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US power plant carbon standards and clean air and health co-benefits

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Carbon dioxide emissions standards for US power plants will influence the fuels and technologies used to generate electricity, alter emissions of pollutants such as sulphur dioxide and nitrogen oxide, and influence ambient air quality and public health. We present an analysis of how three alternative scenarios for US power plant carbon standards could change fine particulate matter and ozone concentrations in ambient air, and the resulting public health co-benefits. The results underscore that carbon standards to curb global climate change can also provide immediate local and regional health co-benefits, but the magnitude depends on the design of the standards. A stringent but flexible policy that counts demand-side energy efficiency towards compliance yields the greatest health benefits of the three scenarios analysed.