

CATL HK SDR 30to1

(SGX: HCCD)

Global Leader in Electric Vehicle Batteries

- **Global Market Leader in EV and ESS Batteries:** CATL is the world's largest electric vehicle battery manufacturer, commanding a dominant 38% share of the global EV battery market and 36.5% of the energy storage system (ESS) battery market. The company has grown from a domestic Chinese supplier into a global powerhouse through partnerships with major automakers like BMW and strong sales in both China and Europe. With EV adoption accelerating globally, particularly in China where EVs make up over 50% of new car sales, CATL is well-positioned to ride the structural demand tailwinds.
- **LFP Technology Innovation Differentiates CATL from Peers:** Unlike Korean rivals that focus on NMC battery chemistry, CATL has led the industry in developing Lithium Iron Phosphate (LFP) batteries. These offer better safety, longer lifespans, and significantly lower production costs – key attributes for mass-market EVs. While LFP has lower energy density, CATL has closed this gap with advanced R&D. Its latest product, the Shenxing Plus battery, boasts a 1,000 km driving range and can deliver 600 km on just 10 minutes of charge, a major leap from its previous generation.
- **Highly Profitable with Strong Margins and Operating Leverage:** CATL stands out as the most profitable battery company globally, generating nearly 90% of the industry's total profits. In Q2 2025, CATL's net profit surged by 33.7% year-on-year to RMB 16.5 billion, despite falling battery prices. This was driven by a 480-bps improvement in gross margins to 25.6%, thanks to increased sales of premium products and economies of scale from high plant utilisation (above 90%).
- **Rapid Growth with Prudent Execution and Global Expansion:** Beyond its dominance in China, CATL is aggressively expanding in Europe and North America. The company is scaling both its EV and ESS divisions to capture long-term global demand, which is further supported by energy-intensive applications like AI data centres. Its continued investments in next-generation battery technology and overseas capacity position it as a long-term beneficiary of the global electrification trend.
- **Key Risks:** Despite strong structural drivers, CATL operates in a capital-intensive and highly competitive market. Excess capacity buildout by peers, slower-than-expected EV or ESS adoption, or pressure on pricing from overcompetition could impact future margins. Any meaningful decline in plant utilisation or slowdown in global EV penetration could weigh on earnings growth.
- **Valuation Reflects Leadership and Earnings Power:** Following its H-share listing in Hong Kong in May 2025, CATL's stock has climbed 36% and now trades at 21.7x forward P/E.

Ticker	HCCD
Rating	Not Rated

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Global Leader in EV and Energy Storage Batteries

Contemporary Amperex Technology Co., Limited (CATL) is currently the world's largest manufacturer of electric vehicle (EV) and energy storage system (ESS) batteries. The company is widely recognised as a global leader in innovative energy solutions. Previously listed solely on the Shenzhen Stock Exchange, CATL completed a secondary listing on the Hong Kong Stock Exchange in May 2025.

According to CATL's Hong Kong listing prospectus, approximately 70% of the company's total revenue in 2025 is expected to be derived from the EV battery segment, where it supplies batteries to both domestic and global electric vehicle makers. An additional 15% of revenue comes from its ESS battery business.

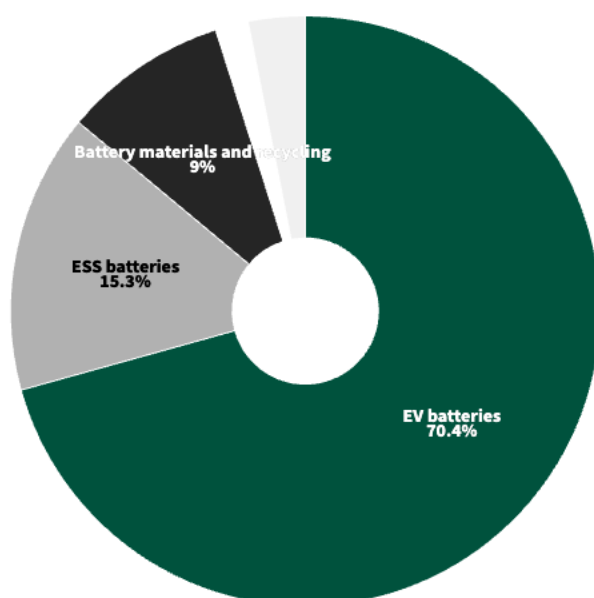
CATL has benefited from strong momentum in EV adoption, particularly in China, where EV penetration reached 53% of total new vehicle sales as of June 2025. The company has also accelerated its international expansion, especially in Europe, through partnerships with key OEMs such as BMW.

