
Year 3		744,981
Year 4		298,980
Year 5		108,762
Thereafter		331,128
Total lease payments		2,399,110
Less: imputed interest		290,665
Total	$	2,108,445

Note 9. Stock-Based Compensation

Stock-Based Compensation

We adopted a 2006 Stock Option and Incentive Plan, or the Plan, under which the Board of Directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants. The Plan was amended at various dates by the Board of Directors to increase the reserved shares of common stock issuable under the Amended Plan to 3,838,750 as of September 30, 2021, and in June 2017 stockholders approved an amendment to extend the termination date of the Plan to January 1, 2026 and ratified all of our option grants issued after January 1, 2016 (the "Amended Plan").

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Amended Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan cannot be less than the fair market value of the underlying shares on the date of the grant. The number of shares remaining available for future issuance under the Amended Plan as of September 30, 2021 was 710,068.

Stock option activity for the nine months ended September 30, 2021 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share		Weighted Average Exercise Price	Weighted Average Remaining Life		Aggregate Intrinsic Value
Outstanding, December 31, 2020	2,496,242	$0.71-$10.33	$	1.94	7.37 years	$	731,744
Granted	208,000	$1.75	$	1.75			
Exercised	—						
Canceled and forfeited	(253,500)	$2.60	$	2.60			
Outstanding, September 30, 2021	2,450,742	$0.71-$10.33	$	1.86	7.62 years	$	1,608,837
Exercisable, September 30, 2021	794,533		$	3.48		$	163,557
Vested and expected to vest, September 30, 2021	2,202,311		$	1.95		$	1,392,045

Consolidated stock-based compensation expense for the three and nine months ended September 30, 2021 and 2020 was $56,889 and $150,655 and $50,582 and $132,312, respectively. No tax benefit was recognized related to the stock-based compensation recorded during the period.

At September 30, 2021 the total compensation cost related to unvested stock option awards not yet recognized is $506,958 and this amount will be recognized over a weighted average period of 2.01 years.

Note 10. Fair Value Measurements

The fair value topic of the FASB Accounting Standards Codification defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The accounting guidance also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. We currently do not have any Level 1 financial assets or liabilities.

Level 2 - Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full term of the asset or liability. We have Level 2 financial assets and liabilities as provided below.

Level 3 - Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. We do not currently have any Level 3 financial assets or liabilities.

The following tables presents the asset reported in "other assets" in the consolidated balance sheet measured at its fair value on a recurring basis as of September 30, 2021 and December 31, 2020 by level within the fair value hierarchy.

September 30, 2021		Quoted prices in active markets for identical assets	Significant other observable inputs	Significant unobservable inputs
Description	**Total**	**Level 1**	**Level 2**	**Level 3**
Recurring fair value measurements				
Marketable equity securities				
EuroSite Power Inc.	$ 131,242	$ —	$ 131,242	$ —
Total recurring fair value measurements	$ 131,242	$ —	$ 131,242	$ —

December 31, 2020		Quoted prices in active markets for identical assets	Significant other observable inputs	Significant unobservable inputs
Description	**Total**	**Level 1**	**Level 2**	**Level 3**
Recurring fair value measurements				
Marketable equity securities				
EuroSite Power Inc.	$ 118,084	$ —	$ 118,084	$ —
Total recurring fair value measurements	$ 118,084	$ —	$ 118,084	$ —

We utilize a Level 2 category fair value measurement to value its investment in EuroSite Power, Inc. as a marketable equity security at period end. That measurement is equal to the quoted market closing price at period end. Since this security is not actively traded we classify it as Level 2.

The following table summarizes changes in Level 2 assets which are comprised of marketable equity securities for the nine months ended September 30, 2021 and 2020:

Fair value at December 31, 2020	$	118,084
Sale of 93,187 shares		(5,591)
Unrealized gain		18,749
Fair value at September 30, 2021	$	131,242
Fair value at December 31, 2019	$	216,487
Unrealized loss		(98,403)
Fair value at September 30, 2020	$	118,084

During the nine months ended September 30, 2021, we received net proceeds of $11,637 from the sale of 93,187 shares of Eurosite Power, Inc. common stock, and recognized a realized gain of $6,046 which is included in other income (expense), net in the condensed consolidated statements of operations.

Note 11. Revolving Line of Credit and Notes Payable

On May 4, 2018 we entered into a Credit Agreement with Webster Business Credit Corporation ("Webster") that provided a line of credit of up to $10 million to us on a revolving and secured basis, with availability based on certain accounts receivables, raw materials, and finished goods.

Borrowings under the Credit Agreement bore interest at a rate equal to, at our option, either (1) One Month LIBOR, plus 3.00%, or (2) Webster's Base Rate, plus 1.5%. Webster's Base Rate is defined as the highest of (a) the Federal Funds rate plus 0.5%, (b) Webster's Prime Rate as adjusted by bank from time to time, and (c) One Month LIBOR, plus 2.75%.

The Credit Agreement contained certain affirmative and negative covenants applicable to us, which included, among other things, restrictions on our ability to (i) incur additional indebtedness, (ii) make certain investments, (iii) acquire other entities, (iv) dispose of assets and (v) make certain payments including those related to dividends or repurchase of equity. The Credit Agreement also contains financial covenants including maintaining a fixed charge coverage ratio of not less than 1.10:1.00 and we may not make any financed capital expenditures in excess of $500,000 in the aggregate in any fiscal year.

The $145,011 of costs incurred in connection with the issuance of the revolving credit facility were capitalized and were being amortized to interest expense on a straight-line basis over three years based on the contractual term of the Agreement.

On May 11, 2020, we terminated our Credit Agreement with Webster, together with several related agreements including, a Revolving Note Security Agreement, Blocked Account Agreement, and Master Letter of Credit Agreement. We paid an early termination fee of $25,000 to terminate the Credit Agreement. As of May 11, 2020, the outstanding balance under the line of credit and accrued and unpaid interest was $0.

Paycheck Protection Program Loan

On April 17, 2020, we obtained an unsecured loan through Webster Bank, N.A. in the amount of $1,874,200 in connection with the Paycheck Protection Program pursuant to the Coronavirus Aid, Relief, and Economic Security Act, as amended ("CARES Act") administered by the United States Small Business Administration ("SBA"). The loan was guaranteed by the SBA. Interest on the loan balance was at the rate of 1% per year, and as a result of the enactment of the Paycheck Protection Program Flexibility Act of 2020 ("PPP Flexibility Act"), repayment of the loan balance could be deferred until August 2021, at which time the balance would be payable in 18 monthly installments of $106,356 with the final payment due in January 2023 if not forgiven in accordance with the CARES Act and the terms of the Promissory Note executed by us in connection with the loan. The loan could be prepaid at any time without penalty. The loan agreement and promissory note include customary provisions for a loan of this type, including prohibitions on our payment of dividends or repurchase of shares of our common stock while the loan remains outstanding. The loan agreement and promissory note also defines events of default to include, among other things, payment defaults, breaches of provisions of the loan agreement or the promissory note and cross-defaults on other loans, if applicable.

