



# Q1 2023 Quarterly Business Update

MAY 9, 2023





# Disclaimer and cautionary note

## Forward-looking statements

This presentation of Luminar technologies, inc. (“Luminar” or the “company”) includes “forward-looking statements” within the meaning of the “safe harbor” provisions of the U.S. Private securities litigation reform act of 1995. Forward-looking statements may be identified by the use of words such as “future,” “growth,” “opportunity,” “well-positioned,” “forecast,” “intend,” “seek,” “target,” “anticipate,” “believe,” “expect,” “estimate,” “plan,” “outlook,” and “project” and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding expected achievement and timing of manufacturing scale up, OEM production readiness, next-gen lidar prototype development, continued software development, program milestones and Order Book growth, and expectations for 2023 revenue growth, gross margin improvement, and year-end cash, cash equivalents and marketable securities (including liquidity) balance. These statements are based on various assumptions, whether or not identified in this presentation, and on the current expectations of Luminar’s management and are not guarantees of actual performance.

You are cautioned not to place undue reliance upon any forward-looking statements, including the projections, which speak only as of the date made. Luminar does not undertake any commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Accordingly, forward-looking statements, including any projections or analysis, should not be viewed as factual and should not be relied upon as an accurate prediction of future results. The forward-looking statements contained in this presentation are based on the company’s current expectations and beliefs concerning future developments and their potential effects on Luminar. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control), or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from the forward-looking statements, including the risks discussed in the “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of Luminar’s most recently filed periodic reports on Form 10-K and Form 10-Q, and other documents Luminar files with the SEC in the future.

Should one or more of these risks or uncertainties materialize, or should any of management’s assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Luminar does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. Accordingly, you should not put undue reliance on these statements.

## Trademarks and trade names

Luminar owns or has rights to various trademarks, service marks and trade names that it uses in connection with the operation of its business. This presentation also contains trademarks, service marks and trade names of third parties, which are the property of their respective owners. The use or display of third parties’ trademarks, service marks, trade names or products in this presentation is not intended in, and does not imply, a relationship with Luminar, or an endorsement or sponsorship by or of Luminar. Solely for convenience, the trademarks, service marks and trade names referred to in this presentation may appear without the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that Luminar will not assert, to the fullest extent under applicable law, its rights or the right of the applicable licensor in these trademarks, service marks and trade names.

## Industry and market data

In this presentation, Luminar relies on and refers to information and statistics regarding the sectors in which Luminar competes and other industry data. Luminar obtained this information and statistics from third-party sources, including reports by market research firms. Although Luminar believes these sources are reliable, the company has not independently verified the information and does not guarantee its accuracy and completeness. Luminar has supplemented this information where necessary with information from discussions with Luminar customers and Luminar’s own internal estimates, taking into account publicly available information about other industry participants and Luminar’s management’s best view as to information that is not publicly available.



# Disclaimer and cautionary note

## Use of non-GAAP financial measures

The financial information and data contained in this presentation is unaudited and does not conform to regulation S-X promulgated under the securities act of 1933, as amended. Accordingly, such information and data may not be included in, may be adjusted in or may be presented differently in, any filing Luminar makes with the SEC. In addition to disclosing financial measures prepared in accordance with U.S. generally accepted accounting principles (GAAP), this presentation contains certain non-GAAP financial measures and certain other metrics. Non-GAAP financial measures and these other metrics do not have any standardized meaning and are therefore unlikely to be comparable to similarly titled measures and metrics presented by other companies. Luminar considers these non-GAAP financial measures and metrics to be important because they provide useful measures of the operating performance of the Company, exclusive of factors that do not directly affect what we consider to be our core operating performance, as well as unusual events. The Company's management uses these measures and metrics to (i) illustrate underlying trends in the Company's business that could otherwise be masked by the effect of income or expenses that are excluded from non-GAAP measures, and (ii) establish budgets and operational goals for managing the Company's business and evaluating its performance. In addition, investors often use similar measures to evaluate the operating performance of a company. Non-GAAP financial measures and metrics are presented only as supplemental information for purposes of understanding the Company's operating results. The non-GAAP financial measures and metrics should not be considered a substitute for financial information presented in accordance with GAAP. This presentation includes non-GAAP financial measures, including non-GAAP cost of sales, gross loss, operating expenses, net loss, EPS and Free Cash Flow. Non-GAAP cost of sales is defined as GAAP cost of sales adjusted for stock-based compensation expense and amortization of intangible assets. Non-GAAP gross loss is defined as GAAP gross loss adjusted for stock-based compensation expense and amortization of intangible assets. Non-GAAP operating expenses is defined as GAAP operating expenses adjusted for stock-based compensation expense, amortization of intangible assets and transaction costs relating to acquisition activities. Non-GAAP net loss is defined as GAAP net loss adjusted for stock-based compensation expense, amortization of intangible assets, transaction costs relating to acquisition activities, change in fair value of warrant liabilities, and provision for income taxes. Non-GAAP EPS is defined as Non-GAAP net loss divided by weighted average shares outstanding for the period. Free Cash Flow is defined as operating cash flow less capital expenditures.

