National Mining Association Forecast

The Outlook for Coal in 2007

Production of coal is expected to set a record in 2007 for the third consecutive year, although the rate of increase will be lower than in the previous two years. As in previous years, production is driven by the demand for affordable and reliable coal supplies that generate more than 50 percent of all the electricity that will be used in the United States this year. Interest in coal as a base load fuel continues to be strong, and the National Mining Association (NMA) expects that, over the long term, coal production and use will frequently set annual records as coal is used not only for electricity but also finds its way into the commercial, industrial and transportation markets through gasification and liquefaction.

In 2007, U.S. coal production is expected to total 1.170 billion tons, 0.9 percent more than the 1.160 billion tons mined in 2006. Production in the Eastern United States, including Appalachia, Illinois, Indiana and West Kentucky, will total approximately 485 million tons, slightly lower than the 491 million tons produced in 2006. Production in the West, including the Powder River Basin, will total 685 million tons, up 2.4 percent from the 669 million tons produced in 2006. Logistical issues that affected Western coal production during 2005 have largely been resolved and are not expected to materially affect production levels this year. (See Table One.)

Actual coal use in the U.S. and export to Canada and overseas destinations will reach 1.190 billion tons, nearly 20 million tons (or 1.8 percent) over actual use and export of 1.169 billion tons of coal in 2006. Factoring in demand to build inventories, total demand for U.S. coal will exceed 1.2 billion tons this year, 1.8 percent above the record total demand of 1.197 billion tons last year.

Supply – production plus imports – exceeded actual use and export of coal in 2006 for the first time since 2001. As a result, coal stockpiles increased at both utilities and industrial plants. The 28 million tons added to consumer stocks in 2006 will be followed by another 15 million ton inventory increase in 2007. Although power plant inventories at the end of 2006 were higher than at any time since 1999, NMA believes that utilities will build inventories to even higher absolute tonnage levels over the next year to maintain the same level of daily supply and to insulate themselves against unforeseen logistical problems or higher than anticipated burn. Thus, total supply in 2007 will again exceed actual use and export.

While remaining a small percentage of domestic coal use, imports will continue on an upward path, increasing from 36 million tons in 2006 to 40 million tons this year. Improvements in infrastructure made over the past two years will accommodate this increase. Columbia accounts for approximately 70 percent of the coal imported into the U.S. Venezuela, Indonesia and Canada account for another 25 percent. These shares are expected to be approximately the same in 2007.

Almost 95 percent of coal used in the United States is consumed for electricity generation (approximately 93 percent of domestic production). In 2006, electric generators used 1.030 billion tons to produce 50.5 percent of the electricity sold through the grid. Commercial and industrial consumers used another 28 million tons to generate electricity. The burn in 2006 was slightly lower than in 2005 due to lower overall demand for electricity caused in part by the warmer than normal fall and early winter. Overall, the demand for electricity increased by an estimated 0.2 percent in 2006.

With more normal weather patterns, electricity production is expected to increase by 1.5 percent in 2007. Coal use for electricity generation will total approximately 1.050 billion tons, 1.9 percent more than last year, taking 50.5 percent of the U.S. electricity market. Consumption of coal is increasing at a faster rate than overall demand for electricity due to greater use of lower Btu coals. Two new coal units came on line in 2006, the Hardin Generator Project Unit 1 in Montana and Tucson Electric Power Company's Springerville Unit 3 in Arizona. Mid America Energy's Council Bluffs Unit 4 in Iowa and the South Carolina Power's Cross Unit 1 are expected to begin service this year.

Nuclear production, which returned to peak capacity levels in 2006, will again perform at top levels this year. One nuclear plant, Brown's Ferry, is expected to return to full operation in 2007. The share of electricity generated from natural gas increased in 2006. This was due in part to lower price levels, partially because the increase in generation exceeded the national average in areas where natural gas is traditionally preferred, for example the Pacific Coast states, and also because gas was used to meet higher summer peaks in the South and Midwest. However, due to the continued high price of natural gas relative to coal, the fuel's share of the electric market is not expected to show a further increase this year.

The 1.5 percent increase in electricity generation over 2006 assumes normal weather patterns. The market share for fuels will remain approximately the same in 2007 as in 2006 with coal, natural gas or nuclear power neither gaining or losing market share. The U.S. Energy Information Administration's latest forecast predicts that the price of natural gas delivered to utilities will average $6.94 per MMbtu in 2007, as opposed to $7.03 in 2006 and $8.21 in 2005.

