



Northvolt - When giga ambitions faced failure of gigantic proportions

The most ambitious project of the West to challenge the dragon's dominance in battery manufacturing, turned out to be a damp squib with the company Northvolt filing for bankruptcy protection in the US in Nov'24, followed by in Sweden in Mar'25. A decade of advancements in Li-ion, Na-ion and Li-metal batteries led by Tesla veterans, funded of ~USD15bn, an order book of +USD50bn, and backed by the likes of Volkswagen, BMW, Goldman Sachs and Baillie Gifford, went up in smoke. As several Indian companies are focusing on new energy, it is important to look at the challenges that lie ahead.

Some Indian companies like RIL have demonstrated phenomenal execution capabilities even with unrelated diversifications like in telecom and retail in the past. However, the know-how built by Chinese, Japanese and South Korean companies over decades, is primarily absent in our country. It will be interesting to see how things turn up with Indian companies venturing into the value chain - not only the ones trying to manufacture batteries or cells, but also those trying to offer chemicals and polymers for a yet-to-emerge ecosystem in India.

Northvolt: 16GWh of capacity, operating at <1% in 2023

By 2023, Northvolt had established 6 units across Europe and the US, including Northvolt Ett, a fully integrated battery gigafactory. However, [reports](#) suggest that due to various technical issues, the failure rate of battery manufacturing stood as high as 80%. 2023 ended with less than 1% utilization. On sales of USD128mn in 2023, the company made an EBITDA loss of USD569mn. Net loss stood at a staggering USD1.2bn. Still building capacity, the company invested USD1.8bn during the year. What followed were order cancellations and drop in investor confidence. By early 2025, its [debt](#) seemed to have ballooned to USD8.7bn.

Exhibit 1: Existing plants (2023)

Unit name	Purpose	Location	Start of commercial operations
Northvolt Labs	R&D & industrialization	Sweden	2020
Northvolt Ett	16GWh fully integrated battery manufacturing unit	Sweden	2022
Northvolt Dwa Industrial	Battery systems production	Poland	2020
Northvolt Dwa ESS	Energy storage systems production	Poland	-
Hydrovolt	Battery recycling	Norway	2023
Cuberg	Li-metal battery subsidiary	California	2019

Source: Company, PL

Exhibit 2: Main projects under development

Unit name	Purpose	Location	Start of construction
Revolv Ett	Battery recycling	Sweden	2022
Northvolt Ett	Expansion to 45GWh	Sweden	2022
Northvolt Drei	Battery gigafactory	Germany	-
Northvolt Fem	CAM manufacturing	Sweden	-
Northvolt Six	Fully integrated battery manufacturing	Canada	-
Aurora Lithium	Lithium conversion JV	Portugal	-
NOVO	R&D and cell assembly with Volvo	Sweden	2023

Source: Company, PL

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Northvolt: Lack of expertise appears to be the biggest stumbling block

Northvolt initially partnered with Wuxi for supply of workers and equipment. However, poor management, cross-cultural issues, lack of technical expertise, procurement challenges, and poor designs all spiraled into chaos. It is said that while Chinese companies take 4 months to raise battery manufacturing yield to 96%, it took Northvolt 4 years to achieve 70% and that too with ~80% defects. Frustrated with poor progress and ballooning costs, BMW cancelled its USD2bn order in 2024. What followed was sinking investor confidence with even Swedish government deciding against providing further financial assistance. With that, went down the West's ambition of creating an alternative to the likes of CATL and BYD.

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (Rs)	Share Price (Rs)
1	Aarti Industries	Hold	420	407
2	Bharat Petroleum Corporation	Reduce	311	332
3	Bharti Airtel	Accumulate	2,148	2,030
4	Clean Science and Technology	Hold	1,425	1,445
5	Deepak Nitrite	Reduce	1,799	1,963
6	Fine Organic Industries	BUY	5,440	5,269
7	GAIL (India)	Hold	180	181
8	Gujarat Fluorochemicals	Reduce	3,541	3,522
9	Gujarat Gas	Sell	404	499
10	Gujarat State Petronet	Hold	348	335
11	Hindustan Petroleum Corporation	Sell	360	437
12	Indian Oil Corporation	Reduce	138	148
13	Indraprastha Gas	Reduce	186	205
14	Jubilant Ingrevia	Hold	743	777
15	Laxmi Organic Industries	Reduce	179	196
16	Mahanagar Gas	Accumulate	1,559	1,483
17	Mangalore Refinery & Petrochemicals	Accumulate	152	139
18	Navin Fluorine International	Accumulate	5,559	5,198
19	NOCIL	Reduce	172	200
20	Oil & Natural Gas Corporation	Accumulate	284	241
21	Oil India	BUY	566	436
22	Petronet LNG	Hold	311	302
23	Reliance Industries	Accumulate	1,555	1,476
24	SRF	Hold	3,071	3,150
25	Vinati Organics	Accumulate	1,882	1,944

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Buy	: > 15%
Accumulate	: 5% to 15%
Hold	: +5% to -5%
Reduce	: -5% to -15%
Sell	: < -15%
Not Rated (NR)	: No specific call on the stock
Under Review (UR)	: Rating likely to change shortly

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