

High Energy Batteries (India) Ltd (HEB) was established in 1961 in Chennai and commenced commercial operations in 1979. The company is a part of the **SPB-Esvin Group**. HEB is an established manufacturer of hi-tech batteries that are used in Indian Army, Navy, Air Force. The company's strong in-house R&D team designs, develops and manufactures silver zinc, Ni-Cad and seawater-based silver chloride magnesium batteries. These are used for stringent purposes such as under water propulsion, emergency starting, industrial and aerospace applications.

HEB functions as a **B2G player** and the prime customers consist of prominent names such as VSSC, ISRO, Department of Defence Supplies, ISRO, MoD, DRDO, BDL, BrahMos (BAPL), etc. Manufacturing and supplying such **high reliability** products require rigorous testings, certifications and approvals outlined by the DRDO and HEB has accreditations to its credit; it complies well with CEMILAC, TUV-Nord, RCMA, DGNAI, DGAQA, etc.

HEB continues to engage itself in **tenders/proposals** related to the defence govt. organizations and enjoys client stickiness. Even though **domestic market** is the major focus, the options and opportunities to explore the **exports** market is being continuously monitored by the Management. Execution of the confirmed **order book** coupled with possible order value in hand provides a steady state revenue visibility. We initiate a Buy on the stock for a TP of Rs735 (32.4x of Mar'28E EPS of Rs22.7), implying an upside of 30%.

**High Margin Business:** HEB derives majority of its revenues from **silver zinc batteries** which is a high margin business. The company garners **major orders** from Navy & Naval Research Labs followed by Aerospace and others DPSUs. There are a couple of DRDO based programs which are either under the testing/approval/anticipated or commencement phase. Some of these **developments** consists of silver zinc cells, silver chloride magnesium battery for LWT, silver zinc system for HWT, Ni-Cad pocket plate batteries, towed and torpedo reel indigenisation and sea water activated batteries (sonobuoy).

**Emerging Developments:** The arrangements undertaken with IIT Madras and OECT for **VRFBs** has progressed and scaled up well. The program with **IOCL, GAIL and CHT** for development of low power **hydrogen FC** stack has completed the testing cum evaluation for 2.5kW plus level unit. The ESS systems requires emerging technologies of flow batteries, fuel cells, VRFBs; HEB is already at the forefront and undertaking gradual steps towards the development for each of them.

**Balanced Financials:** HEB continues to report **moderate sales** and has overall balanced financials operating as a **debt-free** and **dividend paying** entity. The Ebitda margin variations are subject to the spends towards the **scientific research** for defence related programs. The **order book** is closely linked to the GOI spends towards the defence and are thus cyclical. The **confirmed order book** position stood at Rs560mn as of FY26.

SNAPSHOT	
52 week H/L	Mcap (INR mn)
804/470	5,063
Face value: 2	
BSE Code	NSE CODE
504176	NA

Shareholding Pattern as on 31st March, 2026		
Parameters	No of Shares	%
Promoters	3,860,327	43.0
Institutions/MF	575,155	6.4
Public	4,528,358	50.5
TOTAL	8,963,840	100.0

Quarterly Performance				
Parameters (Rs mn)	Jun-25	Sep-25	Dec-25	Mar-26
Sales (Net)	133	173	235	295
EBITDA	7	(7)	74	117
EBITDA (%)	5.6	(4.3)	31.5	39.6
Other Income	9	41	3	6
Interest	3	4	7	5
Depreciation	3	3	3	3
PAT	8	20	50	76
Equity (Rs mn)	18	18	18	18

Source: Annual Report, Progressive Research

Annual Performance				
(Rs mn)	FY24	FY25	FY26	FY27E
Total Revenue	781	810	835	934
EBITDA	226	174	191	215
EBITDA (%)	28.9	21.4	22.8	23.0
Other Income	35	57	59	60
Interest	20	15	19	19
Depreciation	10	9	11	12
PBT	231	207	220	243
PAT	172	153	154	181
Equity (Rs mn)	18	18	18	18
EPS (INR)	19.1	17.1	17.2	20.1

Ratio Analysis				
Parameters (Rs mn)	FY24	FY25	FY26	FY27E
EV/EBITDA (x)	22.6	29.8	27.2	24.1
EV/Net Sales (x)	6.5	6.4	6.2	5.5
M Cap/Sales (x)	6.5	6.3	6.1	5.4
M Cap/EBITDA (x)	22.5	29.2	26.6	23.6
Debt/Equity (x)	0.1	0.2	0.2	0.2
ROCE (%)	29.7	22.7	21.8	21.3
Price/Book Value (x)	5.8	5.1	4.5	4.0
P/E (x) (TTM)	31.7	56.3	37.6	28.0

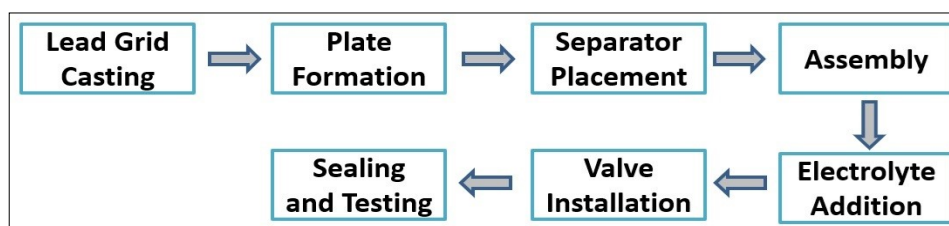
Note: Data calculated as on 07th July, 2026; FV: Rs10 to Rs2 (in 2022)

**Industry Overview:**

**Energy Storage System (ESS):** is basically capturing the surplus produced energy which can be used at a later stage. ESS are referred as collection tools as they are not considered to be the primary electricity generation source; they use the electricity either supplied by electricity generators or electric grids which save energy for later use and often ensures in maintaining a balance between the energy demand and supply for grid stability. ESS technologies can be classified into **thermal** (molten salt storage is utilised for solar power plants), **mechanical** (used in pumped hydro storage, compressed air, flywheels), **electrochemical** (batteries, fuel cells), **electromagnetic** (inductors, superconducting magnets) and **hybrid** (battery to fuel cells). **Battery Energy Storage System (BESS)** is regarded as a specific ESS type which uses electrochemical batteries in order to store energy. Thus, **BESS** is classified as a **subset** of ESS.

**Valve Regulated Lead Acid Batteries (VRLA):** also known as sealed lead-acid batteries (SLA) are classified under lead acid batteries (LAB). In general, all LAB will release hydrogen from the negative plate and oxygen from the positive plate. VRLA batteries utilises **one-way** pressure relief valve and functions on a recombinant technology i.e. the oxygen that gets produced on the positive plate is generally absorbed by the negative plate; this prevents the production of hydrogen on the negative plate. The water retains the moisture internally within the battery eliminating the need for constant refills. Based on this technical feature, these batteries are also considered as **low maintenance** rechargeable battery which often prevents acid leakage and thus are considered as **spill-proof**. VRLA batteries are generally charged via a process termed as electrolysis. The electrolyte fluid that is used in these batteries contains H<sub>2</sub>O which is mixed with sulfuric acid. In addition to the low maintenance and spill-proof characteristic, VRLA batteries also possess additional features of higher durability (resistant to damage from over-charging) and are cost-effective (due to longer lifespan). These batteries are used in end-user industries such as **telecom** (provides power backup for communication led networks), **UPS** (in order to supply continuous power supply to computers, data centers and medical equipments), **renewable energy storage** (stores excess energy generated in solar and wind power systems during peak period to be utilised in times of low production), **automotive** and **marine applications** and security systems.

