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

Form 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the month of March 2024

Commission file number: 001-41334

RAIL VISION LTD.

(Translation of registrant's name into English)

15 Ha'Tidhar St Ra'anana, 4366517 Israel

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.					
Form 20-F ⊠	Form 40-F □				

CONTENTS

On March 25, 2024, Mr. Maximilian Eichhorn's term as a member of the Board of Directors (the "Board") of Rail Vision Ltd. (the "Company") expired pursuant to Section 42(b) of the Amended and Restated Articles of Association of the Company. On March 28, 2024, at a meeting of the Board, Mr. Eichhorn was appointed to continue as a Board observer.

In addition, attached hereto as Exhibit 99.1 and incorporated herein is the Registrant's press release issued on March 28, 2024, titled "Rail Vision Announces Fourth Quarter and Full Year 2023 Financial Results."

The contents of this Report of Foreign Private Issuer on Form 6-K, as well as the section titled "Fourth Quarter 2023 Financial Results" in the press release attached as Exhibit 99.1, are incorporated by reference into the Company's Registration Statements on Form F-3 (File Nos. 333-271068, 333-272933, 333-276869 and 333-277963) and Form S-8 (Registration No. 333-265968), filed with the Securities and Exchange Commission, to be a part thereof from the date on which this report is submitted, to the extent not superseded by documents or reports subsequently filed or furnished.

EXHIBIT INDEX

Exhibit No.	
99.1	Press release issued by Rail Vision Ltd. on March 28, 2024, titled "Rail Vision Announces Fourth Quarter and Full Year 2023 Financia"
	Results."

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, thereunto duly authorized.

Rail Vision Ltd.

By: /s/ Ofer Naveh

Date: March 28, 2024

Name: Ofer Naveh

Title: Chief Financial Officer



Rail Vision Announces Fourth Quarter and Full Year 2023 Financial Results

Ra'anana, Israel, March 28, 2024 (GLOBE NEWSWIRE) – Rail Vision Ltd. (Nasdaq: RVSN) ("Rail Vision" or the "Company"), a development stage technology company seeking to revolutionize railway safety and the data-related market, today reported financial results for the fourth quarter and fiscal year ended December 31, 2023.

"In 2023, while we faced challenges and were presented with new business opportunities, it was a year marked by significant progress and milestones for Rail Vision. We sold our first systems, demonstrating the market's confidence in our technology and laid the groundwork for future success. At the beginning of 2024, we secured a fundraising that strengthens our cash position, enabling us to execute our business plans," commented Shahar Hania, CEO of Rail Vision. "Since then, we have expanded our footprint in the U.S., forged partnerships with industry leaders like Nvidia, and secured additional purchase orders from U.S.-based railway companies, as we take the first steps of achieving our objectives of increasing our presence in the North American market. We believe that with \$3.1 million in cash at the end of 2023, plus the recent \$8.7 million that we received in fundraisings and warrant exercises in the first quarter of 2024, we are well positioned to continue to innovate, grow, and become a leader in the railway safety industry. In addition to our business progress, we continue to innovate and have announced the next generation of our AI-based system. Looking forward, we are energized and more committed than ever to driving forward the future of railway safety and efficiency, as we position Rail Vision to reach the forefront of this vital industry."

