

Freedonia Focus Reports
Global Collection



Global Batteries

June 2018



CLICK TO ORDER
FULL REPORT

BROCHURE

CLICK TO ORDER
FULL REPORT

www.freedoniafocusreports.com

Table of Contents

1. Highlights	3
2. Global Overview & Forecasts	5
Demand by Product	5
Alkaline	6
Zinc-Carbon	6
Lithium	7
Other Primary Batteries	7
Lead-Acid	8
Lithium-Ion	8
Other Secondary Batteries	9
Demand by Market	11
Automotive	11
Consumer	12
Industrial & Other Markets	13
3. Regional Segmentation & Forecasts	14
Regional Shipments Overview	14
Regional Demand Overview	16
North America	18
Western Europe	20
Asia/Pacific	22
Other Regions	24
Central & South America	25
Eastern Europe	25
Africa/Mideast	26
4. Industry Structure	28
Industry Characteristics	28
Market Share	29
5. About This Report	31
Scope & Method	31
Sources	32
Industry Codes	32
Resources	34

List of Tables & Figures

Figure 1 Global Battery Market Outlook, 2017 – 2022	4
Figure 2 Global Battery Demand by Product, 2007 – 2022 (US\$ mil)	5
Table 1 Global Battery Demand by Product, 2007 – 2022 (US\$ mil)	5
Figure 3 Global Battery Demand by Product, 2007 – 2022 (%)	10
Figure 4 Global Battery Demand by Market, 2007 – 2022 (US\$ mil)	11
Table 2 Global Battery Demand by Market, 2007 – 2022 (US\$ mil)	11
Figure 5 Global Battery Demand by Market, 2007 – 2022 (%)	13
Figure 6 Global Battery Shipments by Region, 2007 – 2022 (US\$ mil)	14
Table 3 Global Battery Shipments by Region, 2007 – 2022 (US\$ mil)	14
Figure 7 Global Battery Shipments by Region, 2007 – 2022 (%)	15
Figure 8 Global Battery Demand by Region, 2007 – 2022 (US\$ mil)	16
Table 4 Global Battery Demand by Region, 2007 – 2022 (US\$ mil)	16
Figure 9 Global Battery Demand by Region, 2007 – 2022 (%)	17
Figure 10 North America: Battery Demand by Product, 2007 – 2022 (US\$ mil)	18
Figure 11 North America: Battery Demand by Market, 2007 – 2022 (US\$ mil)	18
Table 5 North America: Battery Demand by Product & Market, 2007 – 2022 (US\$ mil)	19
Figure 12 Western Europe: Battery Demand by Product, 2007 – 2022 (US\$ mil)	20
Figure 13 Western Europe: Battery Demand by Market, 2007 – 2022 (US\$ mil)	20
Table 6 Western Europe: Battery Demand by Product & Market, 2007 – 2022 (US\$ mil)	21
Figure 14 Asia/Pacific: Battery Demand by Product, 2007 – 2022 (US\$ mil)	22
Figure 15 Asia/Pacific: Battery Demand by Market, 2007 – 2022 (US\$ mil)	22
Table 7 Asia/Pacific: Battery Demand by Product & Market, 2007 – 2022 (US\$ mil)	23
Figure 16 Other Regions: Battery Demand by Region, 2007 – 2022 (US\$ mil)	24
Figure 17 Other Regions: Battery Demand by Product, 2007 – 2022 (US\$ mil)	24
Table 8 Other Regions: Battery Demand by Region & Product, 2007 – 2022 (US\$ mil)	27
Figure 18 Global Battery Market Share by Company, 2017 (%)	29
Table 9 Leading Suppliers to the Global Battery Market	30
Table 10 NAICS & SIC Codes Related to Batteries	32
Table 11 NACE Codes Related to Batteries	32
Table 12 SITC Codes Related to Batteries	33
Table 13 HS Codes Related to Batteries	33

About This Report

Scope & Method

This report forecasts to 2022 global demand for batteries by product, market, and major world region in nominal US dollars at the manufacturer level. Product segments include:

- primary alkaline
- primary zinc-carbon
- primary lithium
- other primary batteries such as zinc-air, nickel oxyhydroxide, and silver-oxide batteries
- secondary lead-acid
- secondary lithium-ion
- other secondary batteries such as nickel-based, sodium-sulfur, and sodium-nickel chloride batteries

Reported markets encompass:

- automotive
- consumer
- industrial and other markets such as grid storage systems, uninterruptible power supply systems, and telecom backup systems

Major world regions include North America, Western Europe, Asia/Pacific, and all other regions.

