

The Global Market for Advanced Li-ion and Beyond Lithium Batteries 2024-2035

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Abstracts

Advanced Li-ion and beyond lithium batteries are designed to meet the growing demand for high-energy-density, long-lasting, and cost-effective energy storage solutions in various applications, such as electric vehicles, grid storage, consumer electronics, and stationary power. The Global Market for Advanced Li-ion and Beyond Lithium Batteries 2024-2035 provides a comprehensive analysis of the current Li-ion batteries market plus advanced types including Lithium-metal batteries, Lithium-sulfur batteries, and Solid-state batteries

Beyond lithium batteries that explore alternative chemistries and materials are also covered including Sodium-ion batteries, Aluminum-ion batteries and Redox flow batteries. Other advanced battery concepts include flexible batteries, transparent batteries, degradable batteries, and printed batteries. These innovations aim to cater to specific application requirements and environmental concerns.

The report provides an overview of the global market for advanced Li-ion batteries, segmented by key applications such as electric vehicles (EVs), grid storage, consumer electronics, and stationary batteries. It discusses the market drivers, megatrends, and the role of advanced materials in battery development. The report also highlights the motivation behind the development of beyond lithium batteries. A significant portion of the report is dedicated to Li-ion batteries, covering various aspects such as anode materials (graphite, lithium titanate, lithium metal, and silicon anodes), cathode materials (high-nickel, high-manganese, and zero-cobalt cathodes), electrolytes, binders, conductive additives, separators, and recycling techniques. The report also provides a detailed analysis of the silicon anode market, including its benefits, performance, manufacturing, costs, and applications in EVs, consumer electronics, and energy storage.

The report then delves into beyond lithium technologies, such as lithium-metal, lithium-sulfur, lithium and niobate titanate, sodium-ion, sodium-sulfur, aluminum-ion, solid-state, flexible, transparent, degradable, printed, and redox flow batteries. Each technology is discussed in detail, covering aspects such as technology description, advantages, challenges, SWOT analysis, global revenues, and product developers. The report also includes an extensive section on company profiles, featuring over 340 companies active in the advanced battery market. These profiles provide valuable insights into the strategies, products, and technologies of key players in the industry. Companies profiled include 6K Energy, Addionics, Alsym Energy, Atlas Materials, Basquevolt, Brill Power, BTR New Material Group, CMBlu Energy AG, Coreshell, Echion Technologies, Enerpoly, Enovix, EnPower Inc, ESS Tech, Factorial, Flow Aluminum, Inc., Forsee Power, Ganfeng Lithium, Gotion High Tech, Graphene Manufacturing Group, High Performace Battery Holding AG, Inobat, Inx, Ionblox, LeydenJar Technologies, LionVolt, Li-Metal Corp, Lyten, Nano One Materials, Nanomakers, Our Next Energy (ONE), Prieto Battery, QuantumScape, Reelectrify, Sicona Battery Technologies, Sila Nanotechnologies, Sion Power, Solid Power, Solidion Technology, Stabl Energy, Storedot, Talent New Energy, Tasmanlon, VoltR and VFlowTech.

Contents

1 RESEARCH METHODOLOGY

- 1.1 Report scope
- 1.2 Research methodology

2 INTRODUCTION

- 2.1 The global market for advanced Li-ion batteries
 - 2.1.1 Electric vehicles
 - 2.1.1.1 Market overview
 - 2.1.1.2 Battery Electric Vehicles
 - 2.1.1.3 Electric buses, vans and trucks
 - 2.1.1.3.1 Electric medium and heavy duty trucks
 - 2.1.1.3.2 Electric light commercial vehicles (LCVs)
 - 2.1.1.3.3 Electric buses
 - 2.1.1.3.4 Micro EVs
 - 2.1.1.4 Electric off-road
 - 2.1.1.4.1 Construction vehicles
 - 2.1.1.4.2 Electric trains
 - 2.1.1.4.3 Electric boats
 - 2.1.1.5 Market demand and forecasts
 - 2.1.2 Grid storage
 - 2.1.2.1 Market overview
 - 2.1.2.2 Technologies
 - 2.1.2.3 Market demand and forecasts
 - 2.1.3 Consumer electronics
 - 2.1.3.1 Market overview
 - 2.1.3.2 Technologies
 - 2.1.3.3 Market demand and forecasts
 - 2.1.4 Stationary batteries
 - 2.1.4.1 Market overview
 - 2.1.4.2 Technologies
 - 2.1.4.3 Market demand and forecasts
- 2.2 Market drivers
- 2.3 Battery market megatrends
- 2.4 Advanced materials for batteries
- 2.5 Motivation for battery development beyond lithium

