EXIDE INDUSTRIES

Company Analysis

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ABOUT THE COMPANY

Exide Industries Limited (**Exide**) is an Indian multinational storage battery manufacturing company, headquartered in Kolkata, India. It is the largest manufacturer of lead-acid storage batteries and power storage solutions provider in India.

The company has ten international standard factories spread across five states in the country, out of which 8 factories are dedicated to lead-acid batteries and 2 factories manufacture Home UPS Systems.
Exide also has manufacturing facilities in Sri Lanka, UK and Singapore and does business globally through its subsidiaries and international affiliates.

The company has forayed into manufacturing of lithium-ion battery modules and packs through its subsidiary Exide Energy Private Limited (under the brand Nexcharge) for India's electric vehicle market and stationary applications. Further, it has recently set up a wholly-owned subsidiary – Exide Energy Solutions Limited - and is in the process of setting up a plant for multi-giga watt hour lithium-ion cell manufacturing business

VALUE PROPOSITION

These are the fundamental truths that the organization believes in and people respect and work towards. Core values also set the tone of the organization's culture.

LEADERSHIP

- Have a clear vision of where the company is going.
- Focus on achieving leadership objectives and strategies.

INTEGRITY

- Conduct business fairly, with honesty and transparency.
- Operate within the letter and spirit of the law.
- Uphold the values and principles of the organization in every action and decision.

PEOPLE DEVELOPMENT AND INVOLVEMENT

- Identify and provide the competencies needed to implement the strategies and plans.
- Support development so that people can use their full potential and adapt to the changes.
- Encourage and provide opportunities for involvement in improvement activities while building a culture of trust, openness, and empowerment.
- Provide a good work environment and treat each other with respect & dignity.
- Encourage teamwork so that individuals work as a team and support each other.

AGILITY

- Speed, Responsiveness, and being Proactive is achieved through Collaboration and Empowering Employees.

PASSION FOR INNOVATION AND TECHNOLOGY

- The company advances through creativity and efficient processes to implement new ideas.
- Encourage the development and execution of innovation strategies to be competitive.
- Encourage and disseminate the creation and development of new innovative products, technologies, and ideas for the development of new markets.

CHANNEL PARTNER RELATIONSHIP

- Work cohesively with channel partners around the world, building strong relationships based on tolerance, understanding, and mutual cooperation.
- Constantly drive initiatives to develop and sustain channel partners with a view to improving the business.

CUSTOMER ORIENTATION

- Intimately understand the customers (both external and internal).
- Understand that customer loyalty, retention, and market share gain are maximized through a clear focus on the needs and expectations of both existing and potential customers.
- Keeping in mind the competitive advantage, we anticipate and gather customers' needs and expectations and act in order to meet/exceed them through product and service quality.
- Build and maintain effective and proactive relationships with customers.

RESPONSIBLE CORPORATE CITIZENSHIP

- Strive to adopt a highly ethical approach by being transparent and accountable to their stakeholders.
- Actively promote social responsibility and ecological sustainability.
- Meet and exceed the expectations and regulations of the local and global community through open and inclusive stakeholder engagements.
- Have awareness of the organization's impact on both the current and future community and take care to minimize any adverse impacts.

INDUSTRY OVERVIEW

VALUE CHAINS

Primary Activities:

1. **Inbound Logistics:**

   - **Raw Materials Sourcing:** The company sources materials globally and domestically ensuring quality and cost-effectiveness.
   - **Storage:** Proper storage facilities to maintain the integrity of raw materials until used in production.

2. **Operations:**

   - **Manufacturing Process:** Exide manufactures a wide range of battery products for automotive, industrial, and submarine applications. For this, they utilize state-of-the-art manufacturing facilities.
   - **Quality Control:** Implementation of rigorous testing and quality control measures to ensure the durability and performance of batteries.

3. **Outbound Logistics:**

   - **Distribution Networks:** Vast distribution network that includes warehouses and logistics partners to ensure timely delivery of products.
   - **Packaging:** Effective packaging solutions to ensure product safety.

