



## RESEARCH BRIEF SUSTAINABILITY

## BEEF RESEARCH

### Review of Research to Inform California's Climate Scoping Plan: Agriculture and Working Lands

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#### Abstract

Agriculture in California contributes 8% of the state's greenhouse gas (GHG) emissions. To inform the state's policy and program strategy to meet climate targets, we review recent research on practices that can reduce emissions, sequester carbon and provide other co-benefits to producers and the environment across agriculture and rangeland systems. Importantly, the research reviewed here was conducted in California and addresses practices in our specific agricultural, socioeconomic and biophysical environment. Farmland conversion and the dairy and intensive livestock sector are the largest contributors to GHG emissions and offer the greatest opportunities for avoided emissions. We also identify a range of other opportunities including soil and nutrient management, integrated and diversified farming systems, rangeland management, and biomass-based energy generation. Additional research to replicate and quantify the emissions reduction or carbon sequestration potential of these practices will strengthen the evidence base for California climate policy.

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