# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

## FORM 10-Q

<b></b>	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES	S EXCHANGE ACT OF 1934	
	For the quarterly period	od ended June 30, 2024	
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES	S EXCHANGE ACT OF 1934	
	Commission file a Tecog Clean Energy Solo	number 001-36103	
		. (OTCQX:TGEN) t as specified in its charter)	
	<u>Delaware</u>	<u>04-3536131</u>	
	(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.	.)
		ve Road, Bldg. 1 Jassachusetts 01862	
		cutive Offices and Zip Code)	
	(781) //	66-6400	
		umber, including area code)	
	neck mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d required to file such reports), and (2) has been subject to such filing requirements for the past 90		ng 12 months (or for such shorter period that the
	teck mark whether the registrant has submitted electronically every Interactive Data File required r such shorter period that the registrant was required to submit such files). Yes $\boxtimes$ No $\square$	to be submitted pursuant to Rule 405 of Regulation S-T (§2	32.405 of this chapter) during the preceding 12
	eck mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated rated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Eated filer   Accelerated filer		company. See the definitions of "large accelerated
	nted Filer ⊠ Smaller reporting company ⊠ wth company □		
	g growth company, indicate by check mark if the registrant has elected not to use the extended tra of the Exchange Act. $\Box$	insition period for complying with any new or revised finance	cial accounting standards provided pursuant to
Indicate by ch	teck mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes $\Box$	No Œ	
As of June 30	, 2024, 24,850,261 shares of common stock, \$.001 par value per share, of the registrant were issue	ed and outstanding.	

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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)

	J	une 30, 2024	Dec	ember 31, 2023
ASSETS				
Current assets:				
Cash and cash equivalents	\$	841,913	\$	1,351,270
Accounts receivable, net		5,364,228		6,781,484
Unbilled revenue		1,258,532		1,258,532
Inventories, net		10,113,493		10,553,419
Prepaid and other current assets		486,424		360,639
Total current assets		18,064,590		20,305,344
Long-term assets:				
Property, plant and equipment, net		1,503,204		1,162,577
Right of use assets		2,176,953		943,283
Intangible assets, net		2,698,656		2,436,230
Goodwill		2,563,862		2,743,424
Other assets		147,695		201,771
TOTAL ASSETS	\$	27,154,960	\$	27,792,629
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Related party notes	\$	518,305	S	505,505
Accounts payable		4,405,769	Ψ	4,514,415
Accrued expenses		2,544,467		2,504,629
Deferred revenue, current		2,558,799		1,647,206
Lease obligations, current		475,253		289,473
Acquisition liabilities, current		859,619		845,363
Unfavorable contract liability, current		147,643		176,207
Total current liabilities		11,509,855		10,482,798
Long-term liabilities:		11,505,055		10,102,770
Deferred revenue, net of current portion		264,284		369,611
Lease obligations, net of current portion		1,703,543		683,307
Acquisition liabilities, net of current portion		1,222,690		1,181,779
Unfavorable contract liability, net of current portion		359,041		422,839
Total liabilities		15,059,413		13,140,334
Commitments and contingencies	-	15,057,115		13,140,334
Stockholders' equity:				
Tecogen Inc. shareholders' equity:				
Common stock, \$0.001 par value; 100,000,000 shares authorized; 24,850,261 issued and outstanding at June 30, 2024 and		24,850		24.850
December 31, 2023		57,691,400		57,601,402
Additional paid-in capital  Accumulated deficit				
		(45,523,419)		(42,879,656)
Total Tecogen Inc. stockholders' equity		12,192,831		14,746,596
Non-controlling interest		(97,284)		(94,301)
Total stockholders' equity		12,095,547		14,652,295
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$	27,154,960	\$	27,792,629

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (unaudited)

	Three Months Ended		
	June 30, 2024	June 30, 2023	
Revenues			
Products	\$ 119,673	\$ 2,445,631	
Services	4,126,517	3,952,971	
Energy production	481,597	350,156	
Total revenues	4,727,787	6,748,758	
Cost of sales			
Products	171,982	1,618,456	
Services	2,191,815	2,075,869	
Energy production	284,835	220,007	
Total cost of sales	2,648,632	3,914,332	
Gross profit	2,079,155	2,834,426	
Operating expenses			
General and administrative	2,897,993	2,917,283	
Selling	405,277	480,786	
Research and development	246,489	236,556	
(Gain) loss on disposition of assets	3,363	(19,950)	
Total operating expenses	3,553,122	3,614,675	
Loss from operations	(1,473,967)	(780,249)	
Other income (expense)			
Other income (expense), net	18,894	(21,061)	
Interest expense	(17,869)	(1,857)	
Unrealized gain (loss) on investment securities	(37,497)	37,497	
Total other income (expense), net	(36,472)	14,579	
Loss before provision for state income taxes	(1,510,439)	(765,670)	
Provision for state income taxes	37	9,614	
Consolidated net loss	(1,510,476)	(775,284)	
Income attributable to the non-controlling interest	(28,320)	(4,826)	
Loss attributable to Tecogen Inc.	\$ (1,538,796)	\$ (780,110)	
Net loss per share - basic	\$ (0.06)	\$ (0.03)	
Net loss per share - diluted	\$ (0.06)	\$ (0.03)	
Weighted average shares outstanding - basic	24,850,261	24,850,261	
Weighted average shares outstanding - diluted	24,850,261	24,850,261	

# CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (unaudited)

	Six M	onths Ended
	June 30, 2024	June 30, 2023
Revenues		
Products	\$ 1,611,07	1 \$ 4,155,767
Services	8,140,82	
Energy production	1,161,98	5 883,665
Total revenues	10,913,88	3 12,128,576
Cost of sales		
Products	1,221,52	
Services	4,284,07	
Energy production	753,47	
Total cost of sales	6,259,07	
Gross profit	4,654,81	1 4,926,335
Operating expenses		
General and administrative	5,746,55	
Selling	934,94	
Research and development	501,18	
Gain on sale of assets	(4,02	
Total operating expenses	7,178,66	
Loss from operations	(2,523,85	(2,229,995)
Other income (expense)		
Interest and other income (expense), net	3,14	
Interest expense	(36,53)	
Unrealized gain (loss) on investment securities	(18,74	
Total other income (expense), net	(52,14	<u> </u>
Loss before provision for state income taxes	(2,575,99	
Provision for state income taxes	22,10	
Consolidated net loss	(2,598,09	, , , , ,
Income attributable to non-controlling interest	(45,67	(22,886)
Net loss attributable to Tecogen Inc.	\$ (2,643,76)	8) \$ (2,270,139)
	\$ (0.1	(0.09)
Net income loss per share - basic		
Net income loss per share - diluted	\$ (0.1	<u> </u>
Weighted average shares outstanding - basic	24,850,26	1 24,850,261
Weighted average shares outstanding - diluted	24,850,26	1 24,850,261

# CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY For the Three and Six Months Ended June 30, 2024 and 2023 (unaudited)

Tecogen Inc. Stockholders' Equity Three Months Ended June 30, 2024 Common Stock \$0.001 Par Value Additional Paid-in-Capital Non-controlling Interest Common Stock Shares Accumulated Deficit Total Balance at March 31, 2024 24,850,261 24,850 57,645,936 (43,984,623) (76,950) 13,609,213 Stock-based compensation expense 45,464 45,464 Distributions to non-controlling (48,654 (48,654) (loss) (1,538,796) 28,320 (1,510,476 Balance at June 30, 2024 24,850,261 24,850 57,691,400 (45,523,419) (97,284) 12,095,547

Six Months Ended June 30, 2024	Common Stock Shares	Common Stock \$0.001 ar Value	ditional Paid-in- apital	Ac	ccumulated Deficit	on-controlling terest	Total
Balance at December 31, 2023	24,850,261	\$ 24,850	\$ 57,601,402	\$	(42,879,656)	\$ (94,301)	\$ 14,652,295
Stock-based compensation expense	_	_	89,998		_	_	89,998
Distributions to non-controlling interest	_	_	_		_	(48,654)	(48,654
Net income (loss)	_	_	_		(2,643,763)	45,671	(2,598,092
Balance at June 30, 2024	24,850,261	\$ 24,850	\$ 57,691,400	\$	(45,523,419)	\$ (97,284)	\$ 12,095,547

Three Months Ended June 30, 2023	Common Stock Shares	Common Stock \$0.001 Par Value	dditional Paid-in- Capital	А	.ccumulated Deficit	Non-controlling	Total
Balance at	Stock Shares		 -up.u.i		ecumumica Denen	 - Cores	 10111
March 31, 2023	24,850,261	\$ 24,850	\$ 57,428,356	\$	(39,771,577)	\$ (88,500)	\$ 17,593,129
Stock-based compensation expense	_	_	28,589		_	_	28,589
Distributions to non-controlling interest	_	_	_		_	(23,838)	(23,838
Net income (loss)	_	_	_		(780,110)	4,826	(775,284
Balance at June 30, 2023	24,850,261	\$ 24,850	\$ 57,456,945	\$	(40,551,687)	\$ (107,512)	\$ 16,822,596

Six Months Ended June 30, 2023	Common Stock Shares	Common Stock \$0.001 ar Value	litional Paid-in- pital	A	ccumulated Deficit	on-controlling terest	Total
Balance at December 31, 2022	24,850,261	\$ 24,850	\$ 57,351,008	\$	(38,281,548)	\$ (106,560)	18,987,750
Stock-based compensation expense	_	_	105,937		_	_	105,937
Distributions to non-controlling interest	_	_	_		_	(23,838)	(23,838
Net income (loss)	_	_	_		(2,270,139)	22,886	(2,247,253
Balance at June 30, 2023	24,850,261	\$ 24,850	\$ 57,456,945	\$	(40,551,687)	\$ (107,512)	\$ 16,822,596

# CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)

		Six Months Ended		
		une 30, 2024	June 30, 2023	
CASH FLOWS FROM OPERATING ACTIVITIES:			·	
Consolidated net loss	\$	(2,598,092) \$	(2,247,253)	
Adjustments to reconcile net loss to net cash provided by operating activities:				
Depreciation and amortization		281,498	291,095	
Provision for credit losses		19,063	44,000	
Stock-based compensation		89,998	105,937	
Unrealized (gain) loss on investment securities		18,749	(37,497)	
Gain on disposition of assets		(4,028)	(19,950)	
Non-cash interest expense		12,800	_	
Changes in operating assets and liabilities				
(Increase) decrease in:				
Accounts receivable		1,398,193	755,831	
Employee retention credit		_	667,121	
Unbilled revenue		_	56,994	
Inventory		439,926	(1,133,618)	
Prepaid assets and other current assets		(125,784)	(66,201)	
Other assets		576,926	325,688	
Increase (decrease) in:		370,320	525,000	
Accounts payable		(108,646)	839,784	
Accrued expenses and other current liabilities		39,838	178,241	
Deferred revenue		806,266	752,873	
Other liabilities		(756,410)	(359,369)	
Net provided by operating activities		90,297	153,676	
CASH FLOWS FROM INVESTING ACTIVITIES:		90,297	133,070	
		(55( (20)	(10 (07)	
Purchases of property and equipment		(556,636)	(19,607)	
Proceeds from disposition of assets		36,213	16,863	
Payment for business acquisition		-	(170,000)	
Distributions to non-controlling interest		(48,654)	(23,838)	
Net cash used in investing activities		(569,077)	(196,582)	
CASH FLOWS FROM FINANCING ACTIVITIES:				
Finance lease principal payments		(30,577)	_	
Net cash used in financing activities		(30,577)	_	
Net decrease in cash and cash equivalents		(509,357)	(42,906)	
Cash and cash equivalents, beginning of the period		1,351,270	1,913,969	
Cash and cash equivalents, end of the period	\$	841,913 \$	1,871,063	
Supplemental disclosure of cash flow information:				
Cash paid for interest	\$	22,909 \$	1,443	
•	\$	22,100 \$	32,252	
Cash paid for taxes	\$	22,100 \$	32,232	
Non-cash investing activities:				
Aegis Contract and Related Asset Acquisition:	_		200	
Accounts receivable credit	\$	— <b>\$</b>	300,000	
Accounts payable assumed			111,178	
Contingent consideration		272,901	1,442,462	
Total	\$	272,901 \$	1,853,640	

#### Note 1. Description of Business and Basis of Presentation

Description of Business

Tecogen Inc. (together with its subsidiaries "we", "our", "us" or "Tecogen"), a Delaware corporation, was incorporated on September 15, 2000, and acquired the assets and liabilities of the Tecogen Products division of Thermo Power Corporation. We produce commercial and industrial, natural-gas-fueled 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. The majority of our customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast.