2023 and Recent Highlights

- In March 2024, Rail Vision received an order for its Switch Yard System from a Class 1 freight rail company in the United States, which is one of the largest in North America, that will install and use the system on its locomotive for evaluation and testing different scenarios related to safety.
- In February 2024, Rail Vision announced it has joined NVIDIA Metropolis, a partner program, application framework, and set of developer tools focused on bringing to market a new generation of vision AI applications.
- In January 2024, Rail Vision closed a private placement, issuing 1,651,458 ordinary shares, 1,394,999 pre-funded warrants and 4,569,688 warrants. Gross proceeds for the offering were approximately \$3.5 million prior to deducting offering expenses, which included \$0.5 million that was received upon the partial conversion of a credit facility that the Company entered into in January 2024. During the first quarter of 2024, the Company raised an additional approximately \$5.2 million upon the exercise of warrants.
- In January 2024, Rail Vision signed a supply contract with leading US-based rail and leasing services company, valued at up to \$5,000,000 (USD) for the purchase of its AI-based Switch Yard Systems. The first phase of the contract is valued at \$1,000,000 (USD) with follow-on orders for additional Switch Yard Systems, valued at up to \$4,000,000, subject to customer approval. This contract followed an extensive evaluation on the Company's system by this customer.
- In December 2023, Rail Vision completed the delivery of a Main Line system to a leading Latin American (LATAM) mining company. In
 addition to the delivery of the system, Rail Vision is providing supervision, guidance, and training services as part of the \$500,000 purchase
 order.
- On October 17, 2023, Rail Vision received a \$500,000 purchase order for a single Main Line System and related services from a leading Latin American mining company, which was delivered to the customer in December 2023.

- In May 2023, Rail Vision closed a registered direct offering and concurrent private placement, issuing 3,947,368 ordinary shares and prefunded warrants and 3,947,368 warrants. In June 2023, the Company closed an additional private placement, issuing 3,947,368 ordinary shares and 3,947,368 warrants. Gross proceeds from the May and June 2023 transactions were approximately \$6.0 million prior to deducting placement agent expenses and other offering expenses.
- In January 2023, Rail Vision signed an agreement with Israel Railways for the purchase of 10 Rail Vision Main Line Systems. The initial deliveries of the systems were completed in the first quarter of 2024.

Fourth Quarter 2023 Financial Results

- Research and development ("R&D") expenses, net for the three months ended December 31, 2023, were \$1,611,000, compared to the expenses of \$1,473,000 in the three months ended December 31, 2022. The increase in R&D expenses was primarily attributable to an increase in R&D employees and an increase in R&D equipment purchases.
- General and administrative expenses for the three months ended December 31, 2023, were \$986,000, compared to \$1,087,000 in the three months ended December 31, 2022. The decrease is primarily attributed to a decrease in salaries mainly related to significant changes in USD/NIS exchange rate and decrease in share-based payments.
- Net loss for the three months ended December 31, 2023, was \$2,525,000 or \$0.84 per ordinary share, compared to a net loss of \$2,458,000, or \$1.24 per ordinary share, in the three months ended December 31, 2022.
- As of December 31, 2023, cash and cash equivalents were \$3.1 million, compared to \$8.3 million as of December 31, 2022.

Full Year 2023 Financial Results

- Revenues were \$142,000 for the year ended December 31, 2023, comprised from a US-based rail and leasing services company that purchased a Rail Vision Switch Yard System during Q1 2023 and completed its evaluation during Q3 2023.
- R&D expenses for the year ended December 31, 2023, amounted to \$7,145,000 compared to \$6,230,000 for the year ended December 31, 2022. The increase was primarily attributable to allocation of salary expenses from R&D expenses to cost of sales in 2022 and increase in R&D equipment purchases in 2023.
- General and administrative expenses totaled \$4,339,000 for the year ended December 31, 2023, compared to \$4,265,000 for the year ended December 31, 2022. The increase was primarily attributable to increase in professional services related to operating as a public company offset by share-based payments.
- Net loss for the year ended December 31, 2023, was \$11,148,000 or \$4.30 per ordinary share, compared to \$10,475,000 or \$5.91 per ordinary share for the year ended December 31, 2022.

About Rail Vision Ltd.

