

# GLOBAL SOLID STATE BATTERY MARKET FORECAST 2018-2026

#### https://marketpublishers.com/r/G4E33A4C539EN.html

Date: May 2018 Pages: 145 Price: US\$ 2,500.00 (Single User License) ID: G4E33A4C539EN

## Abstracts

#### **KEY FINDINGS**

Solid-state batteries employ solid electrolytes as well as solid electrodes and are being considered as an alternative to the Li-ion battery technology. By the end of the forecast period of 2018-2026, the Global Solid State Battery market is expected to grow with a CAGR of 66.68%.

#### MARKET INSIGHTS

The global solid-state battery market is segmented by applications, battery capacity and by battery type. The application segment of the market includes electric vehicles, consumer electronics, energy harvesting, wearable devices, medical devices, and other applications. The battery capacity can vary from less than 20 mAh, between 20 mAh & 500 mAh and 500 mAh above. Global solid-state battery market by battery type includes bulk batteries, thin-film batteries and other batteries.

#### **REGIONAL INSIGHTS**

The regional segmentation of the global solid-state battery market is done into North America, Europe, Asia-Pacific and rest of the world. The highest CAGR is expected from the European solid-state battery market over the course of the forecast period of 2018-2026. Favourable government initiatives and efforts taken by several research groups to promote the use of these batteries are driving the market growth in this region.

#### **COMPETITIVE INSIGHTS**



The global solid-state battery market enjoys the presence of eminent market players like Cymbet Corporation, Brightvolt Incorporation, Dyson, Front Edge Technology Inc, Excellatron Solid State Llc, Hitachi Zosen Corporation, Infinite Power Solutions Inc. (Acquired By Apple Inc.), Imec, Panasonic Corporation, Prieto Battery Inc, Planar Energy Devices Inc, Robert Bosch, STMicroelectronics N.V Solid Power Inc, and Toyota Industries Corporation.



# Contents

### **1. RESEARCH SCOPE**

- 1.1. STUDY GOALS
- 1.2. SCOPE OF THE MARKET STUDY
- 1.3. WHO WILL FIND THIS REPORT USEFUL?
- 1.4. STUDY AND FORECASTING YEARS

#### 2. RESEARCH METHODOLOGY

2.1. SOURCES OF DATA

- 2.1.1. SECONDARY DATA
- 2.1.2. PRIMARY DATA
- 2.2. TOP-DOWN APPROACH
- 2.3. BOTTOM-UP APPROACH
- 2.4. DATA TRIANGULATION

### **3. EXECUTIVE SUMMARY**

3.1. MARKET SUMMARY

### 3.2. KEY FINDINGS

- 3.2.1. NORTH AMERICA LEADS THE OVERALL MARKET
- 3.2.2. ELECTRIC VEHICLE SEGMENT TO GROW AT THE FASTEST RATE
- 3.2.3. THIN FILM BATTERY LEADS THE BATTERY TYPE SEGMENT

3.2.4. BULK BATTERY IS ANTICIPATED TO BE DYNAMICALLY EVOLVING BATTERY TYPE

3.2.5. GROWING NUMBER OF START-UPS

### 4. MARKET DYNAMICS

- 4.1. PARENT MARKET ANALYSIS: BATTERY MARKET
- 4.2. ETYMOLOGY OF SOLID STATE BATTERY
- 4.3. MARKET DEFINITION
- 4.4. DRIVERS

