

CCUS: Carbon Capture, Utilization, and Storage



Picture source: Phys.org

- **Dangerous**
- **Expensive**
- **Not Viable at Scale**

Every dollar spent on CCS (CCUS) is a dollar that cannot be spent reducing the need for fossil-fueled energy through efficiency, conservation, and renewable-energy power plants with storage.



Renewable energy can do it all and create 3.1 million net new jobs!

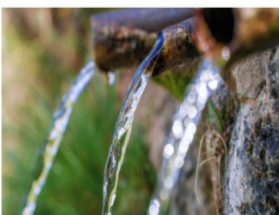
According to Howard Herzog, author of *Carbon Capture* (MIT press, 2018), CCS will increase the cost of electricity to consumers by 25% to 50%.

In many locations, alternative sources of energy (solar and wind) are already cheaper (and far cleaner) than fossil-fueled energy with or without CCS.

CO₂ pipelines operate under high pressure (a little over 1000 pounds per square inch). Therefore, when there is a pipeline leak or a rupture, a great deal of CO₂ can be emitted into the air in very short period of time (8.5 to 22 metric tonnes of CO₂ per second. [Koornneef (2012) pg. 73].

Initially CO₂ escaping from a pipeline will appear similar to steam, but as it quickly warms up to the outdoor temperature it becomes invisible. It is heavier than air, so it lies close to the ground, forming a huge invisible puddle of deadly gas. The CO₂ puddle is odorless and colorless, so humans cannot sense it. The puddle excludes oxygen, suffocating anything within the puddle – plants, animals, and humans.

Workers are killed almost every year by CO₂ leaks from faulty soda vending machines, fire suppression systems, and leaky tanks of CO₂ carried on trucks.



What about our water?

According to the Global CCS Institute (an Australian organization with offices in Washington, D.C., which lobbies for CCS) CCS can increase the water requirements of a power plant by anywhere from 56 percent to 90 percent. At a time when much of the U.S. is (and will continue to be) subject to extended drought conditions, devoting water to CCS so we can burn more fossil fuels seems worse than stupid.

CO2 seeping into water supplies from deep underground has been shown to make water dangerous to drink. Water that has been in contact with CO2 can leach arsenic, uranium, radium, cadmium, chromium, copper, lead, mercury and selenium into the water at levels that exceed federal drinking water standards.

Making fossil fuels WORSE!

CCS equipment to capture CO2 from the smokestack of a power plant requires energy to operate. To produce this energy, the power plant must burn 10% to 40% more fuel than a similar plant without CCS. (Scientists call this the “energy penalty” for using CCS.) Depending on the specific power plant, burning this additional fuel can release even more deadly toxic pollution – sulfur oxides (SOx), nitrogen oxides (NOx), arsenic, mercury, cadmium, lead, volatile organic compounds (VOCs), and ultra-fine particles (PM2.5). These toxicants are associated with many different illnesses, including heart attacks, cancer, asthma, low birth weight, birth defects, chronic obstructive pulmonary disease (COPD), and brain damage in children, among others. As Dr. Devra Davis and others have said, “reductions in burning of fossil fuels can yield powerful, immediate benefits to public health by reducing the adverse effects of local air pollution.”

CCS is just plain bad for public health.

The information quoted here was provided by the Science & Environmental Health Network (SEHN). All this information and MUCH more is available at the website carboncapturefacts.org.



We need to tell policymakers to STOP trying to sell us CCUS.
MOVCA can help you send them the message!



Mid-Ohio Valley Climate Action is a 501(c)(3) nonprofit organization dedicated to educating, mobilizing, and coalition-building to address the global climate crisis in the Mid-Ohio River Valley and beyond.

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