



Dear Friends,

The electric vehicle and energy storage system industries continue to experience rapid transformation. With increasing global awareness of environmental sustainability and the urgent need to reduce greenhouse gas emissions, demand for EVs and ESS solutions is poised for exponential growth. As key stakeholders in these industries, it is essential for us to stay abreast of emerging trends, regulatory developments, and market dynamics. Rest assured, we remain vigilant in monitoring industry trends and adapting our strategies accordingly to capitalize on opportunities and address challenges.

At Cygni, we are dedicated to delivering exceptional products and services to meet the evolving needs of the EV and ESS industries. Central to this commitment is our relentless pursuit of continuous improvement across all aspects of our operations. We are continually assessing our processes, technologies, and methodologies to identify areas for enhancement and innovation. By leveraging feedback from stakeholders like you and investing in research and development, we aim to stay at the forefront of technological advancements and maintain our competitive edge.

I want to express my sincere appreciation for your continued partnership and support. As we embark on the new financial year, I am confident that together, we will achieve even greater success and contribute to the advancement of the electric vehicle and energy storage system industries.

I invite you to peruse our latest Cygni Newsletter and share your insights with us. Your support is invaluable to us, and we wish you continued success in your endeavours.

Thank you,
Venkat Rajaraman
CEO / Founder
Cygni Energy Pvt. Ltd.



Cygni - India Energy Storage Alliance (IESA)

Cygni is a proud member of IESA (India Energy Storage Alliance). Among the several initiatives of IESA, India Electric Mobility Council, Battery Manufacturing and Supply Chain, Stationary Storage and Green Hydrogen are some of the key initiatives. Cygni is looking forward to contributing to IESA and Industry's success.



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SODIUM ION - A REAL CHALLENGER OR ANOTHER PASSERBY FOR INDIAN STORAGE TECH?

Energy storage is a dynamic battleground of evolving technologies where many make headlines, but few become commercial products. Since the formal launch of Sodium Ion Battery (SIB) cells in 2003, it has taken over two decades of development to get them ready for the real world, and many global companies have jumped onto the bandwagon. The world's largest EV maker, BYD, broke ground earlier this year on a 30 GWh SIB facility, and the projected capacity for 2030 is already above 150 GWh. For comparison, the global installed capacity of Lithium Ion Battery (LIB) is around 2,100 GWh after continued investments over the past decade. To fully understand SIB, its environmental impact and its likelihood of success, we start with a walk down the periodic table.

Walk down the periodic table

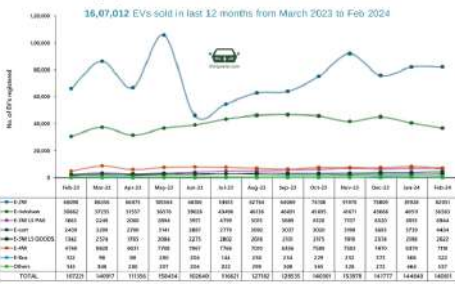
Lithium gained prominence due to its compact atomic size which made it an efficient carrier of charge. Sodium was considered a viable contender because it lives, quite literally, just a block away from Lithium on the periodic table and met other requirements. However, SIB cannot match LIB's energy density due to its larger size. The initial consumer electronics use cases had space constraints, resulting in the adoption of LIBs. With the advent of electric vehicles (EVs), NMC (Nickel-Manganese-Cobalt along with Lithium) or NCA (Nickel-Cobalt-Aluminum along with Lithium) were the preferred chemistries. The initial reductions in LIB prices were due to the scaling of mining and refining capacities to meet demand from EVs.

Sodium ion – a real challenger or another passerby for Indian storage tech?

Cygni Energy opinion piece on Sodium Ion battery technology published in the EVReporter Magazine March '24 edition. This is an evolving area. We delve on the aspects of why India should start considering investing in Sodium-ion battery technology as it has inherent supply chain advantages.

[Read the Full Article](#)

Category wise-Sales Trend from Feb 2023 to Feb 2024



Source: Vehar Dashboard! Data as per 1356 out of 1444 RTOs across 34 out of 36 states/UTs. Data as of March-2, 2024

Sales Report 2023

Electric vehicles are increasingly making their presence felt and are tying for the top sales among all vehicles irrespective of the fuel type, especially in the 3W Auto segment. In February 2024, the overall penetration of EVs in the 2W sales market was 5.7%. For passenger 3W autos, it was 16.2%, and for cargo 3W autos, it was 24%.

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ELECTRIC PUSH	Support target	Max cap (pervehicle)	Outlay (₹ Cr)
e2W	333,389	₹10,000	333
e3W(e-rickshaw)	13,590	₹25,000	34
e3W(13-e-rickshaw with larger battery)	13,590	₹50,000	126

Note: ₹7 crore will go for administration expenses

Source: Ministry of Heavy Industries

Govt brings new Rs 500 crore EV subsidy scheme from April 1 after FAME.

The Electric Mobility Promotion Scheme 2024 (EMPS 2024), a limited fund scheme of INR 500 crore for four months, aims to boost the adoption of electric two-wheelers and three-wheelers from April 1 to July 31, 2024. The new scheme launched will offer support of up to INR 10,000 per two-wheeler for about 3.33 lakh two-wheelers. For small three-wheelers (e-rickshaw and e-carts), the new scheme has provision for up to INR 25,000 subsidy for over 41,000 such vehicles. This scheme is aimed to bridge the gap between the expiring FAME II subsidy and potential future decisions on EV subsidies.

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Chem Soc Rev



Book Review: Sodium-ion batteries Present and future

by Jang-Yeon Hwang, Seung-Taek Myung, Yang-Kook Sun

This book offers a comprehensive overview of sodium-ion battery technology, covering topics such as electrode materials, electrolytes, cell designs, and performance characteristics. It provides insights into the current research landscape and future prospects for sodium-ion batteries.

[Read Here](#)

Earth Hour

Join the movement for [#EarthHour2024](#)! Let's turn off non-essential lights, appliances for an hour Daily to show our love & care for our only home 🌍 [#EarthHour](#). Together, we can make a difference and build a sustainable future. Every hour counts!



Join the Biggest Hour for Earth

Switch off.
Give an hour
for Earth.



Cygni Women's Day Celebration



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