4.4.1. BENEFITS OFFERED BY SOLID-STATE BATTERIES OVER THE LIQUID CELL BATTERIES

- 4.4.2. SURGE IN THE INVESTMENTS TO AID IN MARKET DEVELOPMENT
- 4.4.3. ONGOING TREND OF PRODUCT MINIATURIZING



4.4.4. POSITIVE OUTLOOK OF ELECTRIC VEHICLE MARKET

4.5. RESTRAINTS

4.5.1. HIGH COSTS ASSOCIATED WITH SOLID STATE BATTERY

4.5.2. DIFFICULTIES IN MANUFACTURING

4.6. OPPORTUNITIES

4.6.1. RISING DEMAND FROM MILITARY & DEFENSE INDUSTRY

4.6.2. WEARABLE DEVICES TO OFFER LUCRATIVE OPPORTUNITIES

4.7. CHALLENGES

4.7.1. MANUFACTURING COST-EFFECTIVE SOLID-STATE BATTERY4.7.2. EASY AVAILABILITY OF CONVENTIONAL RECHARGEABLE BATTERIES

### 5. MARKET BY BATTERY TYPE

5.1. THIN-FILM BATTERIES

- 5.2. BULK BATTERIES
- 5.3. OTHER BATTERIES

### 6. MARKET BY BATTERY CAPACITY

6.1. LESS THAN 20 MAH

6.2. BETWEEN 20 MAH & 500 MAH

6.3. 500 MAH ABOVE

### 7. MARKET BY APPLICATION

7.1. CONSUMER ELECTRONIC7.2. ELECTRIC VEHICLE7.3. ENERGY HARVESTING7.4. MEDICAL DEVICES7.5. WEARABLE DEVICES7.6. OTHER APPLICATIONS

### 8. KEY ANALYTICS

8.1. PORTER'S FIVE FORCE MODEL8.1.1. THREAT OF NEW ENTRANTS8.1.2. THREAT OF SUBSTITUTE8.1.3. BARGAINING POWER OF SUPPLIERS8.1.4. BARGAINING POWER OF BUYERS



8.1.5. THREAT OF COMPETITIVE RIVALRY **8.2. OPPORTUNITY MATRIX** 8.3. KEY BUYING CRITERIA 8.3.1. COST 8.3.2. SAFETY 8.3.3. ENERGY DENSITY 8.3.4. LIFESPAN 8.3.5. APPLICATION 8.4. VENDOR LANDSCAPE 8.5. VALUE CHAIN ANALYSIS 8.5.1. RAW MATERIAL SUPPLIERS 8.5.2. MANUFACTURERS 8.5.3. DISTRIBUTOR/RETAILERS 8.5.4. END USERS/CONSUMERS 8.6. LEGAL. POLICY & REGULATORY FRAMEWORK **8.7. INVESTMENT ANALYSIS** 8.7.1. BY REGION 8.7.2. BY TYPE 8.7.3. BY APPLICATION

#### 9. GEOGRAPHICAL ANALYSIS

9.1. NORTH AMERICA 9.1.1. UNITED STATES 9.1.2. CANADA 9.2. EUROPE 9.2.1. UNITED KINGDOM 9.2.2. GERMANY 9.2.3. FRANCE 9.2.4. SPAIN 9.2.5. REST OF EUROPE 9.3. ASIA PACIFIC 9.3.1. CHINA 9.3.2. JAPAN 9.3.3. INDIA 9.3.4. AUSTRALIA 9.3.5. REST OF ASIA PACIFIC 9.4. REST OF WORLD 9.4.1. LATIN AMERICA



#### 9.4.2. MIDDLE EAST AND AFRICA

#### **10. COMPANY PROFILES**

- 10.1. MARKET SHARE ANALYSIS
- 10.2. KEY COMPANY ANALYSIS
- 10.2.1. EXCELLATRON SOLID STATE LLC
- 10.2.2. SOLID POWER INC.
- 10.2.3. DYSON
- 10.2.4. CYMBET CORPORATION
- 10.2.5. TOYOTA INDUSTRIES CORPORATION
- 10.3. CORPORATE STRATEGIES
- 10.3.1. PARTNERSHIP & COLLABORATION
- 10.3.2. MERGER & ACQUISITION
- 10.3.3. PRODUCT LAUNCH
- 10.3.4. OTHER KEY STRATEGIES
- 10.4. COMPANY PROFILES
  - 10.4.1. BRIGHTVOLT INCORPORATION
  - 10.4.2. CYMBET CORPORATION
  - 10.4.3. DYSON
  - 10.4.4. EXCELLATRON SOLID STATE LLC
  - 10.4.5. FRONT EDGE TECHNOLOGY INC.
  - 10.4.6. HITACHI ZOSEN CORPORATION
  - 10.4.7. IMEC
  - 10.4.8. INFINITE POWER SOLUTIONS INC. (ACQUIRED BY APPLE INC.)
  - 10.4.9. PANASONIC CORPORATION
  - 10.4.10. PLANAR ENERGY DEVICES INC.,
  - 10.4.11. PRIETO BATTERY, INC
  - 10.4.12. ROBERT BOSCH
  - 10.4.13. SOLID POWER INC.
  - 10.4.14. STMICROELECTRONICS N.V.
  - 10.4.15. TOYOTA INDUSTRIES CORPORATION