Our operations are comprised of three business segments. Our Products segment designs, manufactures and sells industrial and commercial cogeneration systems. Our Services segment provides operation and maintenance services to customers for our products. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

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

Liquidity, Going Concern and Management's Plans

The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles assuming that we will continue as a going concern, which contemplates the realization of assets and the settlement of obligations in the normal course of business. As of June 30, 2024, our cash and cash equivalents were \$841,913, compared to \$1,351,270 at December 31, 2023, a decrease of \$509,357. For the six months ended June 30, 2024 we generated \$90,297 in cash from operations and a net operating loss of \$2,523,851, due to a decrease in Products revenue and gross margin and a decrease in Services gross margin percentage due to higher labor and material costs to replace engines at certain sites in 2024. Our Service gross margin percentage for the six months ended June 30, 2024 of 47.4% is below our historical Service gross margins which ranged between 53.0% to 55.0%. Working capital at June 30, 2024 was \$6,554,735, compared to \$9,822,546 at December 31, 2023, a decrease of \$3,267,811 and our accumulated deficit was \$45,523,419.

As a result of the above factors, management has performed an analysis to evaluate the entity's ability to continue as a going concern for one year after the financial statements issuance date. Management's analysis includes forecasting future revenues, expenditures and cash flows, taking into consideration past performance as well as key initiatives recently undertaken. Our forecasts are dependent on our ability to maintain margins based on the our ability to close on new and expanded business, leverage existing working capital, and effectively manage expenses. New and expanded business includes the sale and shipment of newly developed hybrid-drive air-cooled chillers and the acquisition of additional maintenance contracts in February 2024 and May 2024 (see Note 7. "Aegis Contract and Related Asset Acquisitions"). Our backlog at June 30, 2024 was \$5,121,551. We may also be required to borrow funds under note subscription agreements with related parties (see Note 11. "Related Party Notes"). Based on management's analysis, we believe that cash flows from operations and the note agreements will be sufficient to fund operations over the next twelve months. There can, however, be no assurance we will be able to do so. Based on our analysis, the consolidated financial statements do not include any adjustments to the carrying amounts and classification of assets, liabilities, and reported expenses that may be necessary if we were unable to continue as a going concern. If we do not achieve our revenue, expenditure or cash flows, we may need to raise additional capital through a debt or equity financing to meet our need for capital to fund operations and future growth.

Basis of Presentation

The financial statements have been prepared in accordance with accounting standards set by the Financial Accounting Standards Board, or FASB. The FASB sets generally accepted accounting principles, or GAAP, to ensure financial condition, results of operations, and cash flows are consistently reported. References to GAAP issued by the FASB in these footnotes are to the FASB Accounting Standards Codification, or ASC. We adopted the presentation requirements for noncontrolling interests required by ASC 810 Consolidation. Under ASC 810, earnings or losses attributed to the noncontrolling interests are reported as part of the consolidated earnings and not a separate component of income or expense.

The accompanying consolidated financial statements include our accounts and the accounts of the entities in which we have a controlling financial interest. Those entities include our wholly-owned subsidiary, American DG Energy Inc. ("ADGE"), Tecogen CHP Solutions, Inc., and a joint venture, American DG New York, LLC, or ADGNY, in which ADGE holds a 51.0% interest. As the controlling partner, all major decisions in respect of ADGNY are made by ADGE in accordance with the joint venture agreement. The interests in the individual underlying energy system projects in ADGNY vary between ADGE and its joint venture partner. The noncontrolling interest and distributions are determined based on economic ownership. The economic

ownership is calculated by the amount invested by us and the noncontrolling partner in each site. Each quarter, we calculate a year-to-date profit/loss for each site that is part of ADGNY and the noncontrolling interest percent of economic ownership in each site is applied to determine the noncontrolling interest share in the profit/loss. The same methodology is used to determine quarterly distributions of available cash to the noncontrolling interest partner. On our balance sheet, noncontrolling interest represents the joint venture partner's investment in ADGNY, plus its share of after-tax profits less any cash distributions. ADGE owned a controlling 51.0% legal and economic interest in ADGNY as of June 30, 2024 and December 31, 2023.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of our financial position as of June 30, 2024 and the results of operations and cash flows for the three and six months ended June 30, 2024 and 2023. The financial data and other information disclosed in these notes for the three and six months ended June 30, 2024 and 2023 are also unaudited. The operating results for the six months ended June 30, 2024 are not necessarily indicative of the results that may be expected for the year ending December 31, 2024. All intercompany transactions have been eliminated in consolidation.

The condensed consolidated balance sheet at December 31, 2023 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, 2023.

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.

Business Combinations

In accordance with applicable accounting standards, we estimate the fair value of assets acquired and liabilities assumed as of the acquisition date of each business combination. Any excess purchase price over the fair value of the net tangible assets acquired is allocated to goodwill. We may make certain estimates and assumptions when determining the fair values of assets acquired and liabilities assumed, including intangible assets. Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from energy production sites or customer maintenance contracts, estimated operating costs, as well as discount rates. At the acquisition date, we will also record acquisition related liabilities, if applicable, for any contingent consideration or deferred payments to the seller. Contingent consideration is recorded at fair value on the acquisition date based on our expectation of achieving the contractually defined revenue targets. The fair value of the contingent consideration liabilities is remeasured each reporting period after the acquisition date and any changes in the estimated fair value are reflected as gains or losses in general and administrative expense in the consolidated statement of operations. Contingent consideration liabilities and deferred payments to sellers are recorded as current liabilities and long-term liabilities in the consolidated balance sheets based on the expected timing of settlement.

Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. Any changes to provisional amounts identified during the measurement period are recognized in the reporting period in which the adjustment amounts are determined. Transaction costs associated with business combinations are expensed as incurred.

Segment Information

Our operations are comprised of three (3) business segments. Our Products segment designs, manufactures and sells industrial and commercial cogeneration systems. Our Services segment installs and maintains our cogeneration systems. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements.

## Recently Issued Accounting Standards

Segment Reporting (Topic 280) - Improvements to Reportable Segment Disclosures. In November 2023, the Financial Accounting Standards Board issued ASU 2023-07, Segment Reporting (Topic 280) - Improvements to Reportable Segment Disclosures. The new standard requires enhanced disclosures about a public entity's reportable segments including more detailed information about a reportable segment's expenses. The amendments in this update apply to all public entities that are required to report segment information, and include those entities that have a single reportable segment. The amendments in this update are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating the impact on our consolidated financial statements and related disclosures.

Income Taxes (Topic 740) - Improvements to Income Tax Disclosures. In December 2023, the Financial Accounting Standards Board issued ASU 2023-09, Income Taxes (Topic 740) - Improvements to Income Tax Disclosures. ASU 2023-09 provides more transparency about income tax information through improvements to income tax disclosures primarily related to the rate reconciliation and income taxes paid information. The amendments in this update are effective for annual periods beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating the impact on our consolidated financial statements and related disclosures.

#### Note 2 Dovenu

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-added 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 six months ended June 30, 2024 and 2023.

		Three Mo		Six Months Ended				
_	Ju	ne 30, 2024	Ju	ine 30, 2023	J	une 30, 2024	J	une 30, 2023
Products:								
Cogeneration	\$	119,673	\$	427,314	\$	893,902	\$	971,007
Chiller		_		1,687,981		657,061		2,756,915
Engineered Accessories		_		330,336		60,108		427,845
Total Products Revenue		119,673		2,445,631		1,611,071		4,155,767
Services		4,126,517		3,952,971		8,140,827		7,089,144
Energy production		481,597		350,156		1,161,985		883,665
Total revenues	\$	4,727,787	\$	6,748,758	\$	10,913,883	\$	12,128,576

#### **Products 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. 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.

#### Services Segment

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 and 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. Revenues resulting from the Aegis acquisition (see Note 7. Aegis Contract and Related Asset Acquisitions) have been included in our revenue from the Services segment since April 1, 2023. 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 bill the customer and recognize revenue for the various forms of energy delivered, based on 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 that amount to which 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.

We did not recognize any revenue during the six months ended June 30, 2024 that was included in unbilled revenue as of June 30, 2024.

Revenue recognized during the six months ended June 30, 2024 that was included in deferred revenue at the beginning of the period was approximately \$43,939.

## 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 June 30, 2024, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately \$2,823,083. We expect to recognize revenue of approximately 74.7% of the remaining performance obligations over the next 24 months, 65.3% recognized in the first 12 months and 9.4% recognized over the subsequent 12 months and the balance thereafter.

## Note 3. Income (Loss) Per Common Share

Basic and diluted income (loss) per share for the three and six months ended June 30, 2024 and 2023, respectively, were as follows:

\ /I	*	, 1			
		Three Months En	ded	Six Months Endo	ed
	·	June 30, 2024	June 30, 2023	June 30, 2024	June 30, 2023
Numerator:					
Net loss available to stockholders	\$	(1,538,796) \$	(780,110) \$	(2,643,763) \$	(2,270,139)
Denominator:					
Weighted average shares outstanding - Basic		24,850,261	24,850,261	24,850,261	24,850,261
Effect of dilutive securities:					
Stock options				<u> </u>	_
Weighted average shares outstanding - Diluted		24,850,261	24,850,261	24,850,261	24,850,261
Basic loss per share	\$	(0.06) \$	(0.03) \$	(0.11) \$	(0.09)
Diluted loss per share	\$	(0.06) \$	(0.03) \$	(0.11) \$	(0.09)
Anti-dilutive shares underlying stock options outstanding		1,911,532	1,831,851	1,911,532	1,831,851

## Note 4. Inventories, net

Inventories at June 30, 2024 and December 31, 2023 consisted of the following:

	June 30, 2024	December 31, 2023
Raw materials, net	\$ 8,828,544	\$ 8,803,054
Work-in-process	702,309	798,522
Finished goods, net	582,640	951,843
Total inventories, net	\$ 10,113,493	\$ 10,553,419

## Note 5. Property, Plant and Equipment, net

Property, plant and equipment at June 30, 2024 and December 31, 2023 consisted of the following:

	_	Estimated Useful Life (in Years)	June 30, 2024	De	cember 31, 2023
Ener	gy systems	1 - 15 years	\$ 2,810,232	\$	2,810,232
Mac equipment	hinery and	5 - 7 years	1,626,060		1,744,596
Furn fixtures	iture and	5 years	222,755		212,963
Com	puter software	3 - 5 years	192,865		192,865
Leas improvements	ehold	*	469,474		466,789
Cons	struction in		539,410		_
			5,860,796		5,427,445
	- accumulated nd amortization		(4,357,592)		(4,264,868)
Prop equipment, net	erty, plant and		\$ 1,503,204	\$	1,162,577

<sup>\*</sup> Lesser of estimated useful life of asset or lease term

Depreciation and amortization expense on property and equipment for the three and six months ended June 30, 2024 and 2023 was \$10,873 and \$205,711 and \$161,701 and \$279,193, respectively. Construction in progress are costs incurred during the three months ended June 30, 2024 for initial improvements required to the North Billerica, Massachusetts leased premises which are estimated to range between \$500,000 and \$750,000.

