

World's First Carbon Capture Pilot Launching Next Week



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2 Comments

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Carbon capture and storage (CCS) technology will get a chance to prove itself next week at the 1,600 MW Schwarze Pumpe coal-fired power plant in Germany. The CCS demonstration will capture up to 100,000 tons of CO2 each year and bury it 3,000 m under a nearby gas field.

The scheme uses oxyfuel technology, which relies on burning coal in pure oxygen and CO2 instead of normal air. This results in a byproduct of almost pure CO2 that is bottled and pumped underground.

The Schwarze Pump has an output of 12 MW of electricity and 300 MW of thermal power—enough for over 1,000 homes.

While the pilot pump will only run for three years, the company behind the Schwarze Pump plan is commissioning a similar project in France next year.

I am cautiously optimistic about the upcoming CCS projects, but we will be waiting a long time to see widespread commercial use of the technology— probably until 2020. And questions about the long-term safety of CCS linger. For example, what happens to a CO2 burial site in the event of an earthquake?

But such questions are not stopping companies from investing time and money in CCS, so we can expect many more test projects like Schwarze Pump in the near future.