



## **Carbon Limits Could Save 175000 Lives By 2030**

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The Emissions Trading Worldwide report from the International Carbon Action Partnership (ICAP) discovered that an increasing number of countries are trialling carbon markets which, if implemented correctly, could bring significant benefits to businesses and citizens.

These particles, because they are very small, penetrate deeply into the lungs when inhaled and there, lead to increased risk of respiratory and cardiovascular diseases and lung cancer.

Heart disease and stroke are the primary deadly consequences of air pollution.

Officials from 195 nations, including the United States, have pledged to make emissions cuts that could meet this goal, as part of the Paris Agreement to limit global warming to below 2 degrees Celsius, Shindell said. They found that reducing the given level of carbon emission from transportation could prevent up to 120,000 premature deaths by 2030. And within those emissions sources, they focused predominantly on particulates and gases-things like sulfur dioxide, nitrogen oxide, and black carbon. By 2030, clean energy policies could prevent ~175,000 premature deaths, with ~22,000 (11,000-96,000; 95% confidence) fewer annually thereafter, whereas clean transportation could prevent ~120,000 premature deaths and ~14,000 (9,000-52,000) annually thereafter. It requires overhauling centuries of fossil fuel-based development and the swift adoption of clean energy technologies.

The figure below shows where in the USA the benefits would be felt most keenly.

The nationwide health benefits associated with preventing these deaths would total around \$250 billion a year in the near term. It is more efficient to switch to renewables and electric cars than bolting on ever more pollution-reducing devices to power stations and vehicles.

Reduction in PM2.5 air pollution (upper maps) and premature deaths (lower maps) as a result of implementing a clean energy policy (left-hand maps) and clean transportation policy (right-hand maps).

IAMs also have major failings in the way they are used to estimate the costs of mitigation efforts, Stern said, arguing they fail to reveal to policymakers how economic growth could be jeopardised if no action is taken to curb emissions.

While the USA would feel the benefit of cutting air pollution, the positive effect would also be felt more widely.

Later, when the new global climate deal was finalized, the agreement recognized that "sustainable lifestyles and sustainable patterns of consumption and production, with developed country parties taking the lead, play an important role in addressing climate change". For example, their combined clean energy and transportation scenario would prevent an estimated 15 million lost adult work days a year.

When the global health and climate impacts of the reduced emissions are both factored in, the value of the accrued long-term benefits could roughly quintuple, becoming 5 to 10 times larger than the costs, the study says.

"People should realize that emissions are having a big impact already".

Chip Knappenberger from the Center for the Study of Science at the Cato Institute, a libertarian think tank, countered that the vast bulk of the health benefits from reducing greenhouse gas emissions as mentioned in the study would not come from reducing greenhouse gas emissions - but rather from air-quality improvements, most of which do not stem from climate-change mitigation