



Rating  
**Buy**

North America  
 United States

Consumer  
 Autos & Auto Technology

Company  
**Rivian**

Reuters  
 RIVN.OQ

Bloomberg  
 RIVN US

Exchange  
 NSM

Ticker  
 RIVN

Date  
 8 November 2023

Forecast Change

Price at 7 Nov 2023 (USD)	17.42
Price target	29.00
52-week range	35.15 - 12.00

## Strong execution but expect larger downtime pressure in 2024

Rivian delivered better than expected Q3 results and tweaked up its full year guidance for vehicle production and smaller Ebitda loss, as its production ramp and unit economics are tracking somewhat better than expected. Revenue per vehicle indeed improved by \$2k+ versus Q2, and even more materially by \$19k when adjusted for LCNRV and Q2's regulatory credit. Looking ahead to rest of the year, management boosted its production outlook from 52k units to 54k for the year, now implying production of 14.3k units in Q4, representing a sequential decline q/q due to a planned one-week downtime as well as Amazon seasonality. All in, we now expect EBITDA loss in Q4 to be -\$1.1bn, lower q/q given the smaller mix of Amazon deliveries which carry better margin and lower volume due to seasonality. Our full year Ebitda loss is now estimated at -\$4.0bn, vs. -\$4.1bn prior, in line with revised guidance.

Looking ahead, we are encouraged by the company's traction with unit economics, and its plans to improve them considerably further through next year, as Rivian scales up volume, integrates large technology improvements and efficiencies, rolls in higher pricing and benefits from renegotiated pricing with its suppliers. At the same time, Rivian was very open this will require multi weeks of plant shutdowns in Q2 and Q3 of next year, along with a rather elongated ramp in Q4 as the company looks to bring back production of various trims in a more staggered fashion. We believe this could mean 2024 volume expectations from the Street may be too high at 75k units, and we cut our own deliveries expectations to 65k units (from 85k previously). At the same time, with most profitability and volume improvements next year not fully in place until 4Q24, and previous quarters' production and costs running only about in-line with the 2023 exit rate, we cut our 2024 vehicle gross margin estimate to -5% (from +1%), reflecting revised expectation for large cost improvement to concentrate in Q4. All in, this brings our Ebitda estimate for 2024 down to -\$2.6bn (vs. -2.4bn prior). We note that, although production disruptions will impact volume and profit expectations for next year, they could indeed be a major steppingstone to meaningfully better unit R1 economics into 2025, with some lessons likely applicable to R2 in 2026.

Separately, we view Rivian's announcement on ending the exclusivity clause with Amazon as incrementally positive. While this has been a source of headline driven benefit for the name, an official agreement in place now means the company can publicly engage with other fleet customers and announce pilot programs that provide color on future volume, though more meaningful volume isn't likely to

### Valuation & Risks

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### Key changes

EPS (USD)	-4.90 to -4.85	↑	1.2%
Revenue (USDm)	4,511.7 to 4,420.2	↓	-2.0%

Source: Deutsche Bank

Deutsche Bank Securities Inc.

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come prior to 2025. All in, we are encouraged with Rivian's continued operational progress, although we stress 2024 may very well be another challenging transition year towards more sustainable business longer term. We reiterate our Buy rating and maintain up our price target at \$29, still based on 1.8x our 2026E revenue (no credit for cash).

### 3Q23 results recap

Rivian reported better than expected 3Q losses with revenue of \$1,337m lower than out \$1,437m but better than Street estimate of \$1,296m. Meanwhile, adjusted Ebitda loss of \$942m was considerably better than our -\$1.123bn and consensus at \$1.049bn. Importantly, vehicle gross margin of -36% compared to 2Q at -37% and the street and DB both at -36%. The company highlighted that the gross profit per vehicle improved \$2,000 vs 2Q, but it would have roughly a roughly a \$14,000 improvement ex LCNRV changes and the loss on firm purchase commitments that were more beneficial in 2Q. Additionally, adjusted for regulatory credits received in Q2, Q3 would have seen a total of \$19k in per vehicle cost improvement. The company highlighted numerous drivers of the gross profit improvement including: 23% QoQ increase in volume driving better fixed cost absorption, reduction of material costs, better mix with more EDVs being sold which are contribution margin positive (30% in 3Q vs 21.5% in 2Q), some sales of the dual motor and lower logistics costs. Note that ASPs were lower sequentially by a touch due to mix shift towards more vans that are at a lower price point. As of the end of the quarter, Rivians' net inventory position includes cumulative inventory write-downs of \$292m and net liabilities for losses on firm purchase commitments of \$160m, for a total of \$452m, a meaningful improvement compared to the end of the first quarter. Rivian expects to no longer have material LCNRV provisions by the end of 2024 as the company reaches positive gross profit.