4. **Marketing and Sales:**

   - **Branding:** Strong brand presence and reputation in the battery market. They are engaged in extensive marketing campaigns across diverse media channels.
   - **Customer Relations:** They maintain robust relations with OEMs and have a broad retail network to boost sales. Customer service centres enhance consumer trust and brand loyalty.

5. **Service:**

   - **After-Sales Support:** Warranties and after-sales service are provided to ensure customer satisfaction and repeat business.
   - **Recycling Program:** Battery recycling programs are run to sustain environmental stewardship and supplementary raw material sourcing.

Support Activities:

1. **Infrastructure:**

- **Leadership and Management:** Effective governance structures and strategic decision-making procedures.
- **Facilities Management:** Maintenance of manufacturing units and administrative facilities.

2. **Human Resource Management:**

   - **Employee Training and Development:** Programs focused on improving employee skills, safety procedures, and productivity.
   - **Employee Welfare:** Initiatives for employee health and well-being that contribute to reduced turnover and increased productivity.

3. **Technology Development:**

   - **Innovation in Battery Technology:** R&D focused on improving battery efficiency, longevity, and environmental footprint.
   - **Automation and Improvement:** Implementing automated systems in manufacturing processes for enhanced precision and output.

4. **Procurement:**

   - **Vendor Management:** Strategic relationships with suppliers to ensure uninterrupted supply at competitive prices.
   - **Cost Management:** Efficient procurement systems and negotiations to keep production costs under control.

GROWTH DRIVERS

Exide Industries Limited, a prominent player in the battery manufacturing sector, has taken a strategic step towards expanding its presence in the rapidly growing electric vehicle (EV) market. On September 20, 2023, the company made a substantial investment of Rs 125 crore in its wholly-owned subsidiary, Exide Energy Solutions Limited (EESL), through a rights issue. EESL incorporated in March 2022, is dedicated to the manufacturing and sale of lithium-ion battery cells, modules, and packs tailored for India's burgeoning EV market and stationary applications. With the EV market gaining momentum and the Indian government's push for cleaner and more sustainable transportation solutions, EXIDE's investment in EESL positions it to play a significant role in powering the future of mobility in India. The company's commitment to cutting-edge battery technology and its willingness to invest in the EV segment signal its determination to remain a key player in the evolving energy landscape. As Exide Industries continues to innovate and expand, it is poised to make a noteworthy impact on the EV market in India and contribute to the country's sustainable energy goals.

PORTER'S FIVE POWER

1. Threat of New Entrants

- **Barriers to Entry:** High barriers due to significant capital requirements for manufacturing facilities and technology investments.
- **Economies of Scale:** Existing companies, such as Exide, benefit from economies of scale which can deter new entrants by enabling lower per-unit costs.
- **Brand Loyalty and Customer Relationships:** Strong brand loyalty and established customer relationships enhance competitive barriers.
- **Regulatory Requirements:** Compliance with environmental and safety standards can be a hurdle for new companies.

2. Bargaining Power of Suppliers

- **Concentration of Suppliers:** If there are few suppliers of raw materials like lead and acid, their bargaining power increases, potentially raising costs for Exide.
- **Criticality of Materials:** Given the critical nature of raw materials in battery production, suppliers wield significant power.
- **Switching Costs:** The cost associated with changing suppliers can affect bargaining power, usually making it lower if costs are high.

3. Bargaining Power of Buyers

- **Buyer Concentration:** If a few large automotive manufacturers or industrial users dominate the purchase volume, their bargaining power increases.
- **Price Sensitivity:** In sectors like automotive, where battery costs are a significant component of overall cost, buyers have higher bargain power.
- **Substitute Products:** Availability and advancements in alternative energy storage technologies can empower buyers to demand better terms.

4. Threat of Substitute Products

- **Technology Innovation:** Innovations such as lithium-ion batteries, renewable energy storage solutions, or improved fuel efficiency in cars can substitute traditional lead-acid batteries.
- **Price-performance Trade-off:** If substitutes offer better performance at comparable prices, the threat they pose increases.

