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Industry Studies ■ Custom Research ■ Focus Reports

NEW US industry forecasts for 2012 & 2017

Batteries

Study # 2449 | January 2009 | $4800

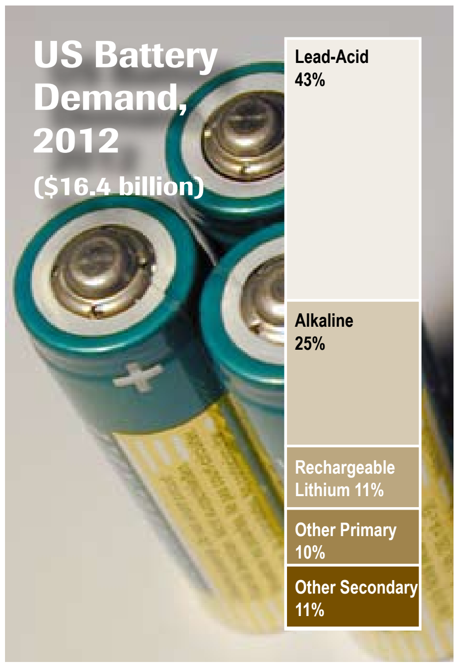
US demand to reach $16.4 billion in 2012

US demand for primary and secondary batteries will increase 2.0 percent annually to $16.4 billion in 2012. Increases will be supported by the rising use of battery-powered products such as digital cameras, portable music players and laptop computers. In addition, the expected recovery in motor vehicle production will support demand for batteries. Market gains will also be assisted by an ongoing shift in the product mix toward more expensive batteries (e.g., rechargeable lithium cells) that deliver improved performance for high-drain electronic devices. However, falling prices for a number of batteries off of elevated 2007 levels and generally weaker economic growth will prevent even more rapid gains.

Shipments of batteries from US facilities are expected to increase 1.5 percent annually to $13.7 billion in 2012. Gains will be bolstered by ongoing efforts to improve the country's advanced battery chemistry manufacturing capabilities, leading to higher shipments of Li-Ion and other batteries. Nevertheless, imports will continue to account for a significant portion of battery demand, reaching 27 percent in 2012.

Primary batteries demand bolstered by high-performance chemistries

Sales of primary batteries are expected to rise faster than secondary types through 2012, bolstered by increasing usage of primary lithium and other high-performance battery chemistries in high-drain applications such as digital cameras. Although alkaline batteries will remain the dominant primary battery type, accounting for 70 percent of sales in 2012, other types such as primary lithium and zinc-air will grow faster. Consumer applications will continue to use the largest share of primary batteries, accounting for more than two-thirds of the market in 2012.



Rechargeable lithium batteries to be fastest growing chemistry

Sales of secondary (or rechargeable) batteries will increase 1.5 percent annually to $10.6 billion in 2012. Gains will be supported by supported by a shift in the product mix toward advanced electronic devices such as MP3 players and multifunction cell phones, most of which require lightweight power sources with a high energy density. The expanding hybrid motor vehicle market will also bolster demand for advanced rechargeable lithium and nickel-metal hydride (Ni-MH) batteries. However, falling prices for many metals used in secondary batteries and lower production costs for more advanced rechargeable chemistries as lithium ion and Ni-MH will restrict gains in value terms.

Lead-acid batteries will continue to dominate the secondary battery market, accounting for more than two-thirds of sales in 2012. However, rechargeable lithium chemistries will see the fastest increases among all secondary chemistries through 2012, with demand increasing 6.0 percent annually to $1.9 billion. Growth will be driven by both rising use of portable devices powered by lithium ion and lithium polymer batteries and by technological advances which improve the performance attributes of these advanced batteries.

Study coverage

This new Freedonia industry study, ***Batteries***, is priced at $4800. It presents historical demand data (1997, 2002 and 2007) and forecasts for 2012 and 2017 by technology (e.g., portable devices, hybrid-electric vehicles, fuel cells, smart batteries), product (e.g., lead-acid, alkaline, lithium, zinc-air, nickel-metal hydride) and market (e.g., motor vehicle, consumer, industrial, portable devices, power tools). The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry competitors.

Contents/Tables/Charts
historical data (1997, 2002, 2007)
plus forecasts for 2012 and 2017

NEW US Industry Study with Forecasts for 2012 & 2017
Batteries

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Non-SLI
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Lithium Polymer
Nickel-Metal Hydride Batteries
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Hybrid-Electric Vehicles
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Portable Computers
Personal Communication Devices
Power Tools
Other Portable Devices
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Other Motive Power
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SECONDARY BATTERY MARKETS

TABLE VIII-6

PORTABLE DEVICES SECONDARY BATTERY MARKET
(million dollars)

Item	1997	2002	2007	2012	2017
Consumer Durables Expend (bil $)					
$ batteries/000$ expenditures					
Portable Devices Battery Demand					
By Application:					
Portable Computers					
Personal Communications Devices					
Power Tools					
Other					
By Chemistry:					
Lead-Acid					
Rechargeable Lithium					
Nickel-Metal Hydride					
Nickel-Cadmium					
Other Secondary					
% portable devices					
Secondary Battery Demand					

SAMPLE TABLE
Historical data for 1997, 2002 and 2007 as well as Freedonia forecasts to 2012 and 2017; data illustrated with the aid of more than 100 tables and charts

Portable Devices Market

Demand for secondary batteries e... tronic devices is forecast to increase by ... billion, a deceleration from the 2002 to 2007 period. Growth will be constrained somewhat by intense price competition and new generations of primary battery designs that provide effective alternatives to rechargeables in certain applications. In addition, rapidly falling production costs of rechargeable lithium and Ni-MH batteries will also hold back value gains.

