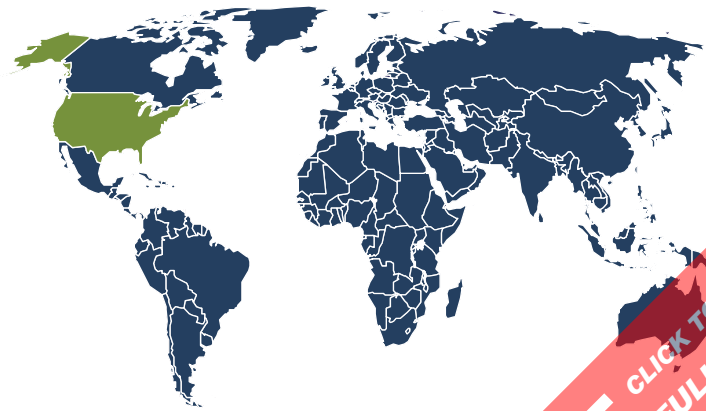




Freedonia Focus Reports
US Collection

Silicon: United States

November 2015



Highlights

Market Environment

Historical Trends | Key Economic Indicators | Trade | Global Overview | Pricing Trends

Segmentation and Forecasts

Products | Applications

Industry Structure

Industry Composition and Characteristics | Additional Companies Cited

Resources

www.freedoniafocus.com

CLICK TO ORDER
FULL REPORT
BROCHURE
CLICK TO ORDER
FULL REPORT

ABOUT THIS REPORT

Scope & Method

This report forecasts US silicon demand and production in metric tons of silicon content to 2019. Total demand is segmented by product in terms of:

- silicon metal
- ferrosilicon
- other silicons such as magnesium-ferrosilicon, silicon carbide, and silvery pig iron.

Semiconductor and solar grades of silicon are excluded from the scope of this report. Further, silicon carbide for abrasive or refractory uses is omitted.

Total demand is also segmented by application as follows:

- steel
- cast irons
- aluminum and other alloys
- silicones and other applications.

To illustrate historical trends, total demand, total production, and the various demand segments are provided in annual series from 2004 to 2014.

This report quantifies trends in various measures of growth and volatility. Growth (or decline) expressed as an average annual growth rate (AAGR) is the least squares growth rate, which takes into account all available datapoints over a period. The volatility of datapoints around a least squares growth trend over time is expressed via the coefficient of determination, or r^2 . The most stable data series relative to the trend carries an r^2 value of 1.0; the most volatile – 0.0. Growth calculated as a compound annual growth rate (CAGR) employs, by definition, only the first and last datapoints over a period. The CAGR is used to describe forecast growth, defined as the expected trend beginning in the base year and ending in the forecast year. Readers are encouraged to consider historical volatility when assessing particular annual values along the forecast trend, including in the forecast year.

Key macroeconomic indicators are also provided with quantified trends. Other various topics, including profiles of pertinent leading suppliers, are covered in this report. A full outline of report items by page is available in the [Table of Contents](#).

Sources

Silicon: United States (FF65024) represents 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

The topic of this report is related to the following industry codes:

NAICS/SCIAN 2007 North American Industry Classification System		SIC Standard Industry Codes	
327992	Ground or Treated Mineral and Earth Manufacturing	3295	Minerals and Earths, Ground or Otherwise Treated
331112	Electrometallurgical Ferroalloy Product Manufacturing	3313	Electrometallurgical Products, Except Steel

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, Inc.

Table of Contents

Section	Page
About This Report	i
Highlights.....	1
Market Environment	2
Historical Trends	2
Chart 1 US Silicon Demand Trends, 2004-2014 ('000 m tons)	2
Chart 2 US Silicon Production Trends, 2004-2014 ('000 m tons)	3
Key Economic Indicators	4
Table 1 Key Indicators for US Silicon Supply & Demand; 2004, 2014, 2019 (2009US\$ bil)	4
Trade.....	5
Chart 3 US Silicon Trade, 2004-2014 ('000 m tons)	5
Global Overview.....	7
Chart 4 Global Silicon Production, 2004-2014 ('000 m tons)	7
Pricing Trends.....	8
Chart 5 US Silicon Pricing Trends, 2004-2014 (US\$/m ton)	8
Segmentation & Forecasts.....	10
Products	10
Chart 6 US Silicon Demand by Product; 2004-2014, 2019 ('000 m tons)	10
Chart 7 US Silicon Production; 2004-2014, 2019 ('000 m tons).....	11
Silicon Metal.	11
Ferrosilicon.	12
Other Silicons.	13
Chart 8 US Silicon Demand by Product Share; 2004-2014, 2019 (%).....	14
Applications.....	15
Chart 9 US Silicon Demand by Application; 2004-2014, 2019 ('000 m tons).....	15
Steel.....	15
Cast Irons.	16
Aluminum & Other Alloys.....	17
Silicones & Other Applications.	18
Chart 10 US Silicon Demand by Application Share; 2004-2014, 2019 (%)	19
Industry Structure	20
Industry Composition & Characteristics	20
Company Profile 1 Dow Corning Corporation	21
Company Profile 2 Georgian American Alloys Inc	22
Company Profile 3 Globe Specialty Metals Inc	23
Additional Companies Cited.....	24
Resources	25

To return here, click on any Freedonia logo or the Table of Contents link in report footers.
 PDF bookmarks are also available for navigation.

RESOURCES

The Freedonia Group, Inc

www.freedoniagroup.com

Related Industry Studies

3277 World Silicones, May 2015

[see study contents](#)

3237 World Industrial Silica Sand, December 2014

[see study contents](#)

3178 World Specialty Silicas, July 2014

[see study contents](#)

3138 Silicones, March 2014

[see study contents](#)

Related Focus Reports

Aluminum: United States

[see report contents](#)

Industrial Silica Sand: United States

[see report contents](#)

Silicones: United States

[see report contents](#)

Specialty Silicas: United States

[see report contents](#)

Steel Mill Products: United States

[see report contents](#)

World Silicones

[see report contents](#)

Freedonia Custom Research, Inc

[see capabilities](#)

Trade Publications

American Metal Market

www.amm.com

Chemical & Engineering News

<http://cen.acs.org>

ICIS Chemical Business

www.icis.com

IHS Chemical Week

www.chemweek.com

Industrial Minerals

www.indmin.com

Modern Metals

www.modernmetals.com

Plastics News

www.plasticsnews.com

Rubber & Plastics News

www.rubbernews.com

Agencies & Associations

The Aluminum Association

www.aluminum.org

American Chemistry Council

www.americanchemistry.com

American Iron and Steel Institute

www.steel.org

Association for Iron & Steel Technology

www.aist.org

Occupational Safety & Health Administration

www.osha.gov

SPI: The Plastics Industry Trade Association

www.plasticsindustry.org

Steel Manufacturers Association

www.steelnet.org

United States Census Bureau

www.census.gov

United States Geological Survey

www.usgs.gov

United State International Trade Commission

www.usitc.gov

Environmental Impact. Please consider the environment before printing this report. Freedonia Focus Report collections feature environmentally friendly products distributed entirely via electronic channels.