5. Competitive Rivalry among Existing Firms

- **Market Saturation:** A high level of competition exists in mature markets like automotive batteries, leading to aggressive pricing strategies.
- **Differentiation:** The ability to differentiate products through technology, durability, or added services affects rivalry levels.
- **Switching Costs for Customers:** If customers can switch suppliers easily without high costs, this can increase the intensity of competition.

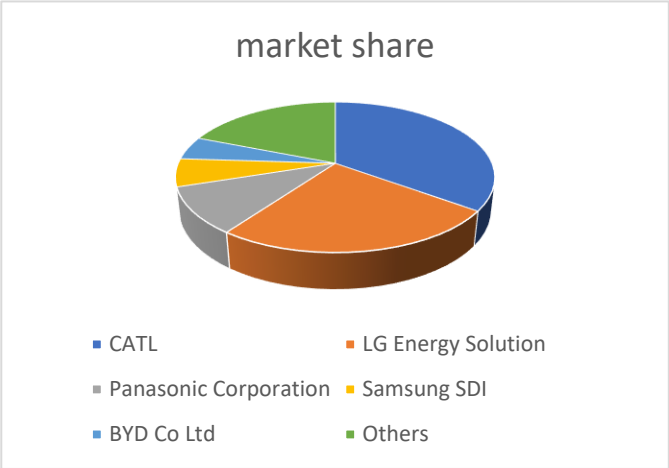
INDUSTRY TRENDS AND STATISTICS

- According to the latest research, the global Industrial Battery market looks promising in the next 5 years. As of 2022, the global Industrial Battery market was estimated at USD 19046.97 million, and it's anticipated to reach USD 28377.68 million in 2028, with a CAGR of 6.87% during the forecast years.
- The global battery market is estimated to reach a value of USD 132.44 billion by the end of this year.
- The market was negatively impacted by COVID-19 in 2020. Currently, it has reached pre-pandemic levels.
- Over the long term, factors such as the declining lithium-ion battery prices and the growing usage of automotive batteries in electric vehicles are expected to drive the market.
- On the flip side, a mismatch in the demand and supply of raw materials for battery manufacturing is likely to hinder the market growth.
- As solar energy is an intermittent source and generates power only during the daytime, using off-grid solar power in conjunction with energy storage substantially enhances the utilization of solar PV units. As a result, energy storage with solar PV has been gaining popularity in developed countries, which is likely to create a huge opportunity for the battery market in the near future.
- Asia-Pacific is expected to dominate the battery market, with most of the demand coming from China, India, Japan, and South Korea.
- Vehicles with internal combustion engine (ICE) technology were the only types preferred earlier. However, technology has now been shifting toward electric vehicles (EVs) due to growing environmental concerns. Lithium-ion batteries are predominantly used in EVs as they provide high energy density, low self-discharge, and low weight and require low maintenance.
- For ICE vehicles, lead-based batteries are being widely used. These batteries are expected to continue to be the only viable mass-market battery system for the foreseeable future. For SLI applications, lithium-ion batteries require heavy cost reductions to be considered a viable mass-market alternative to lead-based batteries.

Major players with market share:

- Contemporary Amperex Technology Co. Limited (CATL) - 35%
- LG Energy Solution - 25%
- Panasonic Corporation – 10%
- Samsung SDI - 6%
- BYD Co Ltd - 5%

- Exide Industries Ltd
- Johnson Controls
- Tesla, Inc.



RELATIVE POSITION AGAINST THE MARKET

Swot Analysis

Strengths

- Only battery brand to provide a lifetime warranty.
- Free service at any Exide centre.

- Offers batteries for every kind of vehicle on Indian roads.
- Huge dealer network even in rural areas.
- Acquisition of smaller firms has strengthened its presence
- Advertising and marketing on TVCs, print etc makes it a high recall brand in India

Weaknesses

- Intense competition means limited market share

- The brand does not have a very strong import market as compared to global brands

Opportunities

- Boom in automobile sales in all segments.
- Customers want better services.
- Price-sensitive customers are increasing.
- Expansion into new territories and global expansion

Threats

- Amaron offers higher performance and is eating into market share.
- Growing perception of Amaron as the better battery brand.