Separately, Capex in the quarter was \$190m down from \$255m in the prior quarter and was lowered to \$1.1bn for the year (vs \$1.7bn previously) with a large chunk of the shift due to a decrease in the timing. Though the company did note that the average capex between 2023/2024 now be "below \$2bn" relative to about ~\$2bn previously, alluding to some benefits associated with better payment terms and other efficiencies. The company exited the quarter with ~\$9.1bn in cash and cash equivalents, which does not include the \$1.75bn green convertible bond that closed in October.

### Improved 2023 production and Ebitda outlook

Looking at the rest of the year, management boosted its production outlook from 52k units to 54k for the year, now implying production of 14.3k units in Q4, representing a sequential decline q/q due to a planned one-week downtime as well as Amazon seasonality. Relatedly, management guided for a larger gap between production and delivery for the remainder of the year. Our delivery estimate for Q4 and for the year remains largely unchanged as a result, at 13.4k units and 49.6k units, respectively (vs. 13.4k and 49.8k units prior). At the same time, management boosted its Ebitda outlook for the year, now expecting -\$4.0bn in loss given strong traction on cost reduction efforts. Indeed, in the quarter, the company improved COGS per vehicle by 19k on q/q basis after adjusting for LCNRV and regulatory credit benefit last quarter. This will continue to improve however somewhat limited by the conservative assumption on the change in balance of LCNRV, which isn't expected to entirely dissipate until Q4 of 2024. All in, we now expect EBITDA loss in Q4 to be -\$1.1bn, representing a q/q decline given the lower mix of Amazon deliveries which carry better margin and lower volume due to seasonality. Our full



year Ebitda loss is now estimated at -\$4.0bn, vs. -\$4.1bn prior, in line with revised guidance.

As mentioned, Rivian also cut its capex guidance more materially, now to \$1.1bn (down from \$1.7bn prior) largely due to timing of payments and episodic nature of some of its investments and equipment purchases. As a result, we increase our 2024 capex now to \$2.5bn, resulting in average 2023-2024 capex of \$1.8bn per year (directionally aligned with company commentary it should be below \$2bn on average).

#### Encouraging traction, but large downtime impact expected in 2024

Looking ahead to next year, management reaffirmed that it will bridge the gap to positive gross profit in 2024, particularly as it looks to integrate much of its technology improvements in Q2 and Q3 of 2024 through plant down time. Recall that through the EDV downtime with commercial vehicles, Rivian had reduced its bill of materials for the commercial van by 35%. It anticipates a similar level of step-change in its material cost following the plant shutdown for R1 mid-year next year. At the same time, 2024 will experience impact on volume with Q1 exhibiting Rivian's existing run-rate exiting 4Q23 this year, and Q2 and Q3 being heavily impacted from a production standpoint as the company will take multiple weeks of downtime through the course of Q2, and from there ramping back all variances of R1. Q4 then becomes be run-rate potential for the business by which Rivian continues to ramp-up R1 and commercial vans volume. Relatedly, 4Q24 should see the full impact of new technologies benefiting its material costs. This also coincides with a significant portion of the commercial cost-down opportunities that the company identified.

