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World Geosynthetics

Industry Study with Forecasts for **2019 & 2024**

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INDUSTRY STRUCTURE

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Growth will be driven by ongoing infrastructure projects and need for erosion control in China, and by more stringent construction codes and regulatory standards for waste management in developed countries.

World demand to rise 6.1% annually through 2019

Global demand for geosynthetics is forecast to rise 6.1 percent per year through 2019 to 6.5 billion square meters. Growth will be driven by China, which is expected to account for 60 percent of additional global demand generated between 2014 and 2019 primarily due to its ongoing development of large-scale infrastructure projects and need for erosion control. Further bolstering world demand will be growing concerns regarding environmental protection and greater awareness of the performance advantages of geosynthetics in a variety of applications. Geosynthetics will gain market share at the expense of other geotechnical solutions, including organic erosion control blankets, aggregates, and compacted soil. Additionally, the implementation of more stringent regulatory standards for environmental stewardship, waste management, and construction codes will provide opportunities.

Transport infrastructure to remain key market

Through 2019, growth in demand for geosynthetics in the transportation infrastructure market is expected to be driven by the ongoing expansion of road and railway networks around the world and the increasing use of geosynthetics in these projects. This is especially true in the large China market, which is expected to add 835,000 kilometers of new paved roads by 2019. In developed

World Geosynthetic Demand (6.5 billion square meters, 2019)



countries, road construction projects have long used geosynthetics for filtration. Over the next decade, geosynthetics' use will expand to provide erosion control, roadside drainage, and soil stabilization underneath retaining walls. In non-transportation construction projects, sustained gains in both building and nonbuilding construction activity will drive demand for geosynthetics, as they can reduce long-term maintenance costs and increase the lifespans of structures.

Asia/Pacific region to be fastest growing market

The Asia/Pacific region is the largest market for geosynthetics, with China alone accounting for nearly 40 percent of

world demand in 2014. Geosynthetics sales in China are expected to continue to record above average gains through 2019, bolstered by sustained advances in nonbuilding construction activity. Elsewhere in the Asia/Pacific region, geosynthetics sales in India are projected to grow at a double-digit pace through 2019 due to the Indian government's continued investment in the country's public infrastructure. In 2014, North America accounted for 22 percent of global geosynthetics sales. Through 2019, gains in North America will result from an expected acceleration in construction activity. Additional support will come from environmental regulations that focus on preventing harmful materials from contaminating groundwater.

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Sample Text, Table & Chart

ASIA/PACIFIC

Taiwan: Demand by Market

In 2014, construction was the largest market for geosynthetic Taiwan, accounting for 46 percent of total sales. Going forward will be bolstered by sustained growth in overall construction addition, this market will benefit from the increasing adoption of synthetics for use in a larger share of construction projects. The country is an island nation with a mountainous topography and coastal erosion are potential problems that must be addressed in construction projects. Geosynthetics are increasingly incorporated to withstand those problems.

Transportation infrastructure was the second largest market in Taiwan in 2014, with 21 percent of sales. Additions in the transportation infrastructure market will be aided by a significant rebound in highway construction expenditures and the continued growth in the paved roadways in Taiwan. Through 2019, Taiwan is projected to invest in roads. The use of geosynthetics is increasing due to excessive damage during typhoons to which the country is exposed. In 2012, geosynthetics began renovations on the Zhongsha Bridge, intending to use geotextiles to prevent soil erosion and ensure safety on the bridge in case of a typhoon.

