

Carbon Capture and Storage

Special Report

How to "Capture" Profits in the Energy Business

Once thought of as a way for the coal industry to mask its polluting nature, carbon capture is rapidly emerging as a viable technology – thanks mostly to heavy lobbyist influence, and not rational cost analyses, energy invested on energy returned, or risk vs. reward scenarios.

Nonetheless, with so much support in Washington, it's beginning to attract serious investment and could have implications that affect much of the energy sector.

Influence has also found its way to the International Energy Agency (IEA), where carbon capture and storage (CCS) has been identified as a very important technology that will be used to address emission cuts.

Of course, with coal providing the world with about 40 percent of its power generation, it's not surprising that CCS would garner so much support. So while we still believe alternative energy is the most economically sustainable solution to our global energy crisis, it would be irresponsible to ignore the fact that CCS will play a role in the new energy economy.

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It's no secret that CCS is very expensive. Although costs are falling to a level where the economic viability of CCS is not completely out of the question. Of course, it doesn't take into account the peaking of coal production or other highly pollutive issues that revolve around the coal industry. But we'll leave that for another day.

Today, we know that with improved economics, CCS is going to happen.

So if you're looking for a way to make a few bucks from CCS, getting in now could provide some nice returns over the next few years. . .if you can handle a bit of risk.

And that's exactly the aim of my service, *Alternative Energy Speculator*. The goal is to take "green" investing one step further – taking on a bit more risk, but enjoying the spoils of much greater rewards. We do this by investing in emerging "clean energy" technologies and stop-gap technologies, like CCS.

Investing in Carbon Capture and Storage

Mitsubishi Heavy Industries (MHI) (Tokyo: 7011) is probably the technology leader in this space. They have developed a commercially available, post-combustion flue gas recovery system called the KM-CDR Process.

It was developed to run on natural gas-fired applications, but is in the demonstration phase of applying the technology to coal-fired plants.

In the past five years, MHI has constructed four major CO2 capture plants and they have another four in the pipeline. The original four plants were in Malaysia, Japan, and India. The other four are being planned in China, India, and the United Arab Emirates.

Of course, MHI isn't a pure CCS play; it is already a well-established company in the heavy-duty manufacturing industry. And while it could provide nice returns, I'd be on the lookout for a play that calls only the energy industry home.

If you're interested, NRG Energy, Inc. (NYSE: NRG) has partnered with technology company Powerspan to develop a commercial-scale CCS facility for a coal power station in Sugar Land, TX, home to one of the largest coal plants in the country.

To date, CCS has only been tested on coal plants no bigger than 5 MW. NRG's system would be applied to a plant emitting 125 MW's worth of emissions.

If successful, the NRG/Powerspan technology could evolve into an industry leader.

I also have a new, smaller pure-play CCS stock on my watch list right now. I'm hoping to share that one soon with *Alternative Energy Speculator* members. Not to mention, a new electric vehicle play, too.

The last time we played an under-the-radar electric vehicle play, we walked away with a 391% gain from a Chinese stock called Byd Company (PK:BYDDF). I'm looking to repeat that one again!

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