Feature Comparison Matrix

Feature	Exide Industries	LG Energy Solutions	Panasonic Corporation	Amara Raja Energy and Mobility
Product Range	Wide range of automotive, industrial, and home batteries	Diverse range of lithium-ion batteries for EVs and ESS	Wide variety including automotive, industrial, and home batteries	Automotive and industrial batteries
Energy Density	Moderate	High	Moderate	Moderate
Battery Technology	Lead-acid and advanced lead-acid technologies	Lithium-ion	Lead-acid and lithium-ion	Lead-acid and lithium-ion
Environmental Friendliness	Emphasis on eco-friendly manufacturing and recycling	Focus on reducing environmental impact	Efforts towards sustainability and recycling	Sustainable practises

THE 4-P FRAMEWORK

PRODUCT

Exide manufactures batteries for any heavy equipment that requires batteries. It manufactures a range of industrial batteries. Exide's product width primarily consists of automotive batteries, industrial batteries, genset batteries, solar batteries, inverter batteries, home UPS batteries, and submarine batteries. The automotive battery products are divided among 2-wheeler, 3-wheeler, 4-wheeler etc. Industrial batteries cater to the railways, telecommunication sector, power, and infrastructural projects, traction and motive power, UPS system & miner's cap lamps. Two of the highest-selling brands sold across India are Exide Inva Tubular IT500 battery and Exide Insta Brite battery. In the Home-UPS system batteries, they typically manufacture batteries of two main types, one with low KVA where load capacity ranges from 450 watts to 1000 watts; for high KVA the capacity ranges from full load output of 6A to 42A.

PRICE

Exide has a diverse pricing for its products. The top selling brand of batteries; i.e. Exide Inva Tubular battery and Exide Insta Brite battery ranges around ₹11500. As for home appliances, Exide manufactures pure sine wave inverters, but the price has been more or less stagnant for inverters. It costs approximately ₹4000. Price virtually depends on the commodity prices and raw materials prices, which vary over the years.

PLACE

Exide distributes its products primarily via the retail chain. Exide batteries can be easily available in any battery or automobile retail shop. It also has exclusive retailers that sell only Exide batteries at their outlets. More than 70% of their sales come from retail sales. In online sales, Exide batteries can be purchased from online e-commerce platforms, but the online sales are limited as consumers tend to buy more from the retailers instead.

PROMOTION

Exide Industries spends a tiny percentage of its revenues on advertisement and promotional activities. As Exide, has been present in the market for 70 years, it has got high brand image among consumers. Advertisement initiatives primarily involve Television advertisements and billboards. Exclusive partnerships with automobile showrooms at strategic locations also cash into their promotional activities. Exide promotes its products as being highly maintenance-free, with excellent storage life and quick rechargeability. To increase its visibility, Exide Industries is involved in many CSR initiatives that revolve around community activities, education, health, and women empowerment. Exide urges consumers to recycle old

batteries, as old batteries disposed of improperly are harmful to the environment, this helps them to earn goodwill among consumers and government agencies.

MARKET SEGMENTATION

Demographic Segmentation: Exide Industries targets people of the age group between 25 – 50 years and whose income is greater than 3LPA.

Geographic Segmentation: Exide Industries is available worldwide and has multiple dealers in tier 1-2-3 cities. The company has ten international standard factories spread across five states in India among which three are located in Maharashtra, two in West Bengal and Uttarakhand each, and one in Tamil Nadu, Haryana, and Gujarat.

Behavioural Segmentation: Exide targets a person having two-wheelers and four-wheelers as they are an automobile manufacturer. It also targets a person who needs an inverter at home.

