

Japan's Dangerous Distractions: Carbon Capture and Storage

Carbon Capture and Storage (CCS) is a dangerous distraction promoted by fossil fuel companies and their government enablers to prolong the use of dangerous and dirty fossil fuels.

CCS is a solution for the fossil fuel industry, not for people and the planet. CCS barely reduces emissions and actually prolongs the lifetime of dirty energy.

The Japanese government is promoting CCS as a tool to combat the climate crisis. However, CCS has been a proven failure for over 50 years and hasn't made a dent in global emissions. Investing in CCS delays our transition to renewable energy.

Instead of wasting time and money on technologies that don't work, Japan and other governments must commit to phasing out fossil fuels before it's too late.



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PROVEN FAILURE
for
50 years

What is CCS?

CCS is a technology proposed to capture carbon dioxide (CO₂) emissions produced by various industrial processes, particularly those related to fossil fuels and heavy industries. Once captured, the CO₂ is transported and attempts are made to utilize or store it, mainly underground.

The vast majority of CCS projects operating today are supposed to capture emissions from the processing of CO₂-rich fossil gas. In many cases, the CO₂ is then injected underground to extract more oil, generating further CO₂ emissions and other pollution.



The Dirty Truth about CCS

Economic Burden



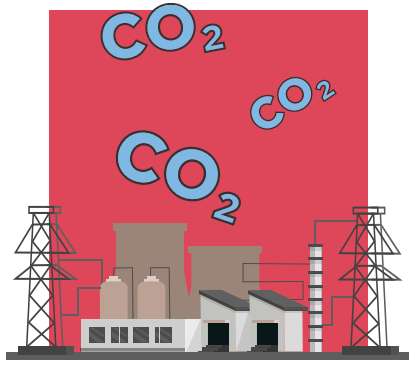
CCS is prohibitively expensive and cannot compete with more affordable renewable energy sources like solar and wind. CCS requires a significant amount of additional energy and infrastructure to capture, process, and store the CO₂. [CCS costs nearly three times more expensive than onshore wind power and more than twice as expensive as solar photovoltaics (PV).] This cost adds to the already high and volatile costs of fossil fuel generation. Even worse, CCS couldn't exist without taxpayer subsidies. Governments around the world have already wasted tens of billions of dollars on CCS and proponents seek billions more in public funds to sustain it.

Unsafe for Communities



CCS poses significant health, safety, and environmental risks, disproportionately affecting marginalized communities already burdened by pollution. Toxic air emissions, pipeline ruptures, and leaks from underground CO₂ storage can harm and kill people. For example, a CO₂ pipeline rupture in Mississippi, USA hospitalized 45 people in 2020.

No Emissions Reduction



CCS does not reduce emissions, but simply prolongs the lifetime of dirty energy.

Global CCS facilities have the theoretical capacity to capture less than 0.1 percent of global carbon emissions⁸, but rarely capture even that small amount.

The Intergovernmental Panel on Climate Change (IPCC) lists CCS as one of the most expensive and least effective emissions mitigation options available. The International Energy Agency (IEA) recently stated that “(r)emoving carbon from the atmosphere is costly and uncertain. We must do everything possible to stop putting it there in the first place.”

The vast majority of CCS operating today is capturing emissions from processing gas. The CO₂ is then primarily injected underground to extract more oil, generating further CO₂ emissions and other pollution.

Solution



For a livable planet, Governments like Japan must phase out fossil fuels and protect carbon-rich ecosystems. Renewable energy is increasingly cost-competitive, making it a superior option to fossil fuels. Transitioning to 100 percent clean, renewable energy through rapid electrification provides a simpler, surer, and more affordable solution to the climate crisis.



To limit dangerous temperature rise Governments like Japan must phase out fossil fuels and protect carbon-rich ecosystems.

Resources:

Carbon Capture and Storage is a False Solution for the Climate and Our Communities, Center for Biological Diversity,

<https://biologicaldiversity.org/campaigns/carbon-capture-and-storage/pdfs/CCS-explainer.pdf>

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- Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach (2023 Update), International Energy Agency, Sep 2023, p. 17, <https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach>.



For more information, please visit:
<https://fossilfreejapan.org/>

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