

US EPA ARCHIVE DOCUMENT

EMISSIONS CAP AND TRADE: A BASIC EXPLANATION & RESULTS UNDER THE ACID RAIN PROGRAM

The Clear Skies Initiative is structured to achieve ambitious air quality goals through a market-based cap and trade approach that rewards innovation, reduces costs, and guarantees results. The successful nationwide cap and trade system under the Acid Rain Program served as the model for the Clear Skies Initiative.

HOW DOES IT WORK?

- The emissions cap is set to meet specific environmental goals.
- EPA distributes allowances equal to the cap (each allowance authorizes one ton of emissions).
- Sources have flexibility to choose how to meet their limits – by reducing their own emissions or purchasing allowances from other sources that make extra reductions.
- Sources measure and report emissions, and must have sufficient allowances to cover their emissions; significant automatic penalties apply for noncompliance.

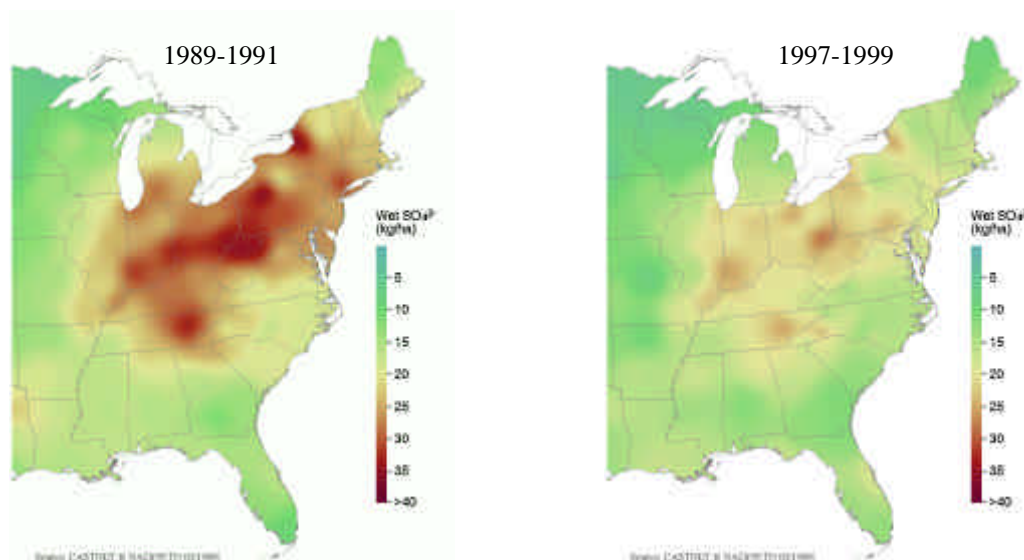
WHY DOES IT WORK?

- The cap and automatic penalties for noncompliance ensure that the environmental goal is achieved and maintained.
- The cap provides market value and certainty.
- Trading and banking allow companies to choose compliance options.
- Trading and banking minimize costs through compliance flexibility.

WHAT ARE THE RESULTS?

- Near-perfect compliance – Compliance with the Acid Rain Program has been an unprecedented success (over 99%).
- Early reductions – Reductions in the early years of the program averaged 25% below allowable levels, resulting in early benefits to human health and the environment.
- Air quality improvement – Emission cuts resulted in air quality improvements over a broad area of the U.S. and significant reductions in acid rain.
- Cost savings – The Acid Rain Program cost 75% less than previous estimates.
- Innovation – A monetary value for lower emissions creates the right incentives.
- Integrity – High accountability and transparency provide credibility.
- Support – The Acid Rain Program enjoys a high level of acceptance by environmental organizations and industry, and bi-partisan Congressional support.

MONITORED REDUCTION IN ACID RAIN DUE TO THE ACID RAIN PROGRAM



WHAT ABOUT HOT SPOTS?

- Under the Acid Rain Cap and Trade Program, no “hot spots” (areas of heavy, localized emissions) have occurred nor any geographical shifting of emissions.
- The highest emitting sources reduced by the greatest amount.
- Several organizations including the Environmental Law Institute, Environmental Defense and Resources for the Future have conducted analyses of emissions trading under the Acid Rain Program and none have concluded that the Program resulted in hot spots.
- Trading occurs under a nationwide cap that represents a reduction in total emissions and improvements in regional air quality. The flexibility under a cap and trade system isn’t about whether to reduce emissions, but about how to reduce them at lowest possible cost.
- All areas of the country must continue to meet national ambient air quality standards.

WHAT ARE PEOPLE SAYING ABOUT EMISSIONS CAP AND TRADE PROGRAMS?

“The data confirm a general prediction about cap-and-trade programs, that they will tend to create incentives for the dirtiest plants to clean up the most, as the per-ton cost of emissions reductions may be expected to be the least...The data show that, if anything, trading may be expected to cool hot spots and not create them.”

-- Byron Swift, Environmental Law Institute, “Allowance Trading and Potential Hot Spots – Good News from the Acid Rain Program” 31 Environment Reporter, pp. 954-959, May 12, 2000.

“The superior environmental and economic results of ..the Program are precisely what should have been expected of a program that matched an explicit emissions limit with a market that turned pollution reductions into marketable assets.”

-- “Obstacle to Opportunity: How Acid Rain Emissions Trading is Delivering Cleaner Air”, Environmental Defense, September 2000, p. 2.

“The flexibility of the trading program has encouraged utilities to capitalize on advantageous trends, such as changing fuel prices and technological innovation that might have been delayed or discouraged by traditional regulatory approaches.”

-- Curtis Carlson, Dallas Burtraw, et al., “Sulfur Dioxide Control By Electric Utilities: What are the Gains from Trade?” Resources for the Future, July 1998, Revised April 2000.

“[The Acid Rain Program] has allowed those being regulated to be creative and choose the least-cost compliance strategy for their specific situation.”

-- Gary Hart, Manager, Clean Air/SO₂ Allowances, Southern Company Services, “Southern Company’s BUBA Strategy in the SO₂ Allowance Market”, in Emissions Trading: Environmental Policy’s New Instrument, edited by Richard Kosobud. New York: John Wiley & Sons, Inc., 2000.

“[The] simplicity [of the Program] has kept transaction costs low and helped to create efficiencies that might otherwise not exist.”

-- Daniel Chartier, Former Emission Trading Manager, Wisconsin Electric, Congressional Testimony, July 1997.

“This grand experiment [emissions trading under the Acid Rain Program] has demonstrated that the government can be effective and non-intrusive..”

-- Denny Ellerman, Executive Director, Massachusetts Institute of Technology Center for Energy and Environmental Policy Research, remarks at the 21st Conference of the International Association for Energy Economics, Quebec City, Canada, May 1998.