

# Sodium Sulfur Batteries Market By Application (Load Levelling, Standby Power Sources, Fluctuating Power Stabilization, Space, Others), : Global Opportunity Analysis and Industry Forecast, 2024-2033

<https://marketpublishers.com/r/S0F8DB290A01EN.html>

Date: June 2024

Pages: 250

Price: US\$ 2,601.00 (Single User License)

ID: S0F8DB290A01EN

## Abstracts

The sodium sulfur batteries market was valued at \$0.5 billion in 2023, and is projected to reach \$1.6 billion by 2033, growing at a CAGR of 12.3% from 2024 to 2033.

Sodium sulfur battery is a rechargeable, high-temperature energy storage device that uses liquid sodium and liquid sulfur as its active materials. These batteries exhibit superior charge/discharge efficiency of about 75–86%, prolonged service life, and high energy density, which make it suitable for many large-scale energy storage applications. Moreover, they are fabricated from inexpensive materials, thus offering dual benefits of reducing operational costs and improving environmental stewardship simultaneously.

The growth of the global sodium sulfur batteries market is majorly driven by surge in need for reliable and efficient energy storage solutions to stabilize electrical grids and balance supply and demand. Moreover, increase in demand for sodium sulfur batteries for industrial and commercial applications such as load leveling, peak shaving, and backup power systems notably contributes toward the growth of the market. This is attributed to the ability of sodium sulfur battery to offer large-scale energy storage solutions. The International Renewable Energy Agency states that the installed capacity of energy storage in the world will increase by 42% to 68% by 2030, which is expected to contribute to the growing adoption and popularity of sodium sulfur batteries. Furthermore, rise in awareness toward environmental degradation has boosted the adoption of sustainable practices, which, in turn, has propelled the demand for sodium sulfur batteries, as sodium and sulfur are abundant and relatively

inexpensive materials, making these batteries a potentially more sustainable and cost-effective option as compared to lithium-ion batteries, which rely on rarer and more expensive materials. In addition, rapid development of electric vehicle infrastructure and rise in adoption of electric vehicles across both developed and developing economies act as the key driving forces of the market. According to the International Energy Agency, a Paris-based autonomous intergovernmental organization, over 3 million electric vehicles were sold in the first quarter of 2024, around 25% higher as compared to 2023. This number is estimated to reach 17 million by the end of 2024, exhibiting a 20% year-on-year increase. These vehicles require high-performance batteries, which, in turn, propel the demand for sodium sulfur batteries. However, safety concerns associated with sodium sulfur batteries restrain the growth of the market. This is attributed to the fact that sodium sulfur batteries operate at high temperatures and contain molten sodium and sulfur, which increase the risk of thermal runaway if not properly managed. The market growth is further hampered by improper disposal practices of batteries that can lead to several environmental and health issues. On the contrary, implementation of supportive government initiatives for proper battery disposal is expected to offer remunerative opportunities for the expansion of the global market during the forecast period. Furthermore, ongoing research and technological advancements to improve the performance, safety, and cost-effectiveness of these batteries are anticipated to open new avenues for the expansion market.

The global sodium sulfur battery market is segmented on the basis by application and region. By application, the market is classified into load levelling, standby power sources, fluctuating power stabilization, space, and others. Region wise, the market is studied across areas such as North America, Europe, Asia-Pacific, and LAMEA.

### Key Findings

On the basis of application, the load levelling segment is expected to dominate the market. On the basis of application, the load levelling segment is expected to dominate the market by 2033.

Region wise, North America is anticipated to exhibit highest growth during the forecast period.

### Competition Analysis

NGK INSULATORS, LTD. is the only commercial manufacturer of sodium sulfur battery

worldwide.

Additional benefits you will get with this purchase are:

Quarterly Update and\* (only available with a corporate license, on listed price)

5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.

Free Upcoming Version on the Purchase of Five and Enterprise User License.

16 analyst hours of support\* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)

15% Free Customization\* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)

Free data Pack on the Five and Enterprise User License. (Excel version of the report)

Free Updated report if the report is 6-12 months old or older.

24-hour priority response\*

Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

Consumer Buying Behavior Analysis

End user preferences and pain points

Industry life cycle assessment, by region

Investment Opportunities

Product Life Cycles

Technology Trend Analysis

Regulatory Guidelines

Additional country or region analysis- market size and forecast

Expanded list for Company Profiles

Historic market data

Import Export Analysis/Data

SWOT Analysis

Key Market Segments

By Application

Load Levelling

Standby Power Sources

Fluctuating Power Stabilization

Space

Others

By Region

North America

U.S.