On January 19, 2021, we received a letter dated January 12, 2021 from Webster Bank, NA confirming that the Paycheck Protection Program Loan issued to us pursuant to the CARES Act, as amended, in the original principal amount of $1,874,200 together with accrued interest of $13,659 was forgiven in full as of January 11, 2021. We have accounted for the loan forgiveness of $1,887,859 as debt extinguishment in accordance with Accounting Standards Update 2020-09, *Debt (Topic 470) ("ASU 2020-09")* and reported as a separate component of other income (expense), net in the condensed consolidated statements of operations for the nine months ended September 30, 2021. The loan forgiveness is expected to be nontaxable for both state and federal purposes and has been treated accordingly in our condensed consolidated financial statements.

Paycheck Protection Program Second Draw Loan

On February 5, 2021, we obtained a Paycheck Protection Program Second Draw unsecured loan through Webster Bank, N.A. in the amount of $1,874,269 pursuant to the CARES Act. The loan was guaranteed by the SBA. Interest on the loan balance was at the rate of 1% per year, and repayment of the loan balance could be deferred until June 5, 2022. If not forgiven in accordance with the CARES Act, as amended, the loan was repayable in forty-four (44) monthly installments of $43,400 beginning July 5, 2022 with final payment due on February 5, 2026. The loan could be prepaid at any time without penalty. The loan agreement and promissory note included customary provisions for a loan of this type, including prohibitions on our payment of dividends or repurchase of shares of our common stock while the loan remains outstanding. The loan agreement and promissory note defines events of default to include, among other things, payment defaults, breaches of provisions of the loan agreement or the promissory note and cross-defaults on other loans, if applicable.

On September 20, 2021, we received a letter dated September 13, 2021 from Webster Bank, NA confirming that the Paycheck Protection Program Second Draw Loan issued to us pursuant to the CARES Act, as amended, in the original principal amount of $1,874,269 together with accrued interest of $11,386 was forgiven in full as of September 8, 2021. We have accounted for the loan forgiveness of $1,885,655 as debt extinguishment in accordance with Accounting Standards Update 2020-09, *Debt (Topic 470) ("ASU 2020-09")* and reported as a separate component of other income (expense), net in the condensed consolidated statements of operations for the three and nine months ended September 30, 2021. The loan forgiveness is expected to be nontaxable for both state and federal purposes and has been treated accordingly in our condensed consolidated financial statements.

Note 12. Commitments and Contingencies

We guarantee certain obligations of EuroSite Power Inc, a former subsidiary of American DG Energy Inc. These guarantees include a payment performance guarantee in respect of collateralized equipment financing loans, with a remaining principal amount outstanding subject to the guarantee at September 30, 2021 of approximately $656 and certain guarantees of performance in respect of certain customer contracts. Based on current conditions, we do not believe there to be any amounts probable of payment by us under any of the guarantees and have estimated the value associated with the non-contingent aspect of the guarantees is approximately $7,000 which is recorded as a liability in the condensed consolidated balance sheets.

Note 13. Segments

As of September 30, 2021, we were organized intotwo operating segments through which senior management evaluates our business. These segments, as described in more detail in Note 1, are organized around the products and services provided to customers and represent our reportable segments. The following table presents information by reportable segment for the three and nine months ended September 30, 2021 and 2020:

	Products and Services	Energy Production	Corporate, other and elimination (1)	Total
Three Months Ended September 30, 2021				
Revenue - external customers	$ 4,700,576	$ 315,292	$ —	$ 5,015,868
Intersegment revenue	48,111	—	(48,111)	—
Total revenue	$ 4,748,687	$ 315,292	$ (48,111)	$ 5,015,868
Gross profit	$ 2,197,161	$ 144,774	$ —	$ 2,341,935
Identifiable assets	$ 28,079,758	$ 4,400,992	$ —	$ 32,480,750
Three Months Ended September 30, 2020				
Revenue - external customers	$ 6,831,012	$ 368,695	$ —	$ 7,199,707
Intersegment revenue	77,514	—	(77,514)	—
Total revenue	$ 6,908,526	$ 368,695	$ (77,514)	$ 7,199,707
Gross profit	$ 2,615,657	$ 171,087	$ —	$ 2,786,744
Identifiable assets	$ 21,031,221	$ 2,877,859	$ 11,338,685	$ 35,247,765
Nine Months Ended September 30, 2021				
Revenue - external customers	$ 15,878,683	$ 1,339,448	$ —	$ 17,218,131
Intersegment revenue	236,155	—	(236,155)	—
Total revenue	$ 16,114,838	$ 1,339,448	$ (236,155)	$ 17,218,131
Gross profit	$ 7,593,267	$ 542,515	$ —	$ 8,135,782
Identifiable assets	$ 28,079,758	$ 4,400,992	$ —	$ 32,480,750
Nine Months Ended September 30, 2020				
Revenue - external customers	$ 21,201,579	$ 1,395,886	$ —	$ 22,597,465
Intersegment revenue	309,224	—	(309,224)	—
Total revenue	$ 21,510,803	$ 1,395,886	$ (309,224)	$ 22,597,465
Gross profit	$ 7,976,904	$ 507,998	$ —	$ 8,484,902
Identifiable assets	$ 21,031,221	$ 2,877,859	$ 11,338,685	$ 35,247,765

(1) Corporate, intersegment revenue, other and elimination includes various corporate assets.

Note 14. Subsequent Events

We have evaluated subsequent events through the date of this filing and determined that no material subsequent events occurred that would require recognition in the consolidated financial statements or disclosure in the notes thereto.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Management's Discussion and Analysis of Financial Condition and Results of Operations and other parts of this Quarterly Report on Form 10-Q ("Form 10-Q") contain forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. For example, statements in this Form 10-Q regarding the potential future impact of the COVID-19 pandemic on our business and results of operations are forward-looking statements. Forward-looking statements can also be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "will," "would," "could," "can," "may," and similar terms. Forward-looking statements are not guarantees of future performance and our actual results may differ significantly from the results discussed in the forward-looking statements. Such forward-looking statements include, among other things, statements regarding the impact of the coronavirus pandemic on demand for our products and services, the availability of incentives, rebates, and tax benefits relating to our products, changes in the regulatory environment relating to our products, competing technological developments, and the availability of financing to fund our operations and growth. Factors that might cause such differences include, but are not limited to, those discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2020 ("2020 Form 10-K"), as supplemented, and Part II, Item 1A of this Form 10-Q, in each case under the heading "Risk Factors." The following discussion should be read in conjunction with the 2020 Form 10-K filed with the Securities and Exchange Commission ("SEC") and the condensed consolidated financial statements and accompanying notes included in Part I, Item 1 of this Form 10-Q. Each of the terms "Tecogen," "we," "our," and "us" as used herein refer collectively to Tecogen Inc. and our wholly owned subsidiaries, unless otherwise stated. While we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and you should not rely on those forward-looking statements as representing ours views as of any date subsequent to the date of the filing of this Form 10-Q.