## Note 6. Intangible Assets and Liabilities Other Than Goodwill

As of June 30, 2024 and December 31, 2023 we had the following amounts related to intangible assets and liabilities other than goodwill:

		Jι	ine 30, 2024			December 31, 2023											
Intangible assets	Cost		ccumulated mortization	Total		Total		Total		Accumulated Cost Amortization		Cost					Total
Product certifications	\$ 777,465	\$	(691,323)	\$	86,142	\$	777,465	\$	(658,676)	\$	118,789						
Patents	888,910		(540,656)		348,254		888,910		(496,807)		392,103						
Developed technology	240,000		(180,000)		60,000		240,000		(172,000)		68,000						
Trademarks	26,896		_		26,896		26,896		_		26,896						
In Process R&D	263,936		(122,542)		141,394		263,936		(103,689)		160,247						
Favorable contract asset	384,465		(377,989)		6,476		384,465		(376,138)		8,327						
Customer contracts	2,225,123		(195,629)		2,029,494		1,772,659		(110,791)		1,661,868						
	\$ 4,806,795	\$	(2,108,139)	\$	2,698,656	\$	4,354,331	\$	(1,918,101)	\$	2,436,230						
Intangible liability																	
Unfavorable contract liability	\$ 2,618,168	\$	(2,111,484)	\$	506,684	\$	2,618,168	\$	(2,019,122)	\$	599,046						

The aggregate amortization expense related to intangible assets exclusive of contract related intangibles for the three and six months ended June 30, 2024 and 2023 was \$2,204 and \$105,199 and \$61,000 and \$110,361. The net aggregate amortization expense (credit) related to the amortization of the contract related intangible assets and liabilities for the three and six months ended June 30, 2024 and 2023 was \$175 and \$(7,523) and \$2,258 and \$(58,675) respectively

## Contract and Non-Contracted Related Intangibles

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. The customer contract asset includes the maintenance contracts acquired by us on

April 1, 2023, February 1, 2024 and May 1, 2024, as part of the Aegis acquisition (see Note 7. "Aegis Contract and Related Asset Acquisition.")

Amortization of intangibles including contract related amounts is calculated using the straight-line method over the remaining useful life or contract term, which range from approximatelyl-11 years, and is charged against cost of sales and general & administrative expenses in the accompanying consolidated statement of operations. Aggregate future amortization over the next five years and thereafter as of June 30, 2024 is estimated to be as follows:

	 n-contract Related itangibles	 Contract Related Intangibles	Total
Year 1	\$ 170,409	\$ 44,847	\$ 215,256
Year 2	164,011	107,604	271,615
Year 3	162,304	126,948	289,252
Year 4	96,534	136,329	232,863
Year 5	22,282	137,208	159,490
Thereafter	20,250	976,350	996,600
Total	\$ 635,790	1,529,286	\$ 2,165,076

## Note 7. Aegis Contract and Related Asset Acquisitions

On March 15, 2023, we entered into an agreement ("Agreement") with Aegis Energy Services, LLC ("Aegis") pursuant to which Aegis agreed to assign to us and we agreed to assume certain Aegis maintenance agreements and agreed to purchase certain assets from Aegis, and related matters ("Acquisition"). On April 1, 2023, the Acquisition closed. Under the Agreement, we agreed to acquire from Aegis and assume Aegis' rights and obligations arising on or after April 1, 2023, under maintenance agreements pursuant to which Aegis provided maintenance services to third parties for approximately 200 cogeneration systems and we agreed to acquire from Aegis certain vehicles and inventory used by Aegis in connection with the performance of its maintenance services. At closing, we acquired eight (8) Aegis vehicles for consideration consisting of \$170,000 in cash. Also, we issued credits against outstanding accounts receivable due from Aegis in the amount of \$300,000 for the acquisition of inventory that Aegis used to provide maintenance services. At closing, we hired eight (8) Aegis employees who, following the closing, have agreed to continue to provide maintenance services relating to the cogeneration systems covered by the maintenance agreements assumed pursuant to the Agreement. Following the closing and for a period of up to seven (7) years, we agreed to pay Aegis a percentage of the revenue collected for maintenance services provided pursuant to the maintenance agreements acquired from Aegis. The Agreement contained certain indemnification provisions and agreements on the part of Aegis and for each party to cooperate with each other and provide certain transitional assistance. We acquired the Aegis maintenance agreements to expand our Service portfolio and to benefit from the long-term contract revenue stream generated by these agreements.

On February 1, 2024, Tecogen and Aegis amended the Agreement to add eighteen (18) additional maintenance contracts (the "Amendment") which includes an undertaking by Aegis to use commercially reasonable efforts to support and assist our execution of maintenance service agreements for an additional thirty-six (36) cogeneration units sold to customers by Aegis. No additional maintenance service agreements contemplated in the Amendment have been executed as of June 30, 2024.

On May 1, 2024, Tecogen and Aegis amended the Agreement to add thirty-one (31) additional maintenance contracts (the "Second Amendment") which includes an undertaking by Aegis to use commercially reasonable efforts to support and assist our execution of maintenance service agreements for an additional forty-eight (48) cogeneration units sold to customers by Aegis. No additional maintenance service agreements contemplated in the Second Amendment have been executed as of June 30, 2024.

We have determined that the assignment and assumption of the Aegis maintenance agreements, in combination with the related asset acquisition and the retention of the former Aegis employees, constitutes a business and should be accounted for as a business combination under the acquisition method. As of the acquisition date, we recognized, separately from goodwill, the identifiable assets acquired and the liabilities assumed, at fair value. We have applied an interpretation of the guidance in ASC 805, Business Combinations, that allows an entity to combine multiple acquisitions as one single transaction due to the April 1, 2023, February 1, 2024 and May 1, 2024 acquisitions being executed in contemplation of one another to achieve the same commercial objective for the Company. As a result, we have adjusted the initial accounting for the April 1, 2023 acquisition for the value of net assets acquired from the February 1, 2024 and May 1, 2024 acquisitions.

We have included the financial results of the Aegis maintenance agreements in our consolidated financial statements from April 1, 2023, from February 1, 2024 and from May 1, 2024, the closing or acquisition dates for the acquisitions.

The following table summarizes the consideration paid for the Aegis acquisitions and the fair value of assets acquired and contract-related liabilities assumed as of the respective acquisition dates for each acquisition along with the combined accounting result:

	A	pril 1, 2023	Fel	February 1, 2024		May 1, 2024		May 1, 2024		Total
Consideration Paid:		,		,		,				
Cash	\$	170,000	\$	_	\$	_	\$	170,0		
Accounts receivable credit issued		300,000		_		_		300,0		
Account payable due to Aegis		91,048		_		_		91,0		
Contingent consideration		1,256,656		101,641		171,260		1,529,5		
Total fair value of consideration transferred		1,817,704		101,641		171,260		2,090,6		
Identifiable assets acquired and liabilities assumed:										
Assets acquired										
Property, plant and equipment		170,000		_		_		170,0		
Inventory		391,048		_		_		391,0		
Identifiable intangible asset - customer contracts		1,772,659		184,587		267,877		2,225,1		
		2,333,707		184,587		267,877		2,786,1		
Acquired contract-related liabilities assumed				,		,				
Deferred maintenance reserve		(853,271)		_		_		(853,2)		
		(853,271)		_		_		(853,2'		
Net identifiable assets acquired		1,480,436		184,587		267,877		1,932,9		
Excess of cost over fair value of net assets acquired (Goodwill)	\$	337,268	\$	(82,946)	\$	(96,617)	\$	157,7		

Initial Acquisition - April 1, 2023

The amounts initially recognized for inventory, identifiable intangible assets, contingent consideration and deferred maintenance reserves were provisional pending completion of the necessary valuations and analysis. ASC 805 establishes a measurement period to provide companies with a reasonable amount of time to obtain the information necessary to identify and measure various items in a business combination and cannot extend beyond one year from the acquisition date. As of December 31, 2023, we have completed our analysis and valuation.

As of June 30, 2024, we recorded no adjustments to the fair value of the contingent consideration and deferred maintenance reserves given the probability of achieving the revenue estimates and the actual and expected maintenance costs were consistent with our initial valuation.

Second Acquisition - February 1, 2024

The amounts initially recognized for identifiable intangible assets and contingent consideration are provisional, pending completion of the necessary valuations and analysis. ASC 805 establishes a measurement period to provide companies with a reasonable amount of time to obtain the information necessary to identify and measure various items in a business combination and cannot extend beyond one year from the acquisition date. During the three months ended June 30, 2024, we identified a \$9,232 adjustment to increase the contingent consideration liability and a \$5,052 adjustment reducing the customer contracts intangible asset. As of June 30, 2024, we have not completed our analysis and valuation for the second maintenance service agreement acquisition.

Third Acquisition - May 1, 2024

The amounts initially recognized for identifiable intangible assets and contingent consideration are provisional pending completion of the necessary valuations and analysis. ASC 805 establishes a measurement period to provide companies with a reasonable amount of time to obtain the information necessary to identify and measure various items in a business combination and cannot extend beyond one year from the acquisition date. As of June 30, 2024, we have not completed our analysis and valuation for the third maintenance service agreement acquisition.

## Acquisition Valuation

The fair value of the identifiable intangible asset was estimated using the income approach. The excess cash flow was discounted to present value using an appropriate rate of return to estimate the market value of the customer identifiable intangible asset and the risks associated with the future revenue forecasts due to potential changes in customer energy requirements or changes in the economic viability of these CHP sites which depend on the spread between natural gas fuel and electricity prices, all of which are not within our control. Key assumptions to value the customer identifiable intangible asset included the discount rate of 15%, profitability assumptions, revenue assumptions, and anticipated existing contract run out were the material assumptions utilized in the discounted cash flow model used to estimate fair value. The discount rate reflects an estimate of our weighted-average cost of capital.

On the date of acquisition, the fair value of the contingent consideration and the deferred maintenance reserve were calculated under the income approach using a weighted average cost of capital of 15%, discounting the future cash flows to present value, and are subsequently remeasured to fair value at each reporting date until the fair value contingencies are resolved. Fair value adjustments which may be determined at subsequent reporting dates will be recorded in our consolidated statements of operations and will not impact the goodwill balance after the measurement period.