2.6 Battery chemistries

3 LI-ION BATTERIES

3.1 Types of Lithium Batteries

3.2 Anode materials

3.2.1 Graphite

3.2.2 Lithium Titanate

3.2.3 Lithium Metal

3.2.4 Silicon anodes

3.3 SWOT analysis

3.4 Trends in the Li-ion battery market

3.5 Silicon anodes

3.5.1 Benefits

3.5.2 Silicon anode performance

3.5.3 Development in li-ion batteries

3.5.3.1 Manufacturing silicon

3.5.3.2 Commercial production

3.5.3.3 Costs

3.5.3.4 Value chain

3.5.3.5 Markets and applications

3.5.3.5.1 EVs

3.5.3.5.2 Consumer electronics

3.5.3.5.3 Energy Storage

3.5.3.5.4 Portable Power Tools

3.5.3.5.5 Emergency Backup Power

3.5.3.6 Future outlook

3.5.4 Consumption

3.5.4.1 By anode material type

3.5.4.2 By end use market

3.5.5 Alloy anode materials

3.5.6 Silicon-carbon composites

3.5.7 Silicon oxides and coatings

3.5.8 Carbon nanotubes in Li-ion

3.5.9 Graphene coatings for Li-ion

3.5.10 Prices

3.5.11 Companies

3.6 Li-ion electrolytes

3.7 Cathodes

- 3.7.1 Overview of Li-ion cathodes
- 3.7.2 High-nickel cathode materials
- 3.7.3 Manufacturing
- 3.7.4 High manganese content
- 3.7.5 Zero-Cobalt NMx
- 3.7.6 Li-Mn-rich cathodes
- 3.7.7 Lithium Cobalt Oxide(LiCoO₂) — LCO
- 3.7.8 Lithium Iron Phosphate(LiFePO₄) — LFP
- 3.7.9 Lithium Manganese Oxide (LiMn₂O₄) — LMO
- 3.7.10 Lithium Nickel Manganese Cobalt Oxide (LiNiMnCoO₂) — NMC
- 3.7.11 Lithium Nickel Cobalt Aluminum Oxide (LiNiCoAlO₂) — NCA
- 3.7.12 LMR-NMC
- 3.7.13 Lithium manganese phosphate (LiMnP)
- 3.7.14 Lithium manganese iron phosphate (LiMnFePO₄ or LMFP)
- 3.7.15 Lithium nickel manganese oxide (LNMO)
- 3.7.16 Comparison of key lithium-ion cathode materials
- 3.7.17 Emerging cathode material synthesis methods
 - 3.7.17.1 Conventional NMC synthesis
 - 3.7.17.2 Conventional LFP synthesis
 - 3.7.17.3 Dry cathode synthesis
- 3.7.18 Cathode coatings
- 3.7.19 Recycled cathodes
- 3.7.20 Companies
- 3.8 Binders and conductive additives
 - 3.8.1 Materials
- 3.9 Separators
 - 3.9.1 Materials
- 3.10 Platinum group metals
- 3.11 Li-ion battery market players
- 3.12 Li-ion recycling
 - 3.12.1 Comparison of recycling techniques
 - 3.12.2 Hydrometallurgy
 - 3.12.2.1 Method overview
 - 3.12.2.1.1 Solvent extraction
 - 3.12.2.2 SWOT analysis
 - 3.12.3 Pyrometallurgy
 - 3.12.3.1 Method overview
 - 3.12.3.2 SWOT analysis
 - 3.12.4 Direct recycling

- 3.12.4.1 Method overview
 - 3.12.4.1.1 Electrolyte separation
 - 3.12.4.1.2 Separating cathode and anode materials
 - 3.12.4.1.3 Binder removal
 - 3.12.4.1.4 Relithiation
 - 3.12.4.1.5 Cathode recovery and rejuvenation
 - 3.12.4.1.6 Hydrometallurgical-direct hybrid recycling
- 3.12.4.2 SWOT analysis
- 3.12.5 Other methods
 - 3.12.5.1 Mechanochemical Pretreatment
 - 3.12.5.2 Electrochemical Method
 - 3.12.5.3 Ionic Liquids
- 3.12.6 Recycling of Specific Components
 - 3.12.6.1 Anode (Graphite)
 - 3.12.6.2 Cathode
 - 3.12.6.3 Electrolyte
- 3.12.7 Recycling of Beyond Li-ion Batteries
- 3.12.8 Conventional vs Emerging Processes
- 3.13 Global revenues

4 LITHIUM-METAL BATTERIES

- 4.1 Technology description
- 4.2 Lithium-metal anodes
- 4.3 Energy density
- 4.4 Anode-less Cells
- 4.5 Lithium-metal and solid-state batteries
- 4.6 Hybrid batteries
- 4.7 High energy Li-ion anode technology
- 4.8 Applications
- 4.9 Challenges
- 4.10 SWOT analysis
- 4.11 Product developers

5 LITHIUM-SULFUR BATTERIES

- 5.1 Technology description
 - 5.1.1 Advantages
 - 5.1.2 Challenges

- 5.1.3 Commercialization
- 5.2 SWOT analysis
- 5.3 Global revenues
- 5.4 Product developers

6 LITHIUM AND NIOBATE TITANATE (LTO/XNO) BATTERIES

- 6.1 Technology description
- 6.2 Niobium titanium oxide (NTO)
 - 6.2.1 Niobium tungsten oxide
 - 6.2.1.1 Advantages over graphite
 - 6.2.1.2 Niobium based anodes
 - 6.2.2 Vanadium oxide anodes
- 6.3 Global revenues
- 6.4 Product developers