Recent Developments

Paycheck Protection Program Loan

On April 17, 2020, we obtained an unsecured loan in the principal amount of $1,874,200 from Webster Bank, NA ("Webster") under the Paycheck Protection Program adopted pursuant to the Coronavirus Aid, Relief and Economic Recovery Act, as amended ("CARES Act"). The loan was forgivable if the proceeds were utilized by us for payroll, utilities, and rent expenses. On January 19, 2021 we received confirmation from Webster that the Paycheck Protection Program Loan in the original principal amount of $1,874,200 together with accrued interest of $13,659 was forgiven in full effective as of January 11, 2021. The loan forgiveness of $1,887,859 was accounted for as debt extinguishment and is reported as a separate component of other income (expense), net in the condensed consolidated statements of earnings for the nine months ended September 30, 2021.

Paycheck Protection Program Second Draw Loan

On February 5, 2021, we obtained a Paycheck Protection Program Second Draw unsecured loan through Webster in the amount of $1,874,269 in connection with the Paycheck Protection Program pursuant to the CARES Act. The loan is guaranteed by the United States Small Business Administration. On September 20, 2021, we received a letter dated September 13, 2021 from Webster Bank, NA confirming that the Paycheck Protection Program Second Draw Loan issued to us pursuant to the CARES Act, as amended, in the original principal amount of $1,874,269 together with accrued interest of $11,386 was forgiven in full as of September 8, 2021. The loan forgiveness of $1,885,655 was accounted for as debt extinguishment and is reported as a separate component of other income (expense), net in the condensed consolidated statements of earnings for the three and nine months ended September 30, 2021.

Employee Retention Credit

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was signed into law providing numerous tax provisions and other stimulus measures, including an employee retention credit ("ERC"), which is a refundable tax credit against certain employment taxes. The Taxpayer Certainty and Disaster Tax Relief Act of 2020 and the American Rescue Plan Act of 2021 extended and expanded the availability of the ERC. The ERC is available through December 31, 2021 and is equal to 70% of qualified wages (which includes employer qualified health plan expenses) paid to employees. In addition, the availability of the ERC was permitted to entities that received a Paycheck Protection Loan subject to certain conditions. During each quarter in 2021, a maximum of $10,000 in qualified wages for each employee is eligible for the ERC. Therefore, the maximum tax credit that can be claimed by an eligible employer in 2021 is $7,000 per employee per calendar quarter. Section 2301(c)(2)(B) of the CARES Act permits an employer to use an alternative quarter to calculate gross receipts and the employer may determine if the decline in gross receipts tests is met for a calendar quarter in 2021 by comparing its gross receipts for the immediately preceding calendar quarter with those for the corresponding calendar quarter in 2019. Accordingly, for the first quarter of 2021, we elected to use our gross receipts for the fourth calendar quarter of 2020 compared to our gross receipts for the fourth calendar quarter of 2019. As a result of our election to use an alternative quarter, we
qualified for the ERC in the first, second and third quarters of 2021 because our gross receipts decreased by more than 20% from the first, second and third quarters of 2019. As a result of averaging 100 or fewer full-time employees in 2019, all wages paid to employees in the first, second and third quarters of 2021 were eligible for the ERC (rather than just wages paid to employees not providing services). During the three and nine months ended September 30, 2021, we recorded ERC benefits of $562,253 and $1,276,021 and, respectively in other income (expense), net in our condensed consolidated statements of operations.

COVID-19 Update

During the first quarter of fiscal 2020, a novel strain of coronavirus ("COVID-19") began spreading rapidly throughout the world, prompting governments and businesses to take unprecedented measures in response. Such measures included restrictions on travel and business operations, temporary closures of businesses, and quarantines and shelter-in-place orders. The COVID-19 pandemic has significantly curtailed global economic activity and caused significant volatility and disruption in global financial markets. The COVID-19 pandemic and the measures taken by U.S. Federal, state and local governments in response have materially adversely affected and could in the future materially adversely impact our business, results of operations, financial condition, and stock price. The pandemic has impacted our operations, revenues and cash flows and the future impact of the pandemic remains uncertain. It may be affected by factors including growth in the number of infections, any increase in the prevalence of highly transmissible COVID-19 variants, the duration of the pandemic, steps taken to combat the pandemic, and the availability and acceptance of effective treatments.

We have made every effort to keep our employees who operate our business safe and minimize unnecessary risk of exposure to the virus. Our service centers have continued to operate due to our essential services designation, however from time to time our service personnel have been unable to perform maintenance services for customers that temporarily ceased or reduced operations at facilities served by our equipment, and certain customers closed their operations, reducing the amount of energy produced and sold to customers during these periods. During the nine-month period ended September 30, 2021, we did see a recovery in our energy production revenues as normal business operations are beginning to resume due to the lifting of government-imposed COVID-19 restrictions. During the pandemic we have also experienced slower payments from certain customers. These business interruptions resulted in reductions in service and installation revenue, energy production revenue, and margins in the affected portions of our business.

Overview

Tecogen designs, manufactures and sells industrial and commercial cogeneration systems that produce combinations of electricity, hot water and air conditioning using automotive engines that have been adapted to run on natural gas. In some cases, our customers may choose to have us engineer and install the system for them rather than simply purchase the cogeneration and/or chiller units, which we refer to as "turnkey" projects. Cogeneration systems are efficient because, in addition to supplying mechanical energy to power electric generators or compressors – displacing utility supplied electricity – they provide an opportunity for the facility to incorporate the engine's waste heat into onsite processes, such as space and potable water heating. We produce standardized, modular, small-scale products, with a limited number of product configurations that are adaptable to multiple applications. We refer to these combined heat and power products as CHP (electricity plus heat) and MCHP (mechanical power plus heat).

Our products are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. We have agreements in place with distributors and sales representatives. Our existing customers include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, military installations and indoor growing facilities. We have an installed base of more than 3,000 units. Our products have long useful lives with proper maintenance. Some of our units have been operating for over 35 years.

