Asphalt in China

Industry Study with Forecasts for 2012 & 2017

Study #2465 | April 2009 | $5200 | 204 pages
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Demand in China to rise 5% yearly through 2012

Demand for asphalt in China is expected to rise 5.0 percent annually through 2012 to 16.8 million metric tons. Growth will be supported by increasing construction expenditures fueled by continuing urbanization and modernization in China. In particular, nonbuilding construction spending will be the leading driver of asphalt demand growth going forward. Central and local governments will continue to invest extensively in asphalt consuming infrastructure projects such as highway and other paved surface construction. Such investment is part of longer-term development plans, but will also be accelerated by spending included in China’s stimulus package designed to offset the effects of declining trade volumes and urban real estate market corrections on the domestic economy.

Asphalt used in paving to outpace roofing uses

Asphalt consumed in the manufacture of paving products in China is forecast to increase 5.4 percent annually through 2012 to 12.8 million metric tons. Rising expenditures on new road construction, as well as the maintenance and repair of a large and rapidly expanding stock of paved roads, will boost paving asphalt demand.

Demand for asphalt used in roofing products in China is expected to expand 4.0 percent per year through 2012 to 3.9 million metric tons. Growth will be driven by increases in building construction expenditures. Asphalt shingles represent the fastest growing material used in sloped-roof applications in China, and will benefit from the ongoing Flat to Slope roof conversion project. Rising construction expenditures on residential, office and commercial, and industrial buildings will benefit demand for low-slope asphaltic roofing, such as modified bitumen membranes and built-up roofing. However, short-term gains will be restricted as urban real estate markets experience a correction following a period of overheating and the Chinese manufacturing sector adjusts to lower levels of global demand.

Southwest, Northwest regions to grow fastest

Asphalt markets in the six regions that make up China vary considerably, reflecting differences in levels of construction activity, demographics, industrial output and economic development. The Central-East is expected to remain the largest regional asphalt market in China through 2012, fueled by increases in regional construction expenditures. However, asphalt consumption is forecast to climb at a much faster pace in the Southwest and Northwest, benefiting from the government’s Great Western Development strategy, which aims at improving the infrastructure and overall economic development in these areas.
Asphalt in China
Industry Study with Forecasts for 2012 & 2017

Sample Text, Table & Chart

Asphalt Products

Asphalt Shingles

Demand for asphalt used in the production of shingles is forecast to rise 16.8 percent per year through 2012 to 250,000 metric tons. Growth will be bolstered by asphalt shingles' increasing popularity as steep-slope roofing materials. The Flat to Slope Conversion Project in urban areas of China will also contribute to market gains.

Traditionally, flat roof construction was adopted for almost all state-funded residential construction in the 1970s due to its lower construction cost. Better waterproofing and insulation effects offered by sloped roofs make them more attractive, despite higher material and labor costs. In addition, sloped roofs are generally considered to be aesthetically more appealing than flat roofs, because they offer a wide range of possible shapes, colors and designs. Starting in the late 1990s and early 2000s, major cities in China started converting previously built flat roofs (mostly on residential apartment buildings built from the 1970s to the 1990s) to sloped roofs out of both functional (better waterproofing, more comfortable in summer and winter, more energy efficient in heating and air conditioning) and aesthetic reasons -- a project referred to as the “Flat to Slope Conversion Project.” For example, 815 buildings had their flat roofs replaced with sloped roofs in Beijing in 2007, with a total building area of 3.5 million square meters. Asphalt shingles are the primary materials used in the project, as they offer a weather-resistant roof covering at a lower cost than most other materials. In addition, the availability of a wide range of styles and colors for asphalt shingles increases their ability to address aesthetic concerns.

Asphalt shingles are assembled from a fiber mat coated with a mixture of asphalt and mineral fillers. One surface is finished with mineral granules, while the other has a mineral dusting (to serve as a release agent) and a line of asphalt sealant (to bond the shingles together on the

TABLE IV-2

<table>
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<td>Road/Other Transport Constr</td>
<td>134</td>
<td>307</td>
<td>819</td>
<td>1245</td>
<td>1730</td>
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<td>m tons asphalt/mil ¥ constr</td>
<td>22.9</td>
<td>23.8</td>
<td>12.0</td>
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<td>Asphalt Demand in Paving Products</td>
<td>3070</td>
<td>7300</td>
<td>9840</td>
<td>12770</td>
<td>15930</td>
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<td>Asphalt Cement</td>
<td>2875</td>
<td>6840</td>
<td>9230</td>
<td>12000</td>
<td>15000</td>
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<td>Asphalt Emulsions</td>
<td>110</td>
<td>270</td>
<td>375</td>
<td>495</td>
<td>620</td>
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<td>Cutback Asphalt</td>
<td>65</td>
<td>145</td>
<td>180</td>
<td>210</td>
<td>235</td>
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<td>Other Asphalt Paving Products</td>
<td>20</td>
<td>45</td>
<td>55</td>
<td>65</td>
<td>75</td>
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<tr>
<td>¥/metric ton</td>
<td>1740</td>
<td>2080</td>
<td>2620</td>
<td>2950</td>
<td>3250</td>
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<tr>
<td>Asphalt Demand in Paving</td>
<td>5.3</td>
<td>15.2</td>
<td>25.8</td>
<td>37.7</td>
<td>51.8</td>
</tr>
<tr>
<td>(bil ¥)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% paving</td>
<td>57.6</td>
<td>72.0</td>
<td>75.7</td>
<td>76.9</td>
<td>77.5</td>
</tr>
<tr>
<td>Total Asphalt Demand (bil ¥)</td>
<td>9.2</td>
<td>21.1</td>
<td>34.1</td>
<td>49.0</td>
<td>66.8</td>
</tr>
</tbody>
</table>
Sample Profile, Table & Forecast

