

What I heard on Day 1

- ▶ Disagreement about whether ramping/turndown causes technical issues for CCS. For example in solvent systems: turndown < 50% cause liquid maldistribution in regenerator that increases reboiler duty by 50%. Disrupts heat exchangers, compressors, flow meters, etc.
- ▶ Controls and control co-design are very important. Also need online sensors for state characterization to do this (e.g., solvent CO₂ loading, T, P).
- ▶ Important to think of this as an integrated system, rather than optimizing a power plant and a CCS plant separately
- ▶ Disagreement re: whether the focus should be on retrofits vs. greenfield sites
- ▶ Pushback on H₂ as out of scope: could help decarbonize other sectors

What I heard on Day 1, continued

- ▶ Disagreements as to what types of CCS perform better at the lower CO₂ concentration of CCGT. Generally, there has not been a lot of work on NG CCS.
- ▶ Need > 90% capture to be relevant, but the optimal capture rate seems unknown
- ▶ Need to increase utilization of high capex equipment—matters more than flexibility. Could be opportunity for some kind of storage, direct air capture
- ▶ Most controversial: whether to focus on DAC.
- ▶ We need to be very clear about scope and program objectives
- ▶ Capex is "a liar's game"