

Single-Use (Primary) Batteries in the US

US Industry Study with Forecasts for 2020 & 2025

Study #3468 | November 2016 | \$4900



Zinc air batteries post fastest gains

In a continuation of historical trends, zinc air batteries will post the most rapid advances of single-use (primary) batteries, buoyed by increased purchases of hearing aids by an aging population. Primary lithium batteries will post similar advances through 2020, boosted by their higher energy density relative to other single-use types and their ability to be used in high-drain applications.

Alkaline batteries continue to dominate market

Alkaline batteries, which accounted for two-thirds of overall single-use battery demand in 2015, will continue to dominate the market, due to their affordability, widespread availability, and the large existing stock of electric and electronic products that they can power. While alkaline battery sales will improve from the declines in dollar terms during the 2010-2015 period, climbing just under one percent per year, the number of units sold will continue to fall.

Consumer applications to face strong competition

The consumer market, which in 2015 accounted for almost two-thirds of all single-use battery sales, will post the largest gains in value terms but will register the weakest gains of any major single-use battery market in percentage terms. The growing energy requirements of many consumer devices and lower lifetime cost of rechargeables will continue to promote a shift in overall battery demand toward rechargeable types at the ex-

pense of single-use cells. In addition, competition from smartphones will lead to decreased use of products such as camcorders, cameras, and MP3 players, further dampening sales gains. Nevertheless, manufacturers have developed single-use batteries that are capable of use in high-drain applications, and demand for these higher-value advanced cells will help bolster segment sales in dollar terms.

Medical equipment spending to drive growth

Healthcare applications will see the fastest gains in demand for single-use batteries of all major markets through 2020, buoyed by an acceleration in medical equipment spending growth, the rising number of adults over the age of 65, and the increasing number of battery-powered medical devices in use. Though a relatively small market, healthcare will also record the second largest gains in dollar terms, trailing only the much larger consumer market.

Study coverage

This study analyzes the US single-use (primary) battery market. It presents historical demand data (2005, 2010 and 2015) plus forecasts (2020 and 2025) by product (e.g., alkaline, primary lithium, zinc air, silver oxide, zinc-carbon/zinc-chloride, etc.) and market (e.g., entertainment, toys and games, lighting, photography, industrial, government, other). The study also considers key market environment factors, assesses the industry structure and evaluates company market share.

CONTENTS SUMMARY

Executive Summary

Market Environment

Technology

- Basic Electrical Properties
- Battery Construction & Operation
- Primary Battery Chemistries
 - Alkaline
 - Zinc-Carbon/Zinc-Chloride
 - Lithium
 - Zinc Air
 - Other

Overview

- Primary & Secondary Batteries
- Primary & Secondary Battery Supply & Demand
- Primary Battery Shipments
- US Foreign Trade in Primary Batteries
 - Imports
 - Exports
- World Primary Battery Outlook
- Pricing Trends

Products

- Supply & Demand
- Alkaline Batteries
- Primary Lithium
- Other Primary Batteries
 - Zinc-Air
 - Zinc-Carbon/Zinc-Chloride
 - Silver Oxide
 - Specialty & All Other Primary Batteries

Markets

- Consumer Market
 - Entertainment
 - Lighting
 - Toys & Games
 - Photography
 - Other Consumer Markets

- Industrial Market
- Government Market
- Other Primary Battery Markets
- Industry Structure**
 - Industry Composition
 - Market Share
 - Research & Product Development
 - Manufacturing
 - Marketing
 - Cooperative Agreements
 - Distribution
 - Financial Requirements
 - Mergers, Acquisitions & Industry Restructuring

TABLES & CHARTS

Executive Summary

- 1 Summary Table
- Overview**
 - 1 Primary & Secondary Battery Supply & Demand
 - 2 Primary Battery Shipments by Type
 - 3 Primary Battery Foreign Trade
- Cht US Primary Battery Imports by Source, 2015
- Cht US Primary Battery Exports by Destination, 2015
- 4 World Primary Battery Demand
- Cht World Primary Battery Demand by Region, 2015
- 5 Price Deflators for Primary Batteries
- Cht Selected Primary Battery Price Deflators, 2005-2025

Products

- 1 Primary Battery Supply & Demand
- Cht Primary Battery Demand by Chemistry, 2015

- Cht Primary Battery Demand: Projected 2015-2020 Annual Rate of Growth by Chemistry
- 2 Alkaline Battery Supply & Demand
- 3 Primary Lithium Supply & Demand
- 4 Other Primary Battery Supply & Demand
- 5 Zinc Air Battery Demand
- 6 Zinc-Carbon/Zinc-Chloride Battery Demand
- 7 Silver Oxide Battery Demand
- 8 Specialty & All Other Primary Battery Demand

Markets

- 1 Primary Battery Demand by Market
- Cht Primary Battery Demand by Market, 2015
- Cht Primary Battery Demand: Projected 2015-2020 Annual Rate of Growth by Market
- 2 Consumer Primary Battery Demand
- Cht Consumer Primary Battery Demand by Application, 2015
- Cht Consumer Primary Battery Demand: Projected 2015-2020 Annual Rate of Growth by Application
- 3 Industrial Primary Battery Demand
- 4 Government Primary Battery Demand
- 5 Other Primary Battery Demand