**Exhibit 01: VRLA Manufacturing Process**



Source: hzhmarine.com/news/what-is-a-valve-regulated-lead-acid-battery, Progressive Research

According to Coherent Market Insights, the **global** VRLA market stood at ~USD11.6bn in 2025 and is anticipated to reach at ~USD18.9bn by 2032; reflecting a CAGR of ~7.3% from 2025-2032. Amongst its sub-classification, Absorbent Glass Mat (AGM) continues to **dominate** the market constituting a share of ~43% of the overall VRLA battery market size. The main driver for the overall growth in the VRLA market is attributed to its **preference** specifically towards applications that need UPS in end-user industries of telecom, data centers, hospitals etc. Despite strong growth triggers, VRLA battery market can face some challenge from the developing and evolving alternative energy storage technology like lithium-ion batteries (Li-ion) which tend to offer high energy density, faster charging capabilities, lesser weight (~3x lesser as compared to VRLA) and longer cycle life (in terms of charge/discharge cycles). These batteries are also considered for the advancements to cater to the **EV demand**. Another key restraint factor that can cause a worry to the overall VRLA battery market growth is that the usage of VRLA is restricted towards medium-scale applications such as UPS systems and smaller renewable energy storage installations which can constrain the growth in meeting the demand for grid-scale energy storage.

**Exhibit 02: VRLA Classification**

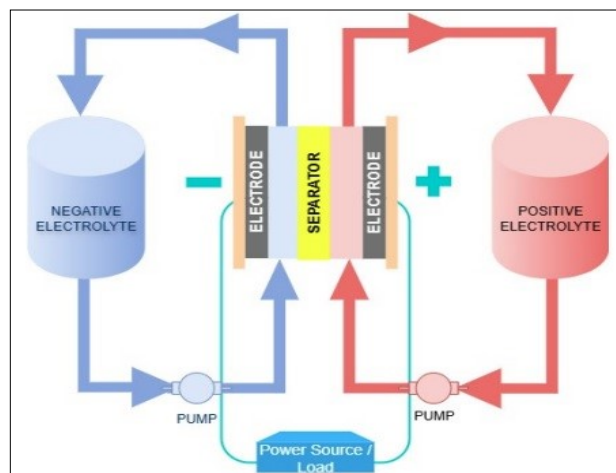
End-User Industries	Application
Absorbent Glass Mat (AGM)	Use a fiberglass mat to absorb the electrolyte. These are widely used in marine, motorcycle and automotive applications
Gel VRLA	The electrolyte is permanently locked in a gel state. Used in off-grid solar systems, mobility devices that require longer lifespan
Sealed Valve Regulated Wet Cell	The electrolyte in these batteries is absorbed into the plate's porous material, but the cell is sealed to prevent the loss of the electrolyte through evaporation. These batteries are commonly used in applications where a traditional wet-cell battery's maintenance and venting issues are not ideal

Source: hzhmarine.com/news/vrla-batteries-a-comprehensive-guide-to-valve-regulated-lead-acid-batteries, Progressive Research

**Industry Overview (contd.):**

**Flow Batteries (FBs):** are rechargeable batteries where the energy gets stored in a liquid electrolyte solution as against the LAB where the energy is stored in electrodes (in solid form of lithium). The liquid electrolyte **flows** through the battery system and hence these batteries are termed as **flow battery**. The two most common form include **vanadium redox flow batteries (VRFB)** and **zinc bromide hybrid flow batteries (ZBFBs)**. Apart from this, there are many other variations like membraneless, organic, metal hydride, nano-network and semi-solid. FBs carry significant **advantage** of (i) less flammable, (ii) long duration storage, (iii) extended life cycle (can endure for decades without the need for replacement as electrode) and expandable storage capacity, (iv) design safety which is prioritized via the usage of aqueous electrolyte solutions which are non-flammable and (v) sustainability-via the utilization of non-toxic materials such as vanadium/organic molecules in the electrolyte solutions. Based on these advantages, FBs are ideal in applications of microgrids, EV charging stations. One of the key limitations/challenges that these batteries face is the high upfront **costs** specifically related to vanadium (rare metal that can cost ~USD20 per pound for a commercial grade vanadium of 95% purity whereas for 99.9% purity the cost can inch upto ~USD100 per pound). As per Fortune Business Insights, the **global** flow battery market size stood at ~USD1.22bn in 2026 and is further anticipated to scale upto ~USD2.88bn by 2034; CAGR of 11.2% during the forecast period.

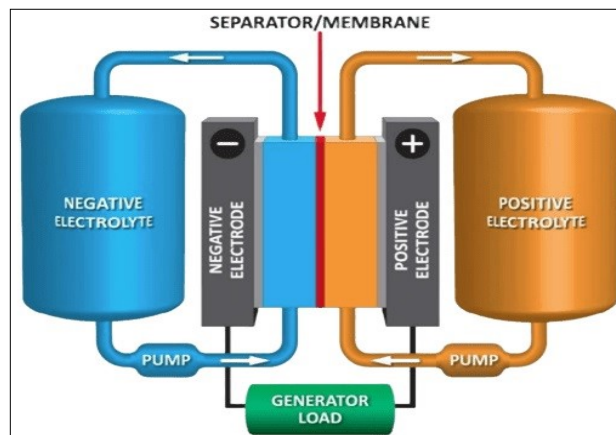
**Exhibit 03: Flow Battery Structure**



Source: Faraday Report, Oct'25

**Vanadium Redox Flow Batteries (VRFBs):** use vanadium ions which are in different oxidation state in order to store and release energy. The electrolyte is composed of vanadium ions (non-toxic metal that is typically used to make steel more ductile) while redox refers to reduction-oxidation (where electrons are transferred between molecules/ions). VRFBs generally include an electrolyte, membrane, bipolar plate, collector plate, pumps, storage tanks and electrode. 2 storage tanks contain vanadium ions in 4 oxidation states; V<sup>2+</sup>, V<sup>3+</sup>, VO<sub>2</sub><sup>+</sup> (V<sup>4+</sup>), and VO<sub>2</sub><sup>+</sup> (V<sup>5+</sup>). These batteries use **vanadium electrolytes** that doesn't degrade overtime and can be reused across multiple systems thus offering sustainability and a lower maintenance requirement. The larger applications are found in commercial and industrial purposes such as data centers, hospitals, factories etc. and these batteries ensure that the operations are maintained at the time of any outages. VRFBs are built via the usage of low-cost materials such as thermoplastics and carbon which are recyclable. In terms of costs while VRFBs are costlier and ranges between ~USD400-600 per kilowatt hour (kWh) as against Li-ion batteries that range ~USD200-400 per kWh. As per Fortune Business Insights, the **global** VRFB market size stood at ~USD684.35bn in 2026 and is anticipated to reach at ~USD2956.78bn by 2034; CAGR of ~20.0%. The leading factors for this growth are attributed to the global transition towards renewable energy systems, increasing need for reliable and long-duration solutions (ability to store energy for extended duration compared to Li-ion batteries). As of 2025, the **regional** market share was: Asia-Pacific (34%), North America (28%), Europe (24%), Germany (9%), UK (6%), Japan (7%), China (15%) and RoW (14%).

