

BY NANCY DEMARCO

COMPETITION HEATS UP IN CHINA



Beijing teems with modern vehicles, evidence of China's growing sophistication.

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hile lubricant and base oil demand crash in most of the world, China's appetite for oils keeps climbing. Expect finished lube demand to rise

2 percent in 2009 over last year's 5.7 million metric ton demand, and soar to 7.3 million tons by 2015, says an expert with Petrochina.

Kong Jinyuan, senior engineer and vice director of oils research in the marketing department of the Beijing-based Petrochina Planning & Engineering Institute, identified trends and forecast base oil supply and demand in China at the ICIS Asian Base Oils & Lubricants Conference, held early this summer in Kuala Lumpur, Malaysia.

Speaking Mandarin with simultaneous translation to English, Kong said the key driver to China's lube market continues to be growth in passenger cars. "In 2008, China had 51 million vehicles, up from 16 million in 2000," she said, and lubricant demand followed, rising from 3.8 million tons in 2000 to last year's 5.7 million.

Growth continues to be healthy, agreed another industry expert. Flora Liu, a Shanghai-based manager with the consultancy Kline & Co., put China's finished lubricants market in 2008 in roughly the same ballpark as Petrochina's Kong, and then sketched the many factors — competition, internal market changes and the global recession — at play in this sprawling market.

"China's lubricant market was estimated to be 5.5 million tons, valued at U.S. \$12.1 billion, in 2008," Liu told the June conference. By volume, she said, the market is 46 percent industrial oils, 39 percent commercial on- and off-highway automotive oils, and 15 percent consumer automotive (which includes lubricants consumed in all gasoline-powered vehicles, such as passenger cars, motorcycles, mini-buses and taxis).

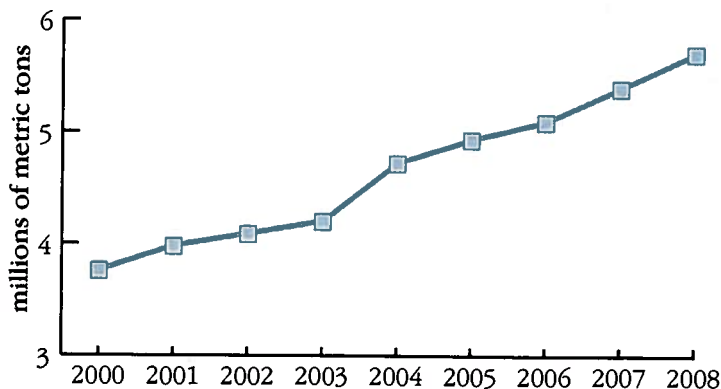
Although the consumer automotive segment is only 15 percent by volume, it accounts for 22 percent of the market by value, or nearly \$2.7 billion, said Liu. This rapidly is becoming a more sophisticated market, she observed. For example, higher-end engine oils (API SG and above) will account for 80 percent of the consumer segment by 2013, up from 60 percent today, while consolidation will continue, driving most local independents from the market.

CHINA'S BASE OIL SUPPLY AND DEMAND (in millions of metric tons)

	2008	2010	2015
Finished lube demand	5.70	6.05	7.30
Base oil consumption	5.41	5.75	6.94
Base oil supply:			
Petrochina	1.90	2.10	2.50
Sinopec	0.98	1.10	1.40
CNOOC	0.30	0.30	0.70
Total domestic supply	3.18	3.50	4.90
Deficit	(2.23)	(2.25)	(2.04)