The contingent consideration is payable within forty-five (45) days following the end of each calendar quarter through the earlier of the expiration or termination of the relevant maintenance agreements, or the seventh (7th) anniversary of the acquisition date. The consideration is equal to the product of the revenues collected in a calendar quarter multiplied by an applicable percentage. The agreement stipulates quarterly aggregate revenue targets and an applicable percentage for a higher applicable percentage if revenues exceed the target revenues. The applicable percentage ranges from 5% to 10% over the agreement term. The deferred maintenance reserve represents costs, which are expected to be incurred over athree-year period from the date of acquisition to repair customer equipment which had not been sufficiently maintained prior to our acquisition of the maintenance service agreements.

The purchase price of the acquisition was allocated to the tangible and intangible assets acquired and liabilities assumed and recognized at their fair value based on widely accepted valuation techniques in accordance with ASC 820, "Fair Value Measurement," as of the acquisition date. The process for estimating fair value requires the use of significant assumptions and estimates of future cash flows and developing appropriate discount rates. The excess of the purchase price over fair value of the net identified assets acquired and liabilities assumed was recorded as goodwill. Goodwill is primarily attributable to the going concern element of the Aegis business, including its assembled workforce and the long-term nature of the customer maintenance agreements, as well as anticipated cost synergies due primarily to the elimination of administrative overhead. Goodwill resulting from the Aegis acquisition is not expected to be deductible for income tax purposes.

Acquisition-related costs which consisted on recurring internal resources were de minimus and such costs were expensed as incurred (ASC 805-50-30-1).

The following table summarizes the contract-related liabilities assumed as of June 30, 2024 and December 31, 2023:

	Ju	ne 30, 2024	December 31, 2023		
Acquisition liabilities, current					
Contingent consideration	\$	269,368	\$	200,639	
Deferred maintenance reserve		590,251		644,724	
		859,619		845,363	
Acquisition liabilities, long-term	·				
Contingent consideration		1,129,172		994,743	
Deferred maintenance reserve		93,518		187,036	
	\$	1,222,690	\$	1,181,779	

Revenues and gross profit from the Aegis maintenance contracts were \$652,785 and \$471,835 and \$1,411,547 and \$956,879, respectively, for the three and six months ended June 30, 2024. Revenue and gross profit for the three months ended June 30, 2023 were \$628,813 and \$411,106. The revenue and gross profit are included in our Services segment since the date of the acquisition.

We are unable to provide the pro forma information required under ASC 805-10-50-2(h) as the disclosure is impracticable since the required pre-acquisition historical information could not be obtained from Aegis.

#### Note 8. Sale of Energy Producing Assets

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. Based upon an analysis of these energy producing assets' expected future performance, as of June 30, 2024, we do not expect to make any material payments under the guarantee.

At June 30, 2024, we were due \$93,517 under the energy production contracts, representing fifty percent of the excess cash flows above the minimum threshold for the bi-annual period ended December 31, 2023 and the bi-annual period ended June 30, 2024. We expect to receive these funds in the third quarter of 2024.

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 9. Leases

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

At lease inception, we determine if an arrangement constitutes 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

Operating leases are included in Right-of-use assets, Lease obligations, current and Long-term liabilities - Lease obligations, net of current portion, 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.

On March 31, 2023, we entered into two lease agreements for two adjoining buildings, located in North Billerica, Massachusetts, containing approximately 26,412 square feet of manufacturing, storage and office space to serve as our headquarters and manufacturing facilities. The lease agreements provide for initial lease terms of five (5) years with two successive options to renew for additional terms of five (5) years. Both leases commence on January 1, 2024 and require payment of the base rent, real estate taxes, common maintenance expenses and aggregate deposits of \$8,200. Our costs for initial improvements required to the lease deposits of \$8,200. Our costs for initial improvements required to the lease of the lease is estimated to range between \$500,000 and \$750,000. The estimated straight-line monthly rent expense for the initial term of the lease is approximately \$26,962 per month. In accordance with ASC 842-20-30-1, we recorded the lease liability and right-of-use asset using the discount rate for the lease commencement date, January 1, 2024.

On January 1, 2024 we extended our lease for the 2,800 square foot Valley Stream, NY service center for an additional three (3) years through December 31, 2026, with an option to renew for an additional term of three (3) years. The straight-line

base monthly rent for the extension is \$4,560 per month. On February 1, 2024 we entered into a lease agreement for2,063 square feet of office and storage space in East Syracuse, New York for an initial lease term of three (3) years, expiring on January 31, 2027, with an option for an additional lease term of two 1) years. The straight-line base monthly rent for the initial lease term is \$1,891 per month. On June 17, 2024, we extended our lease for 1,751 square foot Hayward, CA service center for an additional three (3) years through July 31, 2027. The straight-line monthly rent for the extension is \$6,662 per month.

The lease on our former headquarters located in Waltham, Massachusetts which consists of approximately 43,000 square feet of manufacturing, storage and office space, expired on April 30, 2024. The base monthly rent in 2024 was \$44,254.

Lease expense for operating leases, which principally consists of fixed payments for base rent, is recognized on a straight-line basis over the lease term. Operating lease expense for the three and six months ended June 30, 2024 and 2023 was \$195,651 and \$467,213 and \$216,841 and \$406,556, respectively.

Supplemental information related to operating leases for the six months ended June 30, 2024 and 2023 is as follows:

	 Six Months Ended June 30,					
	2024	2023				
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 451,881	\$	371,264			
Right-of-use assets obtained in exchange for operating lease liabilities	\$ 1,547,800	\$	_			
Weighted-average remaining lease term - operating leases	4.5 Years		3.7 Years			
Weighted-average discount rate - operating leases	7.5 %	,	6.0 %			

Supplemental balance sheet information related to operating leases as of June 30, 2024 and December 31, 2023 was as follows:

June 30, 2024	December 31, 2023		
\$ 1,952,681	\$	743,096	
\$ 421,467	\$	248,933	
1,560,437		523,660	
\$ 1,981,904	\$	772,593	
\$ \$	\$ 1,952,681 \$ 421,467 1,560,437	\$ 1,952,681 \$ \$ 421,467 \$ 1,560,437	

## Finance Leases

Finance leases are included in Right-of-use assets, Lease obligations, current and Long-term liabilities - Lease obligations, net of current portion, 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. Effective December 19, 2023, we entered into a master finance lease agreement for motor vehicles and acquired five (5) service vehicles. On May 21, 2024 we entered into a lease for a waste oil boiler.

Supplemental information for finance leases for the six months ended June 30, 2024 and 2023 was as follows:

	June 30	), 2024 J	une 30, 2023
Right-of-use assets obtained in exchange for finance lease liabilities	\$	27,282 \$	_
Weighted-average remaining lease term - finance leases		0.8 Years	0.0 Years
Weighted-average discount rate - finance leases		— %	— %

Supplemental balance sheet information related to finance leases as of June 30, 2024 and December 31, 2023 is as follows:

Ju	ne 30, 2024 Dec	cember 31, 2023
	• •	
\$	196,990 \$	200,187
	27,282	_
\$	224,272 \$	200,187
\$	53,786 \$	40,540
	143,106	159,647
\$	196,892 \$	200,187
		\$ 196,990 \$ 27,282 \$ 224,272 \$ \$ 53,786 \$ 143,106

Future minimum lease commitments under non-cancellable operating and finance leases as of June 30, 2024 were as follows:

	Oper	ating Leases	Finance Leases		Total
Year 1	\$	548,724	\$	70,468	\$ 619,192
Year 2		544,398		48,931	593,329
Year 3		497,410		48,931	546,341
Year 4		423,484		48,931	472,415
Year 5		210,096		24,466	234,562
Thereafter		89,343		_	89,343
Total lease payments		2,313,455		241,727	2,555,182
Less: imputed interest		331,551		44,835	376,386
Total	\$	1,981,904	\$	196,892	\$ 2,178,796

## Note 10. 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 Plan to 3,838,750 as of June 30, 2024, and in June 2017 stockholders approved an amendment to extend the termination date of the Plan to January 1, 2026 ("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 June 30, 2024 was 1,021,768.

During the six months ended June 30, 2024, we did not grant any options to purchase shares of common stock or issue any stock grants under the Amended Plan.

We adopted the 2022 Stock Incentive Plan (the "2022 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. We have reserved 3,800,000 shares of our common stock for issuance pursuant to awards under the 2022 Plan. The adoption of the 2022 Plan was approved by our shareholders on June 9, 2022.

Under the 2022 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 2022 Plan. The options are not transferable except by will or domestic relations order. The option price per share under the 2022 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 Plan as of June 30, 2024 was 2,943,750.

During the six months ended June 30, 2024, we granted non-qualified options to purchase an aggregate of 25,000 shares of common stock under the 2022 Plan at \$0.77 per share to certain non-employee directors.

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Stock option activity for the six months ended June 30, 2024 was as follows:

Number of Options		P	rice Per			Average	Weighted Average Remaining Life		Aggregate Intrinsic Value
3,638,122	\$	0.71	-\$	10.33	\$	1.49	6.70 years	\$	127,811
125,000		\$	0.77		\$	0.77			
_									
(816,590)	\$	0.74	-\$	10.33	\$	2.73			
2,946,532	\$	0.71	-\$	6.74	\$	1.12	6.95 years	\$	46,675
1,686,532					\$	1.27		\$	29,525
2,651,282					\$	1.15		\$	44,103
	Options 3,638,122 125,000 (816,590) 2,946,532 1,686,532	Options  3,638,122 \$ 125,000	Number of Options S  3,638,122 \$ 0.71  125,000 \$ \$  (816,590) \$ 0.74  2,946,532 \$ 0.71  1,686,532	Options         Share           3,638,122         \$ 0.71         -\$           125,000         \$0.77         -           (816,590)         \$ 0.74         -\$           2,946,532         \$ 0.71         -\$           1,686,532         \$ 0.71         -\$	Number of Options         Price Per Share           3,638,122         \$ 0.71 -\$ 10.33           125,000         \$0.77           -         (816,590)         \$ 0.74 -\$ 10.33           2,946,532         \$ 0.71 -\$ 6.74           1,686,532         \$ 0.71 -\$ 6.74	Number of Options         Price Per Share         Number of Per Share         Number of Share           3,638,122         \$ 0.71         -\$ 10.33         \$ 125,000	Number of Options         Price Per Share         Weighted Average Exercise Price           3,638,122         \$ 0.71 -\$ 10.33         \$ 1.49           125,000         \$0.77         \$ 0.77           (816,590)         \$ 0.74 -\$ 10.33         \$ 2.73           2,946,532         \$ 0.71 -\$ 6.74         \$ 1.12           1,686,532         \$ 1.27	Number of Options         Price Per Share         Weighted Exercise Price         Average Remaining Life           3,638,122         \$ 0.71 -\$ 10.33         \$ 1.49         6.70 years           125,000         \$ 0.77         \$ 0.77         \$ 0.77           (816,590)         \$ 0.74 -\$ 10.33         \$ 2.73           2,946,532         \$ 0.71 -\$ 6.74         \$ 1.12         6.95 years           1,686,532         \$ 1.27	Number of Options         Price Per Share         Weighted Average Exercise Price         Average Remaining Life           3,638,122         \$ 0.71 -\$ 10.33         \$ 1.49         6.70 years         \$ 125,000           - (816,590)         \$ 0.74 -\$ 10.33         \$ 2.73           2,946,532         \$ 0.71 -\$ 6.74         \$ 1.12         6.95 years         \$ 1,686,532

Consolidated stock-based compensation expense for the three and six months ended June 30, 2024 and 2023 was \$45,464 and \$89,998 and \$28,589 and \$105,937, respectively. No tax benefit was recognized related to the stock-based compensation recorded during the period.