COMPANY PROFILES

PetroChina Company Limited
Nine Dongzhimen North Street
Dongcheng District, Beijing 100007
China
86-10-5998-6223
http://www.petrochina.com.cn

Revenues
Employment: 466,500 (2007)
Key Products: paving-grade and industrial asphalt, asphalt emulsions
International Contact: Mr. Duan Wende, Director

PetroChina is a leading Chinese producer of crude oil, refined petroleum products and natural gas. The Company, which is an 86.29-percent owned subsidiary of state-owned China National Petroleum Corporation, is engaged in a broad range of petroleum and natural gas-related activities. PetroChina operates in five segments: Exploration and Production, Refining and Marketing, Chemicals and Marketing, Natural Gas and Pipeline, and Other.

The Company participates in the Chinese asphalt market via the Refining and Marketing segment, which generated revenues of ¥607.1 billion [US$79.8 billion] in 2007 and employed 122,595. This segment produces a wide range of petroleum and crude oil products, such as asphalt, gasoline, diesel fuel, kerosene and lubricants. Asphalt from PetroChina includes a broad range of formulations, such as KUNLUN paving-grade asphalt for heavy-traffic roads and highways. Among its asphalt operations in China are the PetroChina Karamay Petrochemical Company Limited, PetroChina Liaohe Oil Field Petrochemical

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

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Nonbldg Constr Expend (bil 2006 ¥) m tons asphalt/mil ¥ construction</td>
<td>3.0</td>
<td>4.2</td>
<td>5.2</td>
<td>6.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Nonbldg Construction Asphalt Dmnd</td>
<td>2960</td>
<td>7080</td>
<td>9450</td>
<td>12220</td>
<td>15220</td>
</tr>
<tr>
<td>By Product: Paving</td>
<td>2740</td>
<td>6420</td>
<td>7820</td>
<td>9980</td>
<td>12470</td>
</tr>
<tr>
<td>By Application: New</td>
<td>265</td>
<td>725</td>
<td>1710</td>
<td>2340</td>
<td>2870</td>
</tr>
<tr>
<td>Maintenance &amp; Repairs</td>
<td>90</td>
<td>120</td>
<td>150</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>% nonbuilding</td>
<td>55.9</td>
<td>69.9</td>
<td>72.4</td>
<td>73.3</td>
<td>73.9</td>
</tr>
<tr>
<td>Total Asphalt Demand</td>
<td>5380</td>
<td>10225</td>
<td>13160</td>
<td>16800</td>
<td>20750</td>
</tr>
</tbody>
</table>

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It also details market share and profiles major firms and 2016 by product, world region and 20 countries. The study also considers market environment factors, details industry structure, evaluates company market share and profiles industry participants.

#2507 ................... 05/2009 ................... $5200

Roofing in China
Demand for roofing materials in China is forecast to rise 4.1% per annum through 2012, fueled by rising building construction expenditures. Elastomeric and plastic roofing will see the best prospects, while concrete and clay tiles, and built-up and asphalt roll roofing will remain the dominant roofing materials. This study analyzes the 2.2 billion square meter roofing industry in China, with forecasts for 2012 and 2017 by product, market, and region. It also evaluates company market share and profiles industry players.

#2445 ................... 02/2009 ................... $5100

Cement in China
Demand for cement in China will rise 6% annually through 2012, driven by rising construction spending. Nonresidential building construction will stay the largest end use, while nonbuilding construction grows the fastest. Contractors will remain the largest market while ready-mix concrete grows most rapidly. This study analyzes the 517 billion yuan Chinese cement industry, with forecasts for 2012 and 2017 by product, end use, market, and region. It also evaluates market share and profiles industry participants.

#2430 ................... 01/2009 ................... $5100

Large Diameter Pipe in China
Demand for large diameter pipe in China will grow 9% annually through 2012, driven by continued increases in spending on physical infrastructure and new building construction. Pipe used in sanitary sewer, drainage, storm sewer and natural gas transportation applications will see the fastest growth. This study analyzes the 57.1 million meter large diameter pipe industry in China, with forecasts for 2012 and 2017 by material type, market and geographic region. It also evaluates market share and profiles industry participants.

#2400 ................... 10/2008 ................... $5100

World Asphalt
Global demand for asphalt will reach 123 million metric tons in 2011. Most developed areas will register relatively slow gains while developing countries post much more robust advances. Gains in China and India, however, are decelerating. Paving products will remain dominant and outpace roofing and other asphalt products. This study analyzes the 661 million barrel world asphalt industry, with forecasts for 2011 and 2016 by product, world region and 20 countries. It also details market share and profiles major firms.

#2274 ................... 01/2008 ................... $5500

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