All in, we believe the improvements seen so far provide encouraging evidence that the company is progressing towards its positive gross margin target in 2024, but believe it likely won't be achieved until late 2024 given downtime in 2Q24 from R1 re-rate and the time it may take to ramp to 85k in full capacity. All in, we now model 65k units in deliveries for 2024 (vs 85k before), leading to revenue estimate of \$5.9bn vs. \$7.8bn prior. Our Ebitda loss estimate is now -\$2.6bn (vs. -2.4bn prior), and within this, we are now modeling vehicle gross margin to remain in the negative territory at -5.1% vs. +1.1% prior, largely due to the production downtime impact and a more elongated ramp of various trims, leading to margin benefits largely concentrated in Q4 of next year.

#### Ending exclusive Amazon agreement

Rivian announced that it no longer has an exclusive agreement with Amazon and is able to sell the RCVs to other customers. Other than Amazon receiving a fee given the shared ownership of the top hat IP of the RCV, the end of the exclusivity with Amazon does not materially change the agreement. The company was adamant that integrating the RCV into a potential fleet customer's operations is not seamless and requires building the appropriate infrastructure to support electrification amongst other things. Given the nuances and the size of the undertaking for these fleet customers, they will start with lower volume pilot programs before converting to larger orders. The company does not expect material volumes from the pilot programs in 2024 and larger fleet sales outside of pilot programs to begin in 2025. It will announce a range of different pilot programs shortly and has built a diverse set of customer relationship across fleet categories such as last mile and retail. Recall that even with EDV capacity at 65k by end of next year, Rivian had previously communicated that it will only staff the production line with one shift at half of the



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full capacity. As the company gains more traction with more fleet customers, we expect it to utilize the rest of the commercial van capacity, though likely not until 2025.

#### Maintain Buy and price target at \$29

Following a strong 3Q update with continued execution and incremental clarity on the company's 2024 as a transitional year, we believe Rivian remains on track to achieving gross margin positive by end of 2024. The company's message is the sacrifice associated with the mid-2024 downtime for retrofitting its plant to a more cost effective and efficient production process is necessary for it to achieve an attractive positive gross margin exit rate to end 2024. We continue to be encouraged by Rivian's sequential improvement in COGS, opex leverage, operational execution and associated profitability trajectory as we look past the significant downtime next year that will drive a material step-change across its profit levers. Additionally, the newly announced ability to sell its uniquely propositioned and more profitable RCV to other customers longer term is a clear positive.

All in, we now expect EBITDA loss in Q4 to be -\$1.1bn, representing a q/q decline given the lower mix of Amazon deliveries which carry better margin and lower volume due to seasonality. Our full year Ebitda loss is now estimated at -\$4.0bn, vs. -\$4.1bn prior. For 2024, we now model 65k units in deliveries for 2024 (vs 85k before), leading to revenue estimate of \$5.9bn vs. \$7.8bn prior. Our Ebitda loss estimate is now -\$2.6bn (vs. -2.4bn prior), and within this, we are now modeling vehicle gross margin to remain in the negative territory at -5.1% vs. +1.1% prior, largely due to the production downtime impact and a more elongated ramp of various trims, leading to margin benefits largely concentrated in Q4 of next year.

All in, we are encouraged with Rivian's continued operational progress, although we stress that 2024 may very well be another challenging transition year towards more sustainable business longer term. We reiterate our Buy rating and maintain up our price target at \$29, still based on 1.8x our 2026E revenue (no credit for cash).



# Appendix 1

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Disclosure checklist			
Company	Ticker	Recent price*	Disclosure
Rivian	RIVN.OQ	17.42 (USD) 07 Nov 2023	1, 2, 7, 8, 14, 15, 21, 24

