Expert consensus is that the state's future energy demands and GHG emissions reductions will be met only by including low- to negative-carbon electricity and fuels generation. This means applying carbon capture, utilization, and storage, not only to natural gas power plants, but also to sources such as biomass plants or biofuel refineries. While technologies exist today to apply CCUS to these emissions sources, they are not optimized to compete with other GHG emissions reductions strategies, which often are subsidized, incentivized, and for which compliance methodologies exist.

A number of research reports have been issued in the past couple of years, in which California's energy future and GHG emission projections have been analyzed in great detail. These reports recognize that, with a phasing out of nuclear and coal-based electric generation and a planned major increase in the electrification of the transportation sector, there will emerge a major gap in electric generation by 2050. While California's continued investment in various energy efficiency, conservation, and renewable technologies is important and will, by 2050, have a major cumulative impact on the state's GHG emissions mitigation to conform with Governor's Executive Order S-3-05, these measures will not be sufficient to close the gap. Other countries provide illustrative examples. Germany, for example, phased out its nuclear program and made a strategic decision to generate electricity from renewable resources in addition to efficiency programs. This admirable strategy nevertheless found that its renewable sector was unable to meet demand, that electricity prices have soared, and that the country has now approved a major re-investment in coal-based generation. Having CCUS technologies ready as an alternative option is a better solution for California.

The cap and trade auction proceeds should in part be directed to assist research, development and demonstration of the family of CCUS technologies, including better capture and separation processes, utilization technologies such as manufacture of building materials and biofuels, and storage options that may create or revitalize important energy industries in the state. In addition, using cap-and-trade auction revenues to develop sound methodologies to allow these technologies to be accepted compliance options would do much to facilitate their adoption by GHG emitters.

Thank you for providing the opportunity for public input on the appropriate disbursement of funds resulting from the cap and trade program allowance auctions.