

Environmental,
Social and
Governance

Report





Table of Contents

Message from our CEO-Founder	3
ESG Strategy	4
Environmental	5
GHG Emissions	6
Waste Management and Recycling Data	Ś
Social	C
Employees	1
Health and Safety 1	3

Governance	4
Board Composition and Competencies	1
ESG and Climate Risk Management	1
Appendix1	ľ
Standard Indices—SASB	1
Caution Regarding Forward-Looking Statements	

Report Scope

This is The Lion Electric Company (NYSE: LEV) (TSX: LEV) ("Lion" or the "Company")'s third Environmental, Social and Governance ("ESG") report (the "report"). Unless otherwise noted or the context otherwise requires, the report relates to our activities for the 2023 calendar year (January 1, 2023 — December 31, 2023 or the "reporting period") and all information is given as of the date of publication of this report. This report encompasses all of Lion's operations and activities during the reporting period. References to "Lion," "we", "our", "us", "the Company" or similar terms refer to The Lion Electric Company and its subsidiaries, on a consolidated basis.

Reporting Framework

This report contains disclosures recommended in the Industrial Machinery and Goods and Automobiles standards developed by the Sustainability Accounting Standards Board ("SASB").

External Assurance

The operational greenhouse gas ("GHG") emissions data were quantified in collaboration with Quinn+Partners using the Greenhouse Gas Protocol Corporate Standard, and in alignment with ISO 14064-2:2019: Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements. Lion's 2023 avoided GHG emissions were calculated in collaboration with Tetra Tech. These data have not been independently verified.

Contact us

We appreciate any feedback on our report and initiatives. Feel free to reach out to us either by phone at **450-432-5466** or via email at ir.lion@thelionelectric.com.

Message from our

CEO-Founder

"The greatest threat to our planet is the belief that someone else will save it." This powerful message from English historian and explorer, Robert Swan, emphasizes the importance of everyone's actions in the fight against climate change and the decarbonization of the planet.

At Lion Electric, we back up these words with concrete actions. Lion was founded over 15 years ago with the aim of playing a role in decarbonizing the planet. We set out to help change the world, one vehicle at a time.

Today, Lion stands as a leader in transportation electrification in North America. Our 100% electric, zero-emission school buses and urban commercial trucks are turning heads, and our technology is widely acknowledged. Over 2,000 Lion vehicles have driven more than 25 million miles in Canada and the United States.

At the core of our DNA lies a strong commitment to ESG values.

Our dedication to transportation electrification goes far beyond the mere shift to zero-emission vehicles. We are also implementing measures to reduce our carbon footprint. Furthermore, our innovative electric vehicles actively contribute to the reduction of GHG, playing an essential role in the fight against climate change. By contributing to the preservation of air quality, we play a vital part in the collective efforts to mitigate climate change for the benefit of our children and communities.

Our commitment is evident in our approach to employees, customers, partners, and the communities we serve.

This annual ESG report is not just an overview of our actions; it serves as a roadmap, inspiring us to reach even greater heights. It is through collaborative action that we can improve our planet and build a more sustainable future for our children and future generations. Let's keep up the good work!

Marc Bedard
CEO-Founder

ESG Strategy

The core objective of our ESG strategy is to effectively address the most significant issues for both Lion and its stakeholders, including employees, communities, customers, suppliers, investors, and partners. This strategic framework delineates our goals in tackling these pertinent matters, shaping a foundational approach that underscores our commitment to ESG principles.



Climate

GOAL 1: Reduce GHG

We actively undertake initiatives aimed at reducing greenhouse gas (GHG) emissions.

Product innovation

GOAL 2.1: Eco-efficient lifecycle

We are dedicated to innovation, actively seeking new technologies, and continually enhancing the design of our products throughout their lifecycle.

GOAL 2.2: Responsible sourcing

We prioritize the procurement of low-carbon materials whenever feasible and manage ESG risks and opportunities across our entire supply chain.

GOAL 2.3: Safe vehicle design

We design our vehicles with the most stringent health and safety features to protect drivers, passengers and other road users.