With the acquisition of American DG Energy Inc. ("ADGE") in May 2017, we added an additional source of revenue. Through ADGE, we install, own, operate and maintain complete distributed generation of electricity systems, or DG systems or energy systems, and other complementary systems at customer sites, and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We use a contractually defined formula to multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from each customer's local energy utility, to derive the value of our monthly energy sale, which includes a negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customer's local energy utility that month.

Our operations are comprised of two business segments. Our Products and Services segment designs, manufactures and sells industrial and commercial cogeneration systems as described above. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

Results of Operations

Third Quarter of 2021 Compared to Third Quarter of 2020

The following table sets forth for the periods indicated, the percentage of net sales represented by certain items reflected in our condensed consolidated statements of operations:

	Three Months Ended	
	September 30, 2021	September 30, 2020
Revenues	100.0%	100.0%
Cost of sales	53.3%	61.3%
Gross profit	46.7%	38.7%
Operating expenses		
General and administrative	49.3%	32.2%
Selling	13.1%	7.8%
Research and development	2.4%	1.5%
Total operating expenses	64.8%	41.6%
Loss from operations	(18.1) %	(2.9) %
Total other income (expense), net	47.9%	(0.1) %
Consolidated net income (loss)	29.7%	(3.1) %
Income attributable to the non-controlling interest	(0.4) %	(0.1) %
Net income (loss) attributable to Tecogen, Inc.	29.2%	(3.2) %

Revenues

The following table presents revenue for the periods indicated, by segment and the change from the prior year:

	Three Months Ended September 30,			
	2021	2020	Increase (Decrease) $	Increase (Decrease) %
REVENUES:				
Products				
Cogeneration	$ 1,446,001	$ 1,889,941	$ (443,940)	(23.5) %
Chiller	383,100	769,694	(386,594)	(50.2) %
Engineered accessories	42,231	45,787	(3,556)	(7.8) %
Total product revenues	1,871,332	2,705,422	(834,090)	(30.8) %
Services				
Maintenance services	2,766,168	2,611,904	154,264	5.9 %
Installation services	63,076	1,513,686	(1,450,610)	(95.8) %
Total service revenues	2,829,244	4,125,590	(1,296,346)	(31.4) %
Products and services	4,700,576	6,831,012	(2,130,436)	(31.2) %
Energy production revenues	315,292	368,695	(53,403)	(14.5) %
Total revenues	$ 5,015,868	$ 7,199,707	$ (2,183,839)	(30.3) %

Total revenues for the three months ended September 30, 2021 were $5,015,868 compared to $7,199,707 for the same period in 2020, a decrease of $2,183,839 or 30.3% year over year.

Products and Services

Product revenues in the three months ended September 30, 2021 were $1,871,332 compared to $2,705,422 for the same period in 2020, a decrease of $834,090, or 30.8%. The decrease in revenue during the three months ended September 30, 2021 is due primarily to a decrease in cogeneration sales of $443,940 due to decreased unit volume, a decrease in chiller sales of $386,594 due to decreased unit volume and, to a lesser extent, a decrease in sales of engineered accessories of $3,556. Our product sales mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales in which revenue is recognized upon shipment were impacted as energy and other construction projects were delayed due to the COVID-19 pandemic. Further, in the three months ended September 30, 2021 we experienced supply chain delays which impacted our product sales.

Service revenues in the three months ended September 30, 2021 were $2,829,244, compared to $4,125,590 for the same period in 2020, a decrease of $1,296,346, or 31.4%. The decrease in revenue during the three months ended September 30, 2021 is due primarily to a decrease in installation revenues of $1,450,610, offset partially by an increase of $154,264, or 5.9%, in service contract revenues. While service contract revenue generally remains relatively constant, installation activity can vary widely depending on the status of various projects.

Energy Production

Energy production revenues in the three months ended September 30, 2021 were $315,292, compared to $368,695 for the same period in 2020, a decrease of $53,403, or 14.5%. The decrease in energy production revenue is a consequence of certain energy production sites that are not fully operational or have permanently closed. For sites that have not permanently closed, energy production revenues at these sites decreased 7.6% in the three months ended September 30, 2021 compared to the same period in 2020.

Cost of Sales

Cost of sales in the three months ended September 30, 2021 was $2,673,933 compared to $4,412,963 for the same period in 2020, a decrease of $1,739,030, or 39.4%. The decrease in cost of sales is due to the reduction of Products and Services revenues and their related cost of sales. During the three months ended September 30, 2021 our gross margin increased to 46.7% compared to 38.7% for the same period in 2020, a 8.0% percentage point increase. The increase in the gross margin percentage is due to higher margin on both our cogeneration and chiller products due to higher sales prices and lower warranty costs, and an overall change in sales mix to increased higher margin service contract revenue.

Products and Services

Cost of sales for products and services in the three months ended September 30, 2021 was $2,503,415 compared to $4,215,355 for the same period in 2020, a decrease of $1,711,940, or 40.6%. During the three months ended September 30, 2021, our products and services gross margin was 46.7% compared to 38.3% for the same period in 2020, an 8.4% percentage point increase. The increase in products and services gross margin is due primarily to a shift in revenue mix to proportionately higher service maintenance revenues and lower installation activities in the three months ended September 30, 2021 compared to the same period in 2020.

Energy Production

Cost of sales for energy production in the three months ended September 30, 2021 was $170,518 compared to $197,608 for the same period in 2020, a decrease of $27,090, or 13.7%. During the three months ended September 30, 2021 our energy production gross margin decreased to 46.0% compared to 46.4% for the same period in 2020, a 0.4% percentage point decrease. The decrease in the energy production gross margin is due to decreased runtime at our energy production sites in the three months ended September 30, 2021 compared to the same period in 2020.

Operating Expenses

Operating expenses increased $258,207, or 8.6%, to $3,252,106 in the three months ended September 30, 2021 compared to $2,993,899 in the same period in 2020.

Operating Expenses	Three Months Ended September 30, 2021	Three Months Ended September 30, 2020	Increase (Decrease) $	Increase (Decrease) %
General and administrative	$ 2,473,190	$ 2,318,789	$ 154,401	6.7 %
Selling	656,885	563,857	93,028	16.5 %
Research and development	122,031	111,253	10,778	9.7 %
Total	$ 3,252,106	$ 2,993,899	$ 258,207	8.6 %

General and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. General and administrative expenses for the three months ended September 30, 2021 were $2,473,190 compared to $2,318,789 for the same period in 2020, an increase of $154,401 or 6.7%. General and administrative expenses increased due to a $92,669 increase in payroll and payroll related costs, a $52,000 increase in bad debt expense and a $25,795 increase in depreciation and amortization expense, partially offset by a $20,786 decrease in legal expense.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the three months ended September 30, 2021 were $656,885 compared to $563,857 for the same period in 2020, an increase of $93,028 or 16.5%. The increase is due to higher sales commissions which increased $118,934 due to proportionately higher sales agent product sales and decreased royalty expense which decreased $5,165 due to decreased InVerde cogeneration sales.