We use "Order Book" as a metric to measure performance against anticipated achievement of planned key milestones of our business. Order Book is defined as the forward-looking cumulative billings estimate of Luminar's hardware and software products over the lifetime of given vehicle production programs which Luminar's technology is expected to be integrated into or provided for, based primarily on projected / actual contractual pricing terms and our good faith estimates of "take rate" of Luminar's technology on vehicles. "Take rates" are the anticipated percentage of new vehicles to be equipped with Luminar's technology based on a combination of original equipment manufacturer ("OEM") product offering decisions and predicted end consumer purchasing decisions. We include programs in our Order Book when (a) we have obtained a written agreement (e.g. non-binding expression of interest arrangement or an agreement for non-recurring engineering project) or public announcement with a major industry player, and (b) we expect to ultimately be awarded a significant commercial program. We believe Order Book provides useful information to investors as a supplemental performance metric as our products are currently in a pre-production stage and therefore there are currently no billings or revenues from commercial grade product sales. OEMs customarily place non-cancelable purchase orders with their automotive component suppliers only shortly before or during production. Consequently, we use Order Book to inform investors about the progress of expected adoption of our technologies by OEMs because there is, in our view, no other better metric available at our stage. The Order Book estimate may be impacted by various factors, as described in "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and subsequent filings with the Securities and Exchange Commission, including, but not limited to the following: (i) None of our customers make contractual commitments to use our lidar sensors and software until all test and validation activities have been completed, they have finalized plans for integrating our systems, have a positive expectation of the market demand for our features, and unrelated to us, have determined that their vehicle is ready for market and there is appropriate consumer demand. Consequently, there is no assurance or guarantee that any of our customers, including any programs which we included in our Order Book estimates will ever complete such testing and validation or enter into a definitive volume production agreement with us or that we will receive any billings or revenues forecasted in connection with such programs; (ii) The development cycles of our products with new customers vary widely depending on the application, market, customer and the complexity of the product. In the automotive market, for example, this development cycle can be as long as seven or more years. Variability in development cycles make it difficult to reliably estimate the pricing, volume or timing of purchases of our products by our customers; (iii) Customers cancel or postpone implementation of our technology; (iv) We may not be able to integrate our technology successfully into a larger system with other sensing modalities; and (v) The product or vehicle model that is expected to include our lidar products may be unsuccessful, including for reasons unrelated to our technology. These risks and uncertainties may cause our future actual sales to be materially different than that implied by the Order Book metric.

