

# Studying decarbonization effects on premature deaths in U.S., China, & South Asia

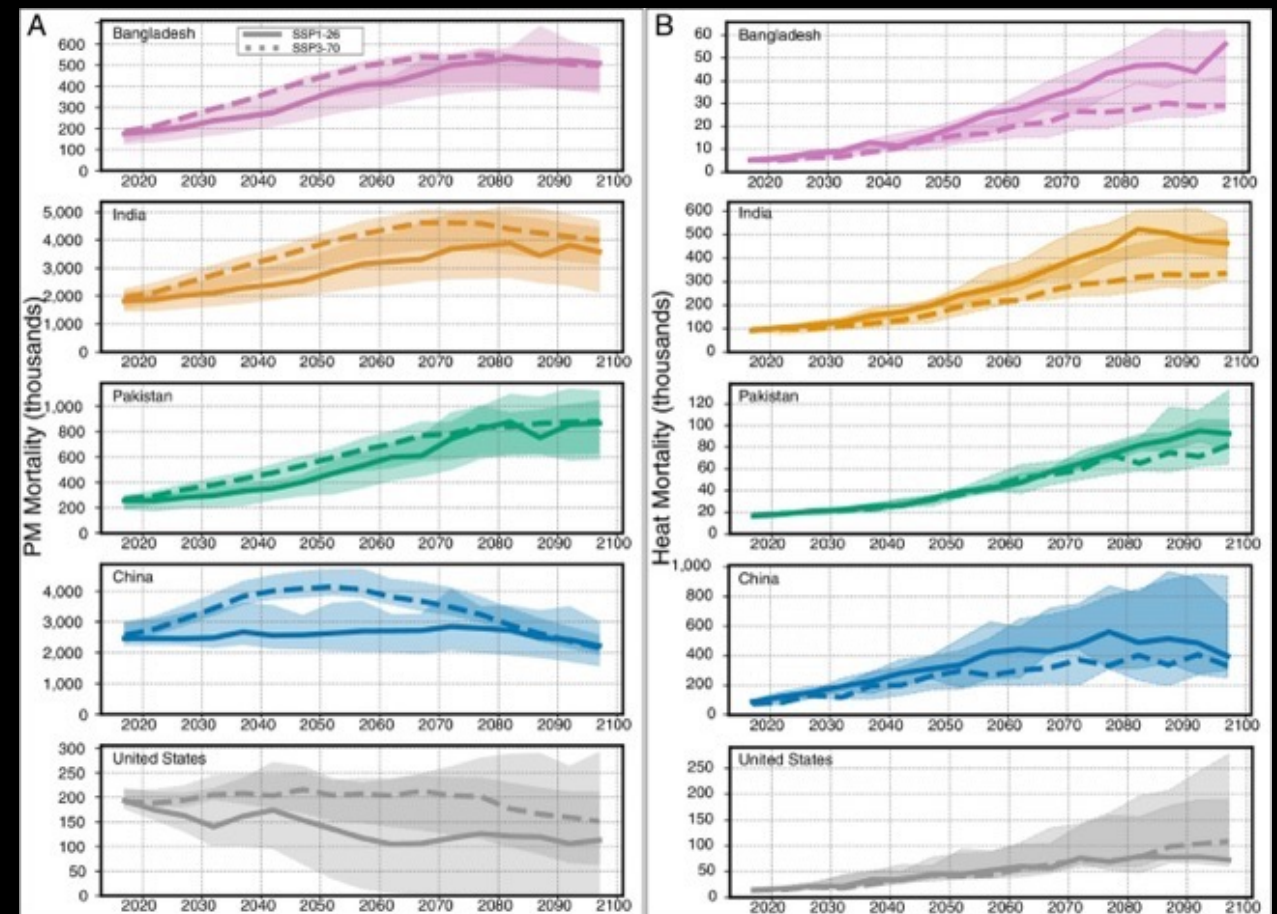
The perception that emissions reductions will require near-term sacrifices but only provide distant future benefits may be unfortunately slowing movement toward decarbonization.

However, certain policies can offer rapid, local health benefits via improved air quality, as well as longer term avoided heat exposure.

We quantify these benefits, showing that they avert millions of premature deaths annually, with valuations in developing Asia that outweigh the costs of mitigation.

The results demonstrate that a global transition from a high-emission scenario to a sustainability scenario including clean energy access, strong air quality policies, and rapid decarbonization consistent with keeping warming below 2 °C provides far greater public health benefits in the near term via improved air pollution than it does via reduced heat exposure.

As populations age and become increasingly sensitive to environmental exposures, mitigating both climate change and air pollution will become an increasingly important component of ensuring public health.



Projected changes in mortality from particulate matter and heat exposure in the indicated countries under the two scenarios. SSP1-2.6 is a sustainable development scenario and SSP3-7.0 is a high-emissions reference case.

Paper: [Reductions in premature deaths from heat and particulate matter air pollution under decarbonization](#)

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