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World Asphalt

Industry Study with Forecasts for **2015 & 2020**

Study #2847 | February 2012 | \$6100 | 402 pages



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Demand in many of the world's most developed asphalt markets, including North America, Western Europe and Japan, is expected to rebound through 2015 after recent declines.

Global consumption to rise 4.1% yearly through 2015

Global consumption of asphalt is forecast to advance 4.1 percent annually from a very weak 2010 base to 119.5 million metric tons in 2015, equivalent to 725 million barrels of primary asphalt. High petroleum prices combined with economic weakness and declining construction activity resulted in a significant drop in consumption in many of the world's most developed asphalt markets over the 2005 to 2010 period. Demand in these markets, including North America, Western Europe and Japan, is expected to rebound through 2015.

North America to exhibit fastest regional gains

Gains will be fastest in North America, where the market for asphalt is expected to expand 6.5 percent per year through 2015. Demand for asphalt in both paving and roofing applications will be driven by the recovering US economy and increasing construction activity in the country. The region is a significant consumer of primary asphalt due to the size of the US and Canadian road networks and the dominant position of asphalt materials in the North American roofing market.

China, India to fuel strong growth in Asia/Pacific

The massive infrastructure development programs in China and India, two of the world's fastest growing economies, will continue to drive strong growth in the

World Asphalt Demand by Region (119.5 million metric tons, 2015)



Asia/Pacific
32%

North America
31%

Western Europe
19%

Other Regions
18%

photo: P.W. Group

Asia/Pacific region. Since 2005, the region has become the largest market for asphalt. China alone will account for nearly one-fifth of global asphalt demand in 2015. Strong growth in asphalt markets in India and a moderate recovery in demand for asphalt in Japan will also contribute to gains. Consumption of asphalt in Western Europe is forecast to rise 1.8 percent annually through 2015. The region will construct new roads at one of the slowest paces in the world. Paving asphalt consumed in road repair and maintenance applications will account for the majority of gains. Western Europe will post the slowest growth in the world for asphalt used in roofing markets, reflecting the slowest regional growth in building construction spending.

Paving products dominate world asphalt demand

Paving products accounted for nearly 80 percent of total asphalt demand in 2010. Asphalt is the dominant material in the paving segment, particularly in Western Europe and North America, where it is widely favored over concrete in most road paving applications. In roofing markets, on the other hand, asphalt holds a dominant position in several key areas (the US and Canada, for example). Going forward, greater acceptance of modified bitumen membranes in low-slope roofing and asphalt shingles in steep-slope roofing will boost demand, particularly in China, where asphalt roofing occupies a small but growing share of the large roofing market.

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Sample Text, Table & Chart

ASIA/PACIFIC

China: Asphalt Demand

Demand for asphalt in China is projected to increase significantly through 2015. Gains will be driven by road and highway paving applications and expansion of the roofing market in China, with high levels of construction activity.

China's network of paved roads, which totaled nearly 1.5 million kilometers in 2010, will continue to expand rapidly, although the rate of expansion will decelerate from the double-digit annual growth rate of 10.5 percent from 2000 to 2010. The country is expected to add over 950,000 kilometers of paved roads through 2015, representing a rate of growth of 6.7 percent per year. China currently has less than 20 kilometers of highway per square kilometer of land. To put that in perspective, it has about one-quarter the density of the highway network in the US. Existing paved roads in urban centers in China are very congested, while many rural areas lack paved roads entirely. A huge network of roads and highways is essential to efficiently transport people and goods and to facilitate China's enormous export economy as more manufacturing takes place inland. To this end, old unpaved roads are being replaced with paved surfaces, and many new extensions and highways are being built to improve transportation in China's interior.

The government has laid out an ambitious road construction program to build seven lines connecting Beijing and seven border cities in China, as well as nine lines running north to south and 18 east-west lines. The network, known as the "7918 Network," will extend the total length of paved highways in China to 85,000 kilometers by 2035. The government's specialist Countryside strategy, emphasizing further development of the rural transportation system, will also contribute to market growth.

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TABLE VI-3

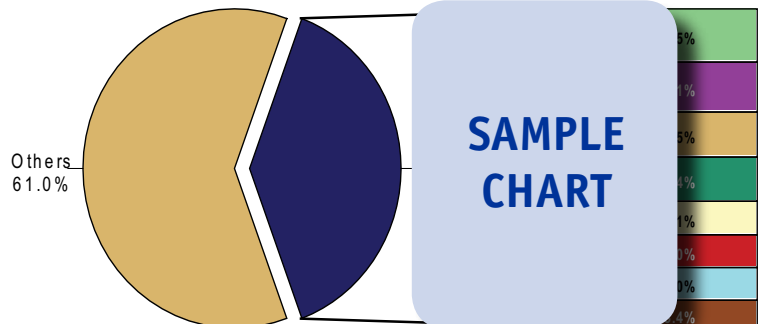
CHINA: ASPHALT SUPPLY & DEMAND

Item	2000	2005	2010	2015	2020
Population (mil persons)	1.2	1.3	1.4	1.5	1.6
GDP/capita	1,000	2,000	4,000	7,000	10,000
Gross Domestic Product (bil 2009\$)	10	20	40	70	100
kg asphalt/capita	0.1	0.2	0.4	0.7	1.0
kg asphalt/000\$ GDP	0.01	0.02	0.04	0.07	0.10
Primary Asphalt Demand (mil m tons)	1.0	2.0	4.0	7.0	10.0
Primary Asphalt Demand (mil bbls)	15.0	30.0	60.0	105.0	150.0
+ net exports & stock increases	0.0	0.0	0.0	0.0	0.0
Primary Asphalt Production (mil bbls)	15.0	30.0	60.0	105.0	150.0