In the ESS segment, CATL's battery systems are used to support renewable energy generation from sources such as wind and solar. The rise of artificial intelligence has driven demand for energy-intensive data centres globally, fuelling further growth in grid-level ESS demand as part of broader energy infrastructure development.

Figure 1: About 70% of CATL's revenue is derived from EV batteries

Revenue breakdown (2024)

■ EV batteries ■ ESS batteries ■ Battery materials and recycling
Battery mineral resources ■ Others



Source: CATL's HK listing prospectus

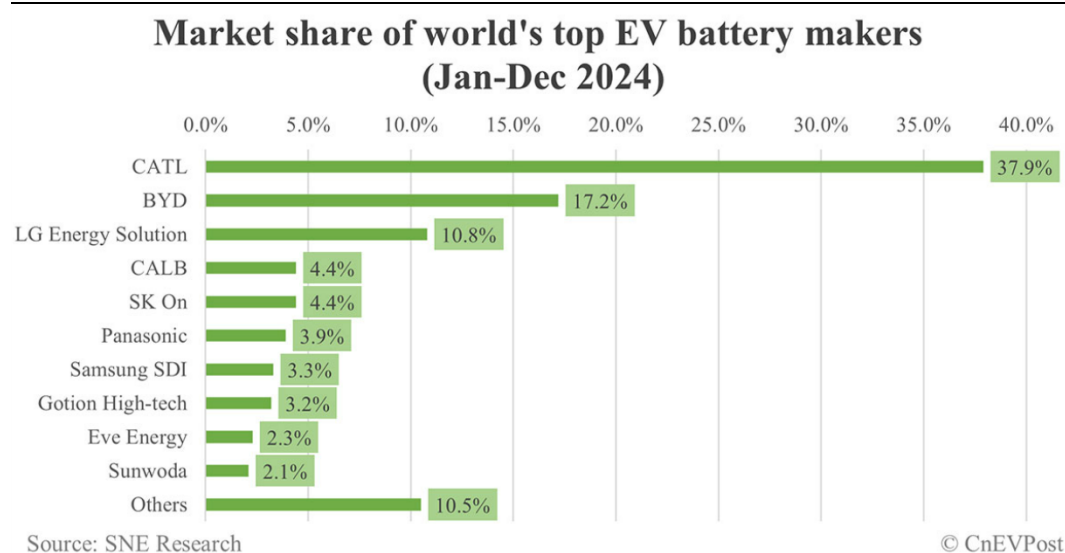
Leading market share

CATL began as a domestic battery supplier to Chinese electric vehicle (EV) manufacturers but has since grown to become the global leader in both EV and energy storage system (ESS) batteries. As of 2025, CATL holds a dominant position with an

estimated 38% global market share in the EV battery segment, reflecting its strong scale, technological edge, and broad customer base.

In the ESS battery segment, CATL also leads globally with a 36.5% market share, supported by rising demand for grid-level storage solutions amid the global transition toward renewable energy.

Figure 2: Market share of top EV battery makers



Source: CATL HK Listing Prospectus

BYD, which primarily uses its batteries in-house for its own EV models, ranks second in global EV battery market share. Meanwhile, Korean players such as LG Energy Solution (LGES), SK On, and Samsung SDI follow, with each holding market shares ranging between 3% and 11%.

Battery Chemistry a Key Differentiator: CATL vs Korean Competitors

The competitive dynamics in the global EV battery market are increasingly shaped by the choice of battery chemistry. Currently, lithium-ion (Li-ion) batteries are dominated by two key types of cathode materials – Nickel Manganese Cobalt (NMC) and Lithium Iron Phosphate (LFP).

Korean battery manufacturers, including LG Energy Solution, SK On, and Samsung SDI, have primarily focused on NMC battery technology. In contrast, CATL has been a leading proponent of LFP batteries, investing significantly in research, development, and production capacity for this chemistry.