To illustrate historical trends, world, product, market, and regional demand (including product and market segments) are provided for 2007, 2012, and 2017. Finally, global shipments are segmented by major world region and provided for 2007, 2012, 2017, and 2022.

This report quantifies trends in terms of compound annual growth rates (CAGRs), which, by definition, employ in their calculation only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the trend beginning in the base year and ending in the forecast year. Forecasts are developed via the identification and analysis of pertinent statistical relationships and other historical trends and events, as well as their expected impact over the forecast period. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year. For any given historical year, US dollar amounts are obtained from values expressed in the applicable local currency. These local currency values are converted to US dollars at the average annual exchange rate for that year. For forecast

About This Report

years, the US dollar amounts assume the same annual exchange rate as that prevailing in 2017.

Other various topics are covered in this report. A full outline of report items by page is available in the Table of Contents.

Sources

Global Batteries (FW45011) is based on a [comprehensive industry study](#) published by The Freedonia Group. Reported findings represent the synthesis and analysis of data from various primary, secondary, macroeconomic, and demographic sources including:

- firms participating in the industry, and their suppliers and customers
- government/public agencies
- national, regional, and international non-governmental organizations
- trade associations and their publications
- the business and trade press
- indicator forecasts by The Freedonia Group
- the findings of other reports and studies by The Freedonia Group

Specific sources and additional resources are listed in the Resources section of this publication for reference and to facilitate further research.

Industry Codes

Table 10 | NAICS & SIC Codes Related to Batteries

NAICS/SCIAN 2007		SIC	
North American Industry Classification System		Standard Industrial Classification	
335911	Storage Battery Manufacturing	3691	Storage Batteries
335912	Primary Battery Manufacturing	3692	Primary Batteries

Source: US Census Bureau

Table 11 | NACE Codes Related to Batteries

NACE Code	Definition
2720	Manufacture of Batteries and Accumulators

Source: European Commission

About This Report

Table 12 | SITC Codes Related to Batteries

SITC Code	Definition
7781	Batteries and Electric Accumulators

Source: United Nations Statistics Division

Table 13 | HS Codes Related to Batteries

HS Code	Definition
8506.10	Primary manganese dioxide batteries
8506.30	Primary mercuric oxide batteries
8506.40	Primary silver-oxide batteries
8506.50	Primary lithium batteries
8506.60	Primary zinc-air batteries
8506.80	Other primary batteries
8507.10	Secondary lead-acid vehicle batteries
8507.20	Other secondary lead-acid batteries
8507.30	Secondary nickel-cadmium batteries
8507.40	Secondary nickel-iron batteries
8507.50	Secondary nickel-metal hydride batteries
8507.60	Secondary lithium-ion batteries
8507.80	Other secondary batteries

Source: United Nations Statistics Division

Copyright & Licensing

The full report is protected by copyright laws of the United States of America and international treaties. The entire contents of the publication are copyrighted by The Freedonia Group.

Resources

The Freedonia Group

Global Batteries, June 2018

Freedonia Industry Studies

Power Tools in the US, June 2018

Global Hybrid & Electric Vehicles, May 2018

Recreational Vehicles in the US, April 2018

Solar Roofing in the US, April 2018

Global Power Lawn & Garden Equipment, December 2017

Global Power Tools Market, May 2017

Power Lawn & Garden Equipment Market in the US, February 2017

Battery Markets in the US, December 2016

Freedonia Focus Reports

Batteries: United States

Energy: United States

Global Hybrid & Electric Vehicles

Global Light Vehicles

Global Motorcycles

Global Power Tools

Manufacturing: United States

Motor Vehicles: United States

Power Lawn & Garden Equipment: United States

Renewable Energy: United States

Freedonia Custom Research

Trade Publications

Automotive News

Batteries and Energy Storage Technology

Batteries International

Battery Power

Energy Storage Journal

Agencies & Associations

Association of European Automotive and Industrial Battery Manufacturers

Battery Association of Japan

Battery Council International

Energy Storage Association

European Association of Advanced Rechargeable and Lithium Batteries

About This Report

Eurostat

Instituto Brasileiro de Geografia e Estatística

Instituto Nacional de Estadística y Geografía

International Monetary Fund

Ministry of Economy, Trade and Industry

Organisation for Economic Co-operation and Development

Rechargeable Battery Association

Statistics Canada

United Nations Comtrade

United States Census Bureau

United States Geological Survey

United States International Trade Commission

World Bank