Canada

Mexico

Europe

Germany

UK

France

Spain

Italy

Rest of Europe

Asia-Pacific

China

India

Japan

South Korea

Australia

Rest of Asia-Pacific

LAMEA

Brazil

Saudi Arabia

South Africa

Rest of LAMEA

Key Market Players

NGK INSULATORS, LTD.

## Contents

### **CHAPTER 1: INTRODUCTION**

- 1.1. Report Description
- 1.2. Key Market Segments
- 1.3. Key Benefits
- 1.4. Research Methodology
  - 1.4.1. Primary Research
  - 1.4.2. Secondary Research
  - 1.4.3. Analyst Tools and Models

### **CHAPTER 2: EXECUTIVE SUMMARY**

- 2.1. CXO Perspective

### **CHAPTER 3: MARKET LANDSCAPE**

- 3.1. Market Definition and Scope
- 3.2. Key Findings
  - 3.2.1. Top Investment Pockets
  - 3.2.2. Top Winning Strategies
- 3.3. Porter's Five Forces Analysis
  - 3.3.1. Bargaining Power of Suppliers
  - 3.3.2. Threat of New Entrants
  - 3.3.3. Threat of Substitutes
  - 3.3.4. Competitive Rivalry
  - 3.3.5. Bargaining Power among Buyers
- 3.4. Market Dynamics
  - 3.4.1. Drivers
  - 3.4.2. Restraints
  - 3.4.3. Opportunities

### **CHAPTER 4: BIOMASS PELLETS MARKET, BY SOURCE**

- 4.1. Market Overview
  - 4.1.1 Market Size and Forecast, By Source
- 4.2. Agricultural Residue And Waste
  - 4.2.1. Key Market Trends, Growth Factors and Opportunities

- 4.2.2. Market Size and Forecast, By Region
- 4.2.3. Market Share Analysis, By Country
- 4.3. Forest And Wood Waste
  - 4.3.1. Key Market Trends, Growth Factors and Opportunities
  - 4.3.2. Market Size and Forecast, By Region
  - 4.3.3. Market Share Analysis, By Country
- 4.4. Virgin Lumber
  - 4.4.1. Key Market Trends, Growth Factors and Opportunities
  - 4.4.2. Market Size and Forecast, By Region
  - 4.4.3. Market Share Analysis, By Country
- 4.5. Food Waste
  - 4.5.1. Key Market Trends, Growth Factors and Opportunities
  - 4.5.2. Market Size and Forecast, By Region
  - 4.5.3. Market Share Analysis, By Country
- 4.6. Energy Crops
  - 4.6.1. Key Market Trends, Growth Factors and Opportunities
  - 4.6.2. Market Size and Forecast, By Region
  - 4.6.3. Market Share Analysis, By Country
- 4.7. Others
  - 4.7.1. Key Market Trends, Growth Factors and Opportunities
  - 4.7.2. Market Size and Forecast, By Region
  - 4.7.3. Market Share Analysis, By Country

## **CHAPTER 5: BIOMASS PELLETS MARKET, BY APPLICATION**

- 5.1. Market Overview
  - 5.1.1 Market Size and Forecast, By Application
- 5.2. Heating
  - 5.2.1. Key Market Trends, Growth Factors and Opportunities
  - 5.2.2. Market Size and Forecast, By Region
  - 5.2.3. Market Share Analysis, By Country
- 5.3. Power Generation
  - 5.3.1. Key Market Trends, Growth Factors and Opportunities
  - 5.3.2. Market Size and Forecast, By Region
  - 5.3.3. Market Share Analysis, By Country
- 5.4. Others
  - 5.4.1. Key Market Trends, Growth Factors and Opportunities
  - 5.4.2. Market Size and Forecast, By Region
  - 5.4.3. Market Share Analysis, By Country