However, growth will be supported by expanding use of various high-drain products like digital cameras and advanced cellular phones outfitted with

PRIMAR...

Primary...

De... lion in 20... will be h... MP3 players and digital cameras, which operate more effectively when powered by primary lithium cells and other batteries intended for high-drain applications. In addition, strong growth in the medical market, driven by rising numbers of battery-containing implantable cardiac devices will support demand for lithium batteries.

Demand will also be fueled by the introduction of ancillary power devices that include lithium batteries in the package for enhanced convenience. For instance, Energizer offers the ENERGI TO GO line of portable chargers for cell phones, and audio and gaming devices which are powered by the company's ENERGIZER ULTIMATE lithium batteries. The availability of primary lithium batteries in additional size formats will also help boost demand.

...estrained somewhat by competi-ti... ...icularly "superpremium" alkaline ce... ...n applications and secondary ba... ...rice of primary lithium batteries in...

SAMPLE PAGE
Explanations that support each table's data and forecasts

...e expected to post annual gains of... ...more rapidly than demand and increasing the modest US trade surplus in primary lithium batteries over the period. Shipment increases will be supported by a shift in the product mix toward high-drain electronic devices like digital cameras and a growing number of lithium battery powered medical devices in use . Although many such products -- including cell phones and music players -- are predominantly powered by secondary lithium or nickel-metal hydride batteries, other devices -- such as certain MP3 players, portable CD players and many digital cameras -- can be powered

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Diesel Engines

The US market for diesel engines is analyzed in this study. It presents historical demand data (1998, 2003, 2008) and forecasts to 2013 and 2018 by type (e.g., motor vehicle, non-motor vehicle), material and market (e.g., trucks, buses, recreational vehicles, passenger cars, construction equipment, agricultural equipment, marine equipment, electric power generation, mining machinery, lawn and garden equipment). The study also considers market environment factors, evaluates market share and profiles industry players.
#2464.................. 02/2009.................... $4700

World Diesel Engines

This study analyzes the global diesel engine industry. It presents historical demand data for 1997, 2002 and 2007 and forecasts for 2007 and 2012 by diesel engine application (e.g., motor vehicles, off-highway, stationary), world regional market (e.g., North America, Western Europe, Asia/Pacific) and major national market. The study also considers market environment factors, reviews emission control technology, details industry composition, evaluates company market share and profiles industry competitors.
#2441.................. 02/2009.................... $5700

Wind Turbine Systems & Components

This study analyzes the US wind turbine component and system industry. It presents historical demand data for 2002 and 2007, and forecasts for 2012 and 2017 by product (horizontal systems, vertical systems, and nacelles, rotors and blades, towers and other components), application (utilities and on- and offgrid small wind), and US regional market. The study also considers market environment factors, outlines government incentives and regulations, evaluates company market share and profiles industry competitors.
#2439.................. 01/2009.................... $4600

World Batteries

Global battery demand will increase 4.8% annually through 2012. China will record the largest gains and surpass the US as the largest market. Consumer battery demand will outperform the market as a whole. Non-lead-acid secondary battery market gains will outpace demand for primary and lead-acid secondary batteries. This study analyzes the $71 billion world battery industry, with forecasts for 2012 and 2017 by product, market, world region and for 32 countries. It also evaluates market share and profiles industry players.
#2375.................. 10/2008.................... $6100

Fuel Cells

US commercial fuel cell demand will expand nearly sixfold through 2012 to $975 million. Electric power generation will remain the largest market and grow 41% annually, bolstered by ongoing interest in less energy pollution and foreign dependency. Portable electronics will be the fastest growing market and benefit direct methanol fuel cells. This study analyzes the US fuel cell industry, with forecasts for 2012 and 2017 by product and market. It also reviews technology, evaluates market share and profiles major players.
#2328.................. 04/2008.................... $4500

Battery & Fuel Cell Materials

US demand for battery and fuel cell materials will rise 4.4% per year through 2011. Growth will be driven by rising production of high-performance batteries (e.g., lithium, Ni-MH) and a nearly fivefold jump in fuel cell demand. Metals will stay the leading material while polymers and carbon/graphite lead gains. This study analyzes the US battery and fuel cell material industry, with forecasts for 2011 and 2016 by type, function and application. It also details company market share and profiles major players.
#2244.................. 10/2007.................... $4400

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