Rail Vision is a development stage technology company that is seeking to revolutionize railway safety and the data-related market. The company has developed cutting edge, artificial intelligence based, industry-leading technology specifically designed for railways. The company has developed its railway detection and systems to save lives, increase efficiency, and dramatically reduce expenses for the railway operators. Rail Vision believes that its technology will significantly increase railway safety around the world, while creating significant benefits and adding value to everyone who relies on the train ecosystem: from passengers using trains for transportation to companies that use railways to deliver goods and services. In addition, the company believes that its technology has the potential to advance the revolutionary concept of autonomous trains into a practical reality. For more information, please visit https://www.railvision.io/

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses its commitment to driving forward the future of railway safety and efficiency, as it positions itself to reach the forefront of this vital industry and and its belief that it is positioned to continue to innovate, grow, and become a leader in the railway safety industry. Forward-looking statements are not historical facts, and are based upon management's current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management's expectations, beliefs and projections will be achieved, and actual results may differ materially from what is expressed in or indicated by the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company's reports filed from time to time with the Securities and Exchange Commission ("SEC"), including, but not limited to, the risks detailed in the Company's annual report on Form 20-F filed with the SEC on March 28, 2024. Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements. References and links to websites have been provided as a convenience, and the information contained on such websites is not incorporated by reference into this press release. Rail Vision is not responsible for the contents of third-party websites.

Contacts

Shahar Hania Chief Executive Officer Rail Vision Ltd. 15 Ha'Tidhar St Ra'anana, 4366517 Israel Telephone: +972- 9-957-7706

Investor Relations:

Michal Efraty +972-(0)52-3044404 michal@efraty.com

Rail Vision Ltd. BALANCE SHEETS (U.S. dollars in thousands, except share data and per share data)

ASSETS		And	• . •	
HODETO		Auu	lited	
Current assets:				
Cash and cash equivalents	\$	3,066	\$	8,270
Restricted cash		322		222
Trade accounts receivable				115
Inventories		977		
Other current assets		336		225
Total current assets		4,602		8,832
Non-current Assets:				
Operating lease - right of use asset		889		1,151
Fixed assets, net		430		449
Total Non-current assets		1,319		1,600
Total assets	\$	5,921	\$	10,432
	Ψ	3,721	ψ	10,432
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities				
Trade accounts payables	\$	185	\$	56
Current operating lease liability	Ψ	285	Ψ	281
Other accounts payable		2,140		1,032
Total current liabilities		2,610	_	1,369
Total cultent habilities	<u></u>	2,010		1,309
Non-current operating lease liability		524		798
Total liabilities	\$	3,134	\$	2,167
	<u></u>			,
Shareholders' equity:				
Ordinary shares		68		46
Additional paid in capital		68,681		63,033
Accumulated deficit		(65,962)		(54,814
Total shareholders' equity (deficit)		2,787		8,265
Total liabilities and shareholders' equity	\$	5,921	\$	10,432

Rail Vision Ltd. STATEMENTS OF COMPREHENSIVE LOSS (U.S. dollars in thousands, except share data and per share data)

	Year ended December 31,				 Three months ended December 31,			
				2022	2023		2022	
	Audited				Unaudited			
Revenues	\$	142	\$	421				
Cost of revenues	_	(61)		(661)				
Gross profit (loss)		81		(240)				
Research and development expenses, net		(7,145)		(6,230)	(1,611)		(1,473)	
Administrative and general expenses	_	(4,339)		(4,265)	(986)		(1,087)	
Operating loss		(11,403)		(10,735)	(2,597)		(2,560)	
Financing income (expenses), net	_	255		260	72		102	
Net loss for the period	_	(11,148)		(10,475)	(2,525)		(2,458)	
Basic and diluted loss per share	\$	(4.30)	\$	(5.91)	\$ (0.84)	\$	(1.24)	
Weighted average number of shares outstanding used to compute basic and diluted loss per ordinary share	_	2,587,290		1,771,803	2,998,278		1,987,005	

Rail Vision Ltd. <u>AUDITED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY</u> (U.S. dollars in thousands, except share data and per share data)