7 SODIUM-ION (NA-ION) BATTERIES

- 7.1 Technology description
 - 7.1.1 Cathode materials
 - 7.1.1.1 Layered transition metal oxides
 - 7.1.1.1.1 Types
 - 7.1.1.1.2 Cycling performance
 - 7.1.1.1.3 Advantages and disadvantages
 - 7.1.1.1.4 Market prospects for LO SIB
 - 7.1.1.2 Polyanionic materials
 - 7.1.1.2.1 Advantages and disadvantages
 - 7.1.1.2.2 Types
 - 7.1.1.2.3 Market prospects for Poly SIB
 - 7.1.1.3 Prussian blue analogues (PBA)
 - 7.1.1.3.1 Types
 - 7.1.1.3.2 Advantages and disadvantages
 - 7.1.1.3.3 Market prospects for PBA-SIB
 - 7.1.2 Anode materials
 - 7.1.2.1 Hard carbons
 - 7.1.2.2 Carbon black
 - 7.1.2.3 Graphite
 - 7.1.2.4 Carbon nanotubes
 - 7.1.2.5 Graphene

- 7.1.2.6 Alloying materials
- 7.1.2.7 Sodium Titanates
- 7.1.2.8 Sodium Metal
- 7.1.3 Electrolytes
- 7.2 Comparative analysis with other battery types
- 7.3 Cost comparison with Li-ion
- 7.4 Materials in sodium-ion battery cells
- 7.5 SWOT analysis
- 7.6 Global revenues
- 7.7 Product developers
 - 7.7.1 Battery Manufacturers
 - 7.7.2 Large Corporations
 - 7.7.3 Automotive Companies
 - 7.7.4 Chemicals and Materials Firms

8 SODIUM-SULFUR BATTERIES

- 8.1 Technology description
- 8.2 Applications
- 8.3 SWOT analysis

9 ALUMINIUM-ION BATTERIES

- 9.1 Technology description
- 9.2 SWOT analysis
- 9.3 Commercialization
- 9.4 Global revenues
- 9.5 Product developers

10 SOLID STATE BATTERIES

- 10.1 Technology description
 - 10.1.1 Solid-state electrolytes
- 10.2 Features and advantages
- 10.3 Technical specifications
- 10.4 Types
- 10.5 Microbatteries
 - 10.5.1 Introduction
 - 10.5.2 Materials

- 10.5.3 Applications
- 10.5.4 3D designs
 - 10.5.4.1 3D printed batteries
- 10.6 Bulk type solid-state batteries
- 10.7 SWOT analysis
- 10.8 Limitations
- 10.9 Global revenues
- 10.10 Product developers

11 FLEXIBLE BATTERIES

- 11.1 Technology description
- 11.2 Technical specifications
 - 11.2.1 Approaches to flexibility
- 11.3 Flexible electronics
 - 11.3.1 Flexible materials
- 11.4 Flexible and wearable Metal-sulfur batteries
- 11.5 Flexible and wearable Metal-air batteries
- 11.6 Flexible Lithium-ion Batteries
 - 11.6.1 Electrode designs
 - 11.6.2 Fiber-shaped Lithium-Ion batteries
 - 11.6.3 Stretchable lithium-ion batteries
 - 11.6.4 Origami and kirigami lithium-ion batteries
- 11.7 Flexible Li/S batteries
 - 11.7.1 Components
 - 11.7.2 Carbon nanomaterials
- 11.8 Flexible lithium-manganese dioxide (Li–MnO₂) batteries
- 11.9 Flexible zinc-based batteries
 - 11.9.1 Components
 - 11.9.1.1 Anodes
 - 11.9.1.2 Cathodes
 - 11.9.2 Challenges
 - 11.9.3 Flexible zinc-manganese dioxide (Zn–Mn) batteries
 - 11.9.4 Flexible silver–zinc (Ag–Zn) batteries
 - 11.9.5 Flexible Zn–Air batteries
 - 11.9.6 Flexible zinc-vanadium batteries
- 11.10 Fiber-shaped batteries
 - 11.10.1 Carbon nanotubes
 - 11.10.2 Types

- 11.10.3 Applications
- 11.10.4 Challenges
- 11.11 Energy harvesting combined with wearable energy storage devices
- 11.12 SWOT analysis
- 11.13 Global revenues
- 11.14 Product developers

12 TRANSPARENT BATTERIES

- 12.1 Technology description
- 12.2 Components
- 12.3 SWOT analysis
- 12.4 Market outlook

13 DEGRADABLE BATTERIES

- 13.1 Technology description
- 13.2 Components
- 13.3 SWOT analysis
- 13.4 Market outlook
- 13.5 Product developers

14 PRINTED BATTERIES

- 14.1 Technical specifications
- 14.2 Components
- 14.3 Design
- 14.4 Key features
- 14.5 Printable current collectors
- 14.6 Printable electrodes
- 14.7 Materials
- 14.8 Applications
- 14.9 Printing techniques
- 14.10 Lithium-ion (LIB) printed batteries
- 14.11 Zinc-based printed batteries
- 14.12 3D Printed batteries
 - 14.12.1 3D Printing techniques for battery manufacturing
 - 14.12.2 Materials for 3D printed batteries
 - 14.12.2.1 Electrode materials

