

Interesting facts:

1. Lithium Market Size & Trends

The global lithium market size was valued at USD 8.20 billion in 2023 and is expected to grow at a compound annual growth rate (CAGR) of 12.8% from 2024 to 2030. Electrification of vehicles is projected to attract a significant volume of lithium-ion batteries, thus anticipated to drive market over the forecast period. Automotive application segment is expected to witness substantial growth, driven by stringent regulations for ICE automakers imposed by government bodies to reduce carbon dioxide emissions from vehicles. This has shifted the interest of automakers toward producing EVs, which is anticipated to benefit the demand for lithium and related products. Government subsidies for EVs, along with investments in this space, are likely to act as an additional booster to market growth. (Market Analysis Report: Grand View Research)

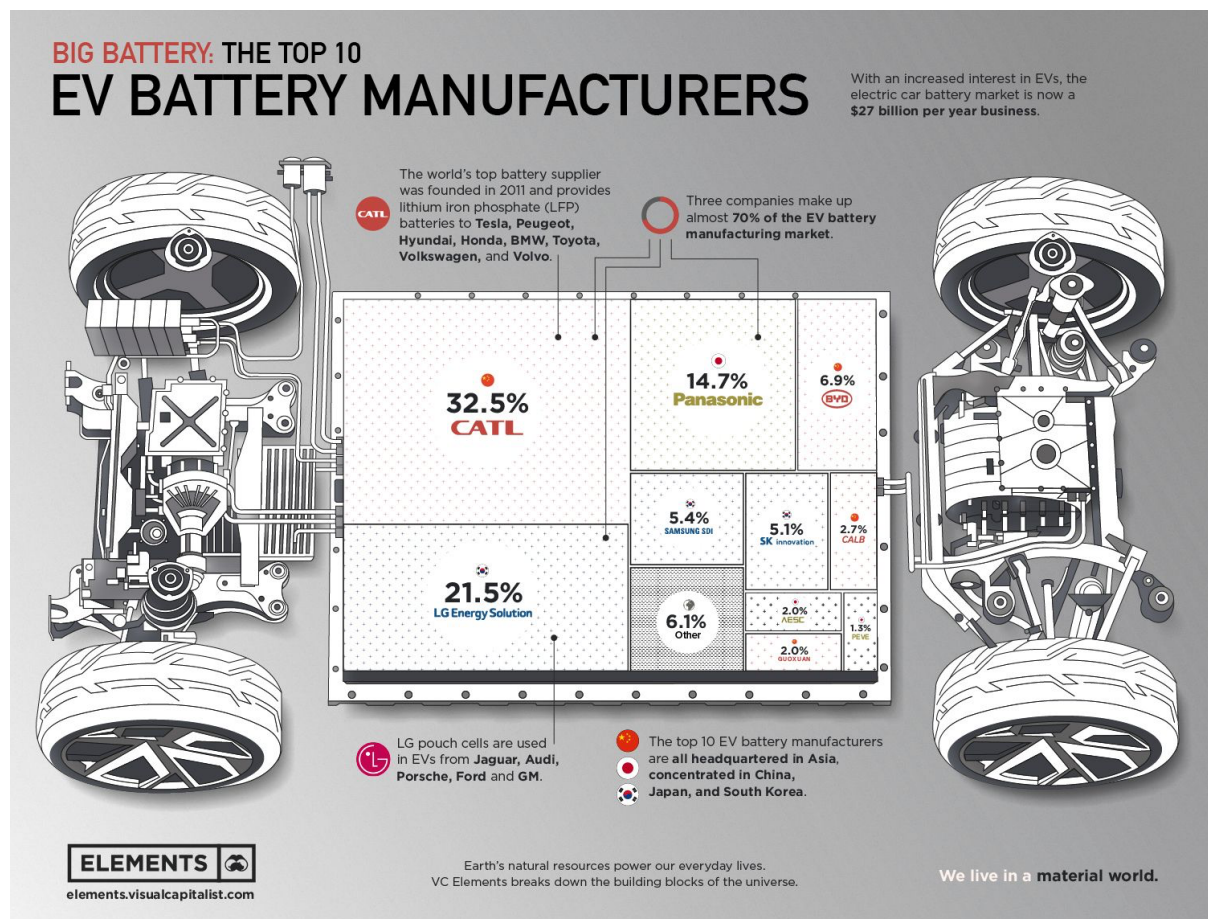


Figure 1: Market share per OEM of manufactured LFP Batteries for EV.