CHANNELS FOR DISTRIBUTION OF THE PRODUCT

- Around 70% of Exide's battery distribution is carried out via retail distribution. Exide batteries can be easily available in any battery or automobile retail shop. It also has exclusive retailers specifically selling Exide batteries. With 35000+ retail outlets, Exide dominates the Fast-Moving Consumer Durables Industry.
- Exide also sells its products on various e-commerce platforms like Amazon, Flipkart, etc.
- Exide has a wide presence across tier 1,2 and 3 cities in India, with multiple dealers.
- Exide Life Insurance, a part of Exide Industries, distributes its insurance products through a direct channel

COMPETITORS AND STEPS TAKEN TO COMBAT THEM

Some of the major competitors of Exide Industries in India are :

- Amara Raja Energy and Mobility Ltd.
- Goldstar Power Ltd.
- PAE Ltd.
- Standard Batteries Ltd.
- Luminous

Steps taken to combat these competitors:

- Exide is the only battery brand providing a lifetime product warranty.
- It is the only battery band in Asia that manufactures submarine batteries.
- It offers batteries for all kinds of on-road vehicles in India, which helps it stand out from its competitors.
- The extensive service network provided by Exide to its customers ensures easy access to their services, thereby increasing customer satisfaction and loyalty.
- Exide Industries has over 19k+ organic keywords, indicating that its digital marketing is gaining a good number of insights
- Exide urges consumers to recycle old batteries, as old batteries disposed of improperly are harmful to the environment, this helps them to earn goodwill among consumers and government agencies.

REVENUE MODEL

- **Automotive Batteries:** Automotive Batteries contribute about 70% to the company's total revenue. It manufactures and sells batteries for automotive vehicles like cars, buses, trucks, two-wheelers, etc.
- **Industrial Batteries:** 30% of the revenue is generated from industrial batteries which includes the production and selling of industrial batteries used in power, infrastructure, telecom, and other sectors.
- **Geographical Distribution:** About 92% of the generated revenue is generated domestically within India while the remaining 8% is from International Operations.
- A substantial amount of revenue is generated from aftermarket sales.
- Exide also manufactures Home UPS Systems and Submarine batteries contributing to its revenue.
- Exide also focuses on manufacturing Solar batteries and solar panels due to the increasing demand for renewable energy which adds to its revenue.
- Exide Life Insurance, a part of Exide Industries, distributes its insurance products through a direct channel which adds to the revenue.

COST STRUCTURE

Historical Financial Statement- 2.1						
Years	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24
Income Statement						
Sales	₹ 7,129.2	₹ 6,621.6	₹ 6,687.3	₹ 8,946.4	₹ 10,663.3	₹ 11,697.9
Sales Growth	#REF!	-7.12%	0.99%	33.78%	19.19%	9.70%
COGS	₹ 5,310.5	₹ 5,666.4	₹ 1,603.7	₹ 2,071.1	₹ 2,280.5	₹ 1,467.0
COGS % Sales	74.49%	85.57%	23.98%	23.15%	21.39%	12.54%
Gross Profit	₹ 1,818.8	₹ 955.2	₹ 5,083.6	₹ 6,875.3	₹ 8,382.8	₹ 10,231.0
Gross Margin	25.51%	14.43%	76.02%	76.85%	78.61%	87.46%
Selling and General Expenses	₹ 213.6	₹ 438.8	₹ 190.4	₹ 3,784.7	₹ 187.7	₹ 2,478.9
S&G Exp % Sales	3.00%	6.63%	2.85%	42.30%	1.76%	21.19%
EBITDA	₹ 1,605.2	₹ 516.4	₹ 4,893.2	₹ 3,090.5	₹ 8,195.1	₹ 7,752.0
EBITDA Margins	22.52%	7.80%	73.17%	34.55%	76.85%	66.27%
Interest	₹ 1,249.0	₹ 971.9	₹ 1,067.8	₹ 4,623.1	₹ 1,137.6	₹ 1,231.2
Interest % Sales	17.52%	14.68%	15.97%	51.68%	10.67%	10.52%
Depreciation	₹ 117.1	₹ 108.2	₹ 36.5	₹ 64.4	₹ 78.7	₹ 116.0
Depreciation % Sales	1.64%	1.63%	0.55%	0.72%	0.74%	0.99%
Earnings Before Tax	₹ 239.1	₹ (563.7)	₹ 3,788.8	₹ (1,597.0)	₹ 6,978.8	₹ 6,404.9
EBT % Sales	3.35%	-8.51%	56.66%	-17.85%	65.45%	54.75%
Tax	₹ 845.6	₹ 776.8	₹ 809.9	₹ 4,366.9	₹ 822.7	₹ 876.7
Effective Tax Rate	353.67%	-137.80%	21.38%	-273.45%	11.79%	13.69%
Net Profit	₹ (606.5)	₹ (1,340.4)	₹ 2,978.9	₹ (5,963.9)	₹ 6,156.1	₹ 5,528.2
Net Margins	-8.51%	-20.24%	44.55%	-66.66%	57.73%	47.26%