**Exhibit 04: VRFB Structure**

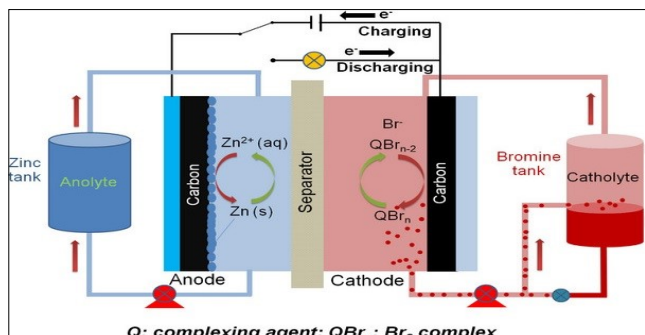


Source: backend.orbit.dtu.dk/ws/files/163012270/VRFB Report

**Zinc Bromide Hybrid Flow Batteries (ZBFBs):** is a type of rechargeable battery that uses zinc and bromine in the electrolytes in order to store and release electrical energy. Considering the higher energy density and longer lifespan has proven that these batteries are commercially viable for both grid scale and residential energy storage applications. They are often termed as **hybrid** flow batteries because they combine the characteristics of both general flow batteries (liquid electrolyte) as well as conventional batteries (solid plating; some of the energy is stored on the anode by plating it with zinc metal at the time of charge). As per Custom Market Insights, the **global** ZBFB market is expected to grow at a CAGR of ~20.5% during 2023-2032 to reach at ~USD46.5bn; this is driven by demand across energy storage, emerging automotive applications and growing renewable energy integration.

Industry Overview (contd.):

Exhibit 05: ZBFB Structure



Source: pmc.ncbi.nlm.nih.gov/articles/PMC10742200/

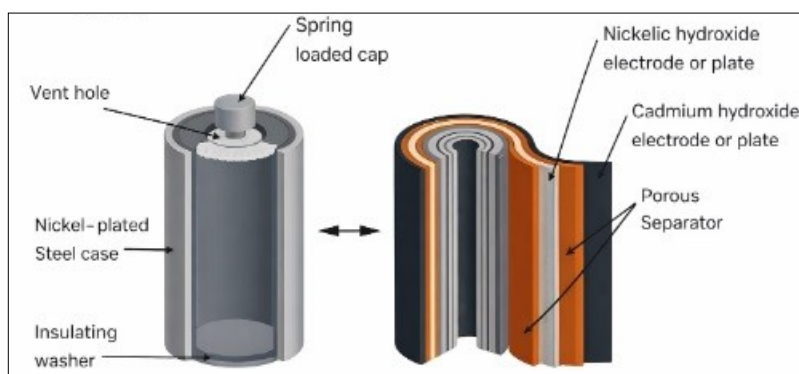
Exhibit 06: Comparative Features

Feature	VRFB	Lithium-ion	Lead Acid	ZBFB
Cycle Life	20,000+	2,000-7,000	500-2,000	2,000-5,000
Depth of Discharge	100%	80-90%	50-70%	80%
Safety	Non-flammable	Fire Risk	Moderate	Moderate
Scalability	High	Medium	Low	High
Energy Density	Low	High	Low	Low
Cost-effectiveness	High (long-term)	Medium	Low	Medium

Source: ziontechnologies.co.nz/vanadium-redox-flow-battery-guide-2025/, Progressive Research

**Nickel Cadmium (Ni-Cad) Batteries:** have nickel oxide hydroxide for the positive side and cadmium for the negative side. The conversion into electrical energy is undertaken via a reversible electrochemical reaction between nickel and cadmium electrodes. On account of several advantages of **durability** (long lifecycle without capacity loss), **high discharge rate** (deliver high currents), **temperature tolerance** (very low to high without degradation) and **simple maintenance** (can be refurbished to extend lifespan) such batteries are considered as rechargeable and are used in industrial (portable power tools, medical devices), emergency lighting (deliver high discharge rates and outperform in case of power outages), aviation (for starting engine), backup power (telecom and UPS) and portable electronics (cordless phone, radio). Some of the types of Ni-Cad batteries include;

Exhibit 07: Ni-Cad Battery Structure



Source: allelcoelec.com/blog/Nickel-Cadmium (NiCd)-Battery-Guide-Working-Principle

**Sealed (portable):** maintenance free batteries sealed in order to prevent electrolyte leakage. Such batteries are found in cordless power tools, toys, small electronic equipments,

**Vented Industrial:** require regular maintenance for electrolyte level checks as well as topping up with distilled water. They find applications in power plants, aviation ground systems, telecom backup systems, railways, etc.,

**Pocket Plate:** are highly durable to withstand harsh conditions,

**Sintered Plate:** used in aviation, military equipment and high-performance power tools which needs high discharge rates and

**Fiber Plate:** improves conductivity and efficiency and are thus used in specialised industrial applications.

As per Insight Partners.com, the **global** Ni-Cad market size is expected to increase from ~USD1.36bn in 2025 to USD1.65bn by 2034; registering a CAGR of ~2.2% during the forecast period. On account of durability, long life cycle, ability to perform and operate in harsh weather conditions, ongoing technological developments, growth in renewable energy storage solutions, all these factors are expected to further drive the trajectory for Ni-Cad battery market.

**Silver Zinc Batteries:** use silver oxide (AgO) and zinc (Zn) as electrodes and is most suitable for applications that demand high power density for aerospace and military. As these batteries are **not inflammable** as compared to Li-ion this offers an advantage and a much wider acceptance in the aircraft requirements. These prime materials are entirely **recyclable** which retains the initial properties even after the recycling process has been undertaken. Silver zinc batteries also have a very low **self-discharge** rate thus, when the batteries are not in use, the energy consumption is much relatively lower as compared to other type of batteries. According to Market Report Analytics, the silver zinc battery market size stood at ~USD10.7bn in 2025 and is further projected to reach at ~USD13.6bn by 2031; CAGR of ~4.1% during the forecast period of 2025-2031 which is led by significant contributions anticipated out of medical devices (hearing aids, implantable devices), aerospace & defence (A&D) and emerging sectors of wearable technology coupled with specialized electronics that demand the need of extended shelf life. **North America** held a significant market share of ~40% in the global silver zinc battery market followed by **Europe** at ~25%. Some of the major global players included prominent names of Panasonic Corporation, Energizer Holdings, Maxwell Technologies Inc.; Seiko Instruments Inc.; Camelion Battery, Varta AG, etc. According to Coherent Market Insights, the **end-user market share** of silver zinc batteries (in FY26) was dominated by toys (38%), medical equipment (35%), electronics (18%) and others (10%).

**About the Company:** High Energy Batteries (India) Ltd (HEB) was established in 1961 in Chennai and commenced commercial operations in 1979. The company is a part of the **SPB-Esvin Group** (Seshasayee Paper and Boards). The group companies of HEB consists of Seshasayee Paper and Boards Ltd, Ponni Sugars (Erode) Ltd, SPB Projects & Consultancy Ltd and Esvin Advanced Technologies. HEB is an established manufacturer of hi-tech batteries that are used in Indian Army, Navy, Air Force. It has a strong in-house R&D base that is dedicated to design, develop and manufacture silver zinc, nickel cadmium and seawater-based silver chloride magnesium batteries for stringent applications such as under water propulsion, control guidance, communication, emergency starting, rail-road, industrial and aerospace applications. The company also has the facility to manufacture commercial batteries for auto and standby VRLA power applications. HEB obtained the **technical collaboration** from M/s Yardney Electric Corporation, USA (the pioneers in the field of aircraft application) for the manufacture of silver oxide zinc batteries for MIG aircraft. In 1981, the HEB aircraft battery was tested and approved for bulk manufacturing. Over the years, with the core skill set and expertise of the in-house R&D team, the company constantly upgraded the design features for its product range in order to suit the customers' requirements. The **principal customers** of the company consist of prominent names such as Vikram Sarabhai Space Centre (VSSC), ISRO, Department of Defence Supplies, Ministry of Defence (MoD), Defence Research and Development Organisation (DRDO), Naval Physical Oceanographic Laboratory (NPOL), Naval Materials Research Laboratory (NMRL), Bharat Dynamics Ltd (BDL), BrahMos (BAPL), BEL, HAL, Aeronautical Development Establishment (ADE), Aeronautical Development Agency (ADA), Naval Science and Technological Laboratory (NSTL), Technology Development Fund (TDF), National Institute of Ocean Technology (NIOT). Other defence based organizations include Director General of Naval Armament (DGONA), Directorate of Armament Production and Indigenization (DAPI), Combat Vehicles Research and Development Establishment (CVRDE), Master General of the Ordnance (MGO), Air (HQ), HQMC, etc. HEB is an ISO 9001:2015 company certified by TUV-Nord for the development, manufacture and supply of high-tech silver zinc and Ni-Cad, silver chloride magnesium and zinc manganese dioxide cells/batteries. The company also has an Environmental Management Systems (EMS) ISO 14001:2015 and Occupational Health and Safety Management Systems (OHMS) 45001:2018 certifications for aerospace, naval battery and lead acid battery divisions. Even though domestic market is the key focus area, the company also exports its products to various countries such as Sri Lanka, Malaysia, Algeria, Italy and Kyrgyzstan. As of 31st March, 2026, the company had 125 employees on its rolls (81 are managerial and the remaining are supervisory and production staff). It also employs ~160 persons on contract basis, depending upon time-to-time job requirements. Mr. N Gopalaratnam is the Chairman and Dr. G A Pathanjali is the Managing Director of the company.