For more information, download our **ESG Policy HERE.**



• GOAL 3.1: Healthy, fair work environment

We cultivate a healthy and safe work environment for all employees, contractors, customers, and visitors. Additionally, we foster an inclusive work culture that embraces diverse perspectives.

GOAL 3.2: Industry leadership

We actively educate stakeholders about the advantages of electric vehicles and engage with industry and regulators to drive the clean electrification of the transportation sector.



Governance

GOAL 4.1: Board competence

We are guided by a capable and diverse Board of Directors in shaping our strategic direction and decision-making processes.

GOAL 4.2: Ethics and values

We embrace high ethical standards and apply our values in all aspects of our work.

GOAL 4.3: Cybersecurity

We protect the data privacy of our employees, investors, customers, suppliers and contractors from cyberthreats.



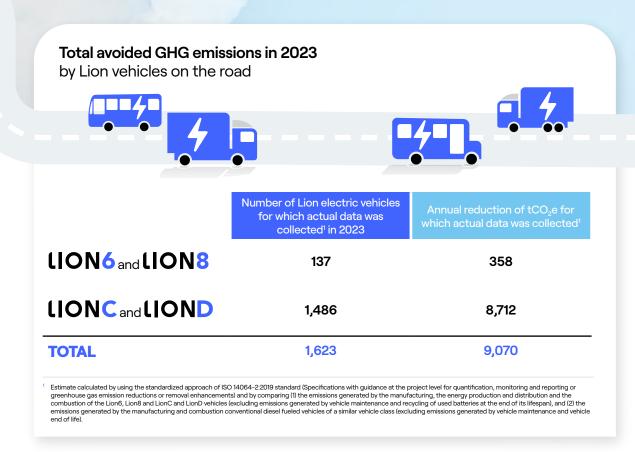
GHG Emissions

2023 AvoidedGHG Emissions

In collaboration with Tetra Tech, the calculation of GHG emissions avoided in 2023 involved assessing actual miles covered by Lion trucks and buses on the road. Data was collected using LionBeat, our purpose-designed EV telematics. The calculation assumed that these vehicles replaced conventional diesel-fueled counterparts within a similar vehicle class.

Although Lion trucks and buses do not emit direct tailpipe emissions, there are indirect GHG emissions associated with operations, manufacturing, and charging. These indirect emissions were factored into the avoided emissions calculation. It is essential to note that the total avoided GHG emissions in 2023 by Lion electric vehicles are dependent on the carbon intensity of the local grid electricity. Emissions are lower if the electricity is derived from renewable energy sources compared to fossil fuel-derived source.

In 2023, 137 Lion trucks and 1,486 Lion buses for which we collected data avoided 9,070 tCO₂e of GHG emissions while being driven on the road in Canada and in the United States.





GHG Emissions

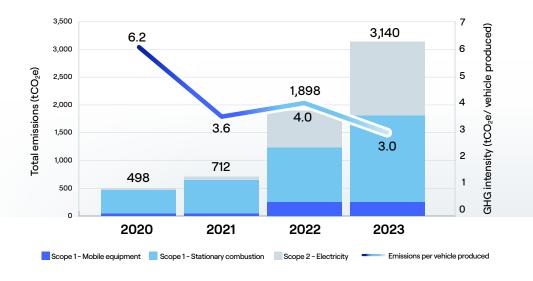
Scope 1 and 2 Emissions

To optimize our efforts in addressing climate change, we enlisted the expertise of Quinn+Partners to assess the scope 1 and scope 2¹ GHG emissions linked to our operations². In 2023, our total emissions amounted to 3,140 tCO₂e, marking an increase compared to 1,898 tCO₂e in 2022 and 712 tCO₂e in 2021.

Significant emission rises were notable at our manufacturing facilities in Joliet, IL, and Mirabel, QC. This uptick was primarily due to the commencement of operations in 2022 and subsequent scaling efforts in 2023, collectively constituting 87% of the overall emissions surge.