Research and development expenses consist of engineering and technical staff, materials, outside consulting and other related expenses. Research and development expenses for the three months ended September 30, 2021 were $122,031 compared to $111,253 for the same period in 2020, an increase of $10,778 or 9.7%.

Loss from Operations

Our loss from operations for the three months ended September 30, 2021 was $910,171 compared to a loss of $207,155 for the same period in 2020, an increase of $703,016. The increase in our loss from operations is due primarily to the lower revenue for our Products and Services Segment and our Energy Production Segment and a $258,207 increase in operating expenses.

Other Income (Expense), net

Other income, net for the three months ended September 30, 2021 was $2,401,758 compared to other expense, net of $4,857 for the same period in 2020, an increase of $2,406,615. The increase in other income in the three months ended September 30, 2021 is due primarily to the gain on the extinguishment of debt of $1,885,655 as a result of the Paycheck Protection Program Second Draw Loan forgiveness, the recognition of the Employee Retention Credit of $562,253 for the third calendar quarter of 2021, a $990 decrease in interest expense and partially offset by an increase in the unrealized loss on investment securities of $37,497 compared to the same period in 2020. The reduction in interest expense is due to the May 2020 termination of our Credit Agreement with Webster Business Credit Corporation. See Note 11. *"Revolving Line of Credit and Notes Payable"* to our unaudited condensed consolidated financial statements for the period ended September 30, 2021.

Provision for State Income Taxes

The provision for state income taxes for the three months ended September 30, 2021 and 2020 was $3,000 and $9,397, respectively and represents estimated income tax payments, net of refunds to various states.

Non-controlling Interest

Income attributable to the non-controlling interest was $21,890 for the three months ended September 30, 2021 which represents the non-controlling interest portion of American DG Energy's 51% owned subsidiary, American DG New York, LLC. For the same period in 2020, income attributable to the non-controlling interest was $10,511.

Net Income (Loss) Attributable to Tecogen Inc

The net income (loss) attributable to Tecogen for the three months ended September 30, 2021 was net income of $1,466,697 compared to a net loss of $231,920 for the same period in 2020, an improvement of $1,698,617, or 732.4%.The improvement is due primarily to the extinguishment of debt associated with the forgiveness of the Paycheck Protection Program Second Draw loan and recognition of the Employee Retention Credit in the three months ended September 30, 2021.

Net Income (Loss) per Share

The net income (loss) per share, basic and diluted, for the three months ended September 30, 2021 was net income per share of $0.06 compared to net loss per share of $0.01 for the same period in 2020. Weighted average shares outstanding used to calculate basic and diluted earnings per share for the three months ended September 30, 2021 were 24,850,261 and 25,154,905 shares, respectively, and for the same period in 2020 were 24,850,261 and 24,850,261 shares, respectively.

Nine Months Ended September 30, 2021 compared to the Nine Months Ended September 30, 2020

The following table sets forth for the periods indicated, the percentage of net sales represented by certain items reflected in our condensed consolidated statements of operations:

	Nine Months Ended	
	September 30, 2021	September 30, 2020
Revenues	100.0%	100.0%
Cost of sales	52.7%	62.5%
Gross profit	47.3%	37.5%
Operating expenses		
General and administrative	42.8%	33.8%
Selling	10.2%	8.9%
Research and development	2.2%	2.8%
Total operating expenses	55.1%	45.6%
Loss from operations	(7.9)%	(8.1)%
Total other income (expense), net	29.3%	(0.9)%
Consolidated net income (loss)	21.3%	(9.1)%
Income attributable to the non-controlling interest	(0.2)%	(0.1)%
Net income (loss) attributable to Tecogen, Inc.	21.1%	(9.2)%

Revenues

The following table presents revenue for the periods indicated, by segment and the change from the prior year:

	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020	Increase (Decrease) $	Increase (Decrease) %
REVENUES:				
Products				
Cogeneration	$ 2,542,962	$ 8,234,423	$ (5,691,461)	(69.1) %
Chiller	2,929,411	518,485	2,410,926	465.0 %
Engineered accessories	967,608	790,408	177,200	22.4 %
Total product revenues	6,439,981	9,543,316	(3,103,335)	(32.5) %
Services				
Maintenance services	8,613,377	7,533,072	1,080,305	14.3 %
Installation services	825,325	4,125,191	(3,299,866)	(80.0) %
Total service revenues	9,438,702	11,658,263	(2,219,561)	(19.0) %
Products and services	15,878,683	21,201,579	(5,322,896)	(25.1) %
Energy production revenues	1,339,448	1,395,886	(56,438)	(4.0) %
Total revenues	$ 17,218,131	$ 22,597,465	$ (5,379,334)	(23.8) %

Total revenues for the nine months ended September 30, 2021 were $17,218,131 compared to $22,597,465 for the same period in 2020, a decrease of $5,379,334 or 23.8% year over year primarily due to a $5,322,896 decrease in Products and Services revenue due to decreased cogeneration sales and installation revenue.

Products and Services

Product revenues in the nine months ended September 30, 2021 were $6,439,981 compared to $9,543,316 for the same period in 2020, a decrease of $3,103,335, or 32.5%.This decrease is due primarily to a decrease in cogeneration sales of $5,691,461 due to decreased unit volume, partially offset by an increase in chiller sales of $2,410,926 due to increased unit volume and increased sales of engineered accessories of $177,200. Chiller sales in the first quarter of 2020 were negatively impacted by the return of chiller products of approximately $655,000. Our product sales mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales in which revenue is recognized upon shipment and were negatively impacted as energy and other construction projects were delayed due to the COVID-19 pandemic. Further, in the nine months ended September 30, 2021 we experienced supply chain delays which impacted our product sales.

Service revenues in the nine months ended September 30, 2021 were $9,438,702, compared to $11,658,263 for the same period in 2020, a decrease of $2,219,561, or 19.0%. The decrease in the nine months ended September 30, 2021 is due primarily to a decrease in installation revenues of $3,299,866, offset partially by an increase of $1,080,305, or 14.3%, in service contract revenues. While service contract revenue generally remains relatively constant, installation activity can vary widely depending on the status of various projects.

Energy Production

Energy production revenues in the nine months ended September 30, 2021 were $1,339,448, compared to $1,395,886 for the same period in 2020, a decrease of $56,438, or 4.0%. The decrease in energy production revenue is a consequence of certain energy production sites that are not fully operational or have permanently close, partially offset by the revenue recognized from our share of the bi-annual excess cash flows from energy production contracts we sold in the first quarter of 2019. Energy production revenue at sites permanently closed represented 4.1% of energy production revenue during the nine months ended September 30, 2020. For sites that have not permanently closed, energy production revenues at these sites decreased 1.7% in the nine months ended September 30, 2021 compared to the same period in 2020.

