

**The Co-Benefits of Energy Efficiency and Conservation:  
Improving Air Quality & NJ Health Today, Climate Change & Global Health Tomorrow**

Information Presented to  
The New Jersey Clean Air Council's public hearing on  
**"Improving Air Quality through Energy Efficiency and Conservation-  
The Power of Governmental Policy and an Educated Public"**

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I am here today to support the efforts of the New Jersey Clean Air Council to investigate the impacts of energy efficiency and conservation on air quality and, by extension, on human and environmental health. As a health scientist, it is important to point out those policies which support enhanced energy efficiency and conservation measures from fossil fuel combustion will also help control greenhouse gas emissions. These measures will not only help reduce New Jersey's contribution to global warming, but will also reduce levels of other pollutants related to fossil fuel combustion that have direct impacts on the health of New Jersey residents, including fine particles and ozone. So this is really a win-win idea.

First, reducing greenhouse gas emissions will curb New Jersey's contribution to global warming, which could have a range of dire consequences for the metropolitan region over the coming century. Everybody knows about the risks of sea level rise and severe storms. Our research team at Columbia University has been looking at health impacts that could result from global warming. Our work suggests that heat stress, air quality, and pollen could all become more severe problems in the metropolitan region if climate continues to warm. These are impacts that are beginning to be evident now, but will really be felt by our children and their children. Second, reducing greenhouse gas emissions will also help improve local air quality today and have immediate health benefits. Many sources of greenhouse gases – car and truck exhaust, emissions from generating electrical power and other industrial processes – are also sources of air pollutants like fine particles and chemicals that combine to form lung-damaging ozone on the roadways and neighborhoods of New Jersey. So fuel efficiency and conservation-promoting measures would have local health "co-benefits" for state residents of today and tomorrow.

Addressing climate change poses immense opportunities for positive action. Increasing the emphasis on and support for energy efficiency and conservation would provide an incentive for local entrepreneurs to develop alternative energy technologies and systems. I am encouraged by the worldwide flood of interest in these new technologies that could benefit local air quality, help strengthen the local economy and reduce overall fossil fuel use and global warming emissions. It is important for New Jersey to be a leader in matters of such great local, national, and global importance. The Nation and indeed the world watch what happens here. New Jersey can and should play a leadership role on this critically important issue, which will benefit the health and economic vitality of its residents.

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