The primary sources of our emissions stem from natural gas and electricity consumption across our facilities. While Lion's Canadian operations predominantly utilize renewable energy sources, resulting in lower GHG emissions, our U.S.-based operations rely on grids with higher emission levels for electricity. The heightened activities at U.S. sites in 2023 led to increased emissions from electricity consumption.

Furthermore, Quinn+Partners conducted an analysis of GHG intensity per vehicle produced, revealing a decline from 6.2 tCO₂e to 3 tCO₂e per vehicle between 2020 and 2023. We anticipate this trend to persist as vehicle production continues to ramp up.



¹ Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy.

Lion's operational GHG inventory was prepared using the GHG Protocol Corporate Accounting and Reporting Standard and the protocol's location-based approach for purchased electricity, Emissions of carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O) are represented in units of CO2 equivalents (CO2e) using Global Warming Potentials from the Intergovernmental Panel on Climate Change's Fourth Assessment Report. Emissions are calculated using emission factors and conversions provided by the Government of Canada and U.S. Environmental Protection Agency.

GHG Emissions

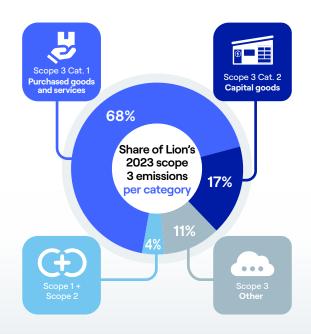
Scope 3 Emissions

To ensure we maximize the greenhouse gas (GHG) reduction potential of our electric vehicles, we acknowledge the importance of addressing scope 3 emissions generated throughout the entire vehicle lifecycle. In this regard, we enlisted the expertise of Quinn+Partners to help quantify scope 3 emissions, which encompass all indirect emissions occurring in the Company's value chain, including those upstream and downstream of our operations, and not accounted for in scope 2 emissions.

The findings revealed that our scope 3 emissions constitute 84% of our total emissions, a common scenario in manufacturing companies. The most significant contributors to our scope 3 emissions include:

- Purchased Goods and Services (Category 1): This
 category encompasses all materials and batteries
 utilized in Lion vehicles' production in 2023, thirdparty warehouse usage, and various services such
 as accounting, insurance, fleet management, and IT.
- Capital Goods (Category 2): These emissions are associated with the development of our new facilities and production lines.

Looking ahead, we anticipate a decrease in emissions from Capital Goods as we progress towards full-scale production. This strategic approach underscores our commitment to minimizing emissions across the entirety of our operations and supply chain.

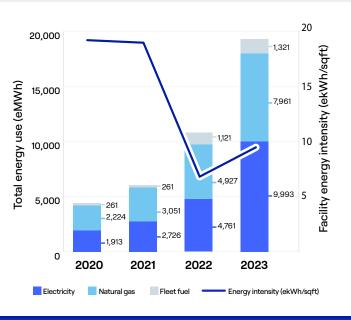


Energy Use and **Management**

Energy, encompassing purchased electricity, natural gas, and fuels, serves as a vital input in our industrial manufacturing process. Recognizing the significance of resource efficiency, we try to prioritize the use of clean and dependable energy sources in our operations.

In 2023, our total energy consumption amounted to 19,300 equivalent megawatt-hours (eMWh), marking an increase from 10,800 eMWh in 2022 and 6,000 eMWh in 2021. The proportion of our electricity-related emissions is on the rise, driven by the operational commencement and ramp-up of our U.S. facilities.