SAMPLE
TABLE

CHART VIII-1

WORLD PRIMARY ASPHALT CAPACITY SHARE (624.6 million barrels, 2010)



SAMPLE
CHART

Sample Profile, Table & Forecast

COMPANY PROFILES

Kukdong Oil & Chemicals Company Limited

334-36 Yusan-dong
 Yangsan-City
 Kyungnam 626
 South Korea
 82-55-38
 http://w

Sales: \$
 Employ

Key Pro bitumen mem-
 branes, a sized and standard
 paving-g ats

**SAMPLE
PROFILE**

Kukdong Oil & Chemicals is a leading South Korean producer of petroleum-based chemicals and related products. The Company operates through three segments: Waterproofing Membrane, Lubricant and LPG.

The Company is involved in the world asphalt market via the Waterproofing Membrane segment, which comprises operations for the manufacture and sale of styrene-butadiene-styrene (SBS)-modified bitumen membranes, asphalt primers and related products. Kukdong makes SBS-modified bitumen membranes through the RUBY SHEET, RUBYDECK, RUBYPOL-S and RUBYCAP product lines.

RUBYSHEET waterproofing membranes consist of nonwoven polypropylene fabrics coated with layers of SBS-modified bitumen. These membranes, which provide consistent tensile and tear strength properties, can be used by themselves or with other membranes to optimize protection against moisture. Kukdong's RUBYDECK membranes

TABLE VI-4

CHINA: ASPHALT DEMAND BY PRODUCT
 (million metric tons)

Item	2000	2005	2010	2015	2020
Construction Expenditures (bil 2009\$)					
Paved Roads (000 kilometers)					
kg asphalt/000\$ construction					
m tons paving products/km road					
Asphalt Demand					
Paving Products:					
Asphalt Cement					
Asphalt Emulsions, Other Paving					
Roofing Products					
Other Asphalt Products					
% China					
Asia/Pacific Asphalt Demand	21				25

**SAMPLE
TABLE**

“Demand for asphalt in roofing markets in China is expected to increase 6.5 percent per year through 2015 to 5.5 million metric tons. Strong growth in building construction spending will drive demand for flat roof materials such as roll roofing, modified bitumen and other asphaltic roofing materials, and, to a lesser extent, for asphalt shingles. While asphalt shingles account for only a small share of total roofing demand in China, their market presence is expanding.”
 --Section VI, pg. 165

OTHER STUDIES

World Roofing

World demand for roofing materials is forecast to grow 3.8 percent annually through 2016 to 11.7 billion square meters. The US and China will jointly account for nearly 60 percent of global gains in roofing volume demand. The dominant bituminous products segment will post the fastest growth. This study analyzes the 9.7 billion square meter world roofing industry, with forecasts for 2016 and 2021 by product, market, world region and major country. The study also evaluates company market share and profiles industry participants.

#2896June 2012 \$6300

World Cement & Concrete Additives

World demand for cement and concrete additives is projected to increase 8.3 percent annually to \$15.8 billion in 2015. Gains will be bolstered by cement markets in developed regions, which consume much higher volumes of additives per ton of cement than many of the largest cement markets in developing regions. This study analyzes the \$10.6 billion world cement and concrete additive industry, with forecasts for 2015 and 2020 by type, market, world region and for 21 countries. The study also evaluates company market share and profiles industry players.

#2841January 2012 \$5900

World Construction Aggregates

World demand for sand, crushed stone, gravel and other construction aggregates will rise 5.2 percent annually through 2015 to 48.3 billion metric tons. The Asia/Pacific market will grow the fastest, followed by Eastern Europe and the Africa/Mideast region. Recycled and secondary types will grow the fastest. This study analyzes the 37.4 billion metric ton world construction aggregates industry, with forecasts for 2015 and 2020 by product, market, application, world region and for 19 countries. The study also evaluates company market share and profiles industry players.

#2838January 2012 \$5900

Oilfield Chemicals

US oilfield chemical demand will rise 8.3 percent yearly through 2015, driven by the recovery of oil prices and the development of shale gas resources. Stimulation and cementing chemicals will be the fastest growing products, followed by drilling fluids. Natural gums, polymers, acids and surfactants will be among the best prospects in raw materials. This study analyzes the \$9.1 billion US oilfield chemical industry, with forecasts for 2015 and 2020 by product and raw material. The study also evaluates company market share and profiles industry players.

#2821 November 2011 \$4900

Asphalt

US demand for asphalt is forecast to rise 7.4 percent annually through 2015, driven primarily by a recovery in new residential construction. Paving products will remain the dominant type and grow the fastest, led by the key asphalt cement segment, as well as by smaller volume products such as emulsified asphalt and polymer-modified asphalts. This study analyzes the 24.4 million metric ton US asphalt industry, with forecasts for 2015 and 2020 by product, market and US region. The study also evaluates company market share and profiles industry players.

#2793 October 2011 \$5100

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