

LITHIUM & BATTERY TECHNOLOGY INDEX FACT SHEET

as of 9/30/23



A benchmark to track global companies associated with the development, production and use of lithium battery technology.

The Case for Lithium Battery Technology

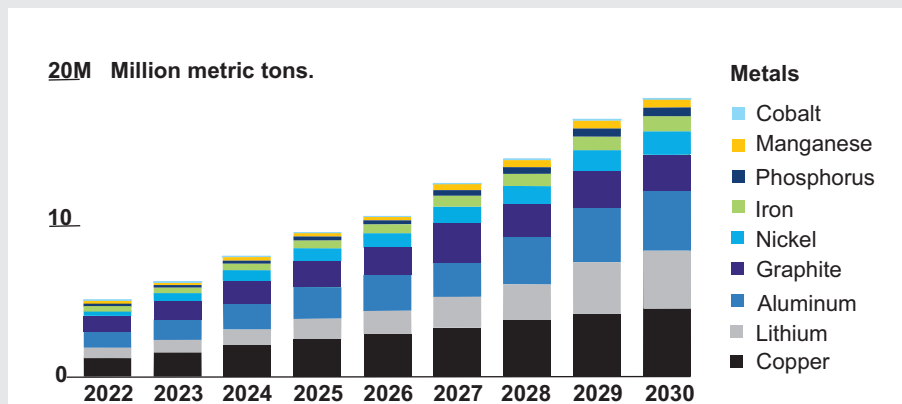
Growing global demand for lithium-ion batteries to power consumer devices, grid storage, and electric vehicles, coupled with constrained supply and capacity has created favorable conditions for companies associated with the lithium and battery technology supply chain.

- 1. Growing Global Opportunity** - According to Markets and Markets, the lithium-ion battery market is expected to grow from an estimated \$44.2 USD billion in 2020 to \$94.4 billion by 2025, at a CAGR of 16.4%.¹
- 2. Multiple Drivers of Demand** - A number of factors continue to fuel growth in lithium-ion batteries, including continued demand for mobile devices, the accelerating pace of global electric vehicle adoption and a rising need for grid energy storage solutions.
- 3. Constrained Supply Conditions** - Automakers are accelerating their planned electric vehicle launch plans to comply with increasingly stringent regulations in Europe and China. While COVID-19 has delayed some these plans, government incentives, evolving consumer preference, price parity, and a slate of new innovative models, will fuel accelerating EV growth in the post pandemic world.

1. Markets and Markets, January 2020

Battery Boom

Rising EV demand supercharges demand forecasts for a group of metals.



Metals demand from lithium batteries is expected to top 17 million in 2030.

Source: BloombergNEF, July 15, 2022



Overview

The EQM Lithium and Battery Technology Index (BATTIDX) tracks global companies associated with the development, production and use of lithium battery technology including:

- the development and production of lithium battery technologies and/or battery storage solutions,
- the exploration, production, development, processing, and/or recycling of the materials and metals used in lithium-ion batteries such as Lithium, Cobalt, Nickel, Manganese, Vanadium and/or Graphite, and/or
- the development and production of electric vehicles.

Ticker	BATTIDX
Inception Date	8/14/2020
Index Calculation/ Publication	Refinitiv LSEG
Total # Holdings	109
# US Holdings	26
# Non-US Holdings	83
Rebalance (Aug/Nov/Feb/May)	Quarterly
Weighting Scheme	Modified market-cap weighting

Licensing Information

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Provided by EQM Indexes
Not investment advice or a recommendation to buy or sell securities. Investors may not invest directly in an index.

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Top Constituents

For a complete list of holdings, go to eqmindexes.com.