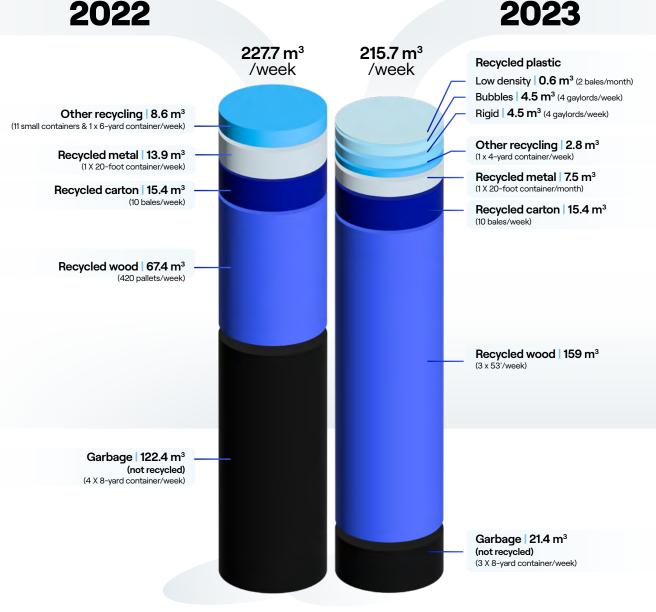
The energy intensity per square foot exhibited a decline from 18.2 to 7.5 eMWh between 2021 and 2022. However, in 2023, this metric increased to 9.8 eMWh. This shift can be mainly attributed to increased energy use at the Joliet plant, the Mirabel battery plant and the Mirabel Innovation Centre facilities



Waste Management and Recycling Data

Waste management holds a crucial role in upholding environmental principles, a cornerstone of sustainable business practices. By managing waste effectively, companies can minimize their ecological footprint, conserve resources, and safeguard local ecosystems. Tackling waste generation and disposal not only mitigates environmental pollution but also reflects a commitment to social responsibility, ensuring the health and well-being of communities.

Efficient waste management showcases a company's dedication to responsible operations, fostering trust among stakeholders and contributing to a greener, more sustainable future. In 2023, we enhanced our waste management practices by introducing recycling initiatives at our Saint-Jérôme facility, optimizing landfill stockage practices, and refining our processes and communications related to waste management.



Waste Management Weekly volume (m³)



Employees Engagement, Well-Being and Culture

At Lion, we attribute every innovation to the creativity, passion, and authenticity of our people. The synergy of collaborative effort brings the best ideas to life. Therefore, our goal is to foster a work environment that is stimulating, creative, respectful, safe, collaborative, rewarding, and enlightening—something we can all take pride in.

Specifically, we are dedicated to building an inclusive and diverse culture that values and maximizes the contributions of diverse backgrounds among our employees. This commitment aims to benefit our clients, employees, shareholders, and broader communities.

Our culture, encapsulated by the tagline "We are breathing the Lion Air," is anchored in the values of "Agility," "Intensity," and "Respect." These attributes are embodied by our people in their daily activities.

In 2023, we focused our efforts on conveying our values and associated behaviors to our employees.



We are **breathing** Lion



Agility

Having fun while thinking outside the box.



Intensity

Driven by our passion; powered by our raw energy.

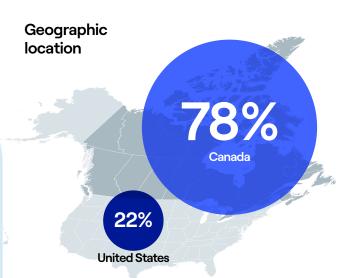


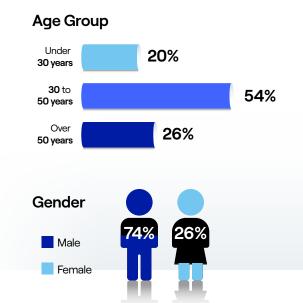
Respect

Everyone is equal; everyone matters.

Employee Data

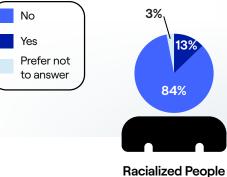






Results of the employment equity survey

(based on a 50% response rate from office-based employees who filled the employment equity survey).







Visible Minorities

disabilities

First Nations

Employees

Health and Safety

As a vehicle designer, developer, manufacturer, and distributor, we prioritize a robust approach to ensuring the safety of our workforce. This involves regular communications and mandatory training, with a particular emphasis on manufacturing employees.

Our commitment extends to promoting and sustaining a healthy and safe workplace for all, including employees, subcontractors, and visitors. We meticulously track work permits, accidents, and incidents, providing clear procedures to follow in case of any such events at the workplace.

Furthermore, we diligently manage all aspects of chemical storage, usage, and disposal, conducting regular inspections of cranes and jibs to ensure their optimal functionality and safety.