The landfill market is another key market for geosynthetics in Taiwan, since the majority of municipal waste is landfilled. However, Taiwan continues to implement a variety of waste control measures including developing more incinerators and requiring residential trash collection by the bag, to greatly reduce reliance on landfills. One reason is that the country has limited land available for landfill development. Still, modern landfills will continue to have a place in the future as it seeks to develop landfills that offer the opportunity to recapture gas for power generation, or to excavate and redevelop closed

230

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SAMPLE
TEXT

TABLE VII-2

CENTRAL & SOUTH AMERICA:
 GEOSYNTHETICS DEMAND BY TYPE & MARKET
 (million square meters)

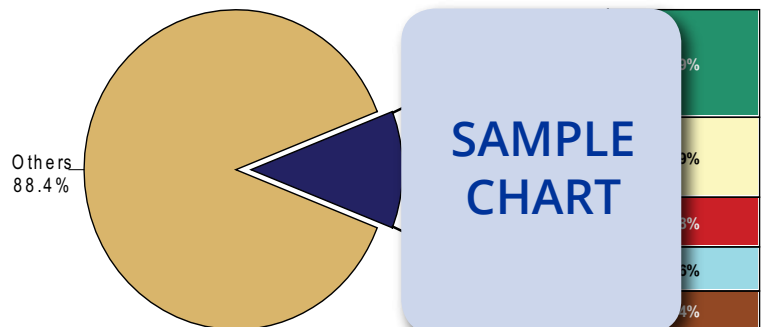
Item	2004	2009	2014	2019	2024
Nonbldg Construction Expend (bil 2013\$) / sq m geosynthetics/000\$ construction					
Geosynthetics Demand					
By Type:					
Geotextiles					
Geomembranes					
Geogrids					
Geonets					
Other					
By Market:					
Construction					
Transportation Infrastructure					
Landfill					
Liquid Containment					
Other					
% Central & South America World Geosynthetics Demand					

SAMPLE
TABLE

Source: The Freedonia Group, Inc.

CHART VIII-1

WORLD GEOSYNTHETICS MARKET SHARE
 (\$11.0 billion, 2014)



SAMPLE
CHART

Sample Profile & Table, & Study Coverage

TABLE V-4
FRANCE: GEOSYNTHETICS DEMAND BY TYPE
 (million square meters)

Item	2004	2009	2014	2019	2024
Nonbldg Construction Expend (bil 2013\$) sq m geosynthetics/000\$ construction					
Geosynthetics Demand					
Geotextiles					
Geomembranes					
Geogrids					
Geonets					
Other					
% France					
Western Europe Geosynthetics Demand					

Source: The Freedonia Group, Inc.



COMPANY PROFILES

JUTA as
 Dukelská 417
 Dvůr Králové nad Labem 544 15
 Czech Republic
 420-499
 www.juta.cz

Annual Revenue (2014) \$10.9 million (9/15)
 Employment 100 (9/15)
 Key Products Geotextiles, geomembranes, geogrids

SAMPLE PROFILE

JUTA manufactures geosynthetics for construction and agricultural industries, in addition to artificial grass, packing materials, and products for technical purposes. The Company is privately held.

The Company participates in the world geosynthetics industry through the manufacture of geotextiles, geocomposites, geomats, geomembranes, geogrids, and natural nets, which are used in such applications as waste storage, liquid waste disposal, reservoir and dam, canal, tunnel, road, railway, erosion control, and construction end uses. JUTA's geotextiles include GEOJUTEX and GEONETEX products. GEOJUTEX geotextiles are woven types made using utilize polypropylene strip fibers. These geotextiles are designed to provide high strength and low elongation properties in civil engineering and building end uses. The Company's GEONETEX nonwoven geotextiles are produced using needlepunched polypropylene and polyester staple fiber materials. These geotextiles are suitable for filtration, reinforcement, drainage, protection, and separation applications in solid and liquid waste containment, reservoir and dam, canal, and other water works end uses. JUTA also manufactures GEONETEX geotextiles under the NETEXHOME tradename for do-it-yourself customers and gardeners.

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STUDY COVERAGE

This Freedonia study, *World Geosynthetics*, offers historical data (2004, 2009 and 2014) plus forecasts (2019 and 2024) for demand by product and market in 6 regions and 19 countries. The study also considers market environment factors, details the industry structure, evaluates company market share and profiles 36 global industry players.