Industry Structure

- 1 US Primary Battery Sales by Manufacturer, 2015
- Cht US Primary Battery Market Share, 2015
- 2 Selected Cooperative Agreements
- 3 Selected Acquisitions & Divestitures

PRODUCTS

Alkaline Batteries

Sales of alkaline batteries are expected to grow through 2020 to \$1.5 billion, a slight decline in real terms due to higher product prices. Alkaline battery demand is expected to grow at a higher energy density over the longer term as the alkaline battery market shifts to future sales growth of zinc-chloride as the choice due to the former's higher energy density, superior performance, low internal resistance, and longer shelf-life. As a result, there is strong competition among alkaline battery manufacturers, which will temper future dollar gains. In addition, technological advances that improve alkaline battery life or protect power will further limit sales.

Some offsetting support will be provided by the ongoing need for single-use batteries in consumer applications such as in toys and lighting, as well as lighting. Likewise, increases in manufacturing output and government spending will promote unit sales of alkaline batteries in these markets. In low-drain devices like smoke detectors, alkaline batteries will work much longer than rechargeable cells before needing to be changed, making the former a practical source of power in these applications. In addition, the Federal Communications Commission's August 2015 ruling that voice over internet protocol (VoIP) telephone service providers must offer consumers the option to buy backup power sources for use during electric outages will promote alkaline sales to a degree. For example, in response to this ruling, Verizon is offering a PowerServe device fueled by 12 D-cell batteries.

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TABLE VI-3

INDUSTRIAL PRIMARY BATTERY DEMAND (million dollars)

Item	2005	2010	2015	2020	2025
Manufacturers' Shipments (bil \$) \$ batteries/mil \$ mfg					
Industrial Single-Use Battery Demand					
By Application:					
OEM					
Replacement/MRO					
By Chemistry:					
Alkaline					
Primary Lithium					
Zinc-Carbon/Zinc-Chloride					
Other Single-Use					
% industrial Single-Use Battery Demand					

Source: The Freedonia Group

TABLE IV-3

PRIMARY BATTERY FOREIGN TRADE (million dollars)

Item	2005	2010	2015	2020	2025
Single-Use Battery Shipments					
- exports					
+ imports					
Single-Use Battery Demand					
Exports as a Percent of Shipments					
Imports as a Percent of Demand					

Source: The Freedonia Group

This study can help you:

- Determine your market & sales potential
- Learn more about industry competitors
- Assess new products & technologies
- Identify firms to merge with or acquire
- Complement your research & planning
- Gather data for presentations
- Confirm your own internal data
- Make better business decisions

Related Studies

Circuit Breakers & Fuses

The US market for circuit breakers and fuses is forecast to advance by 4.3 percent per year through 2020 to \$5.3 billion. Sales will be fueled by ongoing efforts to expand and upgrade the US electrical grid. The electric power market is and will remain the largest end user, though the residential market will offer the best gains. This study presents historical demand data plus forecasts for 2020 and 2025 by product and market. The study also analyzes key market environment factors, assesses the industry structure, and evaluates company market share.

#3471..... September 2016..... \$5100

Rechargeable (Secondary) Batteries

US demand for rechargeable batteries is forecast to expand 5.3 percent annually through 2020 to \$14.2 billion. Gains will be fueled by continued strong growth in hybrid and electric vehicle production. Rechargeable lithium batteries will see the fastest overall demand gains through 2020 with product sales expanding at double-digit rates. This study presents forecasts (2020, 2025) for demand by product and market. The study also reviews key market environment factors, assesses the industry structure and evaluates company market share.

#3458..... September 2016..... \$4900

World Battery Materials

Global demand for battery materials will rise 8.3 percent annually to \$46.8 billion in 2019. Chemicals will be the fastest growing materials, led by lithium and nickel used in Li-Ion and Ni-MH batteries. China will remain the fastest growing market. This study analyzes the \$31.4 billion world market for battery materials, with forecasts for 2019 and 2024 by product and application for six world regions and 16 major countries. Total demand is given for an additional six countries. The study also evaluates company market share and profiles industry participants.

#3350..... December 2015 \$6200

World Batteries

Global battery demand is forecast to rise 7.8 percent per year to \$120 billion in 2019. China will remain the largest national market as well as one of the fastest growing. Secondary batteries will outpace primary types. Rechargeable lithium-ion batteries will be the fastest growing products. This study analyzes the \$83 billion world battery industry, with forecasts for 2019 and 2024 by type and market for six world regions and 16 countries. The study also reviews battery technology, evaluates company market share and profiles industry participants.

#3309..... July 2015 \$6700

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Freedonia's methods

- Establishing consistent economic & market forecasts
- Using input/output ratios, flow charts & other economic methods to quantify data
- Employing in-house analysts who meet stringent quality standards
- Interviewing key industry participants, experts & end users
- Researching a proprietary database that includes trade publications, government reports & corporate literature

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