# **List Of Tables**

### LIST OF TABLES

TABLE 1: GLOBAL SOLID STATE BATTERY MARKET, BY GEOGRAPHY, 2018-2026 (IN \$ MILLION)

TABLE 2: STARTUP ORGANIZATIONS ENGAGED IN SOLID STATE BATTERY MARKET

TABLE 3: COMPARISON BETWEEN LIQUID CELL BATTERY & SOLID STATE BATTERY

TABLE 4: PERFORMANCE CHARACTERISTICS AND DIMENSIONS OF SOLID-STATE, THIN FILM BATTERY

TABLE 5: WORLDWIDE SALES OF ELECTRIC VEHICLES IN 2017 (MONTH-WISE SALES)

TABLE 6: COUNTRY-WISE STOCK TARGETS OF ELECTRIC VEHICLE TILL 2020 TABLE 7: GLOBAL SOLID STATE BATTERY MARKET, BY BATTERY TYPE, 2018-2026, (IN \$ MILLION)

TABLE 8: GLOBAL THIN-FILM BATTERIES MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 9: GLOBAL BULK BATTERIES MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 10: GLOBAL OTHER BATTERIES MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 11: GLOBAL SOLID STATE BATTERY MARKET, BY BATTERY CAPACITY, 2018-2026, (IN \$ MILLION)

TABLE 12: GLOBAL LESS THAN 20 MAH MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 13: GLOBAL BETWEEN 20 MAH & 500 MAH MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 14: GLOBAL 500 MAH ABOVE MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 15: GLOBAL SOLID STATE BATTERY MARKET, BY APPLICATION, 2018-2026, (IN \$ MILLION)

TABLE 16: GLOBAL CONSUMER ELECTRONICS MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 17: GLOBAL ELECTRIC VEHICLE MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 18: GLOBAL ENERGY HARVESTING MARKET, BY REGION, 2018-2026 (IN \$ MILLION)



TABLE 19: GLOBAL MEDICAL DEVICES MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 20: GLOBAL WEARABLE DEVICES MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 21: GLOBAL OTHER APPLICATIONS MARKET, BY REGION, 2018-2026 (IN \$ MILLION)

TABLE 22: OPPORTUNITY MATRIX FOR SOLID STATE BATTERY MARKET

TABLE 23: VENDOR LANDSCAPE OF SOLID STATE BATTERY MARKET

TABLE 24: LEGAL, POLICY & REGULATORY FRAMEWORK

TABLE 25: GLOBAL SOLID STATE BATTERY MARKET, BY GEOGRAPHY, 2018-2026, (IN \$ MILLION)

TABLE 26: NORTH AMERICA SOLID STATE BATTERY MARKET, BY COUNTRY, 2018-2026 (IN \$ MILLION)

TABLE 27: EUROPE SOLID STATE BATTERY MARKET, BY COUNTRY, 2018-2026 (IN \$ MILLION)

TABLE 28: ASIA PACIFIC SOLID STATE BATTERY MARKET, BY COUNTRY,

2018-2026 (IN \$ MILLION)

TABLE 29: REST OF WORLD SOLID STATE BATTERY MARKET, BY REGION,

2018-2026 (IN \$ MILLION)