# What's inside

Business update / recent highlights

---

Industrialization progress

---

Commercial momentum

---

Product development progress

---

2023: key milestones and guidance

---

Q1'23: summary financial results

---

Appendix





# Q1'23 Business update / recent highlights

- 1 New high-volume automated Monterrey, Mexico factory now online**
  - Facility online ahead of guidance provided at Luminar Day
  - New factory will complete a rigorous validation and optimization process leading up to first high-volume global production vehicle start of production (SOP)
- 2 TPK signs partnership agreement with Luminar for new higher-volume production in Asia**
  - Facility to have initial annual capacity of up to 600K to support awarded vehicle programs, with ability to further expand capacity for additional demand
- 3 Shipped Iris+ B samples to lead customer; on track to enter Iris+ C-phase in 2023**
  - On track to complete software to support Volvo and Mercedes-Benz series production programs
  - Opportunistic strategic activity in the quarter to expand engineering and accelerate development; hired specialized teams from Argo AI, Seagate, and Velodyne/Ouster
- 4 Announced expansions/new vehicle models with Mercedes-Benz, Polestar, Volvo Cars**
  - Volvo Cars unveiled EX90 Excellence variant, with Luminar as standard; EX90 pre-orders surpassed Volvo Cars' "boldest and most ambitious internal projections"
- 5 Q1 revenue higher than guidance; affirm FY'23 financial guidance & milestones**
  - Q1'23 revenue \$14.5M; up 112% YoY, beating expectations
  - Progress towards profitability demonstrated with gross loss improving QoQ

Watch a video tour of the new high volume manufacturing facility at: <https://t.co/dSi4Uhj8O>



# Successful bring-up of automated, high-volume factory in MX

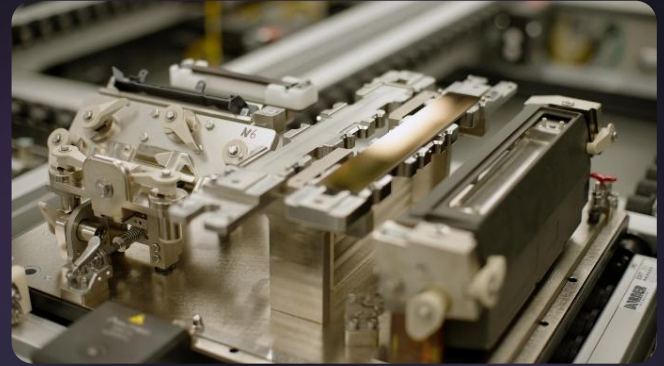
- Timeline to bring facility online came in ahead of schedule in Q1, versus guidance at Luminar Day for Q2 and original target of 2H'23
- New highly automated, high-volume manufacturing facility with Celestica will now complete a rigorous validation & optimization process through 2H'23



*The new dedicated facility for high-volume production of Luminar's sensors is operated by Celestica, a leader in design, manufacturing, and supply chain solutions. This new facility will have initial capacity for up to 250K sensors per year, expandable to approximately 500K sensors per year.*



New automated lines produced first sensors in Q1; now shipping to lead high-volume customer



Construction began in July '22; high-volume line installation began in Dec '22



Luminar executive team and OEM leadership in the cleanroom after successful audit



# TPK and Luminar partner for high-volume production in Asia

- Luminar is expected to be equipped on millions of vehicles throughout Asia this decade
- New facility will have initial capacity of up to 600K sensors annually to support awarded programs from OEMs, with ability to further expand capacity with additional demand
- TPK has entered into a definitive agreement to proceed with an investment in Luminar, reflecting TPK's belief in Luminar's leading technology and economic trajectory



*TPK has a strong track record of execution for producing innovative high-performance and automotive-grade technology at scale.*





*The Luminar executive team gathered with TPK management for a signing ceremony in Xiamen, followed by a press conference in Shanghai.*

# Luminar Showcased at Shanghai Auto Show



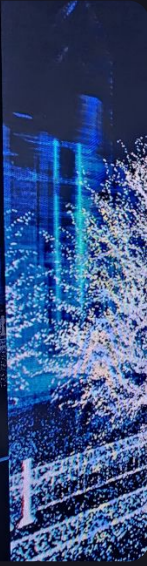
Polestar CEO, Thomas Ingenlath, on stage at Auto Shanghai

- China showing strong demand for lidar to enable next-generation safety & autonomy
- Approx. half of the 20M vehicles sold in China last year were foreign-branded automakers, including Luminar partners
- Of the >20 production vehicle models Luminar is planned into, majority are also slated for the China market



## Luminar激光雷达

沃尔沃EX90搭载市面上最先进的Luminar激光雷达。通过车内外传感器融合感知，不管低、高速行驶，都让你360度看清一切。最远600米探测距离，远达6个足球场。黑夜中，高速行驶下也能看到250米外的行人，提前7.5秒预知危险。采用1550纳米波长的激光，更保护所有交通行为参与者的视网膜安全，打造全方位安全的车外安全空间。



