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# World Geosynthetics

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Industry Study with Forecasts for **2017 & 2022**

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Study #3108 | December 2013 | \$6100 | 462 pages

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*Gains will result from a rebound in nonbuilding construction, increased concerns about environmental protection and greater awareness of the advantages of geosynthetics.*

## World demand to rise 8.9% annually through 2017

Global demand for geosynthetics is expected to rise 8.9 percent per year to 5.2 billion square meters in 2017. Gains will result from a much improved environment for the construction of structures and roads. Additional growth will be driven by increased market penetration, stimulated by growing concerns regarding environmental protection and greater awareness of the performance advantages of these products in a variety of applications. For example, the implementation of proposed federal rules on coal ash disposal in the US has the potential to create rapid gains for geosynthetics to line and cap coal ash containment sites. Concerns about the leaching of hazardous material into soil and groundwater at mining and oil and gas sites, as well as interest in limiting erosion and reducing roadway maintenance, will also promote geosynthetics use throughout the world.

## Asia/Pacific region to remain fastest growing market

In 2012, the Asia/Pacific region surpassed North America to become the largest regional market for geosynthetics, with 35 percent of the global total. Advances in the region will be propelled by the rapidly developing Chinese market, which will account for roughly three-quarters of the regional sales in 2017 and over half of additional global volume demand through 2017. China's vast stretches of available land, its

## World Geosynthetics Demand (5.2 billion square meters, 2017)



Asia/Pacific

North America

Western Europe

Other Regions

ongoing development of large-scale infrastructure projects, and its need for erosion control will provide opportunities for geosynthetics going forward. India is also expected to post double-digit annual growth through 2017, although from a much smaller base. In many of the least developed countries, however, growth for geosynthetics will be more limited due to inadequate government funding, a lack of regulations that require their use, and the presence of lower-cost alternatives such as natural fiber geotextiles and aggregates.

In 2012, North America was the second largest regional geosynthetics market, accounting for 28 percent of global sales. The US is the world's largest

national market, alone accounting for 23 percent of global demand in 2012. The position of the US market reflects the immense size and advanced nature of the country's economy. In addition to its a huge construction sector and extensive transportation infrastructure, the US has relatively strict environmental control regulations regarding containment of waste and chemicals; all of these will continue to provide significant opportunities for geosynthetics through 2017.

The construction market accounted for approximately one-third of global geosynthetics sales in 2012. In addition to being the largest, this market is projected to register the fastest gains overall through 2017.

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## Sample Text, Table & Chart

### ASIA/PACIFIC

#### India: Demand by Type

India's construction and transportation infrastructure markets are similarly sized in 2012, accounting for a combined 58 percent of the total market. Of these, the construction market was slightly larger than the transportation infrastructure market in the 2007-2012 period. Going forward, the construction market will maintain its position as the larger market through 2017. A continued increase in construction activity is driving use of geosynthetics in the construction market. The use of geosynthetics in the construction market is driven by the need for soil erosion control. The country faces a high level of soil erosion during the monsoon season. Therefore, geosynthetics are increasingly used for soil erosion control and reinforce soil along hillsides, embankments, and coastal areas, as well as building foundations.

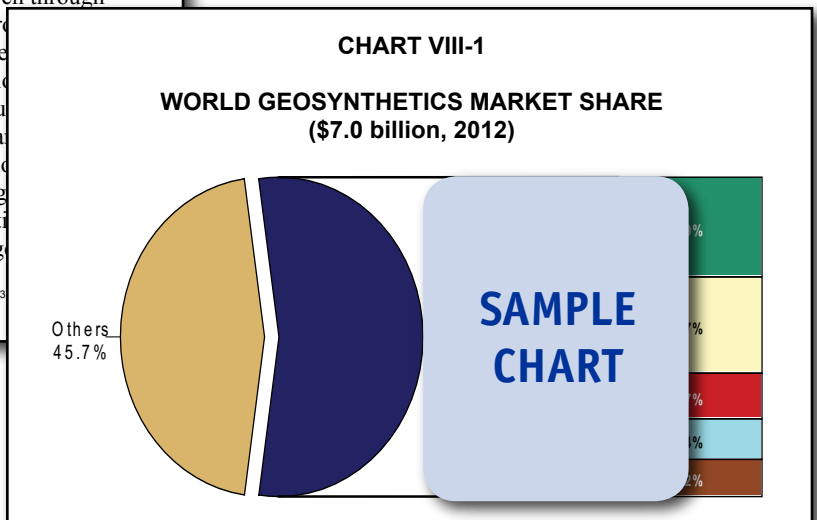
India is in the process of increasing the length of paved roads throughout the country as a way of better connecting rural areas and to enable a more efficient transport of goods to market. As such, the country is expected to add nearly 350,000 kilometers of new paved roads by 2017, some of which will be funded by the World Bank. Since 2005, the World Bank has made geotextile use mandatory in the infrastructure projects it funds. Geosynthetics are considered an effective way to reduce erosion and extend the useful life of roadways, even through heavy monsoon seasons. Among the institutions in India promoting increased use of geosynthetics in road construction is the Central Road Research Institute (CRRI). The CRRI helps to develop national standards and specifications, and codes of practices are also issued by agencies such as the Indian Roads Congress, the Bureau of Indian Standards, the Ministry of Road Transport and Highways, and the National Road Development Agency in areas such as materials, design, and engineering for road and transportation construction. The CRRI also has a geotechnical engineering division that is testing geosynthetics for use in road construction.