TABLE 30: LIST OF PARTNERSHIP & COLLABORATION

TABLE 31: LIST OF MERGERS & ACQUISITIONS

TABLE 32: LIST OF PRODUCT LAUNCHES

TABLE 33: LIST OF OTHER KEY STRATEGIES



# **List Of Figures**

#### LIST OF FIGURES

FIGURE 1: GLOBAL SOLID STATE BATTERY MARKET, BY APPLICATION, 2017 & 2026 (IN %) FIGURE 2: NORTH AMERICA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 3: WORLDWIDE BATTERY MARKET, 2015-2024 (IN \$ BILLIONS) FIGURE 4: TIMELINE OF SOLID STATE BATTERY FIGURE 5: WORLDWIDE SALES OF LIGHT DUTY ELECTRIC VEHICLES, 2014-2024 (IN MILLION UNITS) FIGURE 6: GLOBAL SOLID STATE BATTERY MARKET, BY THIN-FILM BATTERIES, 2018-2026 (IN \$ MILLION) FIGURE 7: GLOBAL SOLID STATE BATTERY MARKET, BY BULK BATTERIES, 2018-2026 (IN \$ MILLION) FIGURE 8: GLOBAL SOLID STATE BATTERY MARKET, BY OTHER BATTERIES, 2018-2026 (IN \$ MILLION) FIGURE 9: GLOBAL SOLID STATE BATTERY MARKET, BY LESS THAN 20 MAH, 2018-2026 (IN \$ MILLION) FIGURE 10: GLOBAL SOLID STATE BATTERY MARKET, BY BETWEEN 20 MAH & 500 MAH, 2018-2026 (IN \$ MILLION) FIGURE 11: GLOBAL SOLID STATE BATTERY MARKET, BY 500 MAH ABOVE, 2018-2026 (IN \$ MILLION) FIGURE 12: GLOBAL SOLID STATE BATTERY MARKET, BY CONSUMER ELECTRONICS, 2018-2026 (IN \$ MILLION) FIGURE 13: GLOBAL SOLID STATE BATTERY MARKET, BY ELECTRIC VEHICLE, 2018-2026 (IN \$ MILLION) FIGURE 14: GLOBAL SOLID STATE BATTERY MARKET, BY ENERGY HARVESTING, 2018-2026 (IN \$ MILLION) FIGURE 15: GLOBAL SOLID STATE BATTERY MARKET, BY MEDICAL DEVICES, 2018-2026 (IN \$ MILLION) FIGURE 16: GLOBAL SOLID STATE BATTERY MARKET, BY WEARABLE DEVICES, 2018-2026 (IN \$ MILLION) FIGURE 17: GLOBAL SOLID STATE BATTERY MARKET, BY OTHER APPLICATIONS, 2018-2026 (IN \$ MILLION) FIGURE 18: PORTER'S FIVE FORCE MODEL OF SOLID STATE BATTERY MARKET FIGURE 19: KEY IMPACT ANALYSIS FIGURE 20: VALUE CHAIN OF SOLID STATE BATTERY MARKET



FIGURE 21: INVESTMENT ANALYSIS OF SOLID STATE BATTERY MARKET, BY REGION, IN 2017

FIGURE 22: INVESTMENT ANALYSIS OF SOLID STATE BATTERY MARKET, BY BATTERY TYPE, IN 2017

FIGURE 23: INVESTMENT ANALYSIS OF SOLID STATE BATTERY MARKET, BY APPLICATION, IN 2017

FIGURE 24: GLOBAL SOLID STATE BATTERY MARKET, REGIONAL OUTLOOK, 2017 & 2026 (IN %)

FIGURE 25: UNITED STATES SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 26: CANADA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 27: UNITED KINGDOM SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 28: GERMANY SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 29: FRANCE SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 30: SPAIN SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 31: REST OF EUROPE SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 32: CHINA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 33: JAPAN SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 34: INDIA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION) FIGURE 35: AUSTRALIA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 36: REST OF ASIA PACIFIC SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 37: LATIN AMERICA SOLID STATE BATTERY MARKET, 2018-2026 (IN \$ MILLION)

FIGURE 38: MIDDLE EAST AND AFRICA SOLID STATE BATTERY MARKET, BY COUNTRY, 2018-2026 (IN \$ MILLION)

FIGURE 39: MARKET SHARE ANALYSIS OF KEY PLAYERS IN 2017 (IN %)

### **COMPANIES MENTIONED**

- 1. BRIGHTVOLT INCORPORATION
- 2. CYMBET CORPORATION
- 3. DYSON
- 4. EXCELLATRON SOLID STATE LLC
- 5. FRONT EDGE TECHNOLOGY INC.



- 6. HITACHI ZOSEN CORPORATION
- 7. IMEC
- 8. INFINITE POWER SOLUTIONS INC. (ACQUIRED BY APPLE INC.)
- 9. PANASONIC CORPORATION
- **10. PLANAR ENERGY DEVICES INC**
- 11. PRIETO BATTERY, INC
- 12. ROBERT BOSCH
- 13. SOLID POWER INC.
- 14. STMICROELECTRONICS N.V.
- **15. TOYOTA INDUSTRIES CORPORATION**



#### I would like to order

Product name: GLOBAL SOLID STATE BATTERY MARKET FORECAST 2018-2026 Product link: <u>https://marketpublishers.com/r/G4E33A4C539EN.html</u>

> Price: US\$ 2,500.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/G4E33A4C539EN.html</u>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970