**Investment Rationale:**

**(A) Defence Based Programs:** Silver zinc (Ag-Zn) batteries possess the highest energy densities that stores a significant amount of energy which is relative to its **size and weight** and makes them the ideal choice for applications in A&D and wearable electronics where space and weight requirements are often considered critical. **Long lifecycle** (able to withstand large number of charge/discharge cycles thus making it cost effective), safe due to its **non-inflammable** electrolyte (as against Li-ion) enhances its importance for critical devices, **low self-discharge** rate (in a position to carry/hold the charge for an extended duration even when not in use), **environment friendly** with prime components being silver and zinc that are easier to recycle are some of the unique characteristics that makes Ag-Zn batteries indispensable for specialized applications especially in aerospace (where recharging options are limited), military (used in night vision devices, communication equipment), medical devices (hearing aids, pacemakers), wearable electronics (smartwatches, fitness trackers), underwater equipments (underwater vehicles, sensors), emergency backup power (telecommunications, data centres), consumer electronics (GPS devices), etc.

**Exhibit 08: Customer Base**

Customer Base	FY22	FY23	FY24	FY25	FY26
Navy & Naval Research Labs	60%	65%	45%	65%	58%
DRDO Labs	10%	6%	11%	7%	-
Defence Public Sector (D-PSUs)	15%	17%	1%	10%	15%
Aerospace & Others (Ni-Cad, TDF and NuPro)	15%	12%	43%	18%	27%

Source: HEB Annual Reports, Progressive Research

HEB is one of the eminent suppliers of **silver zinc batteries** to several defence authorities of Navy, Army, Air Force and Space Research Organisations. HEB derives a **major portion** of its orders from Navy & Naval Research Labs followed by Aerospace & Other Defence Public Sectors (D-PSUs). According to Ind-Ra ratings report 2025, HEB enjoys a **market share** of ~65-70% in this domain. The company **manufactures 2 distinct types** of batteries viz; rechargeable secondary silver oxide zinc batteries and primary reserve type batteries. These batteries are mainly deployed in fighter aircraft's, launch vehicles, missiles and torpedoes. **Silver Zinc** batteries constitute a larger portion of the overall sales contributing ~90-95%. Serving the niche defence industry requires high reliability products that undergo thorough **testings and certifications** outlined by the DRDO; thus, these batteries must comply with Center for Military Airworthiness and Certification (CEMILAC), Regional Centres for Military Airworthiness (RCMA), Directorate General of Naval Armament Inspection (DGNAI), Directorate General of Aeronautical Quality Assurance (DGAQA) and HEB is **accredited** with all these certifications. Under the **cuprous chloride magnesium sea water** chemistry, cuprous chloride electrodes are used as cathode, magnesium alloy electrodes are used as anodes and the sea water serves as the electrolyte. The company deploys this chemistry for heavy weight torpedo (HWT) propulsion applications. In FY26, the company secured a development cum supply order from the DRDO for silver zinc battery for **HWT** (these are fired from submarines) which has observed progressive developments.

**Investment Rationale (contd.):**

**(A) Defence Based Programs (contd.):** The 270kW propulsion battery requirement is for underwater motive power to be expended within short period. Based on satisfactory completion of testing and qualification, the supplies have commenced and the production orders are anticipated after the sea trials are undertaken. In addition to this, the design related to **silver zinc cells** with improved cycle and wet life was developed in FY26 which at present is under the testing phase. The company has also completed the development of **sea water activated battery** (silver chloride magnesium) that caters to the requirement of **light weight torpedo (LWT)** of 120kW power wherein modifications along with sea trial was successfully accomplished. Such supply orders from the DRDO and the Indian Navy showcases regular production and is anticipated to commence during FY27E. The Management envisions the development cum supply orders related to LWT and HWT batteries to materialize into production orders by the year end; expecting to garner orders from the **Indian Navy** in the range of **~Rs500-600mn per year**. Additionally, a high-power **Mg-based** battery for NSTL is in the initial development and qualification trial stage and expected to be in production mode in subsequent years.

**Exhibit 09: Electric HWT Battery**



Source: HEB Annual Report 2026

**Exhibit 10: Advanced LWT Battery**



Source: HEB Annual Report 2026

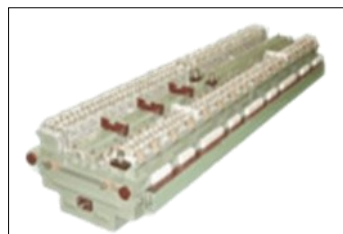
Under **TDF**, a flagship program by the MoD and executed by the DRDO had promoted the need for self-reliance in the sector of A&D via offering a grant-in-aid to the Indian industries particularly MSMEs and start-ups to provide them with the necessary impetus for their R&D related projects beyond the proof-of-concept stage. According to MoD article dated 09th Dec'22, a total of 54 industries were supported under the TDF scheme and **HEB** was one of the approved candidates for the R&D funding with an allocation of **~Rs88.5mn**. As the company's products directly aligns with the TDF goal of indigenization, import substitution and self-reliance, this approach provides a leverage to design products for high density based defence applications. In one such project, in FY26, the company developed a **long-life sea water activated battery (SWA)** in order to provide power for underwater monitoring instruments for over a year or longer and at a continuous pace. The activities related to the design, development cum evaluation of **long endurance sea water battery** was initiated through the **TDF, DRDO**. The company was in a position to complete all the necessary field trials and battery testing in FY26 (one at HEB premises and one battery in co-ordination with NIOT at sea, off the coast of Chennai) and the Management expects more such enquiries for the same.

**Exhibit 11: Torpedo Battery Portfolio**

SZ 104 Primary Battery



SZ 149 Secondary Battery



SZ 039 Primary Battery



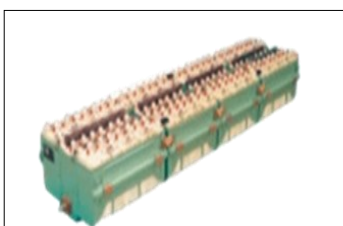
SZ 110 Secondary Battery



SZ 061 Primary Battery



SZ 046 Secondary Battery



Silver Chloride Mg SWA-002



SZ 107 Primary Battery



Source: HEB Torpedo Product Brochure

**Investment Rationale (contd.):**

**(B) Emerging Battery Technologies:** India heavily relies on the **import** of key battery materials such as lithium, nickel and cobalt. In the EV space, batteries are considered as one of the most important components and the entire domestic demand for Li-ion batteries is sourced via imports. As per the Ministry of Commerce and Industry, the imports have risen from ~Rs35.32bn in FY18 to Rs376.24bn in FY26. This surge is owing to the EV market that has been gaining traction in the Indian markets. Despite the key characteristics of high energy density, longer cycle life and fast charging, there are certain limitations of Li-ion batteries like high upfront cost, safety risks and reliance on sourcing raw materials like lithium and cobalt. Therefore, in order to develop a **sustainable battery** ecosystem, **alternates** like VRFB, sodium-ion technologies, hydrogen as fuel (HFC) cells are considered lucrative.

