Case Study Responses

1. According to the case study, a corporation should use carbon offsets as a means of reducing its emissions under circumstances where immediate, direct emission reductions are not viable due to existing technological, operational, or financial limitations. This is particularly relevant when companies face the urgent need to respond to climate change goals, such as achieving "net zero" GHG emissions by 2050 as outlined by the IPCC, but lack immediate alternatives to their current carbon-intensive operations. Carbon offsets, while criticized for allowing companies to continue "business as usual," can serve as an interim measure to mitigate emissions while more sustainable, long-term solutions are developed and implemented.
2. The motivation for a company to consider permanent carbon capture and storage (CCS) solutions, despite their higher costs, is multi-faceted. The urgency to address climate change, as emphasized by the dire projections of the IPCC and the requirement to peak GHG emissions before 2025, places significant pressure on companies to act decisively. Companies may also be driven by a desire to lead in sustainability, a strategic response to anticipated future regulations and carbon pricing, and the realization that traditional carbon offsets may not offer the permanence or verifiability required to combat climate change effectively. As the case study highlights, the increasing scrutiny of carbon offset effectiveness and the emerging preference for technological solutions that offer permanent CO2 removal underscore the strategic consideration for companies to invest in CCS as a more definitive response to climate change.
3. Anticipating increased regulation in the carbon offset market is sensible for companies, given the growing skepticism and criticism regarding the effectiveness and transparency of current offset projects. The case study suggests that regulation could take the form of stricter standards for verifying carbon offsets, including requirements for real, measurable, permanent, additional, independently verified, and unique emission reductions. There may also be a move towards more transparent reporting and tracking systems to prevent double counting and ensure the integrity of offsets. This could lead to a more standardized and reliable market, pushing companies to prioritize high-quality, technology-based carbon removal projects, despite their higher costs, over less certain nature-based solutions.