Freedonia forecasts to 2008 & 2013 for the Chinese asphalt market

Asphalt in China

Study # 1901
March 2005
$4800

Chinese demand to grow 6.8% per year through 2008

Demand for asphalt in China is forecast to rise 6.8 percent per annum through 2008 to 15 million metric tons. Measured in yuan, asphalt demand is projected to climb more than ten percent annually to ¥31.5 billion. The Chinese asphalt market will experience the fastest growth among major economies in the world, driven by strong growth in road construction activity and healthy gains in building construction.

Paving asphalt to post strong gains

Asphalt demand in paving applications will outperform roofing and account for three-quarters of overall demand in China. Market gains will be driven primarily by strong increases in road construction activity. Beginning with its very first highway completed in 1988, China has increased its highways to nearly 30,000 kilometers in 2003, second only to the US. China’s national highway development plan – known as the “7918 Network,” consisting of seven routes connecting Beijing and seven major border cities, nine north-south routes and 18 east-west routes -- will expand China’s highways to 85,000 kilometers during the next three decades. Asphalt has surpassed concrete in road construction and will continue to account for the majority of road paving in China.

Roofing uses to remain largest, fastest growing

Demand for asphalt in the roofing segment will moderate to a below average annual growth rate of 3.4 percent despite a strong building construction market. Although asphaltic roofing products such as asphalt shingles and modified bitumen membranes will continue their inroads in the Chinese roofing market, demand for built-up and asphalt roll roofing will continue its downward trajectory, constraining market gains for roofing asphalt. While BUR and roll roofing has historically dominated low slope roof construction in China, steep slope types are being adopted more frequently in new residential constructions. In addition, under China’s “Flat to Slope Conversion Project,” existing flat roofs are being replaced with steep slopes.

Opportunities to vary by region

Among regional markets, the western regions, including the Northwest and Southwest, are projected to post the best gains in demand for asphalt. Stronger upward trends in population, economic growth and construction activity in these regions will support asphalt demand advances in both paving and roofing.

Industry structure

The Chinese asphalt industry consists of over 200 companies. Nevertheless, the five largest asphalt manufacturers -- Sinopec, PetroChina, China National Offshore Oil, Qingdao Guangyuanfa and Shandong Befar -- supplied more than half of China’s asphalt in 2003. Despite a rapid increase in asphalt production, domestic producers will still fall 5 million metric tons short of meeting demand in 2008, creating opportunities for offshore producers.

Study coverage

The 222-page Freedonia study, Asphalt in China, is available for $4800. It provides historical Chinese demand data (1993, 1998, 2003) plus forecasts to 2008 and 2013 by product, market and region. This study also analyzes market trends, discusses foreign and domestic competitive strategies, evaluates producer market share data and profiles 28 Chinese industry competitors.

Freedonia’s China office now open; see www.freedoniagroup.com for details
This study can help you:

- Determine your market & sales potential
- Complement your research & planning
- Learn more about industry competitors
- Assess new products & technologies
- Identify firms to merge with or acquire
- Gather data for presentations
- Confirm your own internal data
- Make better business decisions

REGIONAL TRENDS

Central-East Region

Asphalt Demand — The Central-East region is the largest asphalt market in China, accounting for 28 percent of total product sales in 2003.

Demand for asphalt used in paving applications, which served as the primary stimulant to asphalt market gains, limited asphalt roofing product manufacturing’s impact on overall asphalt market growth. In addition, conventional BUR and asphalt roll roofing has steadily contributed to products that use no or less primary demand growth derived from building construction.

The Central-East region is projected to advance significantly, slowing considerably from the 1998-2003 period; however, the Central-East will remain the largest regional market in China, accounting for 28 percent of total product sales in 2003.

CHART VI-1

Historical data through 2003 as well as Freedonia forecasts to 2008 and 2013

Regional trends.

This research can help you:

- Determine your market & sales potential
- Complement your research & planning
- Learn more about industry competitors
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ASPHALT DEMAND IN THE CENTRAL-EAST REGION OF CHINA

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Asphalt Demand

By End Use:
- Paving
- Roofing
- Other

By Market:
- Nonbuilding
- Nonresidential Building
- Residential Building
- Other

% central east
Total Asphalt Demand

Source: The Freedonia Group, Inc.