(i) **VRFBs:** have the capability to absorb excess renewable power (solar and wind) during peak hours and discharge the same when the demand generation is low. VRFBs can also assist in reducing the over dependence on imported lithium, serve as a pre-requisite for green hydrogen production, infrastructure for EV charging and also provide back-up power while enhancing the grid stability. This next-generation ESS finds applications in grid energy storage, RE integration, industrial & commercial, microgrid and off-grid. In the past, HEB had

**Exhibit 12: VRFB-Clean Energy Storage**



Source: HEB AGM 2026

partnered with **IIT Madras and ONGC Energy Centre Trust (OECT)** to develop and scale up VRFBs, Long Duration Energy Storage (LDES) programs. The company had completed the demonstration cum development program with OECT on **1kW/10kWh** module. Based on the initial developmental success, OECT initiated a follow-on funded program to scale up the system to **10kW/50kWh** rating and additional evaluation on standalone storage mode using solar based energy harness; the scale up activity was completed in FY26. The agreement is also under process with funding agency for further continuity of activities including on-site testing & validation, towards commercial exploitation. HEB is exploring other opportunities by participating in **tenders/proposals** in VRFB segment and energy storage back-up needs of solar PV projects. Some European companies have shown interest to **tie-up** with HEB for VRFB and the Management intends to explore opportunities in the near future.

(ii) **Low Power Fuel Cell (FC):** a proton exchange membrane fuel cell (PEMFC) generates electricity by combining hydrogen and oxygen. As against the **traditional** batteries that store chemical energy internally, PEMFC sustains the chemical reaction and generates electricity via continuous supply of hydrogen fuel and oxygen. The fuel cells do not generate any harmful pollutants, are considered highly efficient and operate at relatively low temperature; thus, they find applications in hydrogen fuel cell EVs (FCEVs), passenger cars, ferries and industrial equipment. As a part of a development work undertaken by HEB, in FY23 a program was funded by both **Centre for High Technology (CHT) & OECT** where the main purpose of the project was to **separate hydrogen and oxygen** at higher pressures and later stock hydrogen in cylinders for further storage/transportation. This project was successfully completed in March 2025. On similar lines, CHT had initiated another program in FY24 with **IOCL and GAIL** as its funding agencies with focus on development of a low power FC stack using hydrogen and air as an open cathode design PEMFC system. The feasibility of the PEM fuel cells is considered as a clean and efficient power source for sustainable mobility solutions. The optimization of membranes, catalysts material selection, catalyst loading and proto type stack evaluation was undertaken successfully. The process flow and control parameters for proto type development was established and the program (inclusive of testing cum evaluation) for **2.5kW plus** level unit was completed in FY26 (this was directed towards the 3Ws applications). The on-road demonstration at IOCL's R&D center is currently under progress. Going ahead, the Management intends to target the EV applications as well.

(iii) **Hydrogen Electrolyser:** Advanced hydrogen electrolyzers are designed and engineered to meet the demanding requirements of various industries viz; refining & petchem, chemical & fertilisers, steel & metals, power generation, pharma & biotech, F&B, glass & ceramics, electronics & semiconductors. Clean H<sub>2</sub> production is considered safe and reliable with high efficiency and a longer service life. In FY26, the company participated in a tender for **Balance of Plant (BOP)** for 60kW PEM electrolyzer; the technical evaluation for the same is work in progress. The company also intends to work on **hydrogen electrolyzers** which would include both alkaline and PEM. HEB has completed the development and demonstration of 3kW hydrogen electrolyser.

**Investment Rationale (contd.):**

**(C) Matured Project Status:**

(i) **Lithium-ion Battery (LIB):** have a life-span of 2-3 years that are utilized in mobile devices and ~8-10 years or more that are used in EVs and storage batteries; the lifespan of these batteries is dependent on storage conditions, charge/discharge cycles and operating temperature. Traditional solar street light that used lead acid batteries had several disadvantages like higher installation charges, bulky nature and more time to charge along with frequent maintenance. As Li-ion batteries are lightweight and compact, they get charged quickly, require very less maintenance and they are considered as the preferred choice for **solar street lights**. At HEB, the facility for cell screening, battery pack assembly, BMS (Battery Management System), controller/electronics/testing was fully established in FY26 and is presently in advanced stage. The company has observed good initial response for its proto types and expects to submit proto types for customer approvals; thereafter undertake development cum production and supply orders. HEB also made a number of standalone **solar PV based street lights** at different locations at Mathur (Tamil Nadu) and at large industrial sites. The company is also focusing on working on EV battery which is at present under the in-house evaluation stage coupled with the in-house development of Li-ion batteries plus inverter, BMS and electronics for backup services as an integrated BESS; the field evaluation along with in-house testing is currently under progress. Some of the key benefits of the overall **Li-ion battery assembly system** includes, higher capacity, enhanced safety, solar integration and captive power generation. The key parameters under the assembly consists of custom built cell and battery charger, discharger and cyclor design for BESS and rail-road applications, development of battery for military application, development of battery for solar power plant and datalogger and control unit for defence battery design & development and low power fuel cell EV.

**Exhibit 13: Li-ion Battery Assembly**



Source: HEB AGM 2026

(ii) **Ni-Cad Batteries:** are most reliable in extreme conditions, offering high power, longer lifecycle and relatively low temperature performance. Amongst various other **end-user applications** related to emergency lighting systems, aviation systems, industrial power back-ups, power tools & professional equipments, medical equipment and telecommunication systems, Ni-Cad batteries are extensively used in **railways** for locomotives, passenger trains, signaling systems. HEB has received a development cum supply order of **Ni-Cad pocket plate batteries** from the Indian Railways (IR) for electric loco application and the company has already established a battery manufacturing, cell assembly cum testing facility for the same. The Management expects regular production/commercialization after receiving customer approval in FY27E. Furthermore, the modernization goal directed towards the IR for development cum supply of both sintered and pocket plate batteries is a work in progress; the company is under active discussions with **reputed companies abroad** in order to establish a local manufacturing base during FY27E.

**Exhibit 14: Ni-Cad Battery Portfolio**

NC 001

FTNC 0184

FTNC 0155

FTNC 0303

NC 253



Source: HEB Ni-Cad Product Brochure

**Investment Rationale (contd.):**

**(C) Matured Project Status (contd.):**

(iii) **Towed Reel and Torpedo Reel Indigenization:** a *towed reel* manages the cables, sonar arrays and is the reel that is inside the submarines torpedo launch tube. The reel functions to match the submarines speed once the torpedo is let out of the launch tube. *Torpedo reel* is an internal fiber optic/copper wire that guides the torpedo once launched out of the tube and facilitates real time data to get towards the target. In FY25, HEB initiated the activity for **underwater applications** and in FY26 has achieved the indigenization of the mechanical hardware. The reel wire development is currently under progress (the Management expects the same to be completed in ~3-4 months) and post the approval and completion from the **Indian Navy**, the Management expects regular supplies to commence from FY27E onwards.