## **CHAPTER 6: BIOMASS PELLETS MARKET, BY REGION**

### 6.1. Market Overview

#### 6.1.1 Market Size and Forecast, By Region

### 6.2. North America

#### 6.2.1. Key Market Trends and Opportunities

#### 6.2.2. Market Size and Forecast, By Source

#### 6.2.3. Market Size and Forecast, By Application

#### 6.2.4. Market Size and Forecast, By Country

#### 6.2.5. U.S. Biomass Pellets Market

##### 6.2.5.1. Market Size and Forecast, By Source

##### 6.2.5.2. Market Size and Forecast, By Application

#### 6.2.6. Canada Biomass Pellets Market

##### 6.2.6.1. Market Size and Forecast, By Source

##### 6.2.6.2. Market Size and Forecast, By Application

#### 6.2.7. Mexico Biomass Pellets Market

##### 6.2.7.1. Market Size and Forecast, By Source

##### 6.2.7.2. Market Size and Forecast, By Application

### 6.3. Europe

#### 6.3.1. Key Market Trends and Opportunities

#### 6.3.2. Market Size and Forecast, By Source

#### 6.3.3. Market Size and Forecast, By Application

#### 6.3.4. Market Size and Forecast, By Country

#### 6.3.5. France Biomass Pellets Market

##### 6.3.5.1. Market Size and Forecast, By Source

##### 6.3.5.2. Market Size and Forecast, By Application

#### 6.3.6. Germany Biomass Pellets Market

##### 6.3.6.1. Market Size and Forecast, By Source

##### 6.3.6.2. Market Size and Forecast, By Application

#### 6.3.7. Italy Biomass Pellets Market

##### 6.3.7.1. Market Size and Forecast, By Source

##### 6.3.7.2. Market Size and Forecast, By Application

#### 6.3.8. Spain Biomass Pellets Market

##### 6.3.8.1. Market Size and Forecast, By Source

##### 6.3.8.2. Market Size and Forecast, By Application

#### 6.3.9. UK Biomass Pellets Market

##### 6.3.9.1. Market Size and Forecast, By Source

##### 6.3.9.2. Market Size and Forecast, By Application

- 6.3.10. Russia Biomass Pellets Market
  - 6.3.10.1. Market Size and Forecast, By Source
  - 6.3.10.2. Market Size and Forecast, By Application
- 6.3.11. Rest of Europe Biomass Pellets Market
  - 6.3.11.1. Market Size and Forecast, By Source
  - 6.3.11.2. Market Size and Forecast, By Application
- 6.4. Asia-Pacific
  - 6.4.1. Key Market Trends and Opportunities
  - 6.4.2. Market Size and Forecast, By Source
  - 6.4.3. Market Size and Forecast, By Application
  - 6.4.4. Market Size and Forecast, By Country
  - 6.4.5. China Biomass Pellets Market
    - 6.4.5.1. Market Size and Forecast, By Source
    - 6.4.5.2. Market Size and Forecast, By Application
  - 6.4.6. Japan Biomass Pellets Market
    - 6.4.6.1. Market Size and Forecast, By Source
    - 6.4.6.2. Market Size and Forecast, By Application
  - 6.4.7. India Biomass Pellets Market
    - 6.4.7.1. Market Size and Forecast, By Source
    - 6.4.7.2. Market Size and Forecast, By Application
  - 6.4.8. South Korea Biomass Pellets Market
    - 6.4.8.1. Market Size and Forecast, By Source
    - 6.4.8.2. Market Size and Forecast, By Application
  - 6.4.9. Australia Biomass Pellets Market
    - 6.4.9.1. Market Size and Forecast, By Source
    - 6.4.9.2. Market Size and Forecast, By Application
  - 6.4.10. Thailand Biomass Pellets Market
    - 6.4.10.1. Market Size and Forecast, By Source
    - 6.4.10.2. Market Size and Forecast, By Application
  - 6.4.11. Malaysia Biomass Pellets Market
    - 6.4.11.1. Market Size and Forecast, By Source
    - 6.4.11.2. Market Size and Forecast, By Application
  - 6.4.12. Indonesia Biomass Pellets Market
    - 6.4.12.1. Market Size and Forecast, By Source
    - 6.4.12.2. Market Size and Forecast, By Application
  - 6.4.13. Rest of Asia-Pacific Biomass Pellets Market
    - 6.4.13.1. Market Size and Forecast, By Source
    - 6.4.13.2. Market Size and Forecast, By Application
- 6.5. LAMEA

- 6.5.1. Key Market Trends and Opportunities
- 6.5.2. Market Size and Forecast, By Source
- 6.5.3. Market Size and Forecast, By Application
- 6.5.4. Market Size and Forecast, By Country
- 6.5.5. Brazil Biomass Pellets Market
  - 6.5.5.1. Market Size and Forecast, By Source
  - 6.5.5.2. Market Size and Forecast, By Application
- 6.5.6. South Africa Biomass Pellets Market
  - 6.5.6.1. Market Size and Forecast, By Source
  - 6.5.6.2. Market Size and Forecast, By Application
- 6.5.7. Saudi Arabia Biomass Pellets Market
  - 6.5.7.1. Market Size and Forecast, By Source
  - 6.5.7.2. Market Size and Forecast, By Application
- 6.5.8. UAE Biomass Pellets Market
  - 6.5.8.1. Market Size and Forecast, By Source
  - 6.5.8.2. Market Size and Forecast, By Application
- 6.5.9. Argentina Biomass Pellets Market
  - 6.5.9.1. Market Size and Forecast, By Source
  - 6.5.9.2. Market Size and Forecast, By Application
- 6.5.10. Rest of LAMEA Biomass Pellets Market
  - 6.5.10.1. Market Size and Forecast, By Source
  - 6.5.10.2. Market Size and Forecast, By Application