- 14.12.2.2 Electrolyte Materials
- 14.13 SWOT analysis
- 14.14 Global revenues
- 14.15 Product developers

15 REDOX FLOW BATTERIES

- 15.1 Technology description
- 15.2 Types
 - 15.2.1 Vanadium redox flow batteries (VRFB)
 - 15.2.1.1 Technology description
 - 15.2.1.2 SWOT analysis
 - 15.2.1.3 Market players
 - 15.2.2 Zinc-bromine flow batteries (ZnBr)
 - 15.2.2.1 Technology description
 - 15.2.2.2 SWOT analysis
 - 15.2.2.3 Market players
 - 15.2.3 Polysulfide bromine flow batteries (PSB)
 - 15.2.3.1 Technology description
 - 15.2.3.2 SWOT analysis
 - 15.2.4 Iron-chromium flow batteries (ICB)
 - 15.2.4.1 Technology description
 - 15.2.4.2 SWOT analysis
 - 15.2.4.3 Market players
 - 15.2.5 All-Iron flow batteries
 - 15.2.5.1 Technology description
 - 15.2.5.2 SWOT analysis
 - 15.2.5.3 Market players
 - 15.2.6 Zinc-iron (Zn-Fe) flow batteries
 - 15.2.6.1 Technology description
 - 15.2.6.2 SWOT analysis
 - 15.2.6.3 Market players
 - 15.2.7 Hydrogen-bromine (H-Br) flow batteries
 - 15.2.7.1 Technology description
 - 15.2.7.2 SWOT analysis
 - 15.2.7.3 Market players
 - 15.2.8 Hydrogen-Manganese (H-Mn) flow batteries
 - 15.2.8.1 Technology description
 - 15.2.8.2 SWOT analysis

- 15.2.8.3 Market players
- 15.2.9 Organic flow batteries
 - 15.2.9.1 Technology description
 - 15.2.9.2 SWOT analysis
 - 15.2.9.3 Market players
- 15.2.10 Emerging Flow-Batteries
 - 15.2.10.1 Semi-Solid Redox Flow Batteries
 - 15.2.10.2 Solar Redox Flow Batteries
 - 15.2.10.3 Air-Breathing Sulfur Flow Batteries
 - 15.2.10.4 Metal-CO₂ Batteries
- 15.2.11 Hybrid Flow Batteries
 - 15.2.11.1 Zinc-Cerium Hybrid Flow Batteries
 - 15.2.11.1.1 Technology description
 - 15.2.11.2 Zinc-Polyiodide Flow Batteries
 - 15.2.11.2.1 Technology description
 - 15.2.11.3 Zinc-Nickel Hybrid Flow Batteries
 - 15.2.11.3.1 Technology description
 - 15.2.11.4 Zinc-Bromine Hybrid Flow Batteries
 - 15.2.11.4.1 Technology description
 - 15.2.11.5 Vanadium-Polyhalide Flow Batteries
 - 15.2.11.5.1 Technology description
- 15.3 Markets for redox flow batteries
- 15.4 Global revenues
 - 15.4.1 By type
 - 15.4.2 By end-use market

16 ZN-BASED BATTERIES

- 16.1 Technology description
 - 16.1.1 Zinc-Air batteries
 - 16.1.2 Zinc-ion batteries
 - 16.1.3 Zinc-bromide
- 16.2 Market outlook
- 16.3 Product developers

17 COMPANY PROFILES 361 (351 COMPANY PROFILES)

18 REFERENCES

List Of Tables

LIST OF TABLES

- Table 1. Battery chemistries used in electric buses.
- Table 2. Micro EV types
- Table 3. Battery Sizes for Different Vehicle Types.
- Table 4. Competing technologies for batteries in electric boats.
- Table 5. Competing technologies for batteries in grid storage.
- Table 6. Competing technologies for batteries in consumer electronics
- Table 7. Competing technologies for sodium-ion batteries in grid storage.
- Table 8. Market drivers for use of advanced materials and technologies in batteries.
- Table 9. Battery market megatrends.
- Table 10. Advanced materials for batteries.
- Table 11. Commercial Li-ion battery cell composition.
- Table 12. Lithium-ion (Li-ion) battery supply chain.
- Table 13. Types of lithium battery.
- Table 14. Li-ion battery anode materials.
- Table 15. Trends in the Li-ion battery market.
- Table 16. Si-anode performance summary.
- Table 17. Manufacturing methods for nano-silicon anodes.
- Table 18. Markets and applications for silicon anodes.
- Table 19. BEV anode market 2020-2035 (GWh).
- Table 20. BEV anode market 2020-2035 (KT).
- Table 21. BEV anode market 2020-2035 (Billions USD)
- Table 22. EV Anode market 2020-2035 (GWh).
- Table 23. EV anode market 2020-2035 (KT)
- Table 24. Consumer devices Anode market 2020-2035 (GWh).
- Table 25. Consumer devices Anode market 2020-2035 (KT).
- Table 26. Anode material consumption by type (tonnes).
- Table 27. Anode material consumption by end use market (tonnes).
- Table 28. Anode materials prices, current and forecasted.
- Table 29. Silicon-anode companies.
- Table 30. Li-ion battery cathode materials.
- Table 31. Key technology trends shaping lithium-ion battery cathode development.
- Table 32. LMR-NMC energy density.
- Table 33. LMR-NMC cost,
- Table 34. Properties of Lithium Cobalt Oxide) as a cathode material for lithium-ion batteries.