Cost of Sales

Cost of sales in the nine months ended September 30, 2021 was $9,082,349 compared to $14,112,563 for the same period in 2020, a decrease of $5,030,214, or 35.6%. The decrease in cost of sales is due to the reduction of Products and Services revenues and their related cost of sales. During the nine months ended September 30, 2021 our gross margin increased to 47.3% compared to 37.5% for the same period in 2020, a 9.8% percentage point increase. The increase in the gross margin percentage is due to higher margins on both our cogeneration and chiller products due to higher sales prices and lower warranty costs and an overall change in sales mix to increased higher margin service contract revenue.

Products and Services

Cost of sales for products and services in the nine months ended September 30, 2021 was $8,285,416 compared to $13,224,675 for the same period in 2020, a decrease of $4,939,259, or 37.3%. During the first nine months of 2021, our products and services gross margin was 47.8% compared to 37.6% for the same period in 2020, a 10.2% percentage point increase. The increase in services gross margin is due primarily to a shift in revenue mix to proportionately higher service maintenance revenues and lower installation activities in the nine months ended September 30, 2021 compared to the same period in 2020.

Energy Production

Cost of sales for energy production in the nine months ended September 30, 2021 was $796,933 compared to $887,888 for the same period in 2020, a decrease of $90,955, or 10.2%. During the first nine months of 2021 our energy production gross margin increased to 40.6% compared to 36.4% for the same period in 2020, a 4.2% percentage point increase. The increase in the energy production gross margin is due to improved site operational efficiency, decreased contract maintenance costs and the reduced cost of natural gas due to decreased therms used in the nine months ended September 30, 2021 compared to the same period in 2020 and the revenue from our share of the bi-annual excess cash flows from energy production contracts we sold in the first quarter of 2019.

Operating Expenses

Operating expenses decreased $814,854, or 7.9%, to $9,494,518 in the nine months ended September 30, 2021 compared to $10,309,372 in the same period in 2020.

	Nine Months Ended			
Operating Expenses	**September 30, 2021**	**September 30, 2020**	**Increase (Decrease) $**	**Increase (Decrease) %**
General and administrative	$ 7,365,495	$ 7,645,729	$ (280,234)	(3.7) %
Selling	1,747,959	2,022,027	(274,068)	(13.6) %
Research and development	381,064	641,616	(260,552)	(40.6) %
Total	$ 9,494,518	$ 10,309,372	$ (814,854)	(7.9) %

General and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. General and administrative expenses for the nine months ended September 30, 2021 were $7,365,495 compared to $7,645,729 for the same period in 2020, a decrease of $280,234 or 3.7%. General and administrative expenses decreased due to management's continued efforts to control overhead costs, resulting in a $268,379 decrease in payroll and payroll related costs, a $182,289 decrease in legal fees due to a reduction in abandoned patent application write-downs which decreased to $7,400 in the nine months ended September 30, 2021 compared to $179,944 in nine months ended September 30, 2020, and a $95,636 decrease in franchise taxes, partially offset by a $67,807 increase in depreciation and amortization expense, a $63,631 increase in business insurance expense, $51,650 increase in bad debt expense, $41,744 increase in audit and consulting fees and a $31,014 increase in occupancy expenses.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the nine months ended September 30, 2021 were $1,747,959 compared to $2,022,027 for the same period in 2020, a decrease of $274,068 or 13.6%. The decrease is due to lower sales commissions which decreased $136,522 due to lower product sales, a $42,448 decrease in royalty expense due to decreased InVerde cogeneration sales, decreased travel and related expenses which decreased $42,690 due to COVID-19 travel curtailment and a $19,826 decrease in public relations expenses.

Research and development expenses consist of engineering and technical staff, materials, outside consulting and other related expenses. Research and development expenses for the nine months ended September 30, 2021 were $381,064 compared to $641,616 for the same period in 2020, a decrease of $260,552 or 40.6%, as certain R&D projects were curtailed or stopped entirely as a consequence of COVID-19.

Loss from Operations

Our loss from operations for the nine months ended September 30, 2021 was $1,358,736 compared to a loss of $1,824,470 for the same period in 2020, a decrease of $465,734. The decrease in our loss from operations is due primarily to the $814,854 decrease in operating expenses.

Other Income (Expense), net

Other income, net for the nine months ended September 30, 2021 was $5,053,120 compared to other expense, net of $207,534 for the same period in 2020, an increase of $5,260,654. The increase in other income in the nine months ended September 30, 2021 is due primarily to the gain on the extinguishment of debt of $3,773,014 as a result of the Paycheck Protection Program Loan forgiveness, recognition of the Employee Retention Credit of 1,276,021 for the first, second and third quarters of 2021, and to a lesser extent, a $107,501 decrease in interest expense and an increase in the unrealized gain on investment securities of $117,152. The reduction in interest expense is due to the May 2020 termination of our Credit Agreement with Webster Business Credit Corporation. See Note 11. *"Revolving Line of Credit and Notes Payable"* to our unaudited condensed consolidated financial statements for the period ended June 30, 2021.

Provision for State Income Taxes

The provision for state income taxes for the nine months ended September 30, 2021 and 2020 was $18,991 and $27,791, respectively and represents estimated income tax payments, net of refunds to various states.

Non-controlling Interest

Income attributable to the non-controlling interest was $42,358 for the nine months ended September 30, 2021 which represents the non-controlling interest portion of American DG Energy's 51% owned subsidiary, American DG New York, LLC. For the same period in 2020, income attributable to the non-controlling interest was $28,400.

Net Income (Loss) Attributable to Tecogen Inc

The net income (loss) attributable to Tecogen for the nine months ended September 30, 2021 was net income of $3,633,035 compared to a net loss of $2,088,195 for the same period in 2020, an improvement of $5,721,230, or 274.0%. The improvement is due primarily to the extinguishment of debt associated with the Paycheck Protection Program and the Paycheck Protection Program Second Draw loans, recognition of the Employee Retention Credit and lower operating expenses.

Net Income (Loss) per Share

The net income (loss) per share, basic and diluted, for the nine months ended September 30, 2021 was net income per share of $0.15 and $0.14, respectively, compared to net loss per share of $0.08 and $0.08, respectively, for the same period in 2020. Weighted average shares outstanding used to calculate basic and diluted earnings per share for the nine months ended September 30, 2021 were 24,850,261 and 25,131,165 shares, respectively, and for the same period in 2020 were 24,850,257 and 24,850,257 shares, respectively.

