

In some situations, voluntary efforts leads other people to join in, whereas in others, it encourages them to hold back. There’s a similar issue about climate mitigation efforts at the national, regional, or state level. Do these efforts really move the ball forward? Or are they counterproductive, because other places increase their own carbon emissions or lose interest in negotiating?

A common sense reaction is that every ton of reduced carbon emissions means one less ton in the atmosphere. But things aren’t quite that simple. If we mandate more efficient cars, a number of other things might happen besides the immediate drop in emissions per mile: people might increase their driving because they don’t have to pay as much for gas; the same number of less efficient cars could be sold, but in other countries; or the reduced demand for gas might lower prices, leading to higher gas sales somewhere in the world. Other countries might feel that if we’re cutting emissions they can wait a little longer to address the issue.

There are also many reasons why our program might reduce emissions elsewhere. Automakers might prefer to produce the same models for multiple markets, here and elsewhere. Or the new technology may be appealing to consumers in other places. Other places might see our regulations and decide to copy them. And seeing that we are taking action could increase confidence that a bargain can be reached, improving prospects for negotiations.

There’s necessarily an element of speculation in all of this. We can’t run experiments in which sub-global mitigation takes place on some planets while others do nothing pending a global agreement. In a recent [paper](#), I’ve tried to look at what limited evidence and modeling seems relevant. On balance, the optimistic view seems more plausible. Acting locally while thinking globally may not be the ideal strategy, but it’s the best we have right now.