## **CHAPTER 7: COMPETITIVE LANDSCAPE**

- 7.1. Introduction
- 7.2. Top Winning Strategies
- 7.3. Product Mapping of Top 10 Player
- 7.4. Competitive Dashboard
- 7.5. Competitive Heatmap
- 7.6. Top Player Positioning, 2023

## **CHAPTER 8: COMPANY PROFILES**

- 8.1. Enviva, Inc.
  - 8.1.1. Company Overview
  - 8.1.2. Key Executives
  - 8.1.3. Company Snapshot
  - 8.1.4. Operating Business Segments

- 8.1.5. Product Portfolio
- 8.1.6. Business Performance
- 8.1.7. Key Strategic Moves and Developments
- 8.2. Drax Group Plc
  - 8.2.1. Company Overview
  - 8.2.2. Key Executives
  - 8.2.3. Company Snapshot
  - 8.2.4. Operating Business Segments
  - 8.2.5. Product Portfolio
  - 8.2.6. Business Performance
  - 8.2.7. Key Strategic Moves and Developments
- 8.3. Forest Energy Corporation
  - 8.3.1. Company Overview
  - 8.3.2. Key Executives
  - 8.3.3. Company Snapshot
  - 8.3.4. Operating Business Segments
  - 8.3.5. Product Portfolio
  - 8.3.6. Business Performance
  - 8.3.7. Key Strategic Moves and Developments
- 8.4. Energex Corporation
  - 8.4.1. Company Overview
  - 8.4.2. Key Executives
  - 8.4.3. Company Snapshot
  - 8.4.4. Operating Business Segments
  - 8.4.5. Product Portfolio
  - 8.4.6. Business Performance
  - 8.4.7. Key Strategic Moves and Developments
- 8.5. Buhler AG
  - 8.5.1. Company Overview
  - 8.5.2. Key Executives
  - 8.5.3. Company Snapshot
  - 8.5.4. Operating Business Segments
  - 8.5.5. Product Portfolio
  - 8.5.6. Business Performance
  - 8.5.7. Key Strategic Moves and Developments
- 8.6. JP Green Fuels
  - 8.6.1. Company Overview
  - 8.6.2. Key Executives
  - 8.6.3. Company Snapshot

- 8.6.4. Operating Business Segments
- 8.6.5. Product Portfolio
- 8.6.6. Business Performance
- 8.6.7. Key Strategic Moves and Developments
- 8.7. Ecostan Biofuel
  - 8.7.1. Company Overview
  - 8.7.2. Key Executives
  - 8.7.3. Company Snapshot
  - 8.7.4. Operating Business Segments
  - 8.7.5. Product Portfolio
  - 8.7.6. Business Performance
  - 8.7.7. Key Strategic Moves and Developments
- 8.8. Zilkha Biomass Fuels
  - 8.8.1. Company Overview
  - 8.8.2. Key Executives
  - 8.8.3. Company Snapshot
  - 8.8.4. Operating Business Segments
  - 8.8.5. Product Portfolio
  - 8.8.6. Business Performance
  - 8.8.7. Key Strategic Moves and Developments
- 8.9. Fram Fuels
  - 8.9.1. Company Overview
  - 8.9.2. Key Executives
  - 8.9.3. Company Snapshot
  - 8.9.4. Operating Business Segments
  - 8.9.5. Product Portfolio
  - 8.9.6. Business Performance
  - 8.9.7. Key Strategic Moves and Developments
- 8.10. Sumitomo Corporation
  - 8.10.1. Company Overview
  - 8.10.2. Key Executives
  - 8.10.3. Company Snapshot
  - 8.10.4. Operating Business Segments
  - 8.10.5. Product Portfolio
  - 8.10.6. Business Performance
  - 8.10.7. Key Strategic Moves and Developments

## I would like to order

Product name: Sodium Sulfur Batteries Market By Application (Load Levelling, Standby Power Sources, Fluctuating Power Stabilization, Space, Others), : Global Opportunity Analysis and Industry Forecast, 2024-2033

Product link: <https://marketpublishers.com/r/S0F8DB290A01EN.html>

Price: US\$ 2,601.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S0F8DB290A01EN.html>

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**

Customer signature \_\_\_\_\_

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

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