Liquidity and Capital Resources

The following table presents a summary of our net cash flows from operating, investing and financing activities:

Cash Provided by (Used in)	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020	Increase (Decrease)
Operating activities	$ 171,996	$ 1,413,428	$ (1,241,432)
Investing activities	(185,253)	(226,895)	41,642
Financing activities	1,874,269	(576,929)	2,451,198
Change in cash and cash equivalents	$ 1,861,012	$ 609,604	$ 1,251,408

Consolidated working capital at September 30, 2021 was $16,450,154 compared to $13,379,263 at December 31, 2020, an increase of $3,070,891, or 20.4%. Included in working capital were cash and cash equivalents of $3,351,231 at September 30, 2021, compared to $1,490,219 at December 31, 2020, an increase of $1,861,012, or 124.9%. The increase in working capital was the result of the receipt in February 2021 of a Second Draw Paycheck Protection Program loan in the amount of $1,874,269 and the forgiveness of the initial Paycheck Protection Program loan and the Second Draw Paycheck Protection Program loan during the nine months ended September 30, 2021.

Cash Flows from Operating Activities

Cash provided by operating activities for the nine months ended September 30, 2021 was $171,996 compared to $1,413,428 of cash provided by operating activities for the same period in 2020 a decrease of $1,241,432, or 87.8% Our accounts receivable and unbilled revenue balances decreased to $7,728,737 and $3,842,282, respectively, at September 30, 2021 compared to $8,671,163 and $4,267,249 at December 31, 2020, providing $890,374 and $424,967 of cash due to timing of billing, shipments, and collections due in part to payment delays from certain of our customers due to COVID-19. In addition, our inventory increased $753,447 in the nine months ended September 30, 2021 due to supply chain issues which delayed product shipments that were anticipated in the nine months ended September 30, 2021.

Accounts payable decreased to $3,546,950 as of September 30, 2021 from $4,183,105 at December 31, 2020, using $636,156 in cash flow from operations. The decrease in accounts payable was due to reduced operating expenses. Deferred revenue increased as of September 30, 2021 compared to December 31, 2020, providing $691,867 of cash from operations. We expect accounts payable and deferred revenue to fluctuate with routine changes in operations.

Cash Flows from Investing Activities

During the nine months ended September 30, 2021 our investing activities used $185,253 in cash for the purchases of property, plant and equipment of $84,160, and purchases of intangible assets of $56,349, along with distributions to the 49% non-controlling interest holders of American DG New York LLC of $66,168, partially offset by the receipt of $11,637 in proceeds from the sale of investment securities and the receipt of $9,787 from the sale of assets. For the nine months ended September 30, 2020 cash used in investing activities was $226,895. The decrease in cash used by investing activities in the nine months ended September 30, 2020 is due to a $24,208 decrease in purchases of property, plant and equipment, a $66,903 decrease in investment in intangible assets, partially offset by a $24,428 increase in distributions to the non-controlling interest holders of American DG New York LLC.

Cash Flows from Financing Activities

During the nine months ended September 30, 2021 our financing activities provided $1,874,269 compared to the use of cash of $576,929 for the same period in 2020. Our financing activities during the nine months ended September 30, 2021 consisted solely of our receipt of $1,874,269 under the Paycheck Protection Program Second Draw loan. Financing activities for the nine months ended September 30, 2020 included net payments on the line of credit of $2,452,329 and the proceeds of $1,874,200 received under the Paycheck Protection Program.

Backlog

As of September 30, 2021, our backlog of product and installation projects, excluding service contracts, was $8.1 million, consisting of $6.0 million of purchase orders received by us and $2.1 million of projects in which the customer's internal approval process is complete, financial resources have been allocated and the customer has made a firm verbal commitment that the order is in the process of execution. Backlog at the beginning of any period is not necessarily indicative of future performance. Our presentation of backlog may differ from other companies in our industry.

Paycheck Protection Program Loan

On April 17, 2020, we obtained an unsecured loan in the principal amount of $1,874,200 from Webster Bank, NA ("Webster") under the Paycheck Protection Program adopted pursuant to the Coronavirus Aid, Relief and Economic Recovery Act, as amended ("CARES Act"). The loan was forgivable if the proceeds were utilized by us for payroll, utilities, and rent expenses. On January 19, 2021 we received confirmation from Webster that the Paycheck Protection Program Loan in the original principal amount of $1,874,200 together with accrued interest of $13,659 was forgiven in full effective as of January 11, 2021. The loan forgiveness of $1,887,859 was accounted for as a debt extinguishment and is reported as a separate component of other income (expense), net in the condensed consolidated statements of earnings for the nine months ended September 30, 2021.

Paycheck Protection Program Second Draw Loan

On February 5, 2021, we obtained a Paycheck Protection Program Second Draw unsecured loan through Webster in the amount of $1,874,269 in connection with the Paycheck Protection Program pursuant to the CARES Act. The loan is guaranteed by the United States Small Business Administration. On September 20, 2021, we received a letter dated September 13, 2021 from Webster Bank, NA confirming that the Paycheck Protection Program Second Draw Loan issued to us pursuant to the CARES Act, as amended, in the original principal amount of $1,874,269 together with accrued interest of $11,386 was forgiven in full as of September 8, 2021. The loan forgiveness of $1,885,655 was accounted for as debt extinguishment and is reported as a separate component of other income (expense), net in the condensed consolidated statements of earnings for the three and nine months ended September 30, 2021.

Employee Retention Credit

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) was signed into law providing numerous tax provisions and other stimulus measures, including an employee retention credit (“ERC”), which is a refundable tax credit against certain employment taxes. The Taxpayer Certainty and Disaster Tax Relief Act of 2020 and the American Rescue Plan Act of 2021 extended and expanded the availability of the ERC. The ERC is available through December 31, 2021 and is equal to 70% of qualified wages (which includes employer qualified health plan expenses) paid to employees. In addition, the availability of the ERC was permitted to entities that received a Paycheck Protection Loan subject to certain conditions. During each quarter in 2021, a maximum of $10,000 in qualified wages for each employee is eligible for the ERC. Therefore, the maximum tax credit that can be claimed by an eligible employer in 2021 is $7,000 per employee per calendar quarter. Section 2301(c)(2)(B) of the CARES Act permits an employer to use an alternative quarter to calculate gross receipts and the employer may determine if the decline in gross receipts tests is met for a calendar quarter in 2021 by comparing its gross receipts for the immediately preceding calendar quarter with those for the corresponding calendar quarter in 2019. Accordingly, for the first quarter of 2021, we elected to use our gross receipts for the fourth calendar quarter of 2020 compared to our gross receipts for the fourth calendar quarter of 2019. As a result of our election to use an alternative quarter, we
qualified for the ERC in the first, second and third quarters of 2021 because our gross receipts decreased by more than 20% from the first, second and third quarters of 2019. As a result of averaging 100 or fewer full-time employees in 2019, all wages paid to employees in the first, second and third quarters of 2021 were eligible for the ERC (rather than just wages paid to employees not providing services). During the three and nine months ended September 30, 2021, we recorded ERC benefits of $562,253 and $1,276,021 and, respectively in other income (expense), net in our condensed consolidated statements of operations.

