3 CARBON CAPTURE & STORAGE (CCS)

Carbon capture is the basis of the myth that carbon dioxide can be safely sucked out of smokestacks or directly from the air, and stored. Carbon capture and storage/sequestration (CCS) is often a catch-all term proposed to be used on natural gas facilities, fertilizer plants, ethanol refineries and coal-fired power plants (sometimes referred to as “clean coal”). The CO2 is then compressed into a liquid and transported to be stored in underground geological formations. CCS is usually referred to when addressing enhanced oil recovery (EOR). EOR is an older technology used by the oil and gas industries to inject CO2 into underground oil and/or gas deposits in order to extract more oil and gas. Carbon capture, utilization (use) and storage (CCUS) is the idea that CO2 could be converted into a new product to be stored in manufactured materials like cement and plastics or used for Enhanced Oil Recovery. Bioenergy with CCS (BECCS) is the concept of burning wood pellets or trees (from monocrop plantations) and capturing the CO2 emissions (see “Bioenergy). Direct air capture (DAC) proposes removing CO2 directly from the atmosphere using chemical & mechanical means.

RELEVANCE FOR BONN/ COP28: largely promoted with Article 6.4 and by oil-extracting economies, such as USA, OPEC states, Japan e.t.c.

HERE ARE SOME THINGS YOU MIGHT HEAR THAT ARE FALSE:

- We need to manage our carbon emissions, not manage carbon emission production at source
- The world can not phase out fossil fuels completely

HERE'S HOW TO RESPOND:

1. In many models, the potential of DACCS and BECCS has been based on theoretical assumptions and a limited set of factors which are not reflected in the real world, with overstated claims of feasibility, safety, readiness and effectiveness.
2. DACCS is an energy-intensive and (sometimes) water-intensive process, which is currently being used for more Enhanced Oil Recovery and as an argument to not pursue emission reductions.
3. DACCS is currently more expensive than nearly all other forms of mitigation, additionally, the emissions produced from the construction of DACCS infrastructure could be astronomical, risking our carbon budget. It is much cheaper for most companies to reduce their own emissions than to buy expensive DACCS credits (and safer for our carbon budget).
4. At present, more DACCS facilities have failed than worked, and ones that work have captured significantly small amounts of CO2 compared to what they have been modelled or promised.
5. The carbon captured (via CCS) would need to be transported - one method of transport is through pipelines over large distances, which could further threaten human rights via land-grabs, health and safety.
6. CCS is a delay tactic for the global north who do not want to pursue climate ambition, but instead secure their economies and their elite. The Global South can not risk delay against the former’s continued and unjustifiable expansion of fossil fuel production and use.

Important links:

- Carbon Capture and Storage briefing by Center for International Law https://www.ciel.org/issue/carbon-capture-and-storage/
- Carbon Capture and Storage - 'False solution' or vital tool to curb emissions? By DeSmog - https://www.desmog.com/carbon-capture-and-storage-technology/