*In Shanghai, Volvo's display featured Luminar (top left). Polestar CEO, Thomas Ingenlath joined Luminar CEO Austin Russell for a photo on stage (bottom left). Luminar's team participated in a live drive to experience the Luminar lidar-enabled safety and autonomous capabilities in SAIC's Rising Auto R7 (above).*

# New Luminar-equipped Volvo EX90 Excellence

*“The EX90 Excellence is the safest four-seater we’ve ever built, and it has an invisible shield of safety enabled by our latest sensing technology, inside and outside, as well as lidar technology as standard from Luminar and a groundbreaking driver understanding system.”*

**V O L V O**





Volvo Cars unveiled the EX90 Excellence in Shanghai and put a spotlight on the capability of Luminar lidar, which comes standard on every vehicle.

# Expanded Polestar partnership extends scope for future cars including Polestar 5

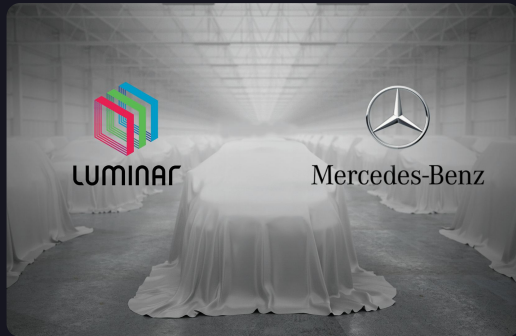
*“Luminar is at the forefront of lidar technology development and this closer collaboration will allow for greater innovation in our cars to come. We look forward to combining our R&D and product design expertise to deliver truly stunning lidar integration and capabilities for the Polestar brand.”*



Thomas Ingenlath  
Polestar CEO

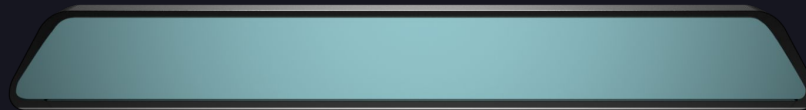


# Mercedes-Benz deal expanded across next-gen production vehicle lines



Austin Russell with Mercedes-Benz CTO Markus Schäfer  
(Image credit: TechCrunch)

# Iris+ B samples delivered to lead series production OEM



In Q1, Luminar brought online a new world-class, long-range test facility in Orlando, designed to validate the leading resolution-at-range performance of its Iris sensors



# Strategically expanded talent, IP & assets to accelerate tech roadmap



Minneapolis, MN



Princeton, NJ



Bangalore, India

Velodyne





# Exclusive ecosystem partners

Internal:  
Luminar Semiconductor



**Optogration**  
a Luminar company



**Black Forest  
Engineering**  
a Luminar company



a Luminar company

External:  
Announced in Q1



**Swiss Re**

scale



SEAGATE



# On track to achieve key 2023 milestones and financial guidance

## Business milestones



### Industrialization / Scale

Target: Bring high-volume, automated manufacturing MX facility online; Meet Volvo SOP requirements  
Status: Achieved bringing MX facility online in Q1, ahead of guidance. On track to SOP requirements.



### Execute Product & Technology Roadmap

Target: Enter Iris+ C-phase; Build next-gen lidar prototype; Complete software for Volvo & Mercedes SOP  
Status: On track. In Q1, achieved shipping Iris+ B samples to lead customer; completing software milestones.



### Grow the Business

Target: Grow Order Book<sup>1</sup> by at least \$1 Billion  
Status: On track. In Q1, announced expansion of partnerships with Mercedes-Benz and Polestar; Volvo unveiled new Luminar-equipped EX90 Excellence.

