

The Coal Industry's Best Friend

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Beginning next Wednesday and for the following two weeks Copenhagen will have the coal industry on pins and needles. That's where President Barack Obama and leaders of 190 other countries will convene to try to reach a consensus on reducing carbon emissions.

It's doubtful that the international community will come to an actual agreement in Denmark. Too many interests, too little time. However, the event is sure to put the spotlight on coal--the world's largest source of energy for power generation as well as one of the largest sources of carbon dioxide emissions.

On the docket back home is "Cap and Trade" legislation, which would require carbon-emitting industries to purchase carbon allowances from the U.S. government. If a company emits less carbon than its allowance, it can sell the leftover permits to another company. If it pollutes more, it will need to buy more permits. For utilities, which generate 44% of the United States' power from coal, the effect could be crippling.

From an economic point of view, a wounded coal industry would not be a wise option. As the world's second-largest consumer of coal behind China, the United States simply uses too much of it to make a clean transition any time soon. The United States uses 1.2 billion tons of coal a year to fire close to 1,500 power plants producing 336,040 megawatts of power. And we're not running out: Estimates put U.S. coal reserves at about 500 billion tons, or a 400 year supply. Put simply, coal is too big to fail.

This leaves two options for reducing emissions: Use less coal, which would translate into higher electricity prices, or make the burning of coal cleaner. Any company that can help the industry become cleaner stands to reap a fortune.

Clean energy is highly desirable, but at what cost? When Andy Obermueller [wrote about this issue in June](#), he cited \$700 billion as the cost of replacing coal-fired power plants. And even if the price tag weren't prohibitive, it would take years to complete.

The only viable option is to make coal cleaner.

Fuel Tech Inc. (Nasdaq: FTEK) does just that. It's quickly finding itself an ally of environmentalists and the coal industry alike. And at this point, it has the field all to itself.

As a leading provider of pollution control technology, Fuel Tech should benefit from environmental regulations and see a flood of orders for its services as regulations tighten, especially if cap-and-trade legislation passes.

The Problem with Coal

There are two key areas where Fuel Tech helps the coal industry.

One is nitrogen oxide emission. Nitrogen oxides are formed when coal is burned and causes nitrogen within the coal to be released or when nitrogen within the air breaks apart and combines with oxygen. These pollutants are linked to the formation of ground level ozone and respiratory ailments.

New environmental legislation is forcing power plants to cut nitrogen oxide levels by as much as -60%. One of Fuel Tech's products, the NOxOUT Cascade system, can cut nitrogen oxide emissions up to -80% for a fraction of the cost of competing technologies.

Another problem is "slag" -- the leftover waste from burning coal. Many utilities are beginning to use cheaper coal mined in areas like Wyoming's Powder River Basin. It contains impurities like sulfur and iron that cause buildup and reduce a plant's efficiency.

Normally, a utility must shut down a plant for up to two weeks and use explosives to remove slag. Fuel Tech's FUEL CHEM division uses a patented chemical treatment to eliminate slag and enhance the performance of power-generating equipment -- all while keeping the plant online. Morningstar estimates slag-reduction could grow into a \$1 billion market in the United States alone.

But Fuel Tech's potential isn't confined to the United States. China has an insatiable appetite for coal -- it now uses more coal than the United States, Europe and Japan combined. Coal supplies a whopping 80% of China's electricity.

Fuel Tech has strategic partnerships that open the door to the Chinese market, which could be worth at least two to three times the potential of the United States. India and Mexico are also coal-heavy markets the company is penetrating.

The slag removal business is still in its infancy, but Fuel Tech has a leg up. FUEL CHEM requires plants to restock chemicals, which represents a recurring revenue stream. The company has 24 customers in the United States, out of a possible 1,512. The more customers it adds, the more scalable the business becomes.

When the attention turns to coal next week, Fuel Tech will be ready. The company has a trailing twelve month revenue of \$71 million and no long-term debt. As Fuel Tech gets more customers and adds more recurring revenue, earnings are likely to snowball.



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Disclosure: Brad Briggs does not own shares of any security mentioned in this article.



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