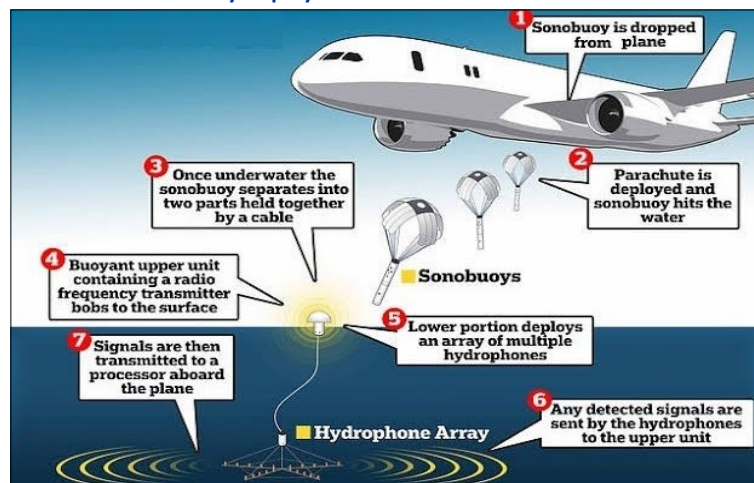
**Exhibit 15: Reel Portfolio**



Source: HEB AGM 2026

(iv) **Sea Water Activated Battery:** *Sonobuoys* are critical sonar device used for underwater detection. A typical sonobuoy consists of a cylindrical/spherical buoyant that has sensors to detect the acoustic signals, a battery/power source and a radio transmitter/communication system to send back the data to the host platform (either an aircraft or a ship). HEB uses a special chemistry of **silver chloride magnesium (Mg-AgCl)** where silver chloride electrodes are used as cathode, magnesium alloy electrodes are used as anodes and the sea water acts as the electrolyte. Under this **chemistry**, the battery is stored without the electrolyte and gets activated by the sea water; which is advantageous with respect to infinite shelf life and are eco-friendly (as these oxidize naturally to benign mineral compounds). Such chemistries are utilized primarily in **underwater propulsion and sonobuoy applications**. The batteries are deployed both in war shot and exercise torpedoes for propulsion systems. In FY26, HEB developed **sea water activated battery for underwater expendable acoustic devices** and the performance on testing, met the requirements satisfactorily. The Management expects regular production and supply to begin from FY27E onwards.

**Exhibit 16: Sonobuoy Deployment**



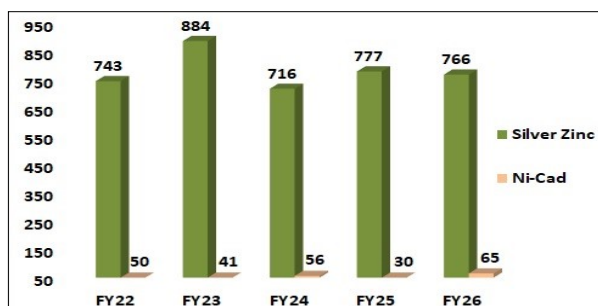
Source: [defencexp.com/sonobuoys-the-silent-sentinels-of-the-sea/](https://defencexp.com/sonobuoys-the-silent-sentinels-of-the-sea/)

(v) **Primary Silver Zinc Battery:** In FY26, HEB received development cum supply of **high-power silver zinc** batteries for combat underwater applications. The battery design and the necessary development was qualified and approved by the DRDO with a satisfactory performance record. The Management anticipates regular supplies for these batteries once the system/platform is inducted into service in the next 6-9 months through the Indian Navy.

(vi) **Other Developments: BrahMos Supersonic Missile Batteries:** BrahMos is a long range, supersonic cruise missile system that is jointly developed by the DRDO and Russia's NPO Mashinostroyeniya (NPOM) through a JV BrahMos Aerospace Pvt. Ltd (BAPL). BrahMos can be launched either from land, sea, air or submarines. As BrahMos operates at nearly 3x the speed of the sound and are regarded as the world's fastest operational supersonic cruise missiles. They require and rely on specialised silver zinc batteries due the unique characteristic like low self discharge, maintains steady voltage, and reserve energy. In order to be self-reliant in the defence sector, the BrahMos Integration and Testing Center facility was established in Lucknow in 2025; the center carries out the complete process of assembly, integration, and testing to the highest technical standards. HEB is the **only qualified supplier** of batteries that are required for BrahMos supersonic missiles and has been qualified for all 3 versions viz; Army, Naval and Air Force. After the initial deals that were signed with Philippines, Vietnam, Indonesia, these supersonic missiles are attracting foreign buyers' interest from the Middle East. All these positive developments towards **export opportunities** portray immense prospects that would divert to battery players like HEB. **Drone related batteries:** HEB intends to pursue battery related development R&D work in ~6-8 months this year. The required facilities are being created/augmented with in-house resource requirements and the Management expects the same to be tentatively ready by Q1-Q2FY28.

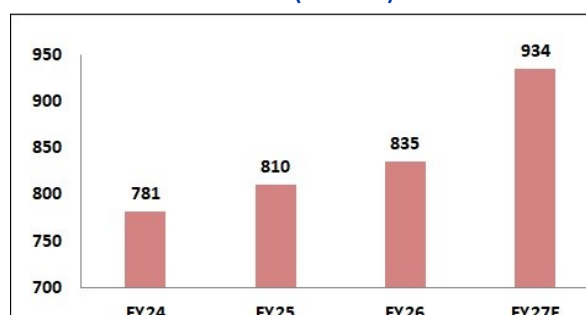
**Financials:** HEB is a prominent supplier of **silver zinc batteries** and derives ~90-95% of its overall revenues from this product followed by **Ni-Cad batteries**. Silver zinc, Ni-Cad and Silver Chloride Magnesium designed and developed by the company find their use cases in high-end and high-margin critical applications of aviation, torpedo propulsion, satellite launch vehicles (SLVs) and army battle tanks. The company has a **repeat customer base** and sells its products to defence customers. As stated earlier as well, the critical and high margin applications of silver zinc batteries in the defence sector are subject to **strict adherence** to high quality products (inclusive of technology upgradation), seeking prior permission from the MoD (to export the batteries) along with testings and certifications outlined by the DRDO. All these are time-consuming process till the time these accreditations are achieved and as HEB is already qualified for these it enjoys **client stickiness**. The demand of such custom-designed batteries are linked to the **govt's budgetary allocation** towards the defence sector and thus, the **demand** as well as the **order book** is cyclical in nature; the **revenues** may often turn out to be lumpy.

Exhibit 17: Annual Product Revenue Trend (Rs in mn)



Source: HEB Annual Reports, Progressive Research

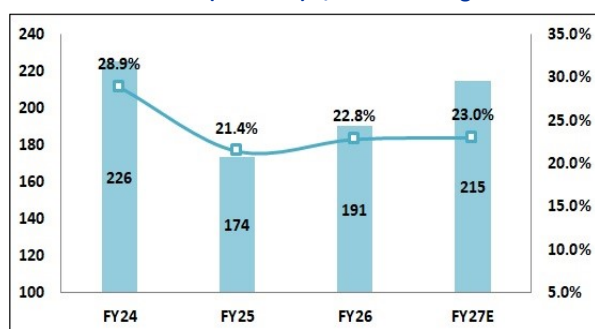
Exhibit 18: Revenue Trend (Rs in mn)



