



**PUBLIC HEALTH INSTITUTE SUBMISSION TO THE CALIFORNIA AIR RESOURCES BOARD
REGARDING THE DEVELOPMENT OF AN INVESTMENT PLAN FOR THE AUCTION PROCEEDS FROM THE
CAP-AND-TRADE PROGRAM TO REDUCE GREENHOUSE GASES**

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The Public Health Institute (PHI) strongly urges the California Air Resources Board (CARB) to prioritize the funding of climate mitigation strategies with significant health co-benefits, in communities that already suffer the greatest health inequities. We ask that the revenue allocation process from the cap and trade program explicitly incorporate health and health equity criteria, and that CARB ensure the inclusion of public health experts in that process.

Climate change is one of the biggest public health threats of this century, undermining our air quality, the availability of clean drinking water, our food supply, our homes, and our security. Climate change disproportionately impacts vulnerable populations, including low-income communities and people of color, those with chronic illness, and the young and old; climate change thus exacerbates existing health inequities.

Many – but not all – strategies to reduce greenhouse gas emissions have significant health co-benefits, or positive impacts on health that are not directly related to the impact on climate change itself. Below we identify several examples of mitigation strategies with health co-benefits, but note that this list is exemplary, not exhaustive.

**1. EXPANDING AND ENHANCING INFRASTRUCTURE TO SUPPORT ACTIVE TRANSPORTATION,
INCLUDING WALKING, BICYCLING AND PUBLIC TRANSIT USE:**

Increasing active transportation is a critical strategy for reducing greenhouse gas emissions (GHGE) from transportation, and the mitigation strategy likely to yield by far the greatest health co-benefits. A recent study, published in the American Journal of Public Health and authored by Dr. Neil Maizlish of the California Department of Public Health, forecast the health impacts of various strategies to reduce transportation greenhouse gas emissions. The study found that increasing median daily walking and bicycling from 4 to 22 minutes reduced the burden of cardiovascular disease and diabetes by 14%, with significant decreases in breast and prostate cancer, osteoporosis, and depression, and decreased GHGE by 14%; low-carbon driving (fuel efficiency and low-carbon fuels) reduced GHGE by 33.5% but had a far lesser health impact, reducing cardiorespiratory disease burden by less than 1%. It should be noted that the model also forecast a significant increase in pedestrian and bicyclist injuries.

These results are comparable to those found in a number of other similar studies conducted internationally. The health benefits of increased physical activity associated with increased active transportation could equal those of our greatest public health achievements, particularly if careful attention is also paid to ensuring that active transportation

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infrastructure is safe. A large investment of cap and trade revenue in active transportation infrastructure is highly recommended.

2. EXPANDING AND ENHANCING URBAN GREENING:

Urban green space and tree canopy can act as a significant carbon sink, absorbing carbon, and simultaneously provide multiple other benefits including reduction in the urban heat island effect, decreased storm water runoff, increased groundwater recharge, and aesthetically pleasing places for people to exercise, play, and congregate. Mitigation of the urban heat island can also have significant impacts on reducing energy use, and thus GHGEs. Urban greenspace can also include school and community gardens that increase access to affordable healthy food. As the earth warms and extreme heat events become increasingly frequent and severe, the health toll of extreme heat events is expected to grow substantially; there were more than 70,000 excess deaths in the European heat wave of 2003, and 650 in the California heat wave of 2006. Without substantial investment in urban green space and tree canopy, as well as other cooling strategies such as cool roofs, cool pavements and green roofs, it is likely that infill development and increased residential density will add to the urban heat island effect with its concomitant adverse health impacts.

3. IMPROVING AIR QUALITY:

- a. Reductions in air pollution, particularly in communities with existing high levels of pollution, can improve health and reduce inequities. We recommend funding of strategies to reduce air pollution associated with goods movement, such as trucks and ships.
- b. Energy efficiency: We strongly support weatherization of homes as a strategy for reducing greenhouse gas emissions through energy efficiency, particularly if weatherization programs target renters and multi-family housing in lower-income areas. However, we caution that weatherization programs must be attentive to common health hazards in poorly maintained homes, such as mold or lead; care must be taken to ensure that these programs do not inadvertently increase indoor air pollution.

PHI stands ready to assist CARB in any way we can to ensure that cap and trade revenues are allocated in a manner that optimizes the health co-benefits of strategies to reduce greenhouse gas emissions, with an emphasis on reducing health inequities.

ABOUT THE PUBLIC HEALTH INSTITUTE:

The Public Health Institute, an independent nonprofit organization, is dedicated to promoting health, well-being and quality of life for people throughout the world. PHI's primary methods for achieving these goals include: sharing evidence developed through quality research and evaluation; conducting public policy and advocacy; providing training and technical assistance; and promoting successful prevention strategies to policymakers, communities and individuals. For more information, visit www.phi.org.