Source: Kong Jinyuan, Petrochina Planning & Engineering Institute

FINISHED LUBE DEMAND IN CHINA

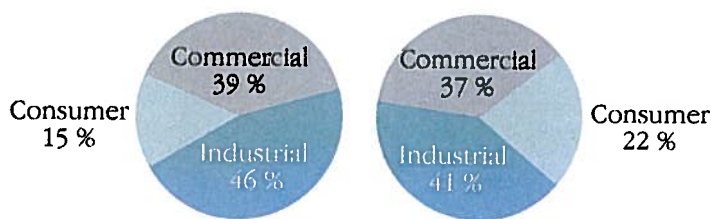


Source: Kong Jinyuan, Petrochina Planning & Engineering Institute

CHINA'S LUBRICANTS MARKET IN 2008

Consumption by Volume
Total: 5.5 million metric tons

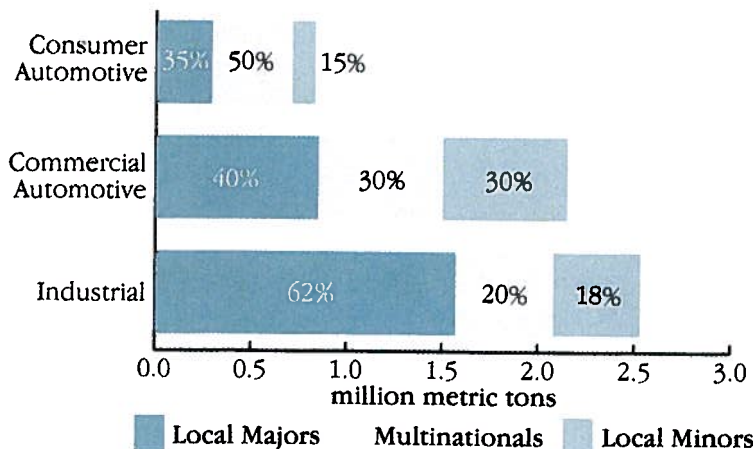
Consumption by Value
Total: \$12.1 billion



Source: Kline & Company

2008 LUBRICANTS MARKET SHARE BY SEGMENT

Total: 5.5 million metric tons



Source: Kline & Company

TAKING A SHARE

Competition in China's lubricant market is strong, concurred Petrochina's Kong, saying, "Multinationals are taking a lot of our market share and are blending in China." Multinational oil companies hold about 29 percent of the finished lubricant market. Petrochina has 26 percent market share, Sinopec has 21 percent, privately owned local blenders have 19 percent, and recycled oils account for about 5 percent, she remarked. "There is no government support of recycled oils," Kong noted, "but that will change in the future."

Turning to base oils, Kong pegged China's base oil supply in 2008 at 5.4 million metric tons. The majority, 53 percent, is supplied by China's two largest national oil majors, Petrochina and Sinopec. Other Chinese refiners, including national oil major CNOOC and some very old and inefficient refineries, supply 22 percent. Imports, at 25 percent, made up the difference.

"Imports are increasing because Sinopec and Petrochina are not increasing production" fast enough to keep up with rising demand, Kong said. Base oil imports have grown from 450,000 tons in 2000 to 1.4 million tons in 2008. Sources of these volumes include Singapore (44 percent of total imported base oils), Japan and Korea (40 percent, including API Group III from Korea), Russia (7 percent) and Taiwan (4 percent).

Most of the Russian base oils "are called 'nonstandardized' oils, of low quality that needs further processing," Kong noted. "Uzbekistan is a new source of better quality than Russia. [Uzbekistan refineries] use solvent refining. They supplied a huge volume in 2008, at low cost."

New refining capacity is on its way in China. In 2011, Sinopec plans to produce an additional 250,000 to 350,000 tons of Group II/III base oils in Yanshan, and CNOOC plans 400,000 tons of Group II/III in Huizhou. Petrochina has announced 300,000 tons of new Group II/III capacity for 2010 in Dalian, Kong added, but that schedule will probably be delayed.

STILL THIRSTY

Despite these planned capacity additions from its national majors, China will need to import base oils for some time, said Kong, and still faces a 2 million ton shortfall in 2015. This gap will be filled by imported base oils, local refiners and recycled oils.

"There will be a big change to 2015 in the quality of base oils in China," Kong continued. The national majors' combined Group II/III capacity will rise from 170,000 tons in 2008 to 1.24 million tons in 2015. Today, Groups II/III account for 13 percent of China's

Continued on page 20



Kong Jinyuan

Continued from page 18

total base oil demand, Kong asserted; she expects that share will rise to 28 percent by 2015.