Demand for metallurgical coal at steel mills showed a small increase last year. In 2006, 24 million tons of metallurgical coal was used to produce approximately 17 million tons of coke. Global steel production increased by just over 9 percent in 2006, led by an 18 percent increase in China, which now accounts for just over one-third of world crude steel production. (Japan, the second largest steel producer, accounts for nearly 10 percent, followed by the United States with 8 percent of global production.) U.S. steel production totaled 105.1 million short tons, 2.5 percent above the 2005 level of 103 million short tons, as reported by the American Iron and Steel Institute. Production increases occurred in both electric and blast furnaces used for pig iron production, thus increasing the demand for metallurgical coal. Coke inventories were drawn down slightly in 2006, and coke imports were steady at approximately 3.5 million tons, down sharply from the nearly 7 million tons imported in 2004, but still above the 2 million-plus mark that was the "norm" earlier this decade.

The rate of increase in both steel production and shipments slowed during the last quarter of 2006 as demand for steel products, especially for automobile production, slowed. The rate of increase in imports also slowed, but overall steel imports were up significantly as reported by the Department of Commerce. In 2007, NMA expects these trends will continue at least in the first half of 2007 and that overall steel production will be slightly lower than in 2006. Coke imports will decline and inventories will remain stable this year. NMA expects coking coal use will decline by one half million tons to 23.5 million tons, reflecting slightly lower steel production.

Total coal exports are expected to decline by nearly one million tons, or by 1.2 percent, to 48.5 million tons in 2007. Metallurgical coal shipments to Canada will be stable, but shipments of steam coal to Canada are expected to decline slightly. Shipments of steam coal overseas will be approximately the same in 2007, at 6 million tons, but shipments of metallurgical coal overseas will decline by one-half million tons. Global demand for metallurgical coal continues to increase, although not at the rate seen earlier this decade. U.S. metallurgical coal shipments overseas will be approximately 23 million tons, with the major markets remaining Brazil (our largest overseas metallurgical coal customer), Italy, Spain, Turkey and the United Kingdom. The U.S. continues to ship small amounts of metallurgical coal to Japan and South Korea, but our largest Asian customer is India, where the steel industry is growing rapidly.

Steam coal shipments overseas, as expected, continued to decline in 2006, but will level out this year at approximately 6 million tons. Other than Canada, there is no single country that dominates the market for U.S. steam coal, although over 80 percent of U.S. steam coal shipments go to European countries in a trend not expected to change. There is little upside potential in the export forecast due to the efforts of nations bound by the Kyoto Protocol to reduce steam coal use, the competitive nature of the steam coal market and the presence of lower-cost competitors, including Venezuela, Colombia and Indonesia.

Shipments of U.S. coal to Canada totaled 19.7 million tons in 2006, nearly equal to the high level of exports to that country in 2003. Coal fired plants that were scheduled to close operations have not yet done so, and Canadian utilities continue to take U.S. coal. Steam coal from the U.S. will be level or decline slightly, to 15.0 million tons in 2007, but metallurgical coal shipments will be level at 4.5 million tons.

The outlook for coal remains positive for 2007, despite our expectations for slower economic growth. In 2006, preliminary data show that the U.S., measured by real GDP, grew an estimated 3.0 percent, marking the lowest rate increase recorded since 2003. Most analysts predict economic growth in 2007, on a year-on-year basis, will be in the range of 2.2–2.7 percent. These forecasts were done before the release of fourth quarter 2006 data. According to a survey done by the Bureau of National Affairs, "the slowdown in the economy that began in 2006 will continue throughout much of 2007, but the United States will avoid a recession and growth should improve in the second half of the year." Past increases in the cost of energy may continue to act as a drag on the economy, translating into higher costs of production for commodities and fewer non-energy dollars for consumers to spend. This drag on consumer spending, plus a housing slowdown, is causing forecasters to cut previously more optimistic 2007 outlooks. Globally, economic growth is also expected to be slower, e.g. the Economist Intelligence Unit (EIU) has lowered its forecast of global economic growth to 3.1 percent. Forecasts for inflation remain in the 2–3 percent range and forecast unemployment rates remain low. NMA has based its 2007 coal forecast on the mid-point of the forecast range or 2.5 percent. Worker shortages will continue in some industries, including mining.

The 2007 coal production and consumption forecast details are attached.