At June 30, 2024, the total compensation cost related to unvested stock option awards not yet recognized is \$61,450 and this amount will be recognized over a weighted average period of 2.43 years.

#### Note 11. Related Party Notes

On October 9, 2023, we entered into note subscription agreements with each of John N. Hatsopoulos, a director and principal shareholder of registrant, and Earl R. Lewis, III, a director of registrant, pursuant to which Mr. Hatsopoulos agreed to provide financing to us of up to \$1 million, and Mr. Lewis agreed to provide financing to us of \$500,000, and potentially, an additional \$500,000 at his discretion. We have the right to determine the amount of the loans at the time of a draw down, subject to the conditions in our agreements with each of Mr. Hatsopoulos and Mr. Lewis discussed below. The loans and terms of the loan agreements were unanimously approved by our board of directors.

The loans bear interest on the outstanding principal at the Internal Revenue Service's Applicable Federal Rate to be determined at the time we issue a promissory note in connection with a loan drawdown. The principal amount and accrued interest of each loan is repayable one year from the date of issuance of the applicable promissory note. A note may be prepaid by us at any time. The principal amount of each loan and accrued interest is subject to mandatory prepayment in the event of a change of control of the registrant. The promissory notes are subject to customary events of default and are transferable provided the conditions to transfer set forth in the promissory notes are satisfied by the noteholder. The proceeds of the loans are expected to be used for general working capital purposes.

On October 10, 2023, we issued a promissory note and borrowed \$500,000 from Mr. Hatsopoulos. The loan bears interest at 5.12% per annum. At June 30, 2024 our obligation to Mr. Hatsopoulos under the promissory note, inclusive of \$11,905 of accrued and unpaid interest, was \$518,305. On March 21, 2024, John H. Hatsopoulos amended the terms of the promissory note, dated October 10, 2023, extending the maturity date by one year, making the maturity date October 10, 2025, and agreeing to accept payment in cash or Tecogen Inc. common stock. On July 23, 2024, we borrowed an additional \$500,000 from Mr. Hatsopoulos, and executed a promissory note with a maturity ofone year and interest at 5.06% per annum.

#### Note 12. 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 as provided below.

Level 3 - Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. We have Level 3 liabilities as provided below.

Available-for-sale equity securities

The following tables present the asset reported in "other assets" in the consolidated balance sheet measured at its fair value on a recurring basis as of June 30, 2024 and 2023 by level within the fair value hierarchy.

			in : mar	ed prices active kets for cal assets	ol	ignificant other bservable inputs	uno	gnificant bservable inputs		
		Total	Level 1		Level 2		Level 3		Gains (losses)	
June 30, 2024	_									
Recurring fair value measurements										
Marketable equity securities										
EuroSite Power Inc.	\$	74,995	\$	_	\$	74,995	\$	_	\$	(18,749)
Total recurring fair value measurements	\$	74,995	\$	_	\$	74,995	\$		\$	(18,749)
June 30, 2023										
Recurring fair value measurements										
Marketable equity securities										
EuroSite Power Inc.	\$	131,241	\$		\$	131,241	\$	_	\$	37,497
Total recurring fair value measurements	\$	131,241	\$		\$	131,241	\$	_	\$	37,497

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 six months ended June 30, 2024 and 2023:

Fair value at December 31, 2023	\$ 93,744
Unrealized losses	(18,749)
Fair value at June 30, 2024	\$ 74,995
Fair value at December 31, 2022	\$ 93,744
Unrealized gains	37,497
Fair value at June 30, 2023	\$ 131,241

## Contingent Contract Consideration

We utilize a Level 3 category fair value measurement to value the contingent contract consideration liability at period end since there are no quoted prices for this liability in non-active markets, there are no quoted prices for similar liabilities in active markets and there are no inputs that are observable for substantially the full term of the the liability. The contingent contract consideration calculation requires management to make estimates and assumptions that affect the reported amount of the liability. The contingent contract consideration is payable each calendar quarter through the earlier of the expiration or termination of the relevant maintenance agreements, or the seventh (7th) anniversary of the acquisition date. The consideration is equal to the product of the revenues collected in a calendar quarter multiplied by an applicable percentage. The agreement stipulates quarterly aggregate revenue targets and an applicable percentage, and provides for a higher applicable percentage if revenues exceed the target revenues. The applicable percentage ranges from 5% to 10% over the agreement term. On the date of acquisition, the fair value of the contingent consideration was calculated using a weighted average cost of capital of 15%, discounting the future cash flows to present value.

		Quote active markets f asset		Signifi observable	icant other inputs	Significant able inputs	
	Total	I	evel 1	L	evel 2	Level 3	Total gains (losses)
June 30, 2024							
Recurring fair value measurements							
Contingent contract consideration							
Current	\$ 269,368	\$	_	\$	_	\$ 269,368	\$
Long-term	1,129,172		_		_	1,129,172	
Total recurring fair value measurements	\$ 1,398,540	\$		\$	_	\$ 1,398,540	\$
		,				<u> </u>	
June 30, 2023							
Recurring fair value measurements							
Contingent contract consideration							
Current	\$ 164,357	\$	_	\$	_	\$ 164,357	\$
Long-term	1,278,105		_		_	1,278,105	
Total recurring fair value measurements	\$ 1,442,462	\$	_	\$	_	\$ 1,442,462	\$

## Note 13. Segments

As of June 30, 2024, we were organized intothree 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 six months ended June 30, 2024 and 2023:

		Products Services		F	Energy Production		Corporate, other and elimination (1)		Total	
Three Months Ended June 30, 2024	_						_			
Revenue - external customers	\$	119,673	\$	4,126,517	\$	481,597	\$	_	\$	4,727,787
Intersegment revenue				81,852				(81,852)	\$	
Total revenue	\$	119,673	\$	4,208,369	\$	481,597	\$	(81,852)	\$	4,727,787
Gross profit	\$	(52,309)	\$	1,934,702	\$	196,762	\$		\$	2,079,155
Identifiable assets	\$	8,801,555	\$	12,798,442	\$	3,150,322	\$	2,404,641	\$	27,154,960
Six Months Ended June 30, 2024	_									
Revenue - external customers	\$	1,611,071	\$	8,140,827	\$	1,161,985	\$	_	\$	10,913,883
Intersegment revenue	_		_	199,200	_		_	(199,200)	\$	
Gross profit	\$	389,546	\$	3,856,755	\$	408,510	\$		\$	4,654,811
Identifiable assets	\$	8,801,555	\$	12,798,442	\$	3,150,322	\$	2,404,641	\$	27,154,960
Three Months Ended June 30, 2023										
Revenue - external customers	\$	2,445,631	\$	3,952,971	\$	350,156	\$	_	\$	6,748,758
Intersegment revenue		_		66,143		_		(66,143)		_
Total revenue	\$	2,445,631	\$	4,019,114	\$	350,156	\$	(66,143)	\$	6,748,758
Gross profit	\$	827,175	\$	1,877,102	\$	130,149	\$	_	\$	2,834,426
Identifiable assets	\$	9,955,171	\$	13,051,494	\$	3,284,542	\$	3,508,978	\$	29,800,185
Six Months Ended June 30, 2023										
Revenue - external customers	\$	4,155,767	\$	7,089,144	\$	883,665	\$	_	\$	12,128,576
Intersegment revenue		_		154,357		_		(154,357)		_
Total revenue	\$	4,155,767	\$	7,243,501	\$	883,665	\$	(154,357)	\$	12,128,576
Gross profit	\$	1,324,743	\$	3,275,673	\$	325,919	\$	_	\$	4,926,335
Identifiable assets	\$	9,955,171	\$	13,051,494	\$	3,284,542	\$	3,508,978	\$	29,800,185

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

## Note 14. Subsequent Events

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

On July 23, 2024, we borrowed an additional \$500,000 from Mr. John N. Hatsopoulos, and executed a promissory note with a maturity of year year and an interest rate of 5.06% per annum on the terms and conditions set forth therein and the Note Subscription Agreement dated October 9, 2023, as amended.

## 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. Forward-looking statements can also be identified by words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "will," "would," "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, 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 I A of this Form 10-Q, in each case under the heading "Risk Factors." The following discussion should be read in conjunction with the 2023 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 I 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 specifica

#### Recent Developments

Assumption of Aegis Energy Services Maintenance Agreements

On March 15, 2023, we entered into an agreement ("Agreement") with Aegis Energy Services, LLC ("Aegis") pursuant to which Aegis agreed to assign to us and we agreed to assume certain Aegis maintenance agreements, we agreed to purchase certain assets, and related matters ("Acquisition"). On April 1, 2023, the Acquisition closed. Under the Agreement, we agreed to acquire from Aegis and assume Aegis' rights and obligations arising on or after April 1, 2023 under maintenance agreements pursuant to which Aegis provided maintenance services for approximately 200 cogeneration systems, and acquired certain vehicles and inventory used by Aegis in connection with the performance of such maintenance services, and, following closing hired eight (8) Aegis employees to provide services with respect to such maintenance agreements. At closing, we acquired eight (8) Aegis vehicles for consideration consisting of \$170,000 in cash. Also, we issued credits against outstanding accounts receivable due from Aegis in the amount of \$300,000 for the acquisition of inventory that Aegis used to provide maintenance services.

On February 1, 2024, Tecogen and Aegis amended the Agreement to add eighteen (18) additional maintenance service agreements (the "Amendment"). The Amendment includes an undertaking by Aegis to use commercially reasonable efforts to support and assist our execution of maintenance service agreements for an additional thirty-six (36) cogeneration units sold to customers by Aegis.

On May 1, 2024, Tecogen and Aegis amended the Agreement to add thirty-one (31) additional maintenance contracts (the "Second Amendment"). The Second Amendment includes an undertaking by Aegis to use commercially reasonable efforts to support and assist our execution of maintenance service agreements for an additional forty-eight (48) cogeneration units sold to customers by Aegis.

See Note 7. Aegis Contract and Related Asset Acquisitions of the Notes to the Consolidated Financial Statements.

Factory Move

In April, 2024, Tecogen moved it's manufacturing operations and corporate offices from 45 First Ave, Waltham, MA to 76 Treble Cove Road, North Billerica, MA. As a result of the move, product revenues were impacted during the second quarter of 2024. The factory move also necessitated construction activities to install equipment test cells and comply with local regulations. The Company will be able to resume manufacturing operations during the third quarter of 2024.

Impact of Anti-fossil Fuel Sentiment

In some key markets such as New York City, the regulatory push to eliminate fossil fuels from buildings has impacted cogeneration unit sales. The Company believes that as regulations take into account scope 2 emissions, products like our hybrid chiller that can choose the cleanest fuel source will have a significant advantage in decarbonization efforts.

## Impact of Utility Power Constraints and Data Center Construction

As more load is added to the utility grid in the form of data centers, EV charging, customers are facing power constraints. Tecogen believes that these power constrained customers, in particular data centers and industrial facilities represent a significant opportunity for growth. The customer need is driven by ability to expand an existing facility or open a new facility quickly while taking advantage of utility bills savings long term. Our chiller products can reduce the electrical capacity needed on-site by 30% or more. Our InVerde product can provide on-site power generation by using an inverter based system that operates at 480V. This allows customers to eliminate long lead times associated with electrical switch gear and bridge any short fall in power from the utility.