## Financial guidance (unchanged)

2023 Revenue  
**≥100% growth vs FY'22**

Gross Margin (Non-GAAP)  
**Positive by Q4'23**

Cash / liquidity  
**>\$300M at year-end 2023**



# Q1'23 financial results & Q2/2H'23 commentary

## Q1'23 revenue: \$14.5M

- Q1 revenue up 112% YoY; ahead of guidance
- Q1 revenue beat primarily driven by higher program revenue and sensor sales
- Sequential organic revenue growth across all business segments

## Q1 GAAP gross loss: \$(14.6)M; Non-GAAP: \$(11.8)M

- Sequential improvement from \$(23.0)M Non-GAAP gross loss in Q4'22

## Cash position<sup>1</sup>: \$422.3M

- Q1 free cash flow<sup>2</sup> of \$(76.4)M improved slightly sequentially from \$(79.5)M in Q4'22

## Q2'23 guidance

- Revenue: \$15M to \$17M
- Non-GAAP EPS<sup>3</sup>: relatively similar to Q1 of \$(0.24)

## 2H'23 expected improvements

- On track to non-GAAP gross margin positive by Q4'23
- Q1 COGS includes ~\$11M of launch & other costs, which are expected to sharply decline in 2H'23
- Q1 free cash flow includes ~\$30M of launch and other costs, which are expected to sharply decline in 2H'23
- As Luminar's business ramps up and launch costs ramp down, free cash flow run rate expected to improve ~50% by year-end relative to Q1

Notes: <sup>1</sup> Includes cash, cash equivalents and marketable securities

<sup>2</sup> Defined as operating cash flow less capex

<sup>3</sup> Please refer to Reconciliation of GAAP to Non-GAAP forecasts slide for a reconciliation of Non-GAAP to GAAP EPS guidance



# Appendix





# Q1'23 selected financials

(In millions)

	Mar 31, 2023	Dec 31, 2022
Cash and cash equivalents	\$89.9	\$69.6
Marketable securities	\$332.4	\$419.3
Cash, cash equivalents & marketable securities	\$422.3	\$488.9
Total Assets	\$658.4	\$687.3

	GAAP	
	Three months ended Mar 31,	
	2023	2022
Revenue	\$14.5	\$6.9
Cost of sales	\$29.1	\$16.7
Gross loss	\$(14.6)	\$(9.8)
Operating expenses	\$127.3	\$72.5

	Three months ended Mar 31,	
	2023	2022
Free cash flow <sup>1</sup>	\$(76.4)	\$(37.8)

Notes: <sup>1</sup> Defined as operating cash flow less capex

<sup>2</sup> Please refer to the next slide for a reconciliation of Non-GAAP measures, including free cash flow, to the most directly comparable GAAP financial measures



# Reconciliation of GAAP to non-GAAP actuals

(In millions, excluding per share amounts)

	Three months ended Mar 31,	
	2023	2022
GAAP cost of sales	\$29.1	\$16.7
Stock-based compensation	\$(2.7)	\$(1.8)
Amortization of intangibles	\$(0.2)	\$(0.0)
Non-GAAP cost of sales	\$26.3	\$14.8
Non-GAAP gross loss	\$(11.8)	\$(8.0)

	Three months ended Mar 31,	
	2023	2022
Operating cash flow	\$(64.7)	\$(32.8)
Capex (Incl. advances) <sup>1</sup>	\$(11.7)	\$(5.0)
Free cash flow	\$(76.4)	\$(37.8)

	Three months ended Mar 31,	
	2023	2022
GAAP EPS	\$(0.40)	\$(0.25)
GAAP Net Income (Loss)	\$146.8	\$(88.3)
Stock based compensation	\$56.0	\$26.7
Amortization of intangibles	\$1.1	\$0.1
Legal, regulatory filing and M&A transaction expenses	\$0.0	\$1.7
Warrant fair value change	\$1.1	\$3.9
Non-GAAP Net Income (Loss)	\$(88.7)	\$(56.0)
Weighted avg. shares outstanding (millions)	370.7	348.7
Non-GAAP EPS	\$(0.24)	\$(0.16)

Notes: <sup>1</sup> Excludes Vendor stock-in-lieu of cash program - purchases and advances for capital projects and equipment of \$2.5M and \$0M in Q1'23 and Q1'22, respectively



# Reconciliation of GAAP to non-GAAP forecasts

(In per share amounts)

	Q2'2023F
GAAP EPS	~\$0.40/sh range
Stock based compensation	~\$0.13-0.16
Amortization of intangibles & other items	~\$0.01
Non-GAAP EPS	Mid-\$(0.20)/sh range