BREAK-EVEN ANALYSIS

Fixed Cost	
Cost Type	**Total Cost**
	in cr
Selling and admin	1276
Other Expenses	62.69
Depreciation	502.12
Interest	78.7
Tax	314.82
Total	**2234.33**

Variable Cost	
Cost Type	**Total Cost**
	in cr
COGS	12146.08
Change in Inventory	310
Total	**12456.08**

Total Units sold (in cr) **3.4**

Break-Even Analysis	
Fixed Cost	2234.33
Variable Cost	12456.08
Gross Profit	2932.08
Break-Even Units	-1140847

PAYBACK PERIOD

Period	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11
Cash Flows(in cr)	-1.4	34.94	-18.82	-15.96	0.26	32.03	-30.83	-11.86
Cumulative Cash Flows	-1.4	33.54	14.72	-1.24	-0.98	31.05	0.22	-11.64

Payback Period	0.040069

The Payback Period for Exide Industries is just 0.04 years as in year 1 which is March 2005 the company had a positive cash flow. (The last annual report available was of March 2004)

CONCLUSION AND INFERENCE

Key Success factors:

- Exide was established in the year 1947, which means around 76 years. This early entry helped to overtake 70% of the market share and position itself at a better place than its competitors and.
- Unlike other OEMs, Exide has its own manufacturing plant in India, which avoids uncertainties, delays, and logistical challenges associated with importing batteries.
- The company has had its own R&D centre in Kolkata since 1976.
- Exide manufactures batteries for various sectors which reduces the reliance of customers on a single industry and provides a broader market reach.
- Exide Industries has a strategic collaboration with SVOLT, a major player in the lithium-ion battery industry in China. This collaboration allows Exide to piggyback on SVOLT's supply chain for raw material requirements, providing them with a reliable and efficient source of raw materials. This ensures a steady supply chain and helps to stabilize their operations.
- The company has a wide distribution network with 150+ warehouses and sales offices and 95000 direct & indirect dealers across India as of FY23. Exide has 1600+ Exide Care outlets and 300+ SF batteries Power Bay outlets.

potential growth opportunities:

- The estimated investment for a lithium-ion cell manufacturing facility is expected to be close to ₹6,000 crore over the next eight-10 years. During FY23, the company invested around ₹715 crore through equity in EESL for setting up the greenfield unit.
- The company is extending the punched plate technology in batteries to 2W, post successful implementation in 4W.
- The company is setting manufacturing process for making Absorbent Glass Mat (AGM) batteries, which has higher efficiency.
- It is developing customized advanced-featured automotive batteries for different countries.
- It has developed compact, high-performance sealed batteries for telecom 5G network roll-out.
- The R&D team developing multiple solutions for future deployment of Battery energy storage systems (BESS).

With the increase in the manufacturing of EVs, there will be a greater demand for lithium-ion batteries. Moreover, Government support for made-in-India electric vehicles will

position Exide as a key player in battery cell localization. Due to all such reasons, a significant growth potential in the shares of Exide Industries Limited over the next decade can be expected.