#### Residual Impacts of Covid

Supply chains were adversely impacted during Covid resulting in significant delays or lack of availability of critical components such as engines. This has continued to have long term impact on product and service margin. The direct impact has been certain costs increasing faster than inflation. The indirect impact is from increased engine related costs in the service segment as replacements were deferred or overhauled components were used due to lack of parts. We have instituted a service price increase and have also been making engineering improvements to increase service intervals to increase margins.

#### Tecochill Hybrid-Drive Air-Cooled Chiller Development

During the third quarter of 2021 we began development of the Tecochill Hybrid-Drive Air-Cooled Chiller. We recognized that there were many applications where the customer wanted an easy to install roof top chiller. Using the inverter design from our InVerde e+ cogeneration module, the system can simultaneously take two inputs, one from the grid or a renewable energy source and one from our natural gas engine. This allows a customer to seek the optimum blend of operational cost savings and greenhouse gas benefits while providing added resiliency from two power sources. We introduced the Tecochill Hybrid-Drive Air-Cooled Chiller at the AHR Expo in February 2023 and received an order on February 8, 2024 for three hybrid-drive air-cooled chillers for a utility in Florida. A patent application based on this concept has been filed with the US Patent and Trademark Office.

#### Controlled Environment Agriculture

On July 20, 2022, we announced our intention to focus on opportunities for the use of our cogeneration equipment in low carbon Controlled Environment Agriculture ("CEA"). We believe that CEA offers an exciting opportunity to apply our expertise in clean cooling, power generation, and greenhouse gas reduction to address critical issues affecting food and energy security. We propose to address this challenge by developing a highly efficient energy solution for CEA grown produce using our cogeneration products in conjunction with solar energy generation, energy storage, and other technologies.

CEA facilities enable multiple crop cycles (15 to 20 cycles) in one year compared to one or two crop cycles in conventional farming. In addition, growing produce close to the point of sale reduces food spoilage during transportation. Food crops grown in greenhouses typically have lower yields per square foot than in CEA facilities, and the push to situate facilities close to consumers in cities requires minimizing land area and maximizing yield per square foot. Yields are increased in CEA facilities by supplementing or replacing natural light with grow lights in a climate-controlled environment - which requires significant energy use.

In recent years our cogeneration equipment has been used in numerous cannabis cultivation facilities because our systems reduce the facility's need for power, significantly reduce operating costs and the facility GHG footprint, and offer resiliency to grid outages. Our experience providing clean energy solutions to cannabis cultivation facilities has given us significant insight into requirements relating to energy-intensive indoor agriculture applications that we expect to be transferable to CEA facilities for food production.

### Related Party Notes

On October 9, 2023, we entered into note subscription agreements with each of John N. Hatsopoulos, a director and principal shareholder of registrant, and Earl R. Lewis, III, a director of registrant, pursuant to which Mr. Hatsopoulos agreed to provide financing to us of \$500,000, and potentially, an additional \$500,000 at his discretion. On October 10, 2023, we issued a promissory note and borrowed \$500,000 from Mr. Hatsopoulos. The loan bears interest at 5.12% per annum. On July 23, 2024, we borrowed an additional \$500,000 from Mr. Hatsopoulos, and executed a promissory note with a maturity of one year and interest at 5.06% per annum. See Note 11. Related Party Notes of the Notes to the Consolidated Financial Statements.

Impact of the Geopolitical Tensions

We have no operations or customers in Russia, the Ukraine or in the Middle East. The higher energy prices for natural gas as a result of the war may affect the performance of our Energy Production Segment and the cost differential between grid generated energy and natural gas sourced energy using our cogeneration equipment. However, we have also seen higher electricity prices as much of the electricity production in the United States is generated from fossil fuels. If the electricity prices continue to rise, the economic savings generated by our products are likely to increase. In addition to the direct result of changes in natural gas and electricity prices, the war in Ukraine and the conflict in the Middle East may result in higher cybersecurity risks, increased or ongoing supply chain challenges, and volatility related to the trading prices of commodities.

## Overview

Tecogen designs, manufactures, markets, and maintains high efficiency, ultra-clean cogeneration products. These include natural gas engine driven combined heat and power (CHP) systems, chillers and heat pumps for multi-family residential, commercial, recreational and industrial use. We are known for products that provide customers with substantial energy savings, resiliency from utility power outages and for significantly reducing a customer's carbon footprint. Our products are sold with our patented Ultera® technology which nearly eliminates all criteria pollutants such as NOx and CO. Our systems are greater than 88% efficient compared to typical electrical grid efficiencies of 40% to 50%. As a result, our greenhouse gas (GHG) emissions per KwH are typically half that of the electrical grid. Our systems generate electricity and hot water or in the case of our Tecochill product, both chilled water and hot water. These result in savings of energy related costs of up to 60% for our customers. Our products are expected to run on Renewable Natural Gas (RNG) as it is introduced into the US gas pipeline infrastructure.

Our products are sold directly to end-users by our in-house sales 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. To date we have shipped over 3,200 units, some of which have been operating for almost 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 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 three business segments. Our Products segment designs, manufactures and sells industrial and commercial cogeneration systems. Our Services segment provides O&M services for our products under long term service contracts. 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**

Three Months Ended June 30, 2024 Compared to Three Months Ended June 30, 2023

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					
	June 30, 2024		June 30, 202	23		
Revenues	100.0	%		100.0%		
Cost of sales	56.0	%		58.0%		
Gross profit	44.0	%		42.0%		
Operating expenses						
General and administrative	61.3	%		43.2%		
Selling	8.6	%		7.1%		
Research and development	5.2	%		3.5%		
Gain on sale of assets	0.1	%		(0.3)%		
Total operating expenses	75.2	%		53.6%		
Loss from operations	(31.2)	%	(11.6)	%		
Total other expense, net	(0.8)	%	0.2	%		
Loss before income taxes	(31.9)	%	(11.3)	%		
Provision for state income taxes	_	%	0.1	%		
Consolidated net loss	(31.9)	%	(11.5)	%		
Income attributable to the non-controlling interest	(0.6)	%	(0.1)	%		
Net loss attributable to Tecogen, Inc.	(32.5)	%	(11.6)	%		

## Revenues

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

	Three Months Ended							
	Ju	June 30, 2024 June 30, 2		June 30, 2023	Iı	ncrease (Decrease) \$	Increase (Decrease) %	
REVENUE:								
Products								
Cogeneration	\$	119,673	\$	427,314	\$	(307,641)	(72.0)	%
Chiller		_		1,687,981		(1,687,981)	(100.0)	%
Engineered accessories		_		330,336		(330,336)	(100.0)	%
Total product revenues		119,673		2,445,631		(2,325,958)	(95.1)	%
Services		4,126,517		3,952,971		173,546	4.4	%
Energy production		481,597		350,156		131,441	37.5	%
Total revenues	\$	4,727,787	\$	6,748,758	\$	(2,020,971)	(29.9)	%

Total revenues for the three months ended June 30, 2024 were \$4,727,787 compared to \$6,748,758 for the same period in 2023, a decrease of \$2,020,971 or 29.9% year over year.

#### Products

Products revenues in the three months ended June 30, 2024 were \$119,673 compared to \$2,445,631 for the same period in 2023, a decrease of \$2,325,958, or 95.1%. The decrease in revenue during the three months ended June 30, 2024 is due to the relocation of our manufacturing operations to our new facility in April 2024, which significantly reduced our production capacity, resulting in a decrease in chiller sales of \$1,687,981, a \$307,641 decrease in cogeneration sales, and a decrease in engineered accessory sales of \$330,336. Our Products sales mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales.

#### Services

Service revenues in the three months ended June 30, 2024 were \$4,126,517, compared to \$3,952,971 for the same period in 2023, an increase of \$173,546, or 4.4%. The increase in revenue during the three months ended June 30, 2024 is due to the addition of \$23,972 in revenue from the acquired Aegis maintenance contracts, \$67,884 of revenue representing our share of the excess cash flows above the minimum threshold for the bi-annual period ended June 30, 2024 and a \$81,690 increase in service contract revenues from existing contracts.

Our service operation revenues grow with the sale of installed systems, since the majority of our product sales are accompanied by a service contract or time and materials agreements and by the acquisition of maintenance contracts. As a result, our "fleet" of units being serviced by our service department grows with product sales.

#### Energy Production

Energy Production revenues in the three months ended June 30, 2024 were \$481,597, compared to \$350,156 for the same period in 2023, an increase of \$131,441, or 37.5%. The increase in Energy Production revenue is due to increased run hours at certain energy production sites.

#### Cost of Sales

Cost of sales in the three months ended June 30, 2024 was \$2,648,632 compared to \$3,914,332 for the same period in 2023, a decrease of \$1,265,700, or 32.3%. The decrease in cost of sales is due to decreased Product sales, offset by increased service contract maintenance costs due to higher labor and material costs to replace engines at certain sites in 2024, and increased energy production costs. During the three months ended June 30, 2024 our gross margin increased to 44.0% compared to 42.0% for the same period in 2023, a 2.0% percentage point increase due to higher service contract revenue.

#### Products

Cost of sales for Products in the three months ended June 30, 2024 was \$171,982 compared to \$1,618,456 for the same period in 2023, a decrease of \$1,446,474, or 89.4% due to decreased sales of Products. During the three months ended June 30, 2024, our Products gross margin was negative 43.7% compared to 33.8% for the same period in 2023, a 77.5% percentage point decrease. The decrease in margin was a function of minimal Products revenue, warranty costs and unabsorbed labor costs in the three months ended June 30, 2024.

#### Services

Cost of sales for Services in the three months ended June 30, 2024 was \$2,191,815 compared to \$2,075,869 for the same period in 2023, an increase of \$115,946, or 5.6%, due to increased labor and material costs as a consequence of increased revenue from the Aegis customer maintenance contracts acquisition. During the three months ended June 30, 2024, our Services gross margin decreased to 46.9% compared to 47.5% in the same period in 2023, a 0.6% percentage point decrease. The decrease in margin is due to higher costs incurred to replace engines at certain sites in 2024.

Supply chains were adversely impacted during Covid resulting in significant delays or lack of availability of critical components such as engines. This has continued to have long term impact on service margin. The direct impact has been certain costs increasing faster than inflation. The indirect impact is from increased engine related costs in the service segment as replacements were deferred or overhauled components were used due to lack of parts. We have instituted a service price increase and have also been making engineering improvements to increase service intervals to increase margins.

#### Energy Production

Cost of sales for Energy Production in the three months ended June 30, 2024 was \$284,835 compared to \$220,007 for the same period in 2023, an increase of \$64,828, or 29.5%. During the three months ended June 30, 2024 our Energy Production gross margin increased to 40.9% compared to 37.2% for the same period in 2023, a 3.7% percentage point increase. The increase in the energy production gross margin is due to increased run hours at certain of our Energy Production sites in the three months ended June 30, 2024 compared to the same period in 2023 and lower maintenance costs.

#### Operating Expenses

Operating expenses decreased \$61,553, or 1.7%, to \$3,553,122 in the three months ended June 30, 2024 compared to \$3,614,675 in the same period in 2023.