Liquidity

At September 30, 2021, we had cash and cash equivalents of $3,351,231, an increase of $1,861,012 or 124.9% from the cash and cash equivalents balance at December 31, 2020. During the nine months ended September 30, 2021, our revenues continued to be negatively impacted due to COVID-19, resulting in customer order delays or deferrals; service delays due to customer facility closures, in some cases for extended periods, and a reduction in our energy production revenues due to customer facility closures, in some cases for extended periods, and a reduction in our energy production revenues due to business closures and increased remote work and learning environments. The extent to which the coronavirus will continue to impact our business, our financial results, and our cash flows will depend on future developments which are highly uncertain and cannot be predicted.

Based on our current operating plan, we believe existing resources, including cash and cash flows from operations, together with the $1,874,269 of proceeds from our Paycheck Protection Program Second Draw loan and current and anticipated Employee Retention Credit will be sufficient to meet our working capital requirements for the next twelve months. The funds made available to us through the Paycheck Protection Program have provided liquidity for our business, and there can be no assurance that additional financing on such favorable terms will be available to us in the future. We will need to generate sufficient cash from operations to finance the company during the periods beyond twelve months in the future. If sufficient funds from operating activities are not available to finance our business, we may need to raise additional capital through debt financing or an equity offering to meet our operating and capital needs.

Significant Accounting Policies and Critical Estimates

Our significant accounting policies are discussed in the Notes to our Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2020. The accounting policies and estimates that can have a significant impact upon our operating results, financial position and footnote disclosures are described in the above notes and in the Annual Report.

Significant New Accounting Standards or Updates Not Yet Effective

The Company's critical accounting policies have remained consistent as discussed in our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 18, 2021.

See Note 1, *Description of Business and Basis of Presentation*, to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report on Form 10-Q.

Seasonality

The majority of our chilling systems sold will be operational for the summer. Our cogeneration sales are not generally affected by seasonality. Demand for our service team is higher in the warmer months when cooling is required. Chiller units are generally shut down in the winter and started up again in the spring. The chiller "busy season' for the service team generally runs from May through the end of September.

Off-Balance Sheet Arrangements

Currently, we do not have any material off-balance sheet arrangements, including any outstanding derivative financial instruments, off-balance sheet guarantees, interest rate swap transactions or foreign currency contracts. We do not engage in trading activities involving non-exchange traded contracts.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 4. Controls and Procedures.

Management's Evaluation of Disclosure Controls and Procedures:

As of the end of the period covered by this Report, our Chief Executive Officer and Chief Financial Officer ("Certifying Officers") conducted evaluations of our disclosure controls and procedures. As defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Securities Exchange Act"), the term "disclosure controls and procedures" means controls and procedures of an issuer that are designed to ensure the information required to be disclosed by the issuer in the reports that it files or submits under the Section 13(a) or 15(d) is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's ("SEC") rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under Section 13(a) or 15(d) of the Securities Exchange Act is accumulated and communicated to the issuer's management, including the Certifying Officers, to allow timely decisions regarding required disclosure.

Our disclosure controls and procedures are designed to provide reasonable assurance that the control system's objectives will be met. Our management, including our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Report, have concluded that our disclosure controls and procedures were not effective due to a material weakness with respect to a small number of individuals dealing with general controls over information technology. Management will continue to evaluate the above weaknesses and we are taking steps to remediate the weaknesses as resources become available.

Changes in Internal Control over Financial Reporting:

There were no changes in our internal controls over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act) during the period covered by this Report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

As of the date of the filing of this Report, we are not a party to any material pending legal proceedings and know of no contemplated governmental proceeding involving us. However, from time to time, we may be involved in ordinary routine litigation incidental to our business.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed under "Item1A - Risk Factors" in our Annual Report on Form 10-K for our fiscal year ended December 31, 2020 ("2020 Form 10-K") The risks discussed in our 2020 Form 10-K could materially affect our business, financial condition and future results. The risks described in our 2020 Form 10-K are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially and adversely affect our business, financial condition or operating results.

Item 2. Unregistered Sales of equity Securities and Use of Proceeds

None.

Item 3. Defaults in Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description of Exhibit
10.1	Letter from Webster Bank, NA dated September 13, 2021 regarding forgiveness of Second Draw Paycheck Protection Program Loan to Tecogen Inc. is herein incorporated by reference to Exhibit 99.01 to the registrant's Current Report on Form 8-K filed with the SEC on September 21, 2021
31.1*	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. 1350, as adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema
100.CAL**	XBRL Taxonomy Extension Calculation Linkbase
100.DEF**	XBRL Taxonomy Extension Definition Linkbase
101.LAB**	XBRL Taxonomy Extension Label Linkbase
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase

* Filed herewith
** Furnished herewith
+ Compensatory plan or arrangement

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.

TECOGEN INC.
(Registrant)

Dated: November 10, 2021

By: /s/ Benjamin Locke
Benjamin Locke
Chief Executive Officer
(Principal Executive Officer)

Dated: November 10, 2021

By: /s/ Abinand Rangesh
Abinand Rangesh
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 31.1

TECOGEN INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Benjamin Locke, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tecogen Inc.;
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(s) 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.
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 10, 2021

/s/ Benjamin Locke
Benjamin Locke
Chief Executive Officer

EXHIBIT 31.2

TECOGEN INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(a) and 15d-14(a),
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Abinand Rangesh, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Tecogen Inc.;

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(s) 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.

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

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

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

Date: November 10, 2021

/s/ Abinand Rangesh
Abinand Rangesh
Chief Financial Officer

EXHIBIT 32.1

TECOGEN INC.
CERTIFICATION REQUIRED BY EXCHANGE ACT RULES 13a-14(b) and 15d-14(b),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Each of, Benjamin Locke, Chief Executive Officer, and Abinand Rangesh, Chief Financial Officer, of Tecogen Inc., or the Company, certify, pursuant to Section 1350, Chapter 63 of Title 18, United States Code that, to his knowledge:

1. The Quarterly Report on Form 10-Q of the Company for the quarter ended September 30, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78 m or 78o(d)); and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 10, 2021

/s/ Benjamin Locke
Benjamin Locke
Chief Executive Officer

/s/ Abinand Rangesh
Abinand Rangesh
Chief Financial Officer