In our continuous effort to prioritize employee well-being, we actively monitor signs of musculoskeletal issues among our production assemblers that may be linked to their work activities. Our objective is to identify potential work-related sources of discomfort, striving to enhance the overall work environment for everyone involved.





3.127Total recordable incident rate¹
Down from 5.76 in 2022





100%

Percentage of employees hired in 2023 in the manufacturing plants that have completed operational Health and Safety training.



20,500Number of risk analyses (Stops) completed in 2023³
Not tracked in 2022

1 Number of recordable incidents per 100 full-time workers during a year, based on 1,918,643 hours worked in 2023.

Potential hazard or incident in which no property was damaged, and no personal injury was sustained, but where, given a slight shift in time or position, damage or injury easily could have occurred.

Employee's individual risk analysis of his/her work environment, to identify and analyze all the potential risks and issues that are detrimental to manufacturing operations and which could possibly put someone in danger.



Board Composition and Competencies



Lion's Board of Directors (the "Board") bears the responsibility of overseeing the implementation of procedures and initiatives concerning ESG matters. In 2023, the Board conducted a review of crucial topics, including mandatory disclosure regulations and the emerging trends in net-zero emissions.

This oversight of ESG matters is facilitated through the guidance of the cross-functional Nominating and Corporate Governance Committee. Their collaborative efforts contribute to informed decision-making and effective governance in these vital areas.

FOR MORE INFORMATION about our Board competencies, please visit our

2024 Management Information Circular.





From left to right:
Ann L. Payne, Marc Bedard, Pierre-Olivier Perras, Pierre Larochelle,
Michel Ringuet, Sheila C. Bair, Dane L. Parker, Lorenzo Roccia.
Above: Latasha Akoma and Pierre Wilkie

ESG and Climate Risk Management

Led by our CEO-Founder and supported by the Vice President of Investor Relations and Sustainable Development, we ensure the adequate implementation of Lion's ESG strategy across the Company.

Looking ahead, our strategic vision encompasses the integration of ESG criteria into our procurement activities. This approach aims to systematically identify and manage risks and opportunities, establish supply chains resilient to climate change and social disruptions, and engage suppliers in our pursuit of ESG objectives.

Reporting on sustainability and climate change is overseen by the Vice President of Investor Relations and Sustainable Development, who regularly engages with the Board, providing quarterly updates on the progress and outcomes of our ESG initiatives. This collaborative reporting ensures ongoing transparency and alignment with our ESG objectives.



Forced Labor Report

As a responsible company and corporate citizen, we are dedicated to conducting our affairs with the utmost standards of ethics, integrity, honesty, fairness, and professionalism. As such, we place the highest importance on respecting human rights while conducting our business and activities everywhere we operate, and we expect the same of our business partners.

Our "2023 Forced Labor Report" is accessible by CLICKING HERE.





Standard Indices: **SASB — Automotive Standards**

Sustainability Disclosure Topics and Accounting Metrics

Topic	Accounting metric	Code	Disclosure
Product Safety	Percentage of vehicle models rated by NCAP programs with an overall 5-star safety rating, by region	TR-AU-250a.1	Not applicable
	Number of safety-related defect complaints, percentage investigated	TR-AU-250a.2	0
	Number of vehicles recalled	TR-AU-250a.3	Transport Canada Recall NHTSA Safety Issues and Recalls
Labor Donatha	Percentage of active workforce covered under collective bargaining agreements	TR-AU-310a.1	0%
Labor Practices	(1) Number of work stoppages and (2) total days idle	TR-AU-310a.2	(1) 0 (2) 0
Fuel Economy & Emissions in Use- phase	Sales-weighted average passenger fleet fuel economy, by region	TR-AU-410a.1	Energy efficiency (kWh/km) Canada: 0.84 USA: 0.96
			CO ₂ efficiency (gCO ₂ e/km) Canada: 638.59 United States: 818.80
	Number of (1) zero emission vehicles, (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold	TR-AU-410a.2	(1) 519 units in 2022 and 852 units in 2023 (2) 0 (3) 0
	Discussion of strategy for managing fleet fuel economy and emissions risks and opportunities	TR-AU-410a.3	Not disclosed
Materials Sourcing	Description of the management of risks associated with the use of critical materials	TR-AU-440a.1	Not disclosed
Materials	Total amount of waste from manufacturing, percentage recycled	TR-AU-440b.1	Total amount of waste (metric tons): 215.7 Percentage recycled: 90%
Efficiency and	Weight of end-of-life material recovered; percentage recycled	TR-AU-440b.2	Not applicable
Recycling	Average recyclability of vehicles sold	TR-AU-440b.3	In 2023, a significant portion of material used to make our vehicles were recyclable.