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**TABLE VI-9**  
**INDIA: MARKET ENVIRONMENT FOR GEOSYNTHETICS**  
(billion 2011 dollars)

Item	2002	2007	2012	2017	2022
Resident Population (mil persons)	1,022	1,106	1,193	1,281	1,370
\$ GDP/capita	1,000	1,500	2,000	2,500	3,000
Gross Domestic Product	1,022	1,658	2,386	3,205	4,110
Gross Fixed Investment	100	150	200	250	300
Manufacturing Value Added	100	150	200	250	300
Construction Expenditures	100	150	200	250	300
Nonbuilding Construction Expenditure	100	150	200	250	300
Agriculture Value Added	100	150	200	250	300
Paved Roads (000 kilometers)	100	150	200	250	300
sq m geosynthetics/mil \$ construction	100	150	200	250	300
Geosynthetic Demand (mil square meters)	100	150	200	250	300



## Sample Profile, Table & Forecast

**TABLE VI-10**  
**INDIA: GEOSYNTHETICS DEMAND BY TYPE**  
 (million square meters)

Item	2002	2007	2012	2017	2022
Nonbldg Construction Expend (bil 2011\$) sq m geosynthetic/000\$ construction					
Geosynthetics Demand					
Geotextiles					
Geomembranes					
Geogrids					
Geonets					
Other					
% India					
Asia/Pacific Geosynthetics Demand	497	725	1200	2200	3500

**SAMPLE  
TABLE**

### COMPANY PROFILES

**Ashimori Industry Company Limited**  
 10-18 Kita-Horie Nishi-Ku, 3-chome  
 Osaka 550  
 Japan  
 81-6-652  
 http://ww

**SAMPLE  
PROFILE**

Sales: \$  
 Employ  
 Key Pro

Ashimori Industry is primarily engaged in the production and supply of disaster prevention textile products and industrial textile products. The Company is also involved in real estate leasing activities. Ashimori Industry conducts operations through three divisions: Automotive Safety Systems, Products, and PALTEM.

The Company is involved in the world geosynthetics industry via the PALTEM division, which operates as Paltem Company (Japan). Paltem manufactures and markets textiles, including geosynthetics and flexible industrial pipelines. Geosynthetics products are made via Paltem's GEO division (Japan). These items include geocomposites and sand filters. Geocomposites are marketed via the PALACE SHEET product line for soil reinforcement applications. These materials comprise polyester fabric jackets sewn into a lattice pattern to form sheets. The polyester jackets are filled with a liquid hardening agent that resists bending and compression. Furthermore, PALACE SHEET geocomposites feature intersecting points used to connect the sheets, thus reducing structural weakness. Sand filters made by the GEO division are sold under the ROGEO brand name. These filters comprise polyester and stainless steel mesh bags filled with sand. ROGEO sand filters are capable of filtering up to 100 liters of water from sand per minute.

### STUDY COVERAGE

This Freedonia study, **World Geosynthetics**, offers historical data (2002, 2007, 2012) plus forecasts for 2017 and 2022 by type, market, world region, and for 19 countries. The study also considers market environment factors, details company market share and profiles 28 players in the world geosynthetics industry.





**OTHER STUDIES**

**World Cement & Concrete Additives**

This study analyzes the world cement and concrete additive industry. It presents historical demand data (2002, 2007, 2012) and forecasts for 2017 and 2022 by type (e.g., water reducers, set controllers, coloring agents, air entrainers, blast furnace slag, gypsum, fly ash, silica fume, fibers), market (e.g., buildings, highways and streets), world region and major country. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#3118..... March 2014..... \$6100

**Geosynthetics**

US geosynthetics demand is forecast to increase 6.6 percent per year to 1.3 billion square yards in 2017, spurred by improved spending on the construction of structures and roads. Geotextiles will remain the largest segment, while more application-specific products (e.g., geogrids, geonets, geosynthetic clay liners, geofoams) will grow the fastest. This study analyzes the 915 million square yard US geosynthetics industry, with forecasts for 2017 and 2022 by product, market and region. The study also evaluates company market share and profiles industry players.

#3003..... March 2013..... \$5100

**World Construction Aggregates**

World sales of construction aggregates will rise 5.8 percent annually to 53.2 billion metric tons in 2017. The Asia/Pacific region will remain the dominant market and grow the fastest. Crushed stone and other aggregates will offer the best prospects. Hydraulic cement will continue to be a key application. This study analyzes the 40.2 billion metric ton world construction aggregates industry, with forecasts for 2017 and 2022 by type, market, application, world region, and for 28 countries. The study also evaluates company market share and profiles industry players.

#3078..... December 2013..... \$6100

**World Cement**

World sales for cement are forecast to expand more than five percent annually through 2017 to over 4.7 billion metric tons. Demand will rebound sharply in North America and Western Europe, while growth in China will decelerate yet still achieve impressive gains. Blended cement will account for over three-fourths of all new demand. This study analyzes the 3.7 billion metric ton world cement industry, with forecasts for 2017 and 2022 by type, market, world region, and for 45 countries. The study also evaluates company market share and profiles industry participants.

#3096..... October 2013..... \$6400

**World Nonwovens**

Global demand for nonwovens is forecast to rise 5.4 percent annually to 9.1 billion metric tons in 2017. Spunmelt nonwovens will lead gains based on growth in key markets such as disposable infant diapers in developing countries, and adult incontinence products in developed areas. This study analyzes the seven billion metric ton world nonwovens industry, with forecasts for 2017 and 2022 by web formation process, application, market, world region, and for 19 countries. The study also evaluates company market share and profiles industry players.

#3077..... October 2013..... \$6100

**About The Freedonia Group**

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