Table 35. Properties of lithium iron phosphate (LiFePO₄ or LFP) as a cathode material for lithium-ion batteries.

Table 36. Properties of Lithium Manganese Oxide cathode material.

Table 37. Properties of Lithium Nickel Manganese Cobalt Oxide (NMC).

Table 38. Properties of Lithium Nickel Cobalt Aluminum Oxide

Table 39. Comparison table of key lithium-ion cathode materials

Table 40. Market players in Li-ion cathodes.

Table 41. Li-ion battery Binder and conductive additive materials.

Table 42. Li-ion battery Separator materials.

Table 43. Li-ion battery market players.

Table 44. Typical lithium-ion battery recycling process flow.

Table 45. Main feedstock streams that can be recycled for lithium-ion batteries.

Table 46. Comparison of LIB recycling methods.

Table 47. Comparison of conventional and emerging processes for recycling beyond lithium-ion batteries.

Table 48. Global revenues for Li-ion batteries, 2018-2035, by market (Billions USD).

Table 49. Applications for Li-metal.

Table 50. Applications for Li-metal batteries.

Table 51. Li-metal battery developers

Table 52. Comparison of the theoretical energy densities of lithium-sulfur batteries versus other common battery types.

Table 53. Global revenues for Lithium-sulfur, 2018-2035, by market (Billions USD).

Table 54. Lithium-sulphur battery product developers.

Table 55. Product developers in Lithium titanate and niobate batteries.

Table 56. Comparison of cathode materials.

Table 57. Layered transition metal oxide cathode materials for sodium-ion batteries.

Table 58. General cycling performance characteristics of common layered transition metal oxide cathode materials.

Table 59. Polyanionic materials for sodium-ion battery cathodes.

Table 60. Comparative analysis of different polyanionic materials.

Table 61. Common types of Prussian Blue Analogue materials used as cathodes or anodes in sodium-ion batteries.

Table 62. Comparison of Na-ion battery anode materials.

Table 63. Hard Carbon producers for sodium-ion battery anodes.

Table 64. Comparison of carbon materials in sodium-ion battery anodes.

Table 65. Comparison between Natural and Synthetic Graphite.

Table 66. Properties of graphene, properties of competing materials, applications thereof.

Table 67. Comparison of carbon based anodes.

- Table 68. Alloying materials used in sodium-ion batteries.
- Table 69. Na-ion electrolyte formulations.
- Table 70. Pros and cons compared to other battery types.
- Table 71. Cost comparison with Li-ion batteries.
- Table 72. Key materials in sodium-ion battery cells.
- Table 73. Product developers in aluminium-ion batteries.
- Table 74. Types of solid-state electrolytes.
- Table 75. Market segmentation and status for solid-state batteries.
- Table 76. Typical process chains for manufacturing key components and assembly of solid-state batteries.
- Table 77. Comparison between liquid and solid-state batteries.
- Table 78. Limitations of solid-state thin film batteries.
- Table 79. Global revenues for All-Solid State Batteries, 2018-2035, by market (Billions USD).
- Table 80. Solid-state thin-film battery market players.
- Table 81. Flexible battery applications and technical requirements.
- Table 82. Flexible Li-ion battery prototypes.
- Table 83. Electrode designs in flexible lithium-ion batteries.
- Table 84. Summary of fiber-shaped lithium-ion batteries.
- Table 85. Types of fiber-shaped batteries.
- Table 86. Global revenues for flexible batteries, 2018-2035, by market (Billions USD).
- Table 87. Product developers in flexible batteries.
- Table 88. Components of transparent batteries.
- Table 89. Components of degradable batteries.
- Table 90. Product developers in degradable batteries.
- Table 91. Main components and properties of different printed battery types.
- Table 92. Applications of printed batteries and their physical and electrochemical requirements.
- Table 93. 2D and 3D printing techniques.
- Table 94. Printing techniques applied to printed batteries.
- Table 95. Main components and corresponding electrochemical values of lithium-ion printed batteries.
- Table 96. Printing technique, main components and corresponding electrochemical values of printed batteries based on Zn–MnO₂ and other battery types.
- Table 97. Main 3D Printing techniques for battery manufacturing.
- Table 98. Electrode Materials for 3D Printed Batteries.
- Table 99. Global revenues for printed batteries, 2018-2035, by market (Billions USD).
- Table 100. Product developers in printed batteries.
- Table 101. Advantages and disadvantages of redox flow batteries.

Table 102. Comparison of different battery types.

Table 103. Summary of main flow battery types.

Table 104. Vanadium redox flow batteries (VRFB)-key features, advantages, limitations, performance, components and applications.

