

Capturing carbon to produce more oil: Climate solution or folly?

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Any method that leads to the production of more oil seems counter to the prevailing wisdom on climate change that says use of more greenhouse-gas-emitting fuel is detrimental. But there's one oil-recovery process that some say could be part of the climate change solution and now unites unlikely allies in industry, government and environmental groups, according to an article in *Chemical & Engineering News (C&EN)*, the weekly news magazine of the American Chemical Society.

Jeff Johnson, a senior correspondent at C&EN, explains that a process called <u>enhanced oil recovery</u> (EOR), which uses carbon dioxide to force the last bits of oil out of partially depleted wells, is fueling this rare agreement. The technique is not new, but what's becoming tantalizing now is where the carbon dioxide comes from. With new advances in carbon capture, the possibility is growing that the carbon dioxide could come from power plants that otherwise would release it into the atmosphere. The environmental and economic appeal is already driving new research into carbon capture techniques. And if power plants could offset the costs of implementing these techniques by selling captured carbon dioxide to oil companies for EOR operations, it could be a winwin situation. An additional perk of enhanced oil recovery is that, according to the oil <u>industry</u>, about half of the carbon dioxide they use to extract oil stays underground.

But, as the <u>article</u> notes, the process is not entirely without flaw or opposition. The carbon dioxide that is supposed to remain tucked away can and has escaped through leaks. In one 2011 case, an inadequately



capped, old well-bore released carbon dioxide for 37 days, suffocating wildlife in the area. And not all environmental groups are onboard. One is challenging a proposed project in California that they say could put the local community at risk.

More information: "A Carbon Commodity" cen.acs.org/articles/92/i17/Carbon-Commodity.html

Provided by American Chemical Society

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