Source: Bloomberg

		Index Wt %
1	BHP GROUP LTD-SPON ADR	8.16
2	TESLA INC	8.14
3	CONTEMPORARY AMPEREX TECHN-A	7.20
4	BYD CO LTD-H	5.69
5	LG ENERGY SOLUTION	5.09
6	GLENCORE PLC	4.76
7	LI AUTO INC - ADR	2.40
8	PANASONIC HOLDINGS CORP	2.00
9	SAMSUNG SDI CO LTD	1.79
10	RIVIAN AUTOMOTIVE INC-A	1.58

Inclusion of a security within the Index is not a recommendation by EQM Indexes to buy, sell, or hold such security, nor is it considered to be investment advice. EQM Indexes is not an investment advisor, and makes no representation regarding the advisability of investing in any such security.



Constituent Requirements

In order to be eligible for inclusion in the index, companies must meet the following conditions:

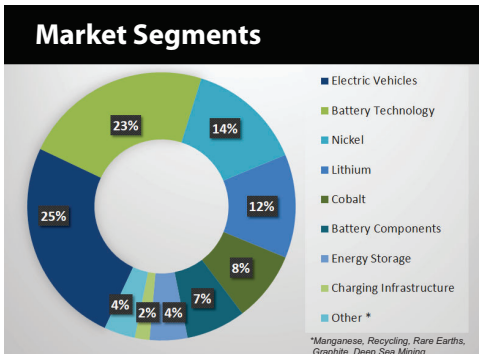
- (a) Publicly traded companies engaged in the development and production of **lithium battery technology and/or battery storage solutions**; the exploration, production, development, processing, and/or recycling of the materials and metals used in **lithium battery chemistries** such as **Lithium, Cobalt, Nickel, Manganese, Vanadium and/or Graphite**; and/or the development and production of electric vehicles.
- (b) The Index seeks to provide exposure to global companies associated with the development, production and use of **lithium battery technology** including:

1. Companies deriving more than 50% of their revenue from the development and production of **lithium battery technologies and/or battery storage solutions**;
2. Companies in the battery materials supply chain that demonstrate a **verifiable beneficial interest** in lithium battery technology as verified by one of the following factors:
 - 2.1 **50% revenue or profit** derived from the mining activity or metal processing, operations, contracts, and/or projects utilized in lithium battery chemistries, and/or
 - 2.2 **global market share** in the top five or at least 10% of global market share of any lithium battery metal utilized in the lithium battery chemistry that represents a primary source of revenue and/or net income for the company.
3. Companies deriving more than 90% of their revenue from the development and production of **electric vehicles**.

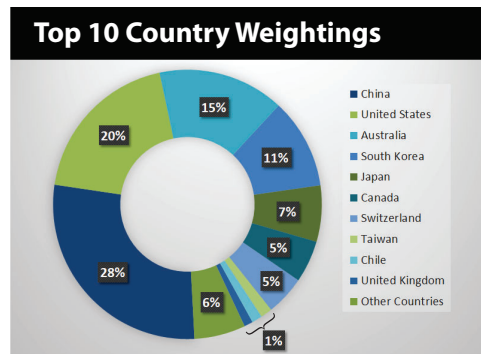
- (c) Listing on a regulated stock exchange in the form of shares tradable for foreign investors without restrictions.
- (d) Market capitalization of at least 250 million USD at time of purchase, and above \$200 million USD at time of reconstitution.
- (e) Average daily traded value of at least 1,000,000 USD over the last six months at time of purchase, or adequate constituent liquidity and accessibility for an exchange listed product as determined by the Index Provider.
- (f) Non-US companies will be U.S. exchange traded ADR versions if available, provided their liquidity is comparable to locally traded shares.
- (g) The only allowable industry concentrations will be in the battery metals and mining industry classified under the diversified metals & mining GICS sub-industry grouping and/or GICS materials industry group.

Portfolio Weightings

For Illustrative Purposes Only



Source: Bloomberg, EQM Indexes



Source: Bloomberg

About EQM Indexes

EQM Indexes LLC is a VettaFi company dedicated to creating and supporting innovative indexes that track growth industries and emerging investment themes. VettaFi is a provider of indexing, data & analytics, industry leading conferences, and digital distribution services to ETF issuers and fund managers with offices in the US and Canada. VettaFi's index solutions power nearly \$19 billion in ETFs and other vehicles.

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