Table 105. Market players in Vanadium redox flow batteries (VRFB).

Table 106. Zinc-bromine (ZnBr) flow batteries-key features, advantages, limitations, performance, components and applications.

Table 107. Market players in Zinc-Bromine Flow Batteries (ZnBr).

Table 108. Polysulfide bromine flow batteries (PSB)-key features, advantages, limitations, performance, components and applications.

Table 109. Iron-chromium (ICB) flow batteries-key features, advantages, limitations, performance, components and applications.

Table 110. Market players in Iron-chromium (ICB) flow batteries.

Table 111. All-Iron flow batteries-key features, advantages, limitations, performance, components and applications.

Table 112. Market players in All-iron Flow Batteries.

Table 113. Zinc-iron (Zn-Fe) flow batteries-key features, advantages, limitations, performance, components and applications.

Table 114. Market players in Zinc-iron (Zn-Fe) Flow Batteries.

Table 115. Hydrogen-bromine (H-Br) flow batteries-key features, advantages, limitations, performance, components and applications.

Table 116. Market players in Hydrogen-bromine (H-Br) flow batteries.

Table 117. Hydrogen-Manganese (H-Mn) flow batteries-key features, advantages, limitations, performance, components and applications.

Table 118. Market players in Hydrogen-Manganese (H-Mn) Flow Batteries.

Table 119. Materials in Organic Redox Flow Batteries (ORFB).

Table 120. Key Active species for ORFBs

Table 121. Organic flow batteries-key features, advantages, limitations, performance, components and applications.

Table 122. Market players in Organic Redox Flow Batteries (ORFB).

Table 123. Zinc-Cerium Hybrid flow batteries-key features, advantages, limitations, performance, components and applications.

Table 124. Zinc-Polyiodide Hybrid Flow batteries-key features, advantages, limitations, performance, components and applications.

Table 125. Zinc-Nickel Hybrid Flow batteries-key features, advantages, limitations, performance, components and applications.

Table 126. Zinc-Bromine Hybrid Flow batteries-key features, advantages, limitations, performance, components and applications.

Table 127. Vanadium-Polyhalide Hybrid Flow batteries-key features, advantages,

limitations, performance, components and applications.

Table 128. Redox flow battery value chain.

Table 129. Global revenues for redox flow batteries, 2018-2035, by type (millions USD).

Table 130. Global revenues for redox flow batteries, 2018-2035, by end-use market (millions USD).

Table 131. ZN-based battery product developers.

Table 132. CATL sodium-ion battery characteristics.

Table 133. CHAM sodium-ion battery characteristics.

Table 134. Chasm SWCNT products.

Table 135. Faradion sodium-ion battery characteristics.

Table 136. HiNa Battery sodium-ion battery characteristics.

Table 137. Battery performance test specifications of J. Flex batteries.

Table 138. LiNa Energy battery characteristics.

Table 139. Natrium Energy battery characteristics.

List Of Figures

LIST OF FIGURES

- Figure 1. Annual sales of battery electric vehicles and plug-in hybrid electric vehicles.
- Figure 2. Electric car Li-ion demand forecast (GWh), 2018-2035.
- Figure 3. EV Li-ion battery market (US\$B), 2018-2035.
- Figure 4. Electric bus, truck and van battery forecast (GWh), 2018-2035.
- Figure 5. Micro EV Li-ion demand forecast (GWh).
- Figure 6. Lithium-ion battery grid storage demand forecast (GWh), 2018-2035.
- Figure 7. Sodium-ion grid storage units.
- Figure 8. Salt-E Dog mobile battery.
- Figure 9. I.Power Nest - Residential Energy Storage System Solution.
- Figure 10. Costs of batteries to 2030.
- Figure 11. Lithium Cell Design.
- Figure 12. Functioning of a lithium-ion battery.
- Figure 13. Li-ion battery cell pack.
- Figure 14. Li-ion electric vehicle (EV) battery.
- Figure 15. SWOT analysis: Li-ion batteries.
- Figure 16. Silicon anode value chain.
- Figure 17. Silicon anode value chain.
- Figure 18. BEV anode market 2020-2035 (GWh).
- Figure 19. BEV anode market 2020-2035 (KT).
- Figure 20. BEV anode market 2020-2035 (Billions USD).
- Figure 21. EV Anode market 2020-2035 (GWh).
- Figure 22. Consumer devices Anode market 2020-2035 (GWh).
- Figure 23. Consumer devices Anode market 2020-2035 (KT).
- Figure 24. Anode material consumption by type (tonnes).
- Figure 25. Anode material consumption by end user market (tonnes).
- Figure 26. Li-cobalt structure.
- Figure 27. Li-manganese structure.
- Figure 28. Typical direct, pyrometallurgical, and hydrometallurgical recycling methods for recovery of Li-ion battery active materials.
- Figure 29. Flow chart of recycling processes of lithium-ion batteries (LIBs).
- Figure 30. Hydrometallurgical recycling flow sheet.
- Figure 31. SWOT analysis for Hydrometallurgy Li-ion Battery Recycling.
- Figure 32. Umicore recycling flow diagram.
- Figure 33. SWOT analysis for Pyrometallurgy Li-ion Battery Recycling.
- Figure 34. Schematic of direct recycling process.