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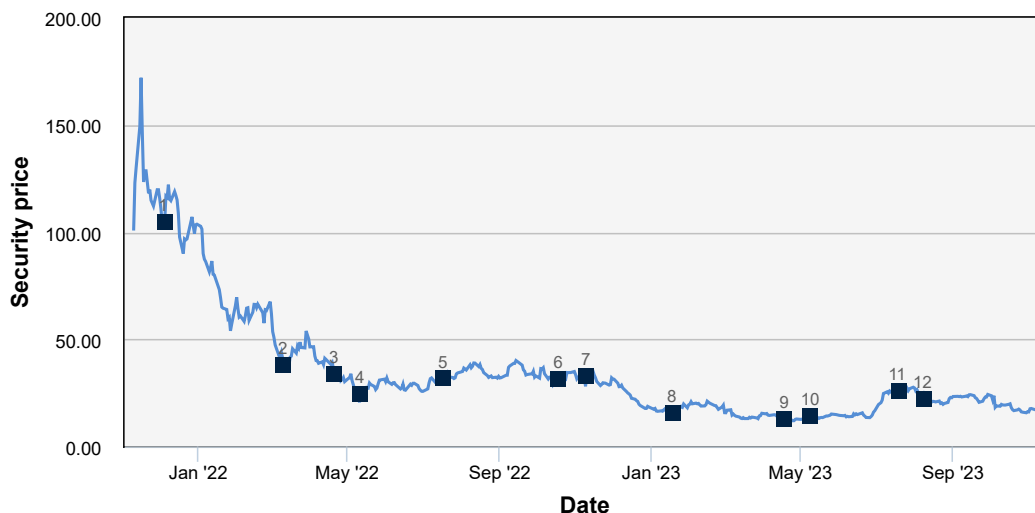
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## Historical recommendations and target price: Rivian (RIVN.OO)

(as of 11/07/2023)



### Current Recommendations

Buy  
 Hold  
 Sell  
 Not Rated  
 Suspended Rating

\*\* Analyst is no longer at Deutsche Bank

1.	12/05/2021	Buy, Target Price Change USD 130.00, Current Price USD 104.67 Emmanuel Rosner, CFA	7.	11/10/2022	Buy, Target Price Change USD 43.00, Current Price USD 32.96 Emmanuel Rosner, CFA
2.	03/11/2022	Buy, Target Price Change USD 91.00, Current Price USD 38.05 Emmanuel Rosner, CFA	8.	01/19/2023	Buy, Target Price Change USD 28.00, Current Price USD 15.79 Emmanuel Rosner, CFA
3.	04/21/2022	Buy, Target Price Change USD 90.00, Current Price USD 33.76 Emmanuel Rosner, CFA	9.	04/19/2023	Buy, Target Price Change USD 17.00, Current Price USD 12.82 Emmanuel Rosner, CFA
4.	05/12/2022	Buy, Target Price Change USD 69.00, Current Price USD 24.30 Emmanuel Rosner, CFA	10.	05/10/2023	Buy, Target Price Change USD 20.00, Current Price USD 14.11 Emmanuel Rosner, CFA
5.	07/18/2022	Buy, Target Price Change USD 46.00, Current Price USD 31.80 Emmanuel Rosner, CFA	11.	07/20/2023	Buy, Target Price Change USD 26.00, Current Price USD 25.81 Emmanuel Rosner, CFA
6.	10/19/2022	Buy, Target Price Change USD 44.00, Current Price USD 31.50 Emmanuel Rosner, CFA	12.	08/09/2023	Buy, Target Price Change USD 29.00, Current Price USD 22.35 Emmanuel Rosner, CFA

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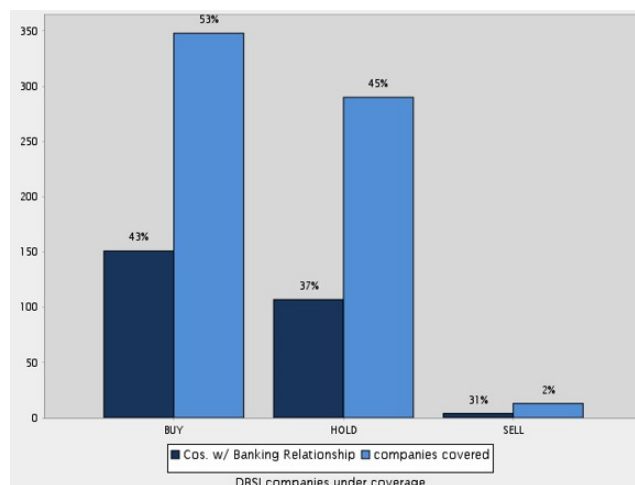
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