Related Studies

World Nonwovens

This study analyzes the world nonwovens industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by web formation process (spunmelt, carded, airlaid, wetlaid), application (disposables, nondisposables), market (e.g., personal hygiene, wipes, construction, filtration, medical/surgical, motor vehicles), world region, and major country. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry players.
#3365.....January 2016.....\$6300

World Cement

World demand for cement will rise 4.5 percent yearly to 5.2 billion metric tons in 2019. India will be the fastest growing major market, as the pace of growth in China slows considerably. Blended cement will remain the most popular type, and will gain market share. This study analyzes the 4.2 billion metric ton world cement industry, with forecasts for 2019 and 2024 by type and market for six world regions and 20 major countries, along with total supply and demand for an additional 23 countries. The study also evaluates company market share and profiles industry players.
#3303.....August 2015.....\$6500

Geosynthetics

US demand for geosynthetics is forecast to rise 3.8 percent yearly to 1.3 billion square yards in 2019, valued at \$2.5 billion. Nonwoven geotextiles will remain the dominant product by volume, while geomembranes will grow the fastest from a smaller base. The best market prospects will be in construction and transportation infrastructure. This study analyzes the one billion square yard US geosynthetics industry, with forecasts for 2019 and 2024 by product, market and region. The study also evaluates company market share and profiles industry players.
#3289.....June 2015.....\$5300

World Coated Fabrics

Global demand for coated fabrics will rise 4.6 percent per year to 6.5 billion square meters in 2019. The Asia/Pacific region will remain dominant, while the Central/South America and Africa/Mideast regions will grow the fastest from small bases. The dominant polymer-coated fabric segment will outpace rubber-coated types. This study analyzes the 5.2 billion square meter world coated fabric industry, with forecasts for 2019 and 2024 by product and market for six regions and 19 countries. The study also evaluates company market share and profiles industry players.
#3276.....June 2015.....\$6300

Coated Fabrics

US demand for coated fabrics is projected to advance 3.2 percent per year to 680 million square yards in 2018. The large motor vehicle market will drive gains, promoted by a higher number of air bags -- usually employing silicone-coated nylon -- per light vehicle. Smaller markets such as awnings, canopies and wall coverings will grow the fastest. This study analyzes the 580 million square yard US coated fabric industry, with forecasts for 2018 and 2023 by product, substrate and market. The study also evaluates company market share and profiles industry players.
#3176.....July 2014.....\$5300

About The Freedonia Group

The Freedonia Group, Inc., is a leading international industry market research company that provides its clients with information and analysis needed to make informed strategic decisions for their businesses. Studies help clients identify business opportunities, develop strategies, make investment decisions and evaluate opportunities and threats. Freedonia research is designed to deliver unbiased views and reliable outlooks to assist clients in making the right decisions. Freedonia capitalizes on the resources of its proprietary in-house research team of experienced economists, professional analysts, industry researchers and editorial groups. Freedonia covers a diverse group of industries throughout the United States and other world markets. Industries analyzed by Freedonia include:

- Automotive & Transport • Chemicals • Construction & Building Products • Consumer Goods • Energy & Petroleum • Industrial Components • Healthcare & Life Sciences • Machinery & Equipment • Metals, Minerals & Glass • Packaging • Plastics & Other Polymers • Security • Services • Textiles & Nonwovens • Water Treatment

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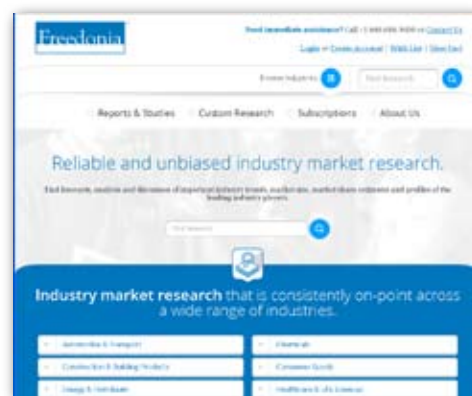
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