Evidence is mounting that air pollution regulation is an effective way of reducing health disparities between disadvantaged communities and the population as a whole. The basic reason is simple: Air pollution is the biggest environmental threat to poor communities and communities of color. As the American Lung Association has said:

"The burden of air pollution is not evenly shared. Poorer people and some racial and ethnic groups are among those who often face higher exposure to pollutants and who may experience greater responses to such pollution. Many studies have explored the differences in harm from air pollution to racial or ethnic groups and people who are in a low socioeconomic position, have less education, or live nearer to major sources of pollution."

Those unequal pollution levels translate into more deaths, more asthma attacks, and more hospitalizations. Correspondingly, limits on pollution can benefit low income communities and communities of color even more than others.

A study in the January issue of the *American Economic Review* provides compelling evidence that capping air pollution is especially beneficial for disadvantaged communities. Since 2000, racial disparities in exposure to dangerous fine particulates have decreased. Combining high-resolution satellite readings of air pollution with census data, the authors found that sixty percent of the reduced disparity was due to tough new national air quality standards.

Under the Biden Administration, EPA has paid increasing heed to the environmental justice implications of air pollution regulations. For instance, in issuing emission limits on new heavy trucks, EPA took a hard look at its impact on disadvantaged communities. EPA's analysis indicated that the rule would reduce disparities in pollution levels between whites and people of color. The analysis drew upon numerous published studies, but also included voluminous evidence that the agency itself had assembled. EPA concluded that "non-Hispanic Blacks will experience the greatest reductions in PM2.5 and ozone concentrations as a result of the standards."

In another rule-making, EPA has considered the impact of limiting mercury emissions from coal-fired power plants. Airborne mercury enters aquatic ecosystems and is concentrated as it moves up the food chain, so people who eat a lot of fish are most at risk. EPA observed that subsistence fishers and their families are at high risk, and that subsistence fishing activity "can be related to a number of

factors including socio-economic status (poverty) and/or cultural practices, with ethnic minorities and tribal populations often displaying increased levels of self-caught fish consumption." In particular, "[l]ow-income Black and white populations in the Southeast and tribal fishers near the Great Lakes" were clearly at high risk. In EPA's view, consideration of the exposure levels of these groups and the vulnerability of children was enough to show that regulation of mercury emissions is "necessary and appropriate," as the statute required.

A familiar saying holds that a rising tide raises all ships. In the case of air pollution, the regulatory tide seems to raise the "ships" of the disadvantaged most of all. That's good news for everyone who cares about public health and everyone who cares about social justice.