The Outlook for Copper in 2007

The market for copper is a global market, and the outlook for copper production in the U.S. must be considered in that context. As with all base metals and minerals, copper has benefited from global economic expansion, which averaged 4.1 percent in 2004, 3.4 percent in 2005 and an estimated 3.9 percent in 2006, according to EIU estimates. Although the EIU expects the rate of global economic growth to slow to approximately 3.1 percent in 2007, growth in developing countries is expected to average 7.5 percent. As a result of continued demand for basic metals in these high-growth countries, analysts expect 2007 to be a good year for global copper production.

The International Copper Study Group (ICSG) forecasts that mine production worldwide will increase 6.8 percent in 2007 to 16.2 million metric tons. This represents a marked improvement over a 1.9 percent increase in 2006 and a

2.5 percent increase in 2005. Production of refined copper is expected to increase by 3.8 percent this year on a global basis. Global demand for refined copper increased by 3.3 percent in 2006 (lower than expected due to lower demand in China) and is expected to increase by 4.2 percent this year. Use of copper is likely to be higher in all regions except in Western Europe, according to ICSG. Demand is expected to strengthen in China, although growth rates will not equal the blistering pace of 2003 and 2004.

Copper inventories began to increase during the last quarter in 2005 and continued to increase throughout 2006. According to Merrill Lynch, the average weeks of inventory supply, which had dropped to 1.7 weeks in 2005, climbed to 2.6 weeks by mid 2006. According to ICSG, end-of-year copper inventories were 61 percent higher than at the end of 2005, representing an additional 96,000 metric tons. Analysts believe that the global refined copper market will again be in a modest surplus in 2007, following several years of deficits, indicating that the demand for copper for inventory build will abate this year.

Production of mined copper in the U.S. increased to 1.220 million metric tons in 2006, the highest level recorded since 2001, according to the U.S. Geological Survey. Several mines that had been affected by a strike in 2005 returned to production and new capacity came on line in Montana, Nevada and Utah. Total refined production of copper in the U.S. in 2006 increased by 6.6 percent. Apparent consumption increased slightly in 2006, but is expected to drop in 2007 due to the overall weakness in the U.S. economy, particularly in the housing market. Despite an expected decline in consumption, analysts are forecasting an increase in U.S. mined copper production of approximately 1.0 percent.

The Outlook for Gold in 2007

The market for gold is also a global market. The price of gold continues to increase, reaching new highs on a regular basis (daily, monthly and annual gold prices can be found at www.kitco.com). This is the longest bull market since gold began to be traded on the world market in the early 1970's. Price increases are being driven by deteriorating political conditions, political unrest, a relatively weak U.S. dollar and concerns regarding the long-term implications of the U.S. trade and budget deficits. Additionally, demand for gold is outstripping production on a global basis, a situation that will not soon change as China is now legally allowing the sale of gold.

Gold is historically used in the production of jewelry and as an investment holding. Although the jewelry market continues to represent 75 percent of worldwide gold demand, thanks largely to strong economic growth in China and India, overall jewelry demand is falling (but at a slower rate than in 2005), and investment demand is increasing. According to the World Gold Council (WGC), investment gold demand increased 40 percent during the first three quarters of 2006, demand for jewelry increased 15 percent (with a very strong increase in the third quarter) and demand for industrial use was up 46 percent.

Globally, supply of gold from all sources (mine production, official sector sales and scrap) did not keep pace with demand in 2006, according to WGC. Analysts at Deutsche Bank expect that this supply-demand imbalance will continue throughout 2007 and for the foreseeable future, an opinion also supported by Merrill Lynch, among others.

The Gold Fields Mineral Service (GFMS) Gold Survey estimated that world production of gold fell by 2 percent, to 2,467 metric tons, in 2006, roughly in line with production in 2005. The decline was due to a number of operational factors, especially in South Africa and Indonesia. GFMS expects a modest rate of increase in mine production during the first half of 2007, as these problems are resolved and new mines come into full operation. GMFS also reported a significant decline in official sector sales during 2006 and predicts that net sales during the first half of 2007 will be lower still.

In 2006, U.S. gold production totaled an estimated 260 tons, 1.6 percent above 2005 levels. Although small, this increase in U.S. gold production is the first in several years. Production in 2007 will be flat with some small upside potential. Preliminary production estimates by the U.S. Geological Survey show that the U.S. and Australia produced approximately the same amount of gold in 2006, and South Africa remained the world's largest gold producer.

