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## HM Payson Alchemy: Turning Coal Into Gold



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Coal stocks are easily among the most hated and worst performing equities in the market today. The basic fundamentals of the commodity's supply and demand, however, suggest that now is the perfect time to buy these stocks at bargain prices.

## A Primer:

There are two basic types of coal – thermal coal used for electricity generation, and metallurgical (met) coal used in the steelmaking process. Our basic thesis for thermal coal lies with robust global demand for the commodity, whereas the met coal opportunity is driven by the supply side of the equation.

## **Global Thermal Coal Demand**

The U.S. produces nearly 6x as much electricity per person as the rest of the world. Blackouts and brownouts are common occurrences, particularly in the developing regions. On a global basis, coal is the most economical and feasible fuel to narrow this gap. Coal plants require less infrastructure than either natural gas or nuclear. Although natural gas prices in the U.S. are currently low, on a global basis prices are set by oil and remain substantially above coal prices.

The reality is that coal plants are being built nearly everywhere except in the U.S. Approximately 75-100 gigawatt (GW) of coal capacity is expected to come online in 2013; a pace of growth expected to continue for at least the next 5 years. To put those numbers in perspective, the entire U.S. coal plant fleet currently stands at 319GW. Given the 5-10yr development cycle for coal plants, there is little chance that these projects will be canceled. While the majority of these plants are being built in India and China, developed nations i.e., Japan and Germany, are also building coal plants to replace their nuclear generation.

## **U.S. Thermal Coal Demand**

In the U.S., coal plants are being closed for environmental and economic reasons. We can afford to buy cleaner power and build the necessary support infrastructure. The most aggressive forecasts for the U.S. call for approximately 77GW of capacity to be shuttered over the next 3-5 years. The corresponding drop in coal tonnage, however, will be less severe since these old, dirty plants are not currently

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RESEARCH NOTES
May 3, 2013

operating at full capacity. Beyond this wave of closures it becomes very difficult to replace the lost generating capacity with alternatives. For example, the shale gas revolution (discovery and extraction) in the U.S. has added ~6 trillion cubic feet (Tcf) of natural gas production on an annual basis. To produce enough natural gas to replace all of the current coal fired electricity another revolution of the sort we've witnessed over the last 5 years would be necessary; in short, an unlikely scenario. Furthermore, as more gas is used for power generation, the price goes up and coal becomes more economical. Utility companies, which just spent billions on environmental controls for coal plants, prefer to have the flexibility of multiple fuels to avoid such price spikes. With existing technology, renewable energy is not plentiful, reliable or economical enough to make a significant dent. So, although coal generation is clearly falling in this country, it is unlikely to go away completely anytime soon.

### **Thermal Coal Supply**

The U.S., Australia and Indonesia currently have more thermal coal reserves than they need and contribute to the seaborne market supply. The largest consumers- India, China and Japan- must import to fulfill their coal needs. As with any commodity business, the lowest cost coal producers are bestpositioned to endure the natural cycles of the industry. Therefore, given geographic proximity, Australian and Indonesian tons go first into the market, with U.S. export tons filling the marginal void. The supply/demand balance for seaborne thermal coal is impacted by a number of factors - industrial

production levels, population growth, urbanization and weather to name a few. Although coal producers cannot control these factors, they can and do ration supply to maintain pricing. Although natural gas wells lose production when they are capped, coal reserves lose nothing by staying in the ground.

### Thermal Coal Favorite Stock: Peabody Energy (BTU)

BTU has thermal coal reserves in the lowest cost U.S. basins and in Australia. It is the only U.S.-based coal producer with international assets. The company's low-cost positioning in the U.S. insulates it from the near-term coal fired plant shutdowns. BTU does export some U.S. coal, but its primary exposure to the global seaborne market is through its Australian operations. BTU recently acquired an Australian coal company for its reserve base and is well positioned to benefit in the longer term from increasing demand in the Pacific. During this trough period BTU has cut costs and production and delayed growth spending, while still generating enough cash to pay down debt from the recent acquisitions. Peabody also has met coal tons in Australia which benefit from the supply thesis discussed more fully, below. BTU also pays a small dividend which provides some cushion during the trough periods. The stock currently trades at its cyclical low, which historically has been 25% of cyclical peak pricing. We expect patient investors to be rewarded when the global supply and demand of coal comes into balance once again.

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#### **Metallurgical Coal Demand**

Steel use in the developed world shrank 15% from 2007-2012, but grew 44% in the developing world as urbanization continues to drive infrastructure investments. Going forward a resumption of normal industrial activity in the developed world and growth from emerging markets will provide increased demand for met coal. In the U.S. steel capacity utilization has begun to recover with stabilization of the construction and auto markets. but weakness in Europe continues. Although the pace of growth in China is debatable, the country continues to support infrastructure investment and higher levels of steel production.

#### **Metallurgical Coal Supply**

Met coal is of limited availability worldwide. Australia, U.S., Canada and Mongolia are the primary exporters with Australia responsible for nearly half of the export tons. Although China has met reserves, they are insufficient to meet its growing appetite. China's economic planning agency has identified met coal as a "strategic resource" to be managed by the government due to its scarcity and value. Given the geographic concentration of reserves, there has traditionally not been ample slack in the met coal supply to avoid significant volatility of prices. Benchmark prices currently are near cycle lows at ~\$172/MT, but have spiked to over \$400/MT during periods of supply disruption.

As much of the demand for seaborne met coal is in the Pacific, the U.S. has historically been the swing supplier. As prices spike, U.S. tons head further east to backfill into Europe and South America. As with thermal coal, producers do exercise discipline and keep tons in the ground when they are not economical to produce. The key for U.S. producers is to have enough tons ready and enough port capacity available to fill the seaborne demand as it arises.

#### Metallurgical Coal Favorite Stock: Alpha Natural Resources (ANR)

ANR has both low and high cost thermal tons and met tons in the U.S. Its low cost thermal tons provide steady cash flow while the met reserves provide the longer term value. We do not assign any value to the company's high cost thermal tons in our valuation, but these tons do begin to move when natural gas prices are above ~\$5/MMBtu. With ANR's acquisition of Massey Energy, the company now has the largest reserve base of met coal in the U.S. Furthermore, ANR has crucial port access to move those tons when the market needs them. During the cyclical trough the company has thus far exceeded its cost-cutting goals and continues to rationalize production to support favorable economics. Additionally, in taking over the troubled Massey mines, the company's solid operational track record has led to improved safety metrics. Similar to BTU, ANR's stock is currently circling the drain at trough prices which represent 10-15% of cyclical peak pricing.



RESEARCH NOTES May 3, 2013

#### Conclusion

Although thermal coal consumption is declining in the U.S., we believe the global supply and demand fundamentals support a more bullish picture. With their strategically-positioned reserves, capital discipline and solid operations we accordingly conclude that BTU and ANR provide a favorable risk/reward proposition at these levels.

#### Market Log- May 2, 2013

S&P 500: 1,597.59 10 year T-Note: 1.74% Crude Oil: \$95.83 Gold: \$1,465.50

If you have questions or comments regarding this or any other communication from us, please email us at **research@hmpayson.com**.