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CUTTING HEALTHCARE COSTS BY CUTTING CARBON

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When you cut greenhouse gas emissions, slowing climate change isn't the only benefit. According to Waterloo environmental engineer Rebecca Saari, you also save on healthcare costs. In many scenarios, those savings could actually

outweigh the costs of reducing emissions.

That's because when you curb the amount of carbon being pumped into the atmosphere, you also reduce co-emissions of pollutants that form smog, which is comprised of ground-level ozone and fine particulates. These air pollutants are linked to a range of respiratory and cardiovascular diseases.

Saari and her collaborators at the Massachusetts Institute of Technology set out to determine just how much of an effect carbon policies could have on those diseases — and hence healthcare costs.

They created highly sophisticated models that looked at the impact of three potential approaches to reducing U.S. carbon emissions: an economy-wide cap-and-trade program, policies that focus on the electricity sector and policies that focus on the transportation sector. The researchers included a range of projections for economic growth, the cost of renewable energy and improvements to fuel efficiency.

The numbers that emerged were compelling. Cutting carbon emissions produces healthcare savings that offset anywhere from 26 per cent to 1,050 per cent of the program costs, depending on the particular scenario.

The biggest net savings came from cap and trade, thanks mainly to its lower price tag. Although the incremental benefits were smaller with a stricter emissions standard, every scenario produced healthcare savings.

These insights can help decision-makers craft carbon policies that are good for the environment, good for health, and good for the economy.

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