Geosynthetics

US Industry Study with Forecasts for 2019 & 2024

Study #3289 | June 2015 | $5300 | 274 pages
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Growth will be driven by projected rebounds in spending on construction and transportation infrastructure, as well as from environmental regulations designed to prevent the contamination of groundwater.

**US demand to grow 3.8% annually through 2019**

US demand for geosynthetics is forecast to increase 3.8 percent annually to 1.3 billion square yards in 2019, valued at $2.5 billion. Projected rebounds in construction spending and expenditures on transportation infrastructure will spark an acceleration in demand. Additional support for growth will come from environmental regulations that focus on preventing harmful materials from contaminating groundwater supplies.

**Construction market to outpace infrastructure**

Transportation infrastructure represents an important market for geosynthetics, as geotextiles and geogrids find significant use in the construction and repair of the nation’s roads and highways. Through 2019, demand growth is expected to lag the overall average, in part due to uncertainty surrounding federal transportation infrastructure funding, which may cause new and reconstruction roadway projects to be put on hold. While geotextiles have long been used in the construction of roadways for their filtration properties, demand for geosynthetics in this market will grow as these products are increasingly used in other applications, including erosion control, roadside drainage, and the construction of retaining walls.

Construction (other than transportation infrastructure) is the largest market for geosynthetics, representing about one-third of total demand in area terms. After a sluggish performance over the 2009-2014 period, growth will be driven by a rebound in building construction and an acceleration in spending for nonbuilding projects. Further bolstering growth will be the increased incorporation of geosynthetics into construction projects due to their ability to reduce long term maintenance costs and increase the lifespan of structures. Geosynthetics are expected to further displace traditional soil and aggregate alternatives in construction applications due to marketing efforts by geosynthetics producers designed to further spread awareness of the cost and performance benefits of geosynthetics.

**Geomembranes to be fastest growing products**

Geotextiles account for the largest share of geosynthetics demand by area due to their versatility in a wide variety of applications. In value terms, geomembranes account for the greatest share of total sales and are expected to register the fastest growth through the forecast period. Geomembranes find significant use as liners in landfills and are also used in CCP containment and water impoundment applications at shale oil and gas sites. More application-specific products -- geogrids, geonets, geosynthetic clay liners, and geofoams -- are also expected to grow, although from smaller bases.

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Geogrids are made from connected ribs that intersect in regular intervals, creating openings that enable the geogrids to interlock with surrounding soil, stone, or other material. Geogrids are made by extruding, punching, or stretching plastics -- most commonly HDPE or polypropylene -- in one or two directions. Geogrids can also be made from coated woven or knit high strength polyester as well as from polyester rods that are laser- or ultrasonically bonded into interlocking matrices.

In 2014, geogrids accounted for nine percent of total geosynthetics area demand. Demand for geogrids is forecast to expand to 111 million square yards in 2019, benefiting from greater market penetration of these products in various reinforcement and stabilization applications. Geogrids are ideal for these applications due to their superior tensile strength and can retain heavy soil and sediment loads. The expected recovery of construction spending and forecast improvement of highway construction expenditures will also provide opportunities. Additionally, the growing scarcity of land and the increasing need to build structures on weak soils or to create steeply sloped vertical retaining walls will drive demand for geogrids.

Geogrids accounted for 17 percent of total geosynthetics value demand in 2014. Value demand for geogrids is forecast to expand three percent annually through 2019 to $390 million. The growth in value demand will largely be related to growth in area terms. The expected recovery of construction spending and forecast improvement of highway construction expenditures will also bolster the market for geogrids.

<table>
<thead>
<tr>
<th>TABLE V-7</th>
<th>SOUTH GEOSYNTHETICS DEMAND BY SUBREGION &amp; MARKET (million square yards)</th>
</tr>
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<tbody>
<tr>
<td>Item</td>
<td>2004</td>
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<tr>
<td>Geosynthetics Demand</td>
<td></td>
</tr>
<tr>
<td>% South</td>
<td>35.9</td>
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<tr>
<td>South Geosynthetics Demand</td>
<td></td>
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<tr>
<td>By Subregion:</td>
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<td>South Atlantic</td>
<td>156</td>
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<tr>
<td>East South Central</td>
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<tr>
<td>West South Central</td>
<td>88</td>
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<tr>
<td>By Market:</td>
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<td>Liquid Containment</td>
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</tr>
<tr>
<td>Other Markets</td>
<td>28</td>
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</table>

Source: The Freedonia Group, Inc.
Brawler Industries LLC
11701 County Road 125 West
Midland, TX 79711
432-563-4005
http://www.brawler.com

Annual Sales: $40 million (estimated)
Employment: 160 (estimated)
Key Products: liners, nonwoven geotextiles, and geomembranes

Brawler Industries is a privately held manufacturer and installer of pit liners, tarps, covers, pond liners, and containment membranes for a wide variety of industrial applications. In May 2014, the Company acquired In-Line Plastics LLC (Houston, Texas), a privately held manufacturer of geosynthetic liner systems. Brawler Industries is owned by Tailwind Capital Group LLC (New York, New York), a private equity firm.

The Company is active in the US geosynthetics industry through the production of geosynthetics for the agriculture and energy markets, as well as through the acquisition of In-Line Plastics. Among Brawler Industries’ agriculture products are BRAWLER pond and ditch liners, which are designed to strengthen and hold the form of irrigation systems, help contain runoff, capture rainfall, and conserve water. For the energy market, the Company manufactures pit/under rig and frac tank liners, and nonwoven geotextiles that are used under liners for cushioning in rocky environments.

In-Line Plastics’ products encompass HERCUSCRIM reinforced liners, HERCULINE smooth geomembranes and HERCUTEX textured geomembranes. HERCUSCRIM reinforced liners are suitable for such...
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Related Studies

**Landscaping Products**  
Demand for landscaping products in the United States is forecast to grow 5.3 percent per year to $8.2 billion in 2019. Decorative products will remain the largest segment, while hardscape products will continue as the fastest growing. Environmental concerns will favor products such as solar lighting and permeable pavers. This study analyzes the $6.3 billion US landscaping products industry, with forecasts for 2013 and 2014 by product, market, end user, and US region. The study also evaluates company market share and profiles industry players.  
#3300 ............... August 2015 .......... $300

**Specialty Films**  
This study analyzes the US specialty film industry. It presents historical demand data (2004, 2009 and 2014) and forecasts (2019 and 2024) by function (e.g., barrier, microporous, safety and security, conductive and insulative, light control, biodegradable, water soluble), resin (e.g., polyolefins, polyester, nylon, polyvinyl butyral), and market (e.g., packaging, personal care products, electronics, transportation equipment, construction). The study also considers market environment factors, evaluates company market share and profiles industry players.  
#3287 ............... August 2015 .......... $5200

**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

**World Geosynthetics**  
Global demand for geosynthetics is expected to rise 8.9 percent per year to 5.2 billion square meters in 2017. Developing regions will be the fastest growing markets, with the Asia/Pacific region remaining the largest. Construction will be the largest and fastest growing application, especially in the key China and US markets. This study analyzes the 3.4 billion square meter world geosynthetics industry, with forecasts for 2017 and 2022 by product, market, world region, and for 19 countries. The study also evaluates company market share and profiles industry players.  
#3108 ............... December 2013 .......... $6100

*About The Freedonia Group*

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