	 I nree Mon	iths Ended		
Operating Expenses	June 30, 2024	June 30, 2023	Increase (Decrease) \$	Increase (Decrease) %
General and administrative	\$ 2,897,993	\$ 2,917,283	\$ (19,290)	(0.7) %
Selling	405,277	480,786	(75,509)	(15.7) %
Research and development	246,489	236,556	9,933	4.2 %
Gain on disposition of assets	3,363	(19,950)	23,313	(116.9) %
Total	\$ 3,553,122	\$ 3,614,675	\$ (61,553)	(1.7) %

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 June 30, 2024 were \$2,897,993 compared to \$2,917,283 for the same period in 2023, a decrease of \$19,290 or 0.7%, due to a \$70,263 decrease in depreciation and amortization costs, a \$66,641 decrease in consulting costs, a \$72,766 decrease in business insurance costs, and a \$39,195 decrease in the provision for credit losses, offset partially by a \$146,369 increase in payroll and related expenses, a \$68,527 increase in facility costs due to the transition to our new facility, and \$83,055 of relocation costs.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the three months ended June 30, 2024 were \$405,277 compared to \$480,786 for the same period in 2023, a decrease of \$75,509 or 15.7%, due to a \$64,218 decrease in sales commission and a \$20,280 decrease in payroll and related benefits.

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 June 30, 2024 were \$246,489 compared to \$236,556 for the same period in 2023, an increase of \$9,933 or 4.2%.

The loss on asset dispositions for three months ended June 30, 2024 was \$3,363 compared to a gain on asset dispositions of \$19,950.

#### Income (loss) from Operation,

Our loss from operations for the three months ended June 30, 2024 was \$1,473,967 compared to a loss from operations of \$780,249 for the same period in 2023, an increase of \$693,718. The increase in the loss from operations is due to lower Products revenues and decreased gross profit, offset partially by a \$61,553 decrease in operating expenses.

#### Other Income (Expense), ne

Other expense net for the three months ended June 30, 2024 was \$36,472 compared to other income net of \$14,579 for the same period in 2023, a decrease of \$51,051, due to unrealized loses on marketable securities of \$37,497 recognized in the three months ended June 30, 2024, compared to an unrealized gain on marketable securities of \$37,497 recognized in 2023 and to a \$16,012 increase in interest due to borrowings under our related party note and lease financing, offset partially by a \$39,955 increase in currency exchange gains.

#### Provision for State Income Taxes

The provision for state income taxes for the three months ended June 30, 2024 and 2023 was \$37 and \$9,614, respectively, and represents estimated income tax payments, net of refunds, to various states.

#### Non-controlling Interest

Income attributable to the non-controlling interest was \$28,320 for the three months ended June 30, 2024 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 2023, income attributable to the non-controlling interest was \$4,826.

### Net Income (loss) Attributable to Tecogen Inc.

The net loss attributable to Tecogen for the three months ended June 30, 2024 was a net loss of \$1,538,796 compared to a net loss of \$780,110 for the same period in 2023, an increase of \$758,686, or 97.3%. The increase in the net loss is due to lower Products revenue and gross profit, offset partially by a \$61,553 decrease in operating expenses.

Six Months Ended June 30, 2024 Compared to the Six Months Ended June 30, 2023

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:

	Si	ix Months Ended
	June 30, 2024	June 30, 2023
Revenues	100.0%	100.0%
Cost of sales	57.3%	59.4%
Gross profit	42.7%	40.6%
Operating expenses		
General and administrative	52.7%	47.1%
Selling	8.6%	8.3%
Research and development	4.6%	3.8%
Gain on sale of assets	%	(0.2)%
Total operating expenses	65.8%	59.0%
Loss from operations	(23.1)%	(18.4)%
Total other income (expense), net	(0.5)%	0.1%
Loss before income taxes	(23.6)%	(18.3)%
Income tax provision	0.2%	0.2%
Consolidated net loss	(23.8)%	(18.5)%
Income attributable to the non-controlling interest	(0.4)%	(0.2) %
Net loss attributable to Tecogen, Inc.	(24.2)%	(18.7)%

## Revenues

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

	Six Months Ended							
	Jı	June 30, 2024		June 30, 2023		ncrease (Decrease) \$	Increase (Decrease)	
REVENUE:								
Products								
Cogeneration	\$	893,902	\$	971,007	\$	(77,105)	(7.9)	%
Chiller		657,061		2,756,915		(2,099,854)	(76.2)	%
Engineered accessories		60,108		427,845		(367,737)	(86.0)	%
Total product								
revenues		1,611,071		4,155,767		(2,544,696)	(61.2)	%
Services		8,140,827		7,089,144		1,051,683	14.8	%
Energy production		1,161,985		883,665		278,320	31.5	%
Total revenues	\$	10,913,883	\$	12,128,576	\$	(1,214,693)	(10.0)	%

Total revenues for the six months ended June 30, 2024 were \$10,913,883 compared to \$12,128,576 for the same period in 2023, a decrease of \$1,214,693 or 10.0% year over year.

Products

Products revenues in the six months ended June 30, 2024 were \$1,611,071 compared to \$4,155,767 for the same period in 2023, a decrease of \$2,544,696, or 61.2%. The decrease in revenue during the six months ended June 30, 2024 is due to the relocation of our manufacturing operations to our new facility in April 2024, which significantly reduced our production capacity and customer order delays, resulting in a decrease in chiller sales of \$2,099,854, a \$367,737 decrease in engineered accessory sales and a \$77,105 decrease in cogeneration sales. Our Products sales mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales.

#### Services

Service revenues in the six months ended June 30, 2024 were \$8,140,827, compared to \$7,089,144 for the same period in 2023, an increase of \$1,051,683, or 14.8%. The increase in revenue during the six months ended June 30, 2024 is due to the addition of \$782,734 in revenue from the acquired Aegis maintenance contracts, \$67,884 of revenue representing our share of the excess cash flows above the minimum threshold for the bi-annual period ended June 30, 2024 and a \$201,065 increase in service contract revenues from existing contracts.

Our service operation revenues grow with the sale of installed systems, since the majority of our product sales are accompanied by a service contract or time and materials agreements and by the acquisition of maintenance contracts. As a result, our "fleet" of units being serviced by our service department grows with product sales.

#### Energy Production

Energy Production revenues in the six months ended June 30, 2024 were \$1,161,985, compared to \$883,665 for the same period in 2023, an increase of 278,320, or 31.5%. The increase in Energy Production revenue is due to increased run hours at certain energy production sites.

#### Cost of Sales

Cost of sales in the six months ended June 30, 2024 was \$6,259,072 compared to \$7,202,241 for the same period in 2023, a decrease of \$943,169, or 13.1%. The decrease in cost of sales is due to decreased Products revenue, offset partially by increased service contract maintenance costs due to higher labor and material to replace engines at certain sites in 2024, and increased energy production costs. During the six months ended June 30, 2024 our gross margin increased to 42.7% compared to 40.6% for the same period in 2023, a 2.1% percentage point increase due to higher service contract revenue.

#### Products

Cost of sales for Products in the six months ended June 30, 2024 was \$1,221,525 compared to \$2,831,024 for the same period in 2023, a decrease of \$1,609,499, or 56.9% due to decreased sales of Products. During the six months ended June 30, 2024, our Products gross margin was 24.2% compared to 31.9% for the same period in 2023, a 7.7% percentage point decrease. The decrease in margin was function of minimal Products revenue, warranty costs and unabsorbed labor costs in the three months ended June 30, 2024.

#### Services

Cost of sales for Services in the six months ended June 30, 2024 was \$4,284,072 compared to \$3,813,471 for the same period in 2023, an increase of \$470,601, or 12.3%, due to increased labor and material costs as a consequence of the Aegis customer maintenance contracts acquisition. During the six months ended June 30, 2024, our Services gross margin increased to 47.4% compared to 46.2% in the same period in 2023, a 1.2% percentage point increase. The increase in margin is due to lower costs incurred to replace engines at certain sites in 2024.

Supply chains were adversely impacted during Covid resulting in significant delays or lack of availability of critical components such as engines. This has continued to have long term impact on product and service margin. The direct impact has been certain costs increasing faster than inflation. The indirect impact is from increased engine related costs in the service segment as replacements were deferred or overhauled components were used due to lack of parts. We have instituted a service price increase and have also been making engineering improvements to increase service intervals to increase margins.

#### **Energy Production**

Cost of sales for Energy Production in the six months ended June 30, 2024 was \$753,475 compared to \$557,746 for the same period in 2023, an increase of \$195,729, or 35.1%. During the six months ended June 30, 2024 our Energy Production gross margin decreased to 35.2% compared to 36.9% for the same period in 2023, a 1.7% percentage point decrease. The decrease in the energy production gross margin is due to increased gas and maintenance costs at certain of our Energy Production sites in the six months ended June 30, 2024 compared to the same period in 2023.

#### Operating Expenses

Operating expenses increased \$22,332, or 0.3%, to \$7,178,662 in the six months ended June 30, 2024 compared to \$7,156,330 in the same period in 2023.

		Six Mont	hs Er				
Operating Expenses	·	June 30, 2024		June 30, 2023	Increas	se (Decrease) \$	Increase (Decrease) %
General and administrative	\$	5,746,559	\$	5,709,766	\$	36,793	0.6 %
Selling		934,946		1,000,856		(65,910)	(6.6) %
Research and development		501,185		465,658		35,527	7.6 %
Gain on disposition of assets		(4,028)		(19,950)		15,922	(79.8) %
Total	\$	7,178,662	\$	7,156,330	\$	22,332	0.3 %

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 six months ended June 30, 2024 were \$5,746,559 compared to \$5,709,766 for the same period in 2023, an increase of \$36,793 or 0.6%, due to a \$180,354 increase in facility costs due to the transition to our new facility, a \$164,120 increase in payroll and related benefits and \$83,055 of relocation costs, offset partially by a \$93,787 decrease in consulting costs, an \$82,702 decrease in operating supplies, a \$72,544 decrease in depreciation and amortization expense, a \$70,603 reduction in travel expenses, a \$59,476 decrease in business insurance costs, and a \$24,937 decrease in the provision for credit losses.

Selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses. Selling expenses for the six months ended June 30, 2024 were \$934,946 compared to \$1,000,856 for the same period in 2023, a decrease of \$65,910 or 6.6%, due to a \$72,213 decrease in trade show expense and a \$27,855 decrease in payroll and related benefits, offset partially by a \$25,872 increase in sales commissions.

Research and development expenses consist of engineering and technical staff, materials, outside consulting and other related expenses. Research and development expenses for the six months ended June 30, 2024 were \$501,185 compared to \$465,658 for the same period in 2023, an increase of \$35,527 or 7.6%, due to a \$94,994 increase in depreciation and amortization, offset partially by a \$67,748 decreased in payroll and related benefits.

The gain on asset dispositions for six months ended June 30, 2024 of \$4,028 compared to \$19,950 for the same period in 2023, represents the excess of insurance proceeds received over the net book value of assets for auto claims filed during the period or the excess of proceeds received over the book value on the sale of vehicles.

#### Income (loss) from Operations

Our loss from operations for the six months ended June 30, 2024 was \$2,523,851 compared to a loss from operations of \$2,229,995 for the same period in 2023, an increase of \$293,856, or 13.2%. The increase in the loss from operations is due to lower Products revenues and gross profit.

#### Other Income (Expense), net

Other expense net for the six months ended June 30, 2024 was \$52,141 compared to other income net of \$14,994 for the same period in 2023, an increase in other expense of \$67,135, due to unrealized loss of \$18,749 recognized in the six months ended June 30, 2024 compared to an unrealized gain of \$37,497 recognized in 2023 and a \$34,267 increase in interest due to borrowings under our related party note and lease financing, offset partially by a \$23,378 increase in currency exchange gains recognized in the six months ended June 30, 2024.