References

BNA, Inc. (2007, January 3). *Economic Outlook*. Bureau of National Affairs, Inc. Washington, D.C.

Economist Intelligence Unit (2007, January 2). *EIU's Quarterly Copper Outlook.* The Economist, London.

Economist Intelligence Unit. (2007, January 16). *USA: 5-Year forecast tables.* The Economist, London

GFMS. (2007, January 18). *Press Release: Rally in Gold Price Forecast for First Half 2007.* GFMS Limited. London.

Global Team (2007, January 2). Mine 2 Market. Merrill Lynch, New York.

International Copper Study Group. (2006, October 2). *Forecast 2006-2007*. International Copper Study Group. Lisbon, Portugal.

Lampard, G. (2006, December 1). *A copper market review – easing to a modest surplus*. Canaccord Capital.

Lewis, M., Richardson, P., Crane J., Sieminski, A. (2007, January 12). *Commodities Outlook, 2007.* Deutsche Bank, Global Markets Research.

USGS. (2007, January). *Mineral Commodity Summaries 2007*. U.S. Geological Survey. Washington, D.C.

World Gold Council. (2006, November). *Gold Demand Trends, Third Quarter 2006.* World Gold Council, New York

Coal 2006 - 2007
National Mining Association - Forecast
Coal Production and Consumption

		Final 2003 million tons	Final 2004 million tons	Final 2005 Million tons	Estmate 2006 Million Tons	% change 2006 vs 2005	NMA Forecast 2007 million tons	% change 2007 vs 2006
DOMESTIC CONSUMPTION								
Electricity	Electric Power Sector	1005.1	1016.3	1037.5	1030.0	-0.7%	1050.0	1.9%
	Commercial & Industrial	26.7	28.5	27.8	28.0	0.7%	30.0	7.1%
	Total Use for Electricity	1031.8	1044.8	1065.3	1058.0	-0.7%	1080.0	2.1%
Coking Coal		24.2	23.7	23.4	24.0	2.6%	23.5	-2.1%
Industrial		36.4	35.6	34.5	35.0	1.4%	35.0	0.0%
Retail-Commercial		2.4	3.2	2.3	3.0	30.4%	2.7	-10.0%
TOTAL DOMESTIC CONSUMPTION		1094.8	1107.3	1125.5	1120.0	-0.5%	1141.2	1.9%
Exports:								
Canada:	Steam	17.2	14.0	15.1	15.2	0.7%	15.0	-1.3%
	Met	3.6	3.8	4.4	4.5	2.3%	4.5	0.0%
	Total	20.8	17.8	19.5	19.7	1.0%	19.5	-1.0%
Overseas:	Steam	3.8	7.1	6.2	5.9	-4.8%	6.0	1.7%
	Met	18.5	23.1	24.2	23.5	-2.9%	23.0	-2.1%
	Total	22.3	30.2	30.4	29.4	-3.3%	29.0	-1.4%
TOTAL EXPORTS		43.1	48.0	49.9	49.1	-1.6%	48.5	-1.2%
TOTAL CONSUMPTION		1137.9	1155.3	1175.4	1169.1	-0.5%	1189.7	1.8%
Consumer Stock Change		-21.7	-14.3	-3.5	27.9		15.5	
TOTAL COAL DEMAND		1116.2	1141.0	1171.9	1197.0	2.1%	1205.2	0.7%
SUPPLY								
Production	East*	469.2	484.8	493.8	490.7	-0.6%	485.0	-1.2%
	West	602.5	627.3	637.7	669.2	4.9%	685.0	2.4%
TOTAL PRODUCTION		1071.7	1112.1	1131.5	1159.9	2.5%	1170.0	0.9%
Producer Stock Change		-5.0	2.9	-6.2	0.0		5.0	-
Imports		25.5	27.3	30.5	36.0		40.0	11.1%
TOTAL COAL SUPPLY		1102.2	1136.5	1168.2	1195.9	2.8%	1205.0	3.2%
% change in electricity generation (EIA)		0.6	2.3	2.4	0.2		1.5	
% change in real GDP		3.0	4.2	3.2	3.0		2.5	
Coal's share of generation		52.5%	51.3%	51.1%	50.5%		50.5%	

* Includes Refuse
2003-2005- Energy Information Administraiton - Monthly Energy Review, December 2006

16-Jan-07