whether to get tested or how to interpret test results," Javitt and Hudson argue. While some state governments have attempted to step in where the federal agencies fear to tread, "as of 2001, more than half of the states permitted [direct-to-consumer] testing for at least some types of tests." The Federal Trade Commission has so far done nothing to curb genetic testing ads.

Javitt and Hudson believe that the FDA and other government agencies already have the means and authority to review genetic testing but lack a clear mandate to do so. New legislation that clarifies oversight authority, they conclude, is needed to ensure the "quality of all genetic tests and the safety of consumers."

SCIENCE & TECHNOLOGY

Turning Down the Heat

THE SOURCE: "Case Closed: The Debate About Global Warming Is Over" by Gregg Easterbrook, in ***Issues in Governance Studies*** (June 2006).

THE GLOBAL WARMING DEBATE is gridlocked in part because the problem seems almost too big and costly to solve. That's foolish, argues Gregg Easterbrook: "Greenhouse gases are an air pollution problem, and *all* air pollution problems of the past have cost significantly less to fix than projected, while declining faster than expected."

Easterbrook, a visiting fellow at the Brookings Institution, detailed that history in his 1995 book *A Moment on the Earth*. He also criticized environmentalists (with whom he was sympathetic) for inducing gloom about what could be accomplished in the future by ignoring the great gains America had already made in reducing pollution. At the time, he was somewhat skeptical of claims about human-caused global warming, but no longer. The question now is what to do about it.

Critics of the Kyoto Protocol, ratified by more than 160 countries but not the United States, are right, Easterbrook says. Even if the treaty were perfectly enforced, "atmospheric concentrations of greenhouse gases in 2050 would be only about one percent less than without the treaty." (The Bush administration's unsung multinational methane reduction pact of 2003, Easterbrook adds, "may do more to slow global warming than perfect compliance with the Kyoto treaty.") And perfect compliance is a pipe dream: "Most nations that have ratified the Kyoto treaty are merrily ignoring it." Canada's greenhouse gas emissions are 24 percent above the Kyoto-mandated level, for instance.

Easterbrook's optimism comes from U.S. experience in reducing ordinary air pollution during the past 30 years. "Today, any make or model new car purchased in the United States emits about one percent the amount of smog-forming compounds per mile as a car of 1970, and the cost of the anti-smog technology is less than $100 per vehicle." Remember acid rain? After Congress enacted an emissions permit trading plan in 1991, the output of harmful sulfur compounds dropped by more than a third, and "Appalachian forests are currently in their best health since Europeans first laid eyes on them." The reductions cost only $200 per ton of emissions cut, not the $2,000 originally projected.

The lesson: "Create a profit incentive for greenhouse gas reduction, and human ingenuity will rapidly be applied to the problem." That means eschewing detailed government regulation and creating "a market-based system of auctioned or traded greenhouse gas permits." Major emitters of gases such as carbon dioxide would be issued permits allowing them to release certain quantities of the gases. If they produced less, they would be entitled to sell leftover permits to producers who emitted more than their quota. Everybody would have a strong financial incentive to reduce emissions.

That would speed the adoption of new technologies, from the familiar wind and solar power alternatives to the less known. General Electric, for example, has developed coal-fired power plants that emit no greenhouse gases. More important, such incentives would unleash the human power of invention, with results we can't even imagine now.

What about the developing world, with its soaring output of greenhouse gases? In a global system that gave credits for cutting emissions in places such as China, where old and antiquated technologies could be quickly updated, the gains could be huge.

The United States led the world in finding ways to tame smog and acid rain, Easterbrook declares, "and we should be first to overcome global warming."