



Kentucky Sustainable Energy Alliance

Healthier Kentuckians through clean energy and energy efficiency

Clean energy can make a big difference in the health of Kentuckians. Investment in clean energy solutions can reduce chronic diseases and improve our health and well being.



Betsy Janes,
Advocacy Director
American Lung Association
in Kentucky

"The health of Kentuckians should be a priority issue, even when we consider our energy policy options; less pollution equals fewer chronic illnesses like asthma and lung disease. Non-polluting energy sources such as from the sun, wind and water can be healthy components of Kentucky's energy mix."

Did you know?
Improving energy efficiency could help reduce cases of asthma by cutting air pollution.

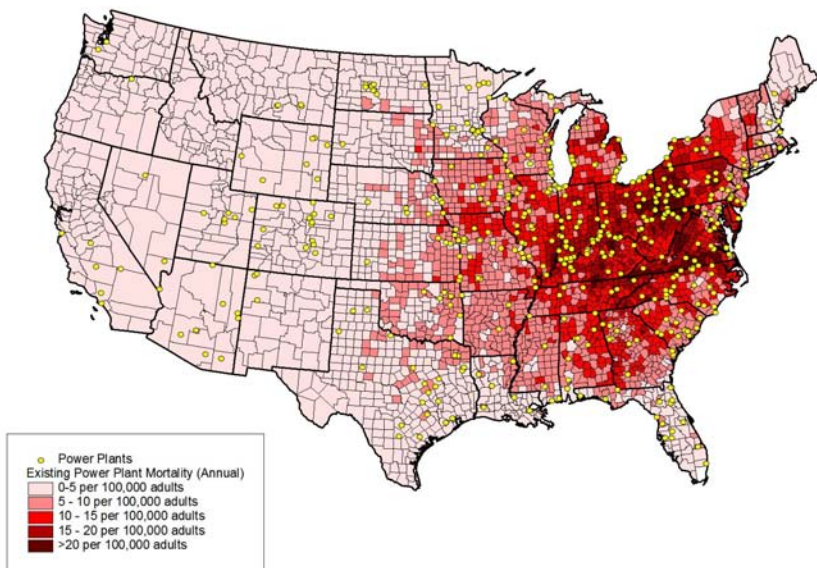
Energy efficiency programs can improve our health.

Researchers in California estimated in 2006 that a state energy efficiency program to add fiberglass attic insulation to electricity-heated homes would result in four-fold reduction in disease burden – a net avoidance of premature deaths from exposure to power plant soot – over the life of the insulation, even considering occupational health associated with manufacturing the insulation.¹ Studies from the UK show that people who live in less drafty, more efficient homes experience improved health as well.²

Growing Kentucky's clean energy sector will help save lives.

In Kentucky there are approximately 412 deaths, 286 hospitalizations and 539 heart attacks annually due to exposure to power plant emissions. Investments in clean energy will actually prevent unnecessary illness and death by reducing the particulate matter that is so harmful to our heart and lungs.^{3,4}

Power Plant Mortality per 100,000 Adults⁴



Passing state energy policy that supports clean energy investments in Kentucky will directly...

Improve our physical and mental health

We know that energy efficiency in our homes and workplaces saves money, but it can also improve quality of life. Research shows that energy efficient lighting in schools and workplaces can improve safety, increase learning, and improve social interaction and physical health.⁵



“Improving the health of Kentuckians depends not only on good medical care but also on prevention of disease. Placing solar panels on the clinic helps deliver the message that clean air is important to us.”

Dr. John Belanger of the Paint Lick Clinic

The Paint Lick Clinic in Garrard County leased and installed a series of 6 solar panels on the roof of their practice. Dr. Belanger and the Clinic staff know they are helping reduce cases of asthma and heart attacks by helping clear the air in Kentucky.



Improve respiratory health

Approximately 1 in 10 Kentuckians suffer from asthma triggered by air pollutants such as particulate matter and ozone. As a result Kentucky hospitals saw over 7,150 asthma patients in 2002 with hospital expenses averaging \$6053.⁶ Cleaning up the air will help Kentuckians save on expensive medical bills. Solar, wind and hydro installations can provide electricity without releasing harmful pollution.

“My teenage son has suffered with asthma for 8 years, and we know all too well the anxiety those hospitalization figures represent,” said Melissa Neal, from Estill County. “I want our state legislators and utilities to take leadership in using clean energy sources that don’t generate air pollution so that my son and others who are vulnerable to air pollution can breathe a little easier.”

Improve proper development and our ability to learn

Power plant emissions like mercury and other heavy metals settle in rivers, lakes and streams, where we are exposed to these toxins by eating fish and drinking contaminated water. Mercury alone is linked to learning disorders, autism, brain damage and seizures.

These types of developmental problems are costly. State Medicaid programs to support people with mental retardation can cost up to \$2,600,000 a year.⁷ In 2003 Medicaid paid \$22,772 per child for treatment of autism spectrum disorder.⁸ By keeping our water ways clean through investment in energy efficiency and clean renewable energy, we can help prevent developmental disabilities that cost approximately \$1,250,000 over the course of their lifetime.⁹

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3. Clean Air Task Force. Existing power plant impacts by state. 2010.

4. Clean Air Task Force, The Toll from Coal. 2010.

5. Veitch JA, Newsham GR. Lighting Quality and Energy-Efficiency Effects on Task Performance, Mood, Health, Satisfaction and Comfort. National Research Council of Canada. 1997.

6. McLendon P, Robeson S. Asthma in Kentucky ~ Hitting the Airways. Kentucky Epidemiologic Notes and Reports, Jul. 2004 Vol. 39, 6

7. Public Policy Collaboration. Kentucky’s investment in Medicaid is Critical to residents with Mental Retardation, Cerebral Palsy, and Related Disabilities. 2003.

8. Wang L, Leslie D. Health Care Expenditures for Children with Autism Spectrum Disorders in Medicaid. JAACAP. 2010; 49 (11): 1165-1171.

9. Trasande L, et al. Mental retardation and prenatal methylmercury toxicity. American Journal of Industrial Medicine. 2006 Mar; 49(3):153-8.