Source: HEB Annual Reports, Progressive Research

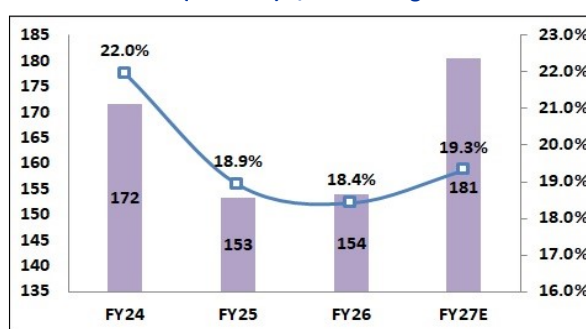
The overall topline has registered a CAGR of ~8.7% from FY19-26. The **gross margins** have broadly remained in the range of ~69-73% with variations owing to change in the overall product mix/raw material price fluctuations. As the company participates in various in-house as well as other defence related programs, the company spends a significant portion on **R&D** (~29.4% in FY26). HEB acts purely as a business to govt. (**B2G**) player serving the niche defence sector and often receives **govt. grants** from the funding agencies such as the DRDO and CHT; this accounts for a larger component of the overall **other income**. The Management aspires to maintain a sustainable Ebitda margin range of ~25%. The company continues to operate as a **debt-free entity** except for certain short-term borrowings that are directed towards the working capital requirements. HEB has a fairly long **working capital cycle** mainly attributed to higher inventory levels (silver serves as the key inventory component alongwith other battery accessories/components that would be required for immediate replacement in case of any failure/damages). As an operating standard, the company generally maintains an **inventory threshold** of ~6-8 months which at times puts stress on the overall **cash generated from operations**.

Exhibit 19: Ebitda (Rs in mn) v/s Ebitda Margins Trend



Source: HEB Annual Reports, Progressive Research

Exhibit 20: PAT (Rs in mn) v/s PAT Margins Trend



Source: HEB Annual Reports, Progressive Research

HEB faced **heavy competition** in the retail market for its **lead acid batteries** product segment and the operations are suspended since Apr'19. In FY26, the company has also been sanctioned with working capital limits amounting to Rs750mn (both fund and non-fund based) by the banks. As of FY26, the company has a confirmed **order book** position of Rs560mn with a **possible order value** of ~Rs1010mn with an execution time-frame of ~12-18 months. HEB is majorly a **domestic** entity with almost 85-90% contribution. Although, the **export** presence is limited, the company is exploring possible markets of Poland, Vietnam, Philippines, Malaysia, Algeria, Italy and Kyrgyzstan. HEB has operated at a decent **ROCE** ratio over the past several years' with FY26 ROCE at ~21.8%; one must however, keep in mind that this return ratio may fluctuate depending on the spends directed towards scientific research and other miscellaneous expenses. The **ROE and ICR** are at comfortable levels of ~15.8% and ~12.9x in FY26. Moreover, HEB has been consistently rewarding the shareholders' over the last 4-5 years with a **DPS** at Rs3 per share.

**Risks and Concerns:** The batteries manufactured by the company are very strategic in nature and custom-designed for use in aviation, torpedo propulsion, SLVs, army battle tanks etc.; the demand is not regular in nature which adds to the **lumpiness** in the business. Moreover, since the application is for strategic defence purposes the **ordering schedule is cyclic** and also not in large volumes which can be a deterrent to the topline growth. Thus, the overall growth of the turnover is backed by govt's thrust and budget allocations skewed towards the **defence sector**. The manufactured products are sold to the **defence customer** base (defence organizations and GOI) where the payment terms are pre-defined as per the terms of the contract. The company is exposed to certain **liquidated damage** clause that would arise out of delayed supplies and is also exposed to counterparty credit risk which affects the overall company operations. The company derives its major revenues from the niche **silver zinc batteries** which somewhat poses a **revenue concentration**

and a non-diversifiable risk for the overall operations of the company. Some of the major **raw materials** include silver, zinc, copper, etc. which are highly volatile commodities. Any abrupt increase or decrease in the raw material prices can lead to compression of the margins. However, the price volatility of silver gets covered by the customers via a **price variation clause**.

The gradual and regular, price fluctuations arising out of **non-silver** materials like copper and zinc get addressed in cost estimates and pricing. Less than ~10% of the total raw materials (silver bullion, silver foil, magnesium sheets, other raw materials, stores & spare parts) consumed by the company are imported which attracts some forex variation, and/or government restrictions. As these materials are imported mostly on **advance payment basis**, HEB doesn't foresee this as a major risk and thus such transactions aren't hedged by the company. These aberrations are factored in the cost workings such that the overall exposure level minimised. When a product is newly launched some flexibilities are available in product pricing during the earlier years, however, **competitive pricing** and pressure also impacts the operating margins. With respect to batteries, the **exports** are generally made either against the advances received/confirmed LCs of usance period not exceeding 90 days. Therefore, any delay in securing payments from the export markets within the stipulated tenure can have an effect on the operations and cash flows. HEB requires prior permission from the MoD for **export** of its products to other countries. In addition to this, there are certain risks associated to **import restriction** and/or delays in receipt of critical materials or components coupled with any change in government policy of procurement (especially by defence departments). The global scenario is quite dynamic and can witness adverse changes with introduction of advanced and/or disruptive systems. Thus, the necessity to train in the **upcoming technologies** and upgradation of production methods and equipment, is a constant requirement for the company. HEB has a **long working capital cycle** which is due to the higher levels of inventory that need to be preserved; which portrays a longer gestation phase. The stock is highly illiquid and is listed only on BSE.

### Outlook and Recommendations:

HEB is an established manufacturer of hi-tech silver zinc and Ni-Cad batteries with an expertise and a strong **in-house R&D team**. The company designs, develops and establishes the manufacturing of alkaline electrolyte-based silver zinc, Ni-cad and seawater-based silver chloride magnesium batteries that are used in stringent applications of underwater propulsion, control guidance, communication, emergency starting, rail road, industrial and aerospace related nature of work. The company also takes conscious efforts on a regular basis and establishes technology in order to manufacture electrochemical systems that are used in varied mission critical applications. The **India defence** sector so far had faced challenges related to constrained budgets, heavy import dependence, lengthy procurement practices. Propelled by continued thrust for indigenization, technological advancement, strategic reforms under the Defence Acquisition Procedure (DAP 2020), self-reliance, positive indigenization lists (to reduce the import dependence) has led to a strategic transitioned shift in the defence sector. The overall defence budget increased from Rs2.53lk-cr in FY13 to Rs7.85lk-cr in FY27E; the production in FY26 stood at ~Rs1.78lk-cr whereas the exports for FY26 surged to Rs384.24bn. All of these initiatives undertaken by the GOI encourages the **domestic manufacturing** and augurs well for **domestic players** like HEB in the distant future. HEB is regarded as one of the **major suppliers** (out of 2 domestic suppliers) in the silver zinc batteries and has secured a strong market position in this product segment. The company derives almost 90-95% of its **overall revenues** from these batteries followed by Ni-Cad batteries. Apart from supplying batteries to the core defence industry, the company is also focusing on **value-added** products including Li-ion based battery/power pack system integration which would help HEB occupy a strong position in both **defence** as well as **non-defence** related industries. The company's products are more of domestic oriented and the Management is judiciously exploring the **export markets with good growth anticipated** in FY27E.