LFP batteries offer several advantages over NMC:

- **Thermal stability:** LFP cells exhibit higher resistance to heat and are less prone to thermal runaway, enhancing safety.
- **Longer lifespan:** LFP batteries support between 2,500 to 9,000 charge-discharge cycles, translating into longer operational life versus NMC batteries, which typically range from 1,000 to 2,000 cycles.

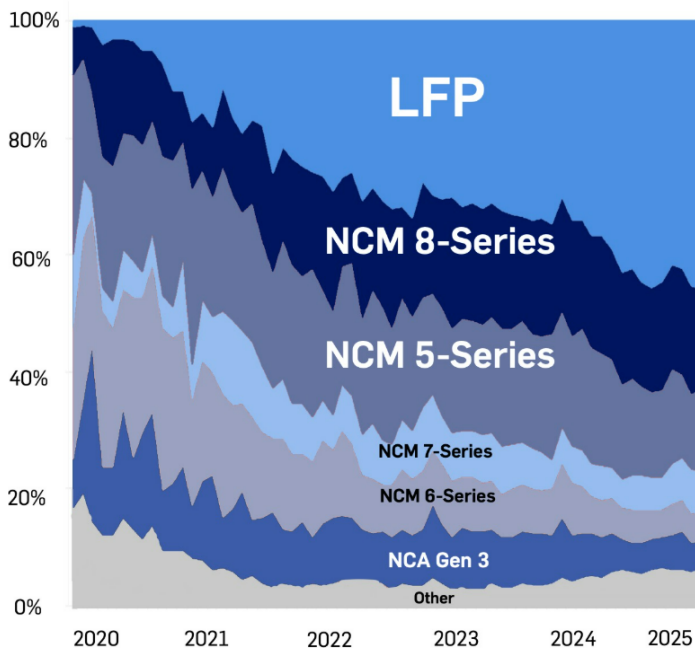
- **Lower cost:** The average LFP cell price stood at approximately US\$60/kWh in 2024, significantly below the US\$120–150/kWh range for NMC.

However, the trade-off is lower energy density. LFP batteries typically store 120 Wh/kg, while NMC batteries can achieve up to 220 Wh/kg – meaning LFP-powered EVs may require more frequent charging or carry larger battery packs to match range.

Despite this, LFP adoption has surged, rising to approximately 46% of EV battery installations globally over the past five years, largely at the expense of NMC. CATL has played a central role in this shift, leveraging its cost leadership, manufacturing scale, and technology capabilities to accelerate global acceptance of LFP technology.

Figure 3: Global market share of various EV battery types

Global Share Jan 2020 to Apr 2025 – GWh



Source: Adamas

CATL Pushing Technological Boundaries in LFP Battery Innovation

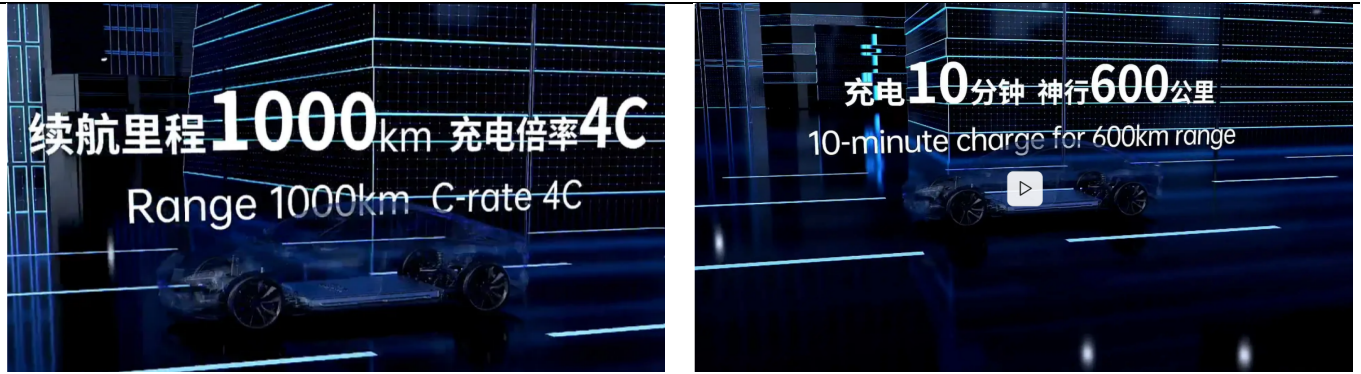
While LFP batteries have traditionally been associated with lower energy density compared to NMC batteries, CATL has been making significant strides in addressing this limitation through continuous innovation.