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TABLE V-2
NONBUILDING CONSTRUCTION – ASPHALT DEMAND IN CHINA
(thousand metric tons)

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<td>Nonbldg Construct Expend (bil 2000 ¥)</td>
<td>160</td>
<td>340</td>
<td>765</td>
<td>1170</td>
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<tr>
<td>Total Asphalt Demand</td>
<td>2970</td>
<td>5600</td>
<td>10800</td>
<td>15000</td>
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Note: The Freedonia Group, Inc.

Asphalt Emulsions
Demand in China for asphalt used in paving emulsions, also known as emulsified asphalt, is expected to grow at an annual rate of 8.8 percent per year through 2008 due to highway construction and driveways and of nonresidential buildings. Emulsified asphalt, which allows the asphalt particles to be suspended in the water, is expected to benefit from diffusion of technological developments, such as in cold-patch techniques for pothole repair and microsurfacing to rejuvenate existing road surfaces. Microsurfacing, for example, involves treatment of a road with a thin layer of emulsified asphalt. The treatments are done on a more frequent schedule than would be done with traditional repaving. The aim is to extend the lifespan of the road and forestall the need to overhaul the entire pavement.

Emulsified asphalts are mixtures of asphalt cement and water, two substances that are normally immiscible. The asphalt cement is mechanically broken up into microscopic droplets and is combined with a surfactant, which allows the asphalt particles to be suspended in the water. A variety of surfactants can be mixed with asphalt cement, including fatty acids, lignins and amines. The emulsion is applied to the road surface, and after the water evaporates, a layer of hardened asphalt is left behind. Emulsified asphalts can be either anionic, cationic or nonionic, depending upon the electrical charge of the surfactant.

By changing the nature of the surfactant, the properties of the asphalt emulsion can be altered to suit the nature of the application. In particular, asphalt emulsions are suitable for surface treatments such as chip seals, a quick-setting emulsion will allow traffic to resume on the road sooner, reducing the costs of delay and detour to the traveler. asphalt emulsions can be either anionic, cationic or nonionic, depending upon the electrical charge of the surfactant.

Data illustrated with the aid of 78 tables and charts

Sample chart

Sample profile

Profiles for 28 China industry participants

Company Profiles: 176-222
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Other Titles from The Freedonia Group

Construction Outlook for China
This study analyzes the overall Chinese construction industry, providing historical demand data (1994, 1999, 2004) plus forecasts to 2009 and 2014. Data are broken down by type (e.g., residential building, nonresidential building, nonbuilding construction); by market (e.g., new construction, alterations and additions, maintenance and repairs); and seven geographic and economic regions. The study also considers market environment factors, evaluates market shares and profiles leading producers.
#1919....................08/2005.........................$4800

Cement in China
Chinese demand for hydraulic cement will grow 5.4% annually through 2008, driven by healthy construction spending. Ready-mix and concrete product manufacturers will benefit from a ban on onsite concrete production. Nonbuilding construction will be the fastest growing use for cement while nonresidential buildings remain the largest. This study analyzes the US$22 billion Chinese cement industry to 2008 and 2013 by product, end use, market and region. It also details market share and profiles major competitors.
#1826....................09/2004.........................$4800

World Asphalt (Bitumen)
The global asphalt/bitumen market will reach 107 million metric tons in 2007 based on increasing demand for paving and roofing, with the smaller roofing segment posting faster gains. Paving products will be supported by infrastructure construction in developing countries such as China, with emulsified asphalt growing the fastest. This study analyzes the world asphalt industry to 2007 and 2012 by product, world region and for 30 countries. It also details market share and profiles major competitors.
#1749....................02/2004.........................$4900

Freedonia opens new office in China
Freedonia is pleased to announce the opening of our new office in Beijing. Initially staffed by four analysts, Freedonia China will provide us with “feet on the ground” in one of the largest and most rapidly developing economies in the world. The office will allow us to upgrade the content in our China and world industry studies and enhance our custom research capabilities on Chinese industries. To learn more about our China industry studies or custom research, please contact Freedonia customer service at (440) 684-9600.

Freedonia industry analyst Evan Yan (above right, pictured with analysts Sean Yang and Hanxing Huang) moved to Beijing from Cleveland earlier this year to manage Freedonia’s new office.

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