#### Provision for State Income Taxes

The provision for state income taxes for the six months ended June 30, 2024 and 2023 was \$22,100 and \$32,252, respectively, and represents estimated income tax payments, net of refunds, to various states.

## Non-controlling Interest

Income attributable to the non-controlling interest was \$45,671 for the six months ended June 30, 2024 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 2023, income attributable to the non-controlling interest was \$22,886.

#### Net Income (loss) Attributable to Tecogen Inc.

The net loss attributable to Tecogen for the six months ended June 30, 2024 was a net loss of \$2,643,763 compared to a net loss of \$2,270,139 for the same period in 2023, an increase in the net loss of \$373,624, or 16.5%. The increase in the net loss is due to decreased Products revenue and gross profit.

#### Liquidity and Capital Resources

Sources of Liquidity

During the six months ended June 30, 2024, we incurred a loss from operations of \$2,523,851 compared to a loss from operations of \$2,229,995 in the same period in 2023. Cash flows from operations decreased \$63,379 during the six months ended June 30, 2024 compared to the same period in 2023. As of June 30, 2024, we had cash equivalents of \$841,913 compared to cash and cash equivalents of \$1,351,270 as of December 31, 2023, a decrease of \$509,357 or 37.7%, and an accumulated deficit as of June 30, 2024, of \$45,523,419. In addition to cash from operations, we have relied upon a loan in the amount of \$500,000 from a related party to help fund operations. The loan becomes due on October 10, 2025. On July 23, 2024, we borrowed an additional \$500,000 from Mr. Hatsopoulos, and executed a promissory note with a maturity of one year and interest at 5.06% per annum. (See "Note 11 to the Condensed Consolidated Financial Statements" and "Liquidity," below.) In view of the foregoing, we may need to raise additional cash through one or more equity or debt financings to continue to fund our operations and expand our business. There is no assurance we will be able to raise such financing or upon terms that are acceptable to us. (See also "Note 2 to the Condensed Consolidated Financial Statements" and in our Condensed Consolidated Financial Statements for the year ended December 31, 2023, included in our 2023 Form 10-K.) If adequate financing is not available when needed, we may be required to implement cost-cutting strategies, delay production, curtail research and development efforts, or implement other measures, which may adversely affect our results of operations and financial conditions and the price of our stock.

## Cash Flows

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

		Six M		
Cash Provided by (Used in)	Ju	ne 30, 2024	June 30, 2023	Increase (Decrease)
Operating activities	\$	90,297	\$ 153,676	\$ (63,379)
Investing activities		(569,077)	(196,582)	(372,495)
Financing activities		(30,577)		(30,577)
Cash Provided by (Used in)	\$	(509,357)	\$ (42,906)	\$ (466,451)

Consolidated working capital at June 30, 2024 was \$6,554,735 compared to \$9,822,546 at December 31, 2023, a decrease of \$3,267,811, or 13.5%. Included in working capital were cash and cash equivalents of \$841,913 at June 30, 2024, compared to \$1,351,270 at December 31, 2023, a decrease of \$509,357, or 37.7%.

## Cash Flows from Operating Activities

Cash provided by operating activities for the six months ended June 30, 2024 was \$90,297 compared to \$153,676 of cash used by operating activities for the same period in 2023, a decrease of \$63,379, or 41.2% Our accounts receivable and unbilled revenue balances were \$5,364,228 and \$1,258,532, respectively, at June 30, 2024 compared to \$6,781,484 and \$1,258,532 at December 31, 2023, providing \$1,398,193 of cash. During the six months ended June 30, 2023 we collected the majority of the outstanding Employee Retention Credit receivables, providing \$667,121 of cash from operations.

Accounts payable decreased to \$4,405,769 as of June 30, 2024 from \$4,514,415 at December 31, 2023, using \$108,646 in cash flow from operations. The decrease in accounts payable was due to decreased material purchases. Deferred revenue increased to \$2,558,799 as of June 30, 2024 compared to \$1,647,206 as of December 31, 2023, due to increased customer deposits, providing \$806,266 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 six months ended June 30, 2024 we used \$569,077 in cash from investing activities. We used \$556,636 of cash to purchase property, plant and equipment and received \$36,213 in proceeds from the disposition of assets, including insurance proceeds and distributed \$48,654 to the 49% non-controlling interest holders of American DG New York LLC. Cash used in asset acquisition are for costs incurred during the six months ended June 30, 2024 for initial improvements required to the North Billerica, Massachusetts leased premises which are estimated to range between \$500,000 and \$750,000.

During the six months ended June 30, 2023 we used \$196,582 in cash from investing activities. We used \$170,000 of cash to acquire certain assets as part of the Aegis acquisition, used \$19,607 of cash to purchase property, plant and equipment, and distributed \$23,838 to the 49% non-controlling interest holders of American DG New York LLC, partially offset by the receipt of \$16,863 in proceeds from the disposition of assets.

Cash Flows from Financing Activities

During the six months ended June 30, 2024 we used \$30,577 of cash in payment of finance lease principal. There were no cash flows from financing activities in the three months ended June 30, 2023.

Backlog

As of June 30, 2024, our backlog of product and installation projects, excluding service contracts, was \$5,121,551, consisting of \$4,681,231 of purchase orders received by us and \$440,320 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. As of June 30, 2023, our backlog of product and installation projects, excluding service contracts, was \$8,234,288 consisting of \$5,720,038 of purchase orders received by us and \$2,514,250 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.

Liquidity

At June 30, 2024, we had cash and cash equivalents of \$841,913, a decrease of \$509,357 or 37.7% from the cash and cash equivalents balance at December 31, 2023. During the six months ended June 30, 2024, our revenues were negatively impacted due to the relocation of our manufacturing operations to our new facility in April 2024, which significantly reduced our production capacity, customer order delays or deferrals for our products; service delays 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.

Based on our current operating plan, we believe existing resources, including cash and cash flows from operations will be sufficient to meet our working capital requirements for the next twelve months. In order to grow our business and fund the development of our hybrid-drive air-cooled chiller and the relocation of our primary facility, we expect that our cash requirements will increase and we may need to raise additional capital through a debt or equity financing to meet our need for capital to fund operations and future growth.

On October 9, 2023, we entered into an agreement with each of John N. Hatsopoulos, a director and principal shareholder of registrant, and Earl R. Lewis, III, a director, pursuant to which Mr. Hatsopoulos agreed to provide financing to us of up to \$1 million, and Mr. Lewis agreed to provide financing to us of \$500,000, and potentially an additional \$500,000 at his discretion. On October 10, 2023, we issued a promissory note and borrowed \$500,000 from Mr. Hatsopoulos. The note, as amended on March 21, 2024, is due and repayable two years from the date of issuance and bears interest at 5.12% per annum payable in full at maturity. The loan is required to be repaid in the event of a change of control of the company and upon the occurrence of an event of default under the note, including upon a failure to pay the principal and interest when due, or the commencement of voluntary or involuntary bankruptcy or insolvency proceeding. The proceeds of the loans are expected to be used for general working capital purpose.

On March 21, 2024, John H. Hatsopoulos amended the terms of the Promissory Note dated October 10, 2023, extending the maturity date by one year, to October 10, 2025, and agreeing to accept payment in cash or Tecogen Inc. common stock. On July 23, 2024, we borrowed an additional \$500,000 from Mr. Hatsopoulos, and executed a promissory note with a maturity of one year and interest at 5.06% per annum.

## 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, 2023. 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, 2023, filed with the SEC on March 25, 2024. 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 are operational during the summer. 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. Our cogeneration sales are not generally affected by seasonality.

## **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 Officer") conducted evaluations of our disclosure controls and procedures. As defined in Rule 13a-15(e) and 15d-15(e) under 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 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 Officer, 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, has 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

Except as described below, there are no material pending legal proceedings, other than ordinary routine litigation incidental to the business, to which we are a party or of which any of our property is the subject.

On November 23, 2022, we were served with a suit filed against us on August 24, 2022 in the Ontario Superior Court of Justice by The Corporation of the Town of Milton, Milton Energy Generation Solutions Inc. and Milton Hydro Distribution Inc ("Plaintiffs"), all of whom are municipal corporations incorporated in the Province of Ontario. The plaintiffs sued for damages in the amount of CDN \$1,000,000, pre-judgment and post-judgment interest, legal fees, alleging breach of contract, breach of warranty, negligent misrepresentations and nuisance. Plaintiffs allege that on or about July 10, 2022, a Tecogen cogenerator installed by us at the plaintiffs' facility caught fire, causing damage to the cogenerator and the plaintiff's facility. We have filed a response denying liability and are represented Canadian counsel. For the year ended December 31, 2022, we reserved \$150,000 for anticipated damages which may not be covered by our insurance and continue to maintain the reserve at June 30, 2024

#### Item 1A. Risk Factors

In addition to the risks described below, 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, 2023 ("2023 Form 10-K") The risks discussed in our 2023 Form 10-K could materially affect our business, financial condition and future results. The risks described in our 2023 Form 10-K and below 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.

We incurred a net loss from operations of \$2,523,851 during the six months ended June 30, 2024, compared to a net loss from operations of \$2,229,995 in the same period in 2023. We have a history of incurring losses from our operations and there can be no assurance we will be able to increase our revenues, manage our expenses and cash flows, and become profitable in the future.

We incurred a net loss from operations of \$2,523,851 during the six months ended June 30, 2024, compared to a net loss from operations of \$2,229,995 in the six months ended June 30, 2023. Historically, we have incurred net losses from operations, including a net loss of \$4,598,103 in the year ended December 31, 2023, and, as of June 30, 2024, we had an accumulated deficit of \$45,523,419. Our business is capital intensive and, because our products are built to order with customized configurations, the lead time to build and deliver a unit can be significant. We may be required to purchase key components long before we can deliver a unit and receive payment. Changes in customer orders or lack of demand may also impact our profitability. There can be no assurance we will be able to increase our sales and achieve and sustain profitability in the future. If our cash flows from operations are insufficient to fund our business and, currently, we are reliant upon financing provided by a related party to help fund our operations we may need to raise additional capital through a debt or equity financing to meet our need for capital to fund operations and future growth. (See "Note 11 to the Condensed Consolidated Financial Statements" and "Liquidity and Capital Resources-Liquidity.")

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The Company did not have any purchases of equity securities during the three months ended June 30, 2024.

#### Item 3. Defaults in Senior Securities

None.

## Item 4. Mine Safety Disclosures

Not applicable.

## Item 5. Other Information

## Securities Trading Plans of Directors and Executive Officers

During the six months ended June 30, 2024, no director or officer of the Company, as defined in Section 16 of the Securities Exchange Act of 1934 and the rules adopted thereunder, adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or pursuant to any "non-Rule 10b5-1 trading arrangement" as defined under Item 408(a) of Regulation S-K.

## Item 6. Exhibits

Exhibit No.	Description of Exhibit
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
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

<sup>\*\*</sup> Filed herewith

\*\* Furnished herewith

+ Compensatory plan or arrangement

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereto duly authorized.

TECOGEN INC. (Registrant)

Dated: August 8, 2024

By: /s/ Abinand Rangesh

Abinand Rangesh

Chief Executive and Financial Officer (Principal Executive and Financial Officer)

## 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: August 8, 2024

/s/ Abinand Rangesh Abinand Rangesh Chief Executive and Financial Officer

## 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

- I, Abinand Rangesh, Chief Executive and 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 June 30, 2024 (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: August 8, 2024

/s/ Abinand Rangesh Abinand Rangesh Chief Executive and Financial Officer