### Exhibit 21: SWOT Analysis

Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> <li>• <b>Niche Positioning</b> in Strategic Defence Batteries</li> <li>• In-house R&amp;D;</li> <li>• <b>Technology Leaders</b></li> <li>• Strong Relationships with D-PSUs</li> <li>• Indigenisation</li> <li>• <b>Atmanirbhar Bharat</b> Beneficiary</li> <li>• <b>Healthy Profitability;</b> High Margins</li> <li>• Specialized Manufacturing Facilities and <b>Certifications</b></li> <li>• Visible <b>Order Pipeline</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Highly Concentrated</b> Customer Base</li> <li>• <b>Lumpy Order</b> Inflows</li> <li>• Insignificant and <b>Volatile Exports</b></li> <li>• <b>Suspended</b> Lead Acid Battery Business</li> <li>• Imported Critical Raw Materials Dependence</li> <li>• Small Company Scale; Limited Economies of Scale</li> <li>• <b>Limited Product Diversification</b></li> </ul>	<ul style="list-style-type: none"> <li>• Indian Defence <b>Capex Expanding</b></li> <li>• <b>Commercialisation</b> of Ag-Cl-Mg Batteries</li> <li>• Scaling up <b>Ni-Cd</b> Batteries for IR</li> <li>• <b>Rapidly Expanding</b> BESS, Flow Batteries, Hydrogen and Green Energy Ecosystem</li> <li>• Growth in <b>Energy Storage Systems</b></li> <li>• Potential <b>Export Opportunities</b></li> </ul>	<ul style="list-style-type: none"> <li>• Changes in <b>GOI Procurement Policies</b></li> <li>• Critical Raw Material <b>Price Fluctuations</b></li> <li>• Import Restrictions, <b>Geopolitical Disruptions</b> and Supplier Delays</li> <li>• <b>Technological Disruption</b> by New Chemistries</li> <li>• <b>Specialised Technical</b> Manpower Dependence; <b>Inability</b> to Upgrade Manufacturing Capabilities</li> </ul>

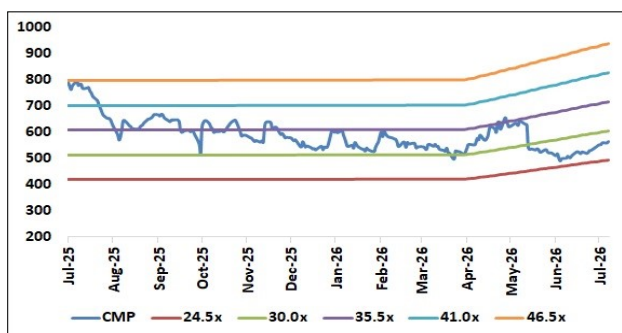
Source: HEB Annual Reports, Progressive Research

### Outlook and Recommendations (contd.):

The company has been successfully supplying strategic requirement of armed forces and renewable energy demand for mission critical battery requirements of the country. In addition to this, the company is also looking at soft diversification to fetch a better topline. HEB has won various **DRDO based programs** which are either under the testing/approval/anticipated or commencement phases. Some of these developments consists of **silver zinc cells** (testing phase is under progress), **silver chloride magnesium battery related to LWT** (the supply and regular production is expected in FY27E), **Ni-Cad pocket plate batteries** (regular production expected to commence after approval), **towed and torpedo reel indigenisation** (regular supplies expected to commence from FY27E), **sea water activated batteries, sonobuoy** (regular production and supply expected to commence in FY27E). The company has been observing good traction for its **torpedo** related batteries from the overseas markets (Italy, Vietnam) and considers this as a **top and high margin** product for the overall business of HEB. The company has 2-3 blockbuster products in the pipeline which can show keen interest as export products. These new products will not only add to the revenue but also add to the reliability and accuracy requirements of the customers. Another high-profile product for the company is the **BrahMos supersonic missile battery** which is expected to contribute in a much better way to the future earnings. There are certain areas where HEB is the sole supplier for batteries for BrahMos missile and Supersonic missiles C-45.

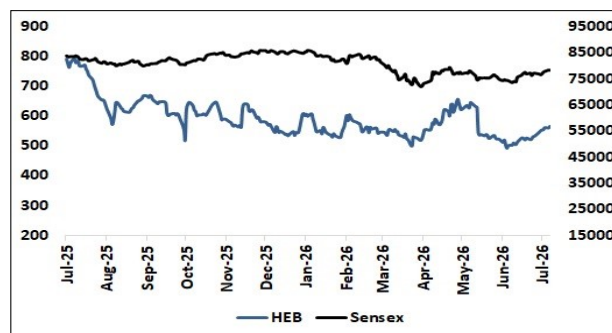
In a move towards the **emerging battery technologies**, the company scaled its development towards the design, development and demonstration of 10kW/50kWh **VRFBs** with the assistance from funding program offered by IIT Madras and OECT. Going ahead, the company intends to participate in tenders/proposals related to VRFB segment and energy storage back-up needs of solar PV projects. Once these projects/proposals are successful, the Management anticipates **incremental revenues** to be fetched from the same. The program with **IOCL, GAIL and CHT** related to the development of a **low power hydrogen FC stack**; the testing cum evaluation for **2.5kW plus** level unit was completed during FY26. The progress towards building standalone **solar PV based street lights** via the development of BMS, controller and electronics related to Li-ion batteries packs was also successfully achieved. The ESS systems at present needs emerging technologies (at present at introductory stage in India as an alternate cum green source of energy) related to flow batteries, fuel cells, VRFBs, green cum hydrogen generation using electrolyzer technology; the company is already undertaking gradual steps and working towards the development for each of them. The **transition** towards high margin silver zinc batteries, improved PBT, gradual reduction in the payment days has shown decent improvement in the cash generated from operations. Overall, client stickiness, major focus on the domestic business, exploring opportunities in the export markets (limited presence as on date), strong and niche market position in the silver zinc batteries, debt-free status, decent return ratios, dividend paying entity and gradual scale up of the DRDO projects while simultaneously working on the developments related to VRFB, FCs are some of the important fundamental rationales that will drive the steady business of HEB from a long-term perspective. The company has a legacy of best in class research and latest technologies. The overall outlook for FY27E appears to be positive and the company is expecting orders not only from India but also some neighbouring countries. The issue is related to the lack of orders from the GOI which currently has a very small base for HEB, however, when the orderbook increases, the benefits of the same will quickly flow to the bottom line and has a possibility of rerating the stock for long term benefits. We initiate a **Buy** on the stock for a target of Rs735 over 12 months horizon.

Exhibit 22: One Year Forward P/E



Source: BSE India, Progressive Research

Exhibit 23: Price v/s Sensex



Source: BSE India, Progressive Research

Glossary: Various Batteries

**ONLY APPROVED**  
SUPPLIER OF  
**BATTERIES**  
FOR  
**BRAHMOS**  
SUPERSONIC MISSILE

**NiCd BATTERIES**  
FOR  
**CHEETAH & CHETAK**  
HELICOPTERS  
TRUSTED POWER. PROVEN PERFORMANCE.

**CHEETAH**  
LIGHT. AGILE. PROVEN.

**CHETAK**  
RELIABLE. VERSATILE.  
MISSION READY.

**NiCd BATTERIES**  
FOR  
**SUKHOI Su-30MKI**  
& **AN-32 AIRCRAFT**  
POWERING CRITICAL MISSIONS. DELIVERING RELIABILITY.

**SUKHOI Su-30MKI**

**AN-32 AIRCRAFT**

**NiCd BATTERIES**  
FOR  
**MI-8 & MI-17**  
HELICOPTERS  
POWERING CRITICAL MISSIONS. DELIVERING RELIABILITY.

**MI-8**  
VERSATILE. RELIABLE. PROVEN.

**MI-17**  
BUILT TO PERFORM.  
BUILT TO ENDURE.  
BUILT FOR INDIA.

**NiCd BATTERIES**  
FOR  
**MIRAGE & JAGUAR AIRCRAFT**  
TRUSTED POWER. PROVEN PERFORMANCE.

**MIRAGE**

**JAGUAR**

**SILVER ZINC BATTERY**  
FOR  
**LIGHT COMBAT AIRCRAFT (LCA) TEJAS**  
PROVEN RELIABILITY. MISSION READY.

**HEB**  
DEFENCE & AEROSPACE  
BUILT FOR MISSION. ENGINEERED TO EXCEL.

Source: HEB AGM 2026

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