	Converti Preferred A		Ordinary	Shares	Additional		Total shareholders'
	Number of shares	USD	Number of shares(*)	USD	paid in capital	Accumulated Deficit	equity (deficit)
BALANCE AS OF DECEMBER 31,		2.24					
2021 Issuance of convertible	51,282	9,965	1,144,666	25	35,987	(44,339)	(8,327)
preferred shares Conversion of convertible preferred shares into ordinary shares upon completion of initial	10,256	2,000			-		
public offering Issuance of units of ordinary shares and warrants in connection with the initial public offering, net of	(61,538)	(11,965)	338,459	8	11,957	-	11,965
issuance costs(***) Conversion of convertible debt into ordinary shares upon completion of initial			473,405	12	13,575		13,587
public offering Issuance of ordinary shares as a result of			30,266	1	999		1,000
exercise of options			209	(**)	10 505		10 505
Share-based payment Net loss				 		(10,475)	(10,475)
BALANCE AS OF DECEMBER 31, 2022			1,987,005	46	63,033	(54,814)	8,265
Issuance of shares as a result of exercise of warrants			24,431	1	(1)		
Issuance of units of ordinary shares and warrants, net of issuance expenses		-	24,431	1	(1)		
(****)			986,842	21	5,376		5,397
Share-based payment Net loss	 	 	 	 	273	(11,148)	273 (11,148)
BALANCE AS OF DECEMBER 31, 2023			2,000,270	(0)	(0.(01	((5.0(2)	2.707
2023			2,998,278	68	68,681	(65,962)	2,787

^(*) On November 15, 2023, the Company effected the Reverse Split. All references to share and per share amounts referred to herein reflect the Reverse Split.

^(**) Represents an amount less than \$1.

^(***) Issuance costs in the amount of approximately \$2,060

^(****) Issuance costs in the amount of approximately \$603

Rail Vision Ltd. STATEMENTS OF CASH FLOWS (U.S. dollars in thousands)

	Year ended December 31, 2023 2022				Three months ended December 31,			
					2023 2022			
		Aud	lited			Audit	ted	
Cash flows from operating activities								
Net loss for the period	\$	(11,148)	\$	(10,475)	\$	(2,525)	\$ (2,4	458)
Adjustments to reconcile loss to net cash used in operating activities:								
Depreciation		171		150		46		35
Share-based payment		273		505		51		125
Exchange rate changes on cash and cash equivalents		(70)				(70)		
Changes in operating assets and liabilities:								
Decrease (increase) in accounts receivable		115				(28)		
Decrease (increase) in other current assets		(111)		163		21		206
Increase in Inventory		(977)				(25)		
Change in operating lease liability, net		(8)		(159)		76		41
Increase (decrease) in trade accounts payable		129		(83)		(107)		(67)
Increase (decrease) in other accounts payable		1,108	_	(82)		652		(31)
Net cash used in operating activities		(10,518)		(9,981)		(1,909)	(2,	149)
Cash flows from investing activities								
Purchase of fixed assets		(152)		(29)		(8)		(14)
Net cash used in investing activities								
Ü		(152)		(29)		(8)		(14)
Cash flows from financing activities:			_					
Issuance of preferred A shares				2,000				
Proceeds from a convertible debt				1,000				
Proceeds from exercise of options				10				
Issuance of ordinary shares and warrants, net of issuance expenses		5,397		13,643		2		
Net cash provided by financing activities		5,397		16,653		2		
		70				70		
Effect of exchange rate changes on cash and cash equivalents		70		<u></u>		70		
Increase (Decrease) in cash, cash equivalents and restricted cash		(5,203)		6,643		(1,845)		163)
Cash, cash equivalents and restricted cash at the beginning of the period		8,492	_	1,849		5,134	10,0	655
Cash, cash equivalents and restricted cash at the end of the period		3,289	_	8,492		3,289	8,	492
Non Cash Activities:								
Obtaining a right-of-use asset in exchange for a lease liability								
Conversion of preferred shares				11,965				
Conversion of a convertible debt				1,000				
Decrease of deferred expenses against additional paid in capital				56				