Activity Metrics

Activity metric	Code	Disclosure
Number of vehicles manufactured	TR-AU-000.A	Not disclosed
Number of vehicles sold	TR-AU-000.B	519 units in 2022 and 852 units in 2023

Standard Indices: SASB - Industrial Machinery & Goods

Sustainability Disclosure Topics & Accounting Metrics

Topic	Accounting metric	Code	Disclosure
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	RT-IG-130a.1	Environmental – Energy Use and Management
Employee Health & Safety	(1) Total recordable incident rate (TRIR), (2) Fatality rate, and (3) near miss frequency rate (NMFR)	RT-IG-320a.1	Social – Health and Safety
Fuel Economy and Use-phase Emissions	Sales-weighted fleet fuel efficiency for medium and heavy-duty vehicles	RT-IG-410a.1	See indicator TR-AU-410a.1 in Automobiles Standard table
	Sales-weighted fuel efficiency for non-road equipment	RT-IG-410a.2	Not applicable
	Sales-weighted fuel efficiency for stationary generators	RT-IG-410a.3	Not applicable
	Sales-weighted emissions of: (1) nitrogen oxides ("NOx") and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines	RT-IG-410a.4	Not applicable
Materials Sourcing	Description of the management of risks associated with the use of critical materials	RT-IG-440a.1	Not disclosed
Remanufacturing Design & Services	Revenue from remanufactured products and remanufacturing services	RT-IG-440b.1	Not applicable

Activity Metrics

Activity metric	Code	Disclosure
Number of units produced by product category	RT-IG-000.A	Not disclosed
Number of employees	RT-IG-000.B	Not disclosed

