

# Global Warming Delays Clean Air Progress



California is experiencing an air pollution crisis that places a severe burden on the health of its residents. Each year, public exposure to unhealthy air contributes to thousands of asthma attacks, emergency room visits, hospitalizations and premature deaths in California. Unfortunately, global warming will make it much harder for California to protect its citizens from unhealthy air.

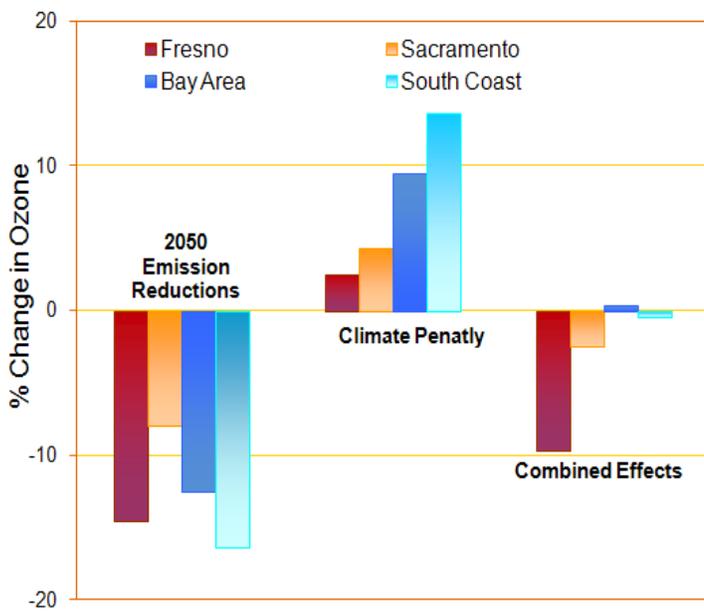
*"Without significant action, global warming will exacerbate our state's ongoing air quality crisis and further threaten the health of all Californians."*

- Sonal R. Patel, MD, Board Member  
American Lung Association in California

As temperatures push higher, California's significant progress toward meeting air quality standards will be challenged and global warming may completely overwhelm current emission control programs in parts of the state by mid-century. This means that state and local districts will need to find additional emission reductions that may be difficult and costly to obtain. These additional costs and measures are known as the "climate penalty" that must be paid to protect air quality from the effects of global warming.

Recent research indicates that global warming may significantly reduce or negate the effectiveness of ozone emission reduction programs in California by 2050 if global warming trends remain unchanged. This will make efforts to achieve clean air in California even more costly and difficult.

Projected Ozone Response to Climate in California, 2050



As shown in the chart at left, the San Francisco Bay Area (an area not subject to high ozone levels at present) may see the effectiveness of emission reduction strategies completely overwhelmed by the effects of global warming. California's climate penalty will also cut into the effectiveness of programs in areas of the state (Sacramento, San Joaquin Valley, and South Coast/Los Angeles area) that do suffer high ozone pollution and have taken action to control emissions. Additional research is underway to further assess the impacts of future climate change on ambient air quality in California.

Steiner et al., "Influence of future climate and emissions on regional air quality in California", JGR 2006; and Millstein D.E. and R. A. Harley. "Impact of Climate Change on Photochemical Air Pollution in Southern California", JGR 2009.

For more information:

Visit: <http://www.californialung.org/advocacy/global-warming>

Email: Will Barrett, [wbarrett@alac.org](mailto:wbarrett@alac.org)