Catl (Contemporary Amperex Technology Co Ltd) is a Chinese battery manufacture that specializes in LFP batteries for EVs, renewable energy systems and other applications. CATL Batteries are known for their high performance, reliability and sustainability. Some key features include:

- High Energy Density
- Long cycle life
- Fast Charging capability
- Low self discharge rate
- Environmental friendliness

As shown in Fig 1 CATL is one of the largest battery manufacturers in the world, with almost 33% of the current market, and supplies batteries to major automotive and renewable energy companies. The Shenxing PLUS battery which allows a 1000km range and a 4C superfast charging was unveiled at the 2024 Auto China event.

CATL has established and strengthened the partnership agreement with Hyundai over the last few years and Beijing Hyundai have recently signed a strategic agreement on EV Batteries.

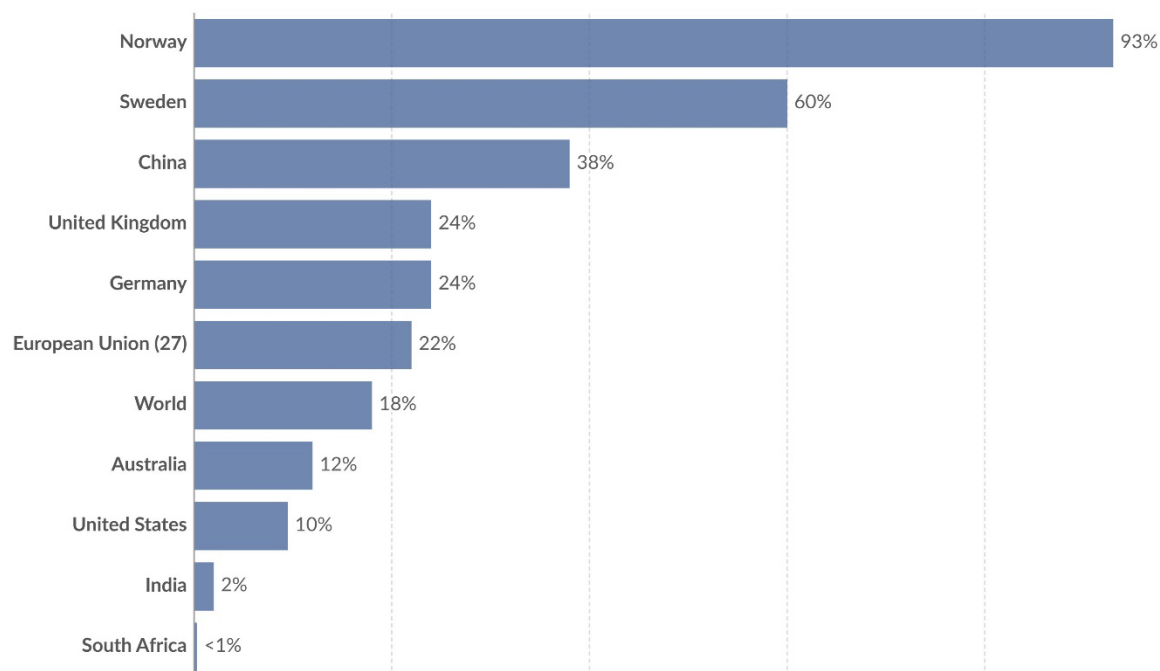
2. Trends in EV Sales

Electric car sales remained strong in the first quarter of 2024, surpassing those of the same period in 2023 by around 25% to reach more than 3 million. This growth rate was similar to the increase observed for the same period in 2023 compared to 2022. The majority of the additional sales came from China, which sold about half a million more electric cars than over the same period in 2023. In relative terms, the most substantial growth was observed outside of the major EV markets, where sales increased by over 50%, suggesting that the transition to electromobility is picking up in an increasing number of countries worldwide. (www.iea.org)

Share of new cars sold that are electric, 2023

Our World
in Data

Electric cars include fully battery-electric¹ and plug-in hybrids².



Data source: International Energy Agency. Global EV Outlook 2024.

OurWorldInData.org/energy | CC BY

1. **Fully battery-electric:** Cars or other vehicles that are powered entirely by an electric motor and battery, instead of an internal combustion engine.

2. **Plug-in hybrid:** Cars or other vehicles that have a rechargeable battery and electric motor, and an internal combustion engine. The battery in plug-in hybrids is smaller and has a shorter range than battery-electric cars, so over longer distances, the car starts running on gasoline once the battery has run out.

Figure 2: EV sales in 2023 showing South Africa as one of the lowest

3. **EV Cost Effective:**

Electric vehicles cost significantly less to fuel and maintain the fossil fuel powered vehicles. The average purchase price of new fully battery powered EVs is expected to decline by nearly 25% over the next year from now around R687000.00 to R545000.00

4. **History:**

The concept of electric vehicles is not new. In fact, Thomas Parker, and English inventor built the first electric vehicle for mass production in 1884. The first electric vehicle was developed in the 1830s by Robert Anderson, a Scottish inventor.