- Figure 35. SWOT analysis for Direct Li-ion Battery Recycling.
- Figure 36. Global revenues for Li-ion batteries, 2018-2035, by market (Billions USD).
- Figure 37. Schematic diagram of a Li-metal battery.
- Figure 38. SWOT analysis: Lithium-metal batteries.
- Figure 39. Schematic diagram of Lithium–sulfur battery.
- Figure 40. SWOT analysis: Lithium-sulfur batteries.
- Figure 41. Global revenues for Lithium-sulfur, 2018-2035, by market (Billions USD).
- Figure 42. Global revenues for Lithium titanate and niobate batteries, 2018-2035, by market (Billions USD).
- Figure 43. Schematic of Prussian blue analogues (PBA).
- Figure 44. Comparison of SEM micrographs of sphere-shaped natural graphite (NG; after several processing steps) and synthetic graphite (SG).
- Figure 45. Overview of graphite production, processing and applications.
- Figure 46. Schematic diagram of a multi-walled carbon nanotube (MWCNT).
- Figure 47. Schematic diagram of a Na-ion battery.
- Figure 48. SWOT analysis: Sodium-ion batteries.
- Figure 49. Global revenues for sodium-ion batteries, 2018-2035, by market (Billions USD).
- Figure 50. Schematic of a Na–S battery.
- Figure 51. SWOT analysis: Sodium-sulfur batteries.
- Figure 52. Saturnose battery chemistry.
- Figure 53. SWOT analysis: Aluminium-ion batteries.
- Figure 54. Global revenues for aluminium-ion batteries, 2018-2035, by market (Billions USD).
- Figure 55. Schematic illustration of all-solid-state lithium battery.
- Figure 56. ULTRALIFE thin film battery.
- Figure 57. Examples of applications of thin film batteries.
- Figure 58. Capacities and voltage windows of various cathode and anode materials.
- Figure 59. Traditional lithium-ion battery (left), solid state battery (right).
- Figure 60. Bulk type compared to thin film type SSB.
- Figure 61. SWOT analysis: All-solid state batteries.
- Figure 62. Global revenues for All-Solid State Batteries, 2018-2035, by market (Billions USD).
- Figure 63. Ragone plots of diverse batteries and the commonly used electronics powered by flexible batteries.
- Figure 64. Flexible, rechargeable battery.
- Figure 65. Various architectures for flexible and stretchable electrochemical energy storage.
- Figure 66. Types of flexible batteries.

- Figure 67. Flexible label and printed paper battery.
- Figure 68. Materials and design structures in flexible lithium ion batteries.
- Figure 69. Flexible/stretchable LIBs with different structures.
- Figure 70. Schematic of the structure of stretchable LIBs.
- Figure 71. Electrochemical performance of materials in flexible LIBs.
- Figure 72. a–c) Schematic illustration of coaxial (a), twisted (b), and stretchable (c) LIBs.
- Figure 73. a) Schematic illustration of the fabrication of the superstretchy LIB based on an MWCNT/LMO composite fiber and an MWCNT/LTO composite fiber. b,c) Photograph (b) and the schematic illustration (c) of a stretchable fiber-shaped battery under stretching conditions. d) Schematic illustration of the spring-like stretchable LIB. e) SEM images of a fiber at different strains. f) Evolution of specific capacitance with strain. d–f)
- Figure 74. Origami disposable battery.
- Figure 75. Zn–MnO₂ batteries produced by Brightvolt.
- Figure 76. Charge storage mechanism of alkaline Zn-based batteries and zinc-ion batteries.
- Figure 77. Zn–MnO₂ batteries produced by Blue Spark.
- Figure 78. Ag–Zn batteries produced by Imprint Energy.
- Figure 79. Wearable self-powered devices.
- Figure 80. SWOT analysis: Flexible batteries.
- Figure 81. Global revenues for flexible batteries, 2018-2035, by market (Billions USD).
- Figure 82. Transparent batteries.
- Figure 83. SWOT analysis: Transparent batteries.
- Figure 84. Degradable batteries.
- Figure 85. SWOT analysis: Degradable batteries.
- Figure 86. Various applications of printed paper batteries.
- Figure 87. Schematic representation of the main components of a battery.
- Figure 88. Schematic of a printed battery in a sandwich cell architecture, where the anode and cathode of the battery are stacked together.
- Figure 89. Manufacturing Processes for Conventional Batteries (I), 3D Microbatteries (II), and 3D-Printed Batteries (III).
- Figure 90. SWOT analysis: Printed batteries.
- Figure 91. Global revenues for printed batteries, 2018-2035, by market (Billions USD).
- Figure 92. Scheme of a redox flow battery.
- Figure 93. Vanadium Redox Flow Battery schematic.
- Figure 94. SWOT analysis: Vanadium redox flow batteries (VRFB)
- Figure 95. Schematic of zinc bromine flow battery energy storage system.
- Figure 96. SWOT analysis: Zinc-Bromine Flow Batteries (ZnBr).
- Figure 97. SWOT analysis: Iron-chromium (ICB) flow batteries.

