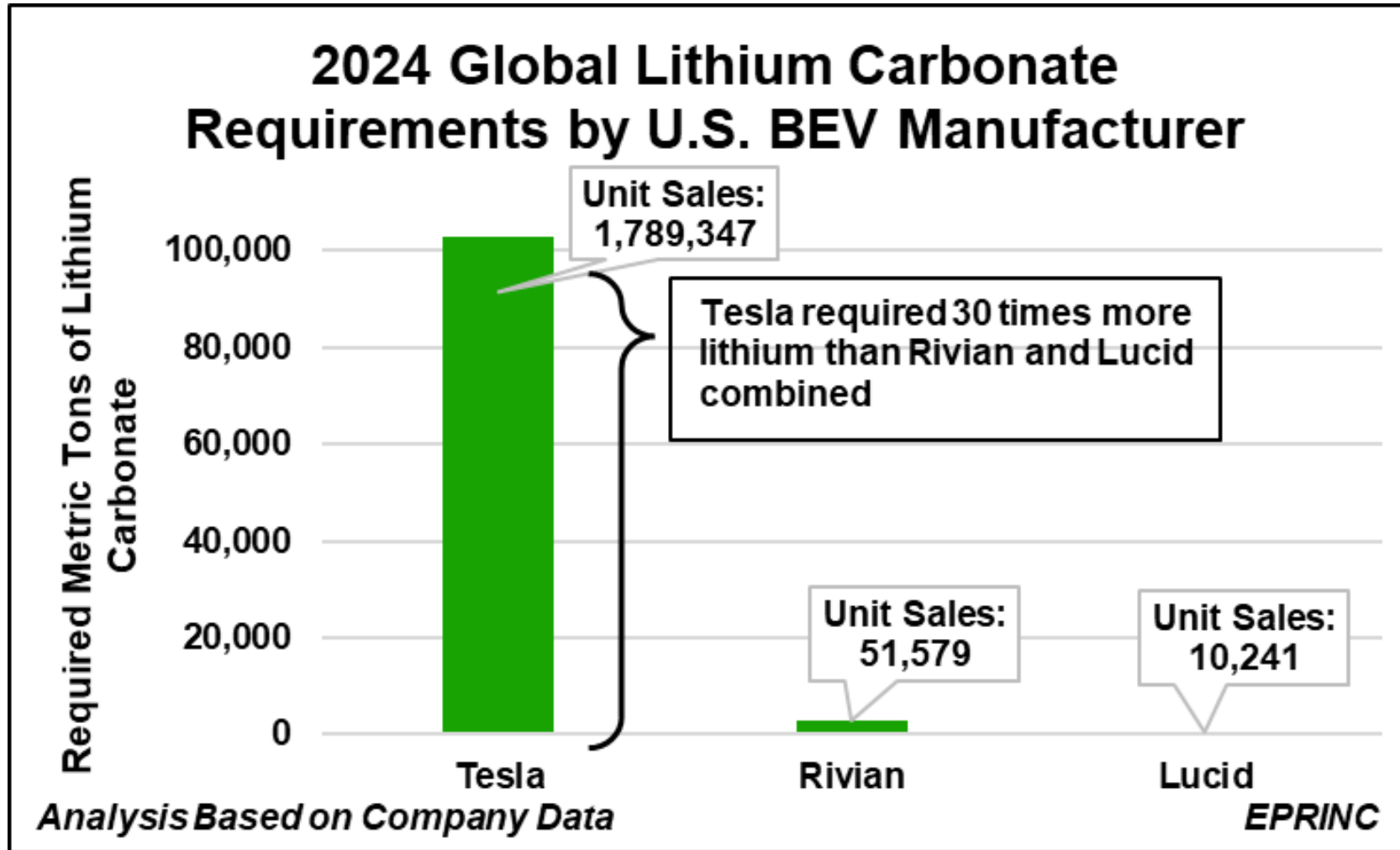


Chart of the Week #2025-15
**Global Lithium Requirements of
Select U.S. BEV Manufacturers**

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Global Lithium Requirements of Select U.S. BEV Manufacturers



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- BEVs (battery electric vehicles) require large amounts of lithium (11 kilograms/24.25 lbs) sourced from 63.5 kgs/140 lbs of lithium carbonate (LCE) for their batteries.
- Of the three BEV-only U.S. manufacturers (Tesla, Rivian, and Lucid), Tesla, by far, has the highest requirements for BEV battery materials such as lithium. At 2024 global vehicle sales of 1.8 million, Tesla is by far the largest BEV producer surpassing Rivian's 51.5 thousand and Lucid's 10.2 thousand sold units.
- Tesla's batteries need 113.6 thousand metric tons of LCE (21.2 thousand mts of lithium) annually, over 11% of global production. Tesla's needs surpass Rivian and Lucid's combined requirements (3.3 thousand and 650 mts of LCE, respectively) by almost 30 times (Figure 1).
- While Chile and Australia, the top two producing countries, together account for 72% of global production, China's share, at number three is 17%. U.S.'s share is 0.3%.
- The U.S. has 25.6 million tons of combined LCE reserves and resources. Nevertheless, there is very little production, all currently from one small Nevada mine. There are five identified U.S. mining locations in various early stages of permitting acquisition. In the U.S., it takes up to 28 years to put a lithium mine into production compared to ten to fifteen years in countries such as Ghana or the DRC.
- N.B.: lithium in its elemental form is unstable. Therefore, it is marketed in compound forms most frequently as LCE and lithium hydroxide, having purity of 18.6% and 16.4%, respectively.
- This slide deck is available at: <https://eprinc.org/chart-of-the-week/>
- For more information on this chart, please contact Max Pyziur (maxp@eprinc.org).