

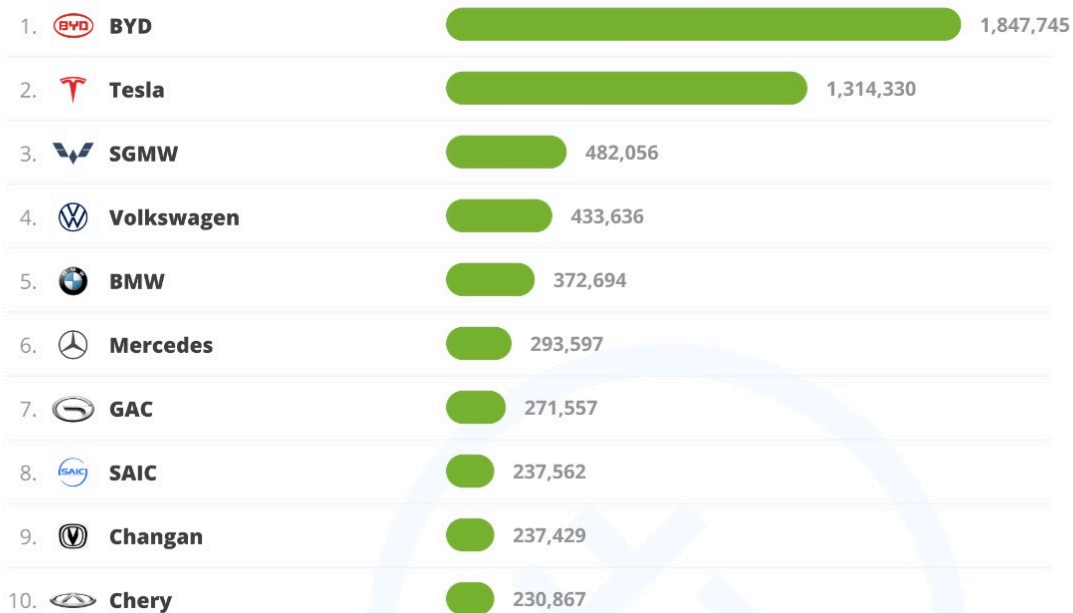


Market Intel

Pathways for clean vehicles and fuels, advanced technologies, mobility and autonomous rides, and multi-modal transportation

February 2023: Tesla Vs. BYD

Top Auto Brands in EV Sales — January–December 2022



Source: *CleanTechnica*

	Tesla	BYD
Vehicles sold in 2022	1.3 M	1,857,379
Revenue	\$81.4 B — up by 51% YOY	\$50.6 B — up by 62.8% YOY
Net Profit	\$12.6 B	\$2.37-\$2.52 estimated
Employees	99,200*	288,200
Battery production capacity	37 GWh	285 GWh**

Numbers provided by companies in investor reports, except where noted.

*Tesla employee. Source: Statista — Dec. 31, 2021

**BYD GWh estimate through the end of 2022 by electrive.com

Interesting points about Tesla:

1. Tesla had dropped prices up to 20%, except for the Model Y in the U.S., which had a price increase of about 2% to \$57,990.
2. This year, Tesla says it will release its long-awaited Cybertruck, a blocky, angular all-electric SUV first announced in 2019
3. A forecast by management consulting and accounting firm Plante Moran shared with Wired says it expects Tesla's share of the North American EV market will drop from 70% in 2022 down to 31% by 2025. Competition is rising from Ford and other automakers.
4. The U.S. Justice Department is currently investigating Tesla over its autopilot and Full Self-Driving features.
5. A San Francisco federal court acquitted Tesla CEO Elon Musk of a stock fraud class action lawsuit filed by a group of Tesla investors earlier this month. Investors had won a pretrial ruling when a judge found Musk's tweets about securing funding to take Tesla private were false and made recklessly—but a federal jury sided with Musk after the trial ended.
6. In the fourth quarter of last year, Tesla said deliveries of its Model 3 sedan and Model Y crossover amounted to 388,131, while deliveries of its higher-end Model S sedan and Model X SUV amounted to 17,147.
7. BYD will supply Tesla with batteries in the near future, a senior company executive told the news media last year. It may be the Blade battery, a less bulky lithium-iron-phosphate (LFP) battery.

Interesting points about BYD:

1. BYD is looking into expanding its presence in some European markets, and spent time last year conducting a study on how to set up a U.S. distribution network for its latest electric models, two sources said. **That could mean** setting up dealership locations in the U.S. The company was expected to make announcements at CES in Las Vegas last month, but that didn't happen. Tense relations between China and the U.S. seemed to put that on hold, one of the sources said.
2. BYD would like to become **India's second-largest EV company** this year, behind only Indian carmaker Tata Motors, as it rolls out more models including a battery-powered premium saloon. An executive with the Chinese automaker said it might expand its Indian production base after 2025 if demand for its vehicles was strong enough.
3. The company reported that its total sales of more than 1.85 million plug-in electric vehicles, more than tripling its 2021 result of 593,745. Battery electric vehicles (BEVs) came in at 911,141 (up 184% year-over-year). Plug-in hybrid electric vehicles (PHEVs) sold 946,238 (up 247% year-over-year). The total was up 213% year-over-year.
4. Its top seller is the **BYD Song family** (BEV + PHEV) with 70,079 units in December and 478,120 in 2022. The Song was the top Chinese SUV last year, reported InsideEVs.

5. BYD **battery production capacity** may go from 285 GWh in 2022 and 445 GWh next year. Globally, BYD ranked third in installed production capacity in the first half of 2022, behind market leader CATL and LG Energy Solution, according to an analysis by SNE Research. The company ranked third in installed production capacity in the first half of 2022, behind CATL and LG Energy Solution, according to an analysis by SNE Research.
6. Over 750 unionized employees work together to build battery electric buses and buses at BYD's 556,000 square foot manufacturing facility in Lancaster, Calif., according to BYD.

Sustainable Transportation Market Data

Alternative Fuel Stations in the U.S. — February 2023

Biodiesel (B20 and above)	838
Compressed Natural Gas (CNG)	783
Electric	50,772*
Ethanol (E85)	4,228
Hydrogen	55
Liquefied Natural Gas (LNG)	51
Propane (LPG)	1,334
Renewable Diesel (R20 and above)	574

Source: Alternative Fuels Data Center

*50,772 station locations; 129,793 EVSE ports. Level 2 and DC fast chargers.

Price Comparisons in Available Fuels

Fuel	Price
Biodiesel (B20)	\$4.89/gallon
Biodiesel (B99-B100)	\$5.25/gallon
Electricity	\$0.16/kWh
Ethanol (E85)	\$3.18/gallon
Natural Gas (CNG)	\$2.88/GGE

Liquefied Natural Gas	\$3.63/DGE
Propane	\$3.55/gallon
Gasoline	\$4.05/gallon
Diesel	\$5.17/gallon

Sources: Alternative Fuel Price Report, October 2022 and U.S. Energy Information Administration