Although the growth rate will slow down in 2009, China's base oil demand will maintain rapid growth over the longer term. Imported base oils will continue to be a necessary supplement, likely in the range of 1.45 million tons in 2009. "Petrochina will work harder to

improve the quality and efficiency of its base oil production," Kong concluded.

RECESSION'S PINCH

From Kline's Liu, the ICIS conference heard additional details of China's finished lubricants market. While local majors Petrochina and Sinopec dominate the market on a volume basis, with a combined 54 percent share, multinational oil companies including Shell, Chevron, BP, ExxonMobil and others now have 28 percent of the market, she said. The remaining 18 percent is shared by "local minors that may number 1,000 or more."

Driven by business with original equipment manufacturers, Liu continued, multinationals have 50 percent of the consumer automotive segment, but just 30 percent of the commercial automotive and 20 percent of the industrial oil segments. The local majors dominate the industrial segment, with a 62 percent share, and have 40 percent of the commercial and 35 percent of the consumer segments.

The global recession, shifts in the Chinese market, geographic disparities and competition are all shaping China's lubricants market, Liu said. "The impact of the global recession has been less severe in China, which had the highest GDP growth rate of 6.1 percent in the first quarter of 2009." Total car sales in China soared from January to May 2009, up 30 percent from the same period of 2008, driven by government incentives. This lays a solid foundation for high consumption of consumer automotive lubricants, she observed.

Only about a quarter of the total commercial lubricants segment has been hit hard by the recession, Liu commented. For example, the manufacture of trucks for export is strongly impacted, while agriculture, buses and trucks for domestic use continue to be healthy. Industrial lubricant applications are even less severely impacted by the recession, with food, chemicals, machinery, fabricated metals and aviation, marine and railway sectors showing little or no effect.

Expect attractive market growth in China's consumer and commercial

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automotive lubricant segments. Double-digit car and agricultural vehicle sales are expected through 2013, although, Liu cautioned, "exports may be hurt."

China's lubricant market is evolving rapidly, Liu contended, with higher-quality products demanded for all applications. As noted above, higher-quality oils (API SG and above) will capture 80 percent of the passenger car engine oil market by 2013. The picture is the same on the commercial automotive side, where oils API CF-4 and above held only 30 percent of the market in 2008; that share will increase to 45 percent by 2013, Liu said.

Channel shifts are also under way, Liu continued. Authorized garages' share of the oil change market will rise from just 10 percent in 2003 to 55 percent in 2013. Quick lubes — virtually nonexistent five years ago — will have 15 percent of the oil change market in 2013, while general repair shops will be the big losers.

"Direct sales will increase further in the business-to-business areas of the commercial and industrial segments," Liu said, as both the local majors and the multinational oil companies increase their direct sales.

MARKET DYNAMICS

"China is not homogeneous," Liu noted, "and the east and south have lately accounted for about 60 percent of the lubricant demand. But market dynamics are changing, as business moves north and west."

Finally, said Liu, competition is changing the face of China's lubricant market, particularly the competition between the multinationals and the local majors PetroChina and Sinopec. "Competition has evolved to be on a value-chain basis," she went on, covering raw material supply, growth through mergers and acquisitions, technical capability, optimizing distribution networks and penetration of the OEM markets.

The local majors' advantage in control of domestic API Group I base stocks could be challenged, as premium base stocks become increasingly available from Korea, Southeast Asia and elsewhere, said Liu.

For local independents, she added, base oil supply is a major issue. "Base oil supply in China is tightly controlled by local majors," leaving the independents to struggle to survive as suppliers of low-end products.

"Local minors will continue to be acquisition targets, and most local minors will get out of the market, as the industry goes through a period of consolidation," Liu concluded. She predict-

ed that the multinationals, through mergers and acquisitions, will continue making inroads into the market's middle-tier, while local majors will succeed in establishing more comprehensive distribution networks.

"Local majors and the multinationals will compete for technical capability and OEM penetration, as more lube formulations are developed locally," said Liu. ■



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