In April 2025, CATL unveiled its latest LFP battery advancement – the Shenxing Plus battery. This new iteration delivers a driving range of up to 1,000 km on a full charge, representing a major leap from the first-generation Shenxing battery introduced in 2024, which offered a 700 km range.

By enhancing both the cathode material and the internal cell structure, CATL has successfully increased the energy density to 205 Wh/kg, bringing LFP performance closer to that of higher-end NMC batteries. In addition to improved energy density, the Shenxing Plus battery supports ultra-fast charging – capable of delivering up to 600 km of range with just 10 minutes of charging. This is a significant improvement from the earlier version, which could deliver 400 km of range from the same charging duration.

CATL's ongoing advancements in LFP technology reflect its strategic focus on bridging the performance gap with NMC batteries, while retaining LFP's inherent advantages of safety, longer lifespan, and cost efficiency. This positions CATL to maintain its leadership in the global EV battery space, particularly as cost competitiveness and charging convenience become increasingly important factors for mass-market EV adoption.

Figure 4: CATL is pushing technological boundaries in LFP battery innovation



Source: CATL

CATL Remains the Most Profitable Battery Manufacturer Globally

CATL continues to demonstrate clear competitive advantages in the EV and ESS battery industry, cementing its position as the most profitable battery company worldwide. In 2024, CATL reported an operating profit margin (OPM) of 17.8%, significantly outperforming both its domestic and international peers. Among its closest competitors, LG Energy Solution recorded a lower OPM of 10%, while others in the industry either operated at break-even or reported losses.

Notably, CATL is estimated to contribute to approximately 90% of the entire battery industry's profit, highlighting the scale of its dominance in both profitability and market influence.

Q2 2025 Performance: Profitability Surges on Margin Expansion

CATL delivered strong second-quarter results in 2025, with revenue rising 8.3% year-on-year to RMB 94.2 billion, and net profit surging 33.7% year-on-year to RMB 16.5 billion.

Despite headwinds from lower average battery selling prices – driven by declining raw material costs and increased competition – battery shipment volume grew 36.4% year-on-year to 150 GWh, reflecting robust demand.

More importantly, gross margin expanded by 4.8 percentage points year-on-year to 25.6%, supported by a higher mix of premium battery products and enhanced operating leverage. High plant utilisation, which remained above 90%, also contributed to scale efficiencies and margin gains.

CATL's ability to grow earnings faster than revenue, even in a deflationary pricing environment, reinforces its operational strength and leadership in battery technology and cost management.

Key Risks

While CATL benefits from strong structural tailwinds in the transition to electric vehicles (EVs) and energy storage systems (ESS), it operates in a highly competitive and capital-intensive industry. The company and its peers have been expanding manufacturing capacity aggressively to capture expected long-term demand growth.

However, if the pace of EV adoption slows, whether due to policy changes, consumer sentiment shifts, or macroeconomic headwinds, or if other verticals such as ESS or industrial storage grow more slowly than anticipated, CATL could face underutilised capacity. This may lead to downward pressure on battery selling prices and lower margins.

In such a scenario, CATL's profitability could be negatively impacted, especially given its high fixed cost base and large-scale capital investments tied to long-term demand assumptions. Investors should closely monitor industry supply-demand dynamics and policy developments that could influence end-market growth.

Trading at 22x P/E

Since its H-share listing in May 2025, CATL's share price has risen by 36%, reflecting investor interest in its position as a global leader in EV and energy storage batteries.

Based on current estimates, CATL trades at a forward price-to-earnings (P/E) ratio of 21.7 times.

You can now trade CATL through Hong Kong Singapore Depository Receipts (SDRs). These HK SDRs offer investors a more accessible way to invest in Hong Kong-listed companies.

Apart from CATL (HCCD), Pop Mart (HPPD) would also be accessible through Hong Kong SDRs for investors from 6 August 2025.

The introduction of Singapore Depository Receipts allows investors to purchase CATL shares with a lower minimum investment outlay compared to buying Hong Kong-listed shares directly.

Additionally, SDR holdings will be custodised within investors' Central Depository (CDP) accounts, providing seamless integration with their existing Singapore-based portfolios.

Disclosure Appendix

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