- Figure 98. SWOT analysis: Iron-chromium (ICB) flow batteries.
- Figure 99. Schematic of All-Iron Redox Flow Batteries.
- Figure 100. SWOT analysis: All-iron Flow Batteries.
- Figure 101. SWOT analysis: Zinc-iron (Zn-Fe) flow batteries.
- Figure 102. Schematic of Hydrogen-bromine flow battery.
- Figure 103. SWOT analysis: Hydrogen-bromine (H-Br) flow batteries.
- Figure 104. SWOT analysis: Hydrogen-Manganese (H-Mn) flow batteries.
- Figure 105. SWOT analysis: Organic redox flow batteries (ORFBs) batteries.
- Figure 106. Schematic of zinc-polyiodide redox flow battery (ZIB).
- Figure 107. Redox flow batteries applications roadmap.
- Figure 108. Global revenues for redox flow batteries, 2018-2035, by type (millions USD).
- Figure 109. Global revenues for flow batteries, 2018-2035, by end-use market (millions USD).
- Figure 110. 24M battery.
- Figure 111. AC biode prototype.
- Figure 112. Schematic diagram of liquid metal battery operation.
- Figure 113. Ampcera's all-ceramic dense solid-state electrolyte separator sheets (25 um thickness, 50mm x 100mm size, flexible and defect free, room temperature ionic conductivity ~1 mA/cm).
- Figure 114. Amprius battery products.
- Figure 115. All-polymer battery schematic.
- Figure 116. All Polymer Battery Module.
- Figure 117. Resin current collector.
- Figure 118. Ateios thin-film, printed battery.
- Figure 119. The structure of aluminum-sulfur battery from Avanti Battery.
- Figure 120. Containerized NAS® batteries.
- Figure 121. 3D printed lithium-ion battery.
- Figure 122. Blue Solution module.
- Figure 123. TempTraq wearable patch.
- Figure 124. Schematic of a fluidized bed reactor which is able to scale up the generation of SWNTs using the CoMoCAT process.
- Figure 125. Cymbet EnerChip™
- Figure 126. Rongke Power 400 MWh VRFB.
- Figure 127. E-magy nano sponge structure.
- Figure 128. Enerpoly zinc-ion battery.
- Figure 129. SoftBattery®.
- Figure 130. ASSB All-Solid-State Battery by EGI 300 Wh/kg.
- Figure 131. Roll-to-roll equipment working with ultrathin steel substrate.

- Figure 132. 40 Ah battery cell.
- Figure 133. FDK Corp battery.
- Figure 134. 2D paper batteries.
- Figure 135. 3D Custom Format paper batteries.
- Figure 136. Fuji carbon nanotube products.
- Figure 137. Gelion Endure battery.
- Figure 138. Portable desalination plant.
- Figure 139. Grepow flexible battery.
- Figure 140. HPB solid-state battery.
- Figure 141. HiNa Battery pack for EV.
- Figure 142. JAC demo EV powered by a HiNa Na-ion battery.
- Figure 143. Nanofiber Nonwoven Fabrics from Hirose.
- Figure 144. Hitachi Zosen solid-state battery.
- Figure 145. Ilika solid-state batteries.
- Figure 146. ZincPoly™ technology.
- Figure 147. TAeTTOOz printable battery materials.
- Figure 148. Ionic Materials battery cell.
- Figure 149. Schematic of Ion Storage Systems solid-state battery structure.
- Figure 150. ITEN micro batteries.
- Figure 151. Kite Rise's A-sample sodium-ion battery module.
- Figure 152. LIBEST flexible battery.
- Figure 153. Li-FUN sodium-ion battery cells.
- Figure 154. LiNa Energy battery.
- Figure 155. 3D solid-state thin-film battery technology.
- Figure 156. Lyten batteries.
- Figure 157. Cellulomix production process.
- Figure 158. Nanobase versus conventional products.
- Figure 159. Nanotech Energy battery.
- Figure 160. Hybrid battery powered electrical motorbike concept.
- Figure 161. NBD battery.
- Figure 162. Schematic illustration of three-chamber system for SWCNH production.
- Figure 163. TEM images of carbon nanobrush.
- Figure 164. EnerCerachip.
- Figure 165. Cambrian battery.
- Figure 166. Printed battery.
- Figure 167. Prieto Foam-Based 3D Battery.
- Figure 168. Printed Energy flexible battery.
- Figure 169. ProLogium solid-state battery.
- Figure 170. QingTao solid-state batteries.

Figure 171. Schematic of the quinone flow battery.

Figure 172. Saku? Corporation 3Ah Lithium Metal Solid-state Battery.

Figure 173. Salgenx S3000 seawater flow battery.

Figure 174. Samsung SDI's sixth-generation prismatic batteries.

Figure 175. SES Apollo batteries.

Figure 176. Sionic Energy battery cell.

Figure 177. Solid Power battery pouch cell.

Figure 178. Stora Enso lignin battery materials.

Figure 179. TeraWatt Technology solid-state battery

Figure 180. Zeta Energy 20 Ah cell.

Figure 181. Zoolnasm batteries.

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