Forward-Looking Statements

- This report contains "forward-looking information" and "forward-looking statements" within the meaning of applicable securities laws and within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, "forward-looking statements"). Any statements contained in the MD&A report that are not statements of historical fact, including statements about Lion's beliefs and expectations, are forward-looking statements and should be evaluated as such.
- Forward-looking statements may be identified by the use of words such as "believe," "may," "will," "continue," "anticipate," "intend," "expect," "should," "would," "could," "plan," "project," "potential," "seem," "seek," "future," "target" or other similar expressions and any other statements that predict or indicate future events or trends or that are not statements of historical matters, although not all forward-looking statements may contain such identifying words. These forward-looking statements include statements regarding the Company's order book and the Company's ability to convert it into actual sales, the expected production capacity of the Company's manufacturing facilities in Saint-Jerome and the United States and the Company's battery manufacturing plant (the "Battery Plant") and innovation center in Quebec (the "Innovation Center" and collectively with the Battery Plant, the "Lion Campus"), the certification of the Lion heavy duty (HD) battery packs, the sourcing of lithium-ion battery cells, the Company's future growth and longterm strategy, the Company's liquidity and capital requirements and management's forecasts related thereto, ongoing litigation proceedings, the Company's expected product pipeline, the implementation by the Company of measures aimed at reducing its vehicle and battery development costs and its inventory levels (including the Company's fiscal 2024 objectives related thereto), and the development and timing of commercial production of certain platforms and models. Such forward-looking statements are based on a number of estimates and assumptions that Lion believes are reasonable when made, including that Lion will be able to retain and hire key personnel and maintain relationships with customers, suppliers and other business partners, that Lion will continue to operate its business in the normal course, that Lion will be able to implement its growth strategy, that Lion will be able to successfully and timely ramp-up manufacturing capacity at its Saint-Jerome facility, its U.S. manufacturing facility and at the Battery Plant and Innovation Center as required in the future, that Lion will not suffer any supply chain challenges or any material disruption in the supply of raw materials on competitive terms, that Lion will be able to
- maintain its competitive position, that Lion will continue to improve its operational, financial and other internal controls and systems to manage its growth and size, that Lion will be able to benefit, either directly or indirectly (including through applications made by the Company and/or its clients), from governmental programs, subsidies and incentives, that Lion will not incur any material obligations with respect to product warranty claims or product recalls, and that Lion will be able to secure additional funding through equity or debt financing on terms acceptable to Lion and in the amounts needed if and when required in the future. Such estimates and assumptions are made by Lion in light of the experience of management and their perception of historical trends, current conditions and expected future developments, as well as other factors believed to be appropriate and reasonable in the circumstances. However. there can be no assurance that such estimates and assumptions will prove to be correct.
- By their nature forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Lion believes that these risks and uncertainties include the following: any adverse changes in U.S. or Canadian general economic, business, market, financial, political or legal conditions, including as a consequence of the ongoing uncertainties relating to inflation and interest rates; any unavailability, reduction, discriminatory application, delay in processing or elimination of governmental programs, subsidies or incentives due to policy changes, government regulations or decisions or otherwise; any inability to ramp-up the production of Lion's products and meet project construction and other project milestones and timelines; any inability to meet the expectations of the Company's customers in terms of products, specifications, and services; any inability to successfully and economically manufacture and distribute its vehicles at scale; any inability to raise additional funds to meet its capital requirements and pursue its growth strategy when and in the amounts needed, if any; any inability to execute the Company's growth strategy; any escalation, deterioration and adverse effects of current military conflicts, which may affect economic and global financial markets and exacerbate ongoing economic challenges; any unfavorable fluctuations and volatility in the availability or price of raw materials included in components used to manufacture the Company's products, including battery cells, modules and packs; the reliance on key suppliers and any inability to maintain an uninterrupted supply of raw materials; any inability to reduce total cost of ownership
- of electric vehicles sold by the Company over time: the reliance on key management and any inability to attract and/or retain key personnel: labor shortages (including as a result of employee departures, turnover, and demands for higher wages) which may force the Company to operate at reduced capacity, to lower its production and delivery rates or lower its growth plans, and could pose additional challenges related to employee compensation: any inability to maintain the Company's competitive position: any inability to reduce the Company's costs of supply over time; any inability to maintain and enhance the Company's reputation and brand: any significant product repair and/or replacement due to product warranty claims or product recalls: any failure of information technology systems or any cybersecurity and data privacy breaches or incidents; any inability to secure adequate insurance coverage or a potential increase in insurance costs: natural disasters, epidemic or pandemic outbreaks, boycotts and geo-political events such as civil unrest, acts of terrorism, the current ongoing military conflicts or similar disruptions; any event or circumstance, including the materialization of any of the foregoing risks and uncertainties. resulting in the Company's inability to convert its order book into actual sales: and the outcome of any legal proceedings in which the Company is or may be involved from time to time.
- These and other risks and uncertainties related to the business of Lion are described in greater detail in section 23.0 of the management's discussion and analysis ("MD&A") for the years ended December 31, 2023 and 2022, entitled "Risk Factors". Many of these risks are beyond Lion's management's ability to control or predict. All forward-looking statements attributable to Lion or persons acting on its behalf are expressly qualified in their entirety by the cautionary statements contained and risk factors identified in the MD&A and in other documents filed with the applicable Canadian regulatory securities authorities and the U.S. Securities and Exchange Commission (the "SEC").
- Because of these risks, uncertainties and assumptions, readers should not place undue reliance on these forward-looking statements. Furthermore, forward-looking statements speak only as of the date they are made. This report reflects information available to the Company as of February 28, 2024, the date of the MD&A. Except as required under applicable securities laws, Lion undertakes no obligation, and expressly disclaims any duty, to update, revise or review any forward-looking information, whether as a result of new information, future events or otherwise.