

Appendix D.1 Strategies to Reduce Greenhouse Gas Emissions

The intent of this appendix is to summarize potential strategies that can be implemented to reduce greenhouse gas emissions and associated contributions to global climate change.

To the extent that it is applicable or feasible for the project, the following measures should be included in the project to reduce the greenhouse gas emissions and potential climate change impacts from projects:

1. Use of reclaimed water—currently 30 percent of the electricity used in California is used for the treatment and delivery of water. Use of reclaimed water helps conserve this energy, which reduces greenhouse gas emissions from electricity production.
2. Landscaping—reduces surface warming and through photosynthesis decreases carbon dioxide.
3. Portland cement—use of lighter color surfaces such as Portland cement helps to increase the albedo effect (measure of how much light a surface reflects) and cool the surface; in addition, Caltrans has been a leader in the effort to add fly ash to Portland cement mixes. Adding fly ash reduces the greenhouse gas emissions associated with cement production—it also can make the pavement stronger.
4. Lighting—Use of energy efficient lighting, such as LED traffic signals
5. Idling restrictions—for trucks and equipment, in accordance with the California Air Resources Board *Air Toxics Control Measures*.