# Policy Brief



## Affordable Energy and Clean Air: Texas Can Have Both

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### **QUICK FACTS**

- Air pollution continues to reach new record lows in Texas and the nation.
- From 1980 to 2005, coal consumption increased more than 60 percent and driving nearly doubled, yet air pollution of all kinds sharply declined.
- Texas already meets federal health standards for most air pollutants.

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#### **EXECUTIVE SUMMARY**

The debate over new power plants in Texas is based on false premises. Environmentalists and their allies in the media have created the mistaken impression that building new coal-fired power plants necessarily means more air pollution. In fact, steady advances in technology are decoupling fossil-fuel energy and air pollution. That is why air pollution continues to reach new record lows and power plant emissions continue to drop in Texas and the nation, even as Americans burn increasing amounts of coal, oil, and natural gas to power their homes, vehicles, businesses, and factories.

From 1980 to 2005, coal consumption increased more than 60 percent and driving nearly doubled, yet air pollution of all kinds sharply declined. Polls show most Americans are unaware of this astounding progress. Indeed, a majority of Americans think air pollution has stayed the same or increased during the last few decades.

Environmental misinformation has been brought to a new level in the battle over whether Texans should be allowed to build coal-fired power plants as one means to meet increasing demand for electricity. The outcome of this battle will determine whether the state is permitted to produce enough electricity to meet its citizens' needs and how much consumers will pay for that electricity.

Opponents of inexpensive energy have created a false dichotomy. They would have Texans believe that more fossil-fuel energy, and particularly more coal-based energy, necessarily means more air pollution. This hasn't been true in the past, and it will not be true in the future. Texans can continue to

meet their electricity needs by the most costeffective means available, while at the same time continuing to reduce air pollution.

Texas already meets federal health standards for most air pollutants. The entire state meets federal standards for sulfur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO), and lead, in all cases with plenty of room to spare. The key remaining air pollution challenge for Dallas-Fort Worth and other Texas metro areas is ozone.

For all intents and purposes, Texas can choose just about whatever level of power plant pollution it wants, regardless of whether growing demand for electricity is met with coal or with other fuels. The real choice Texas policymakers face is how expensive they want to make electricity for their constituents. Given coal's cost advantage, banning new coal generation is likely raise electricity costs, as is requiring existing plants to install the most stringent NOx (nitric oxide and nitrogen dioxide) emission controls. The way to meet air quality goals and keep electricity affordable is to allow utilities to build new coal plants if they wish, while requiring continued steady reductions in overall power plant NOx emissions. Coal-fired power plants account for about 13 percent of Texas NOx emissions and virtually none of the volatile organic compound (VOC) emissions.

Furthermore, EPA's Clean Air Interstate rule will eliminate more than half of all remaining power plant NOx emissions during the next decade or so. Thus, whatever Texas policymakers choose to do about power plants, the effect on air quality will be a small blip. Mobile sources account for the vast majority of ozone-forming emissions

and are, therefore, the sources that really matter for future air quality. Existing regulations will eliminate the vast majority of these emissions, as well. Tough EPA standards for new cars, trucks, and off-road diesel equipment will eliminate at least 80 percent of remaining mobile source emissions during the next 20 years or so. Ozone will, therefore, continue to decline, regardless of policymakers' choices regarding coal-fired energy. It would be foolish for policymakers to force expensive energy on consumers, when cheap energy is compatible with clean air.

The health effects of air pollution are another issue where the pronouncements from activists are more fiction than fact. Despite that fact that virtually all of Texas meets EPA's toughest standards for particulate matter, anti-coal activists claim that "pollution from coal plants shortens the lives of 1,160 Texans each year." The main form of particulate matter from coal-fired power plants is ammonium sulfate (formed from sulfur dioxide emissions), as well as smaller amounts of ammonium nitrate (formed from NOx emissions). However, laboratory studies with human volunteers, including volunteers with respiratory diseases, have shown that sulfate and nitrate are not toxic, even at

levels many times the maximum levels found in ambient air. In fact, ammonium sulfate is used as an inert control—that is, a compound with no health effects—in studies assessing the health effects of other types of particulate air pollution. Furthermore, asthma inhaler medications are delivered in the form of sulfate aerosols. Because sulfates and nitrates are not toxic, environmentalists and their allies are mistaken when they claim reducing particulate matter from power plants would have any health benefits.

Air pollution affects far fewer people, far less often, and with far less severity than advocates claim. When it comes to power plants and air pollution, the public health stakes are far lower than Texans have been led to believe. Environmentalists and regulators derive their power and funding from public fear of air pollution. No matter how clean our air becomes, they continue to create a false appearance of serious danger. In reality, Texans already have air that's safe to breathe. Nevertheless, existing requirements will continue to make the air even cleaner over the next two decades. Texans deserve an energy policy based on these air quality realities, rather than on environmentalists' anticonsumer fear-mongering.

#### About the Author

Joel M. Schwartz is a Visiting Fellow at the American Enterprise Institute. A scientist and environmental consultant, he has spent much of his professional life working in California on environmental issues. He headed the California state agency tasked with evaluating the state's vehicle emissions inspection program and has also worked at the South Coast Air Quality Management District, RAND, and the Coalition for Clean Air. At AEI, Schwartz continues to work on environmental issues and is the author of the forthcoming book *Air Quality in America*. He also writes for AEI's *Environmental Policy Outlook*.

Schwartz is a German Marshall Fund Fellow (research into European solutions to transportation-related air pollution problems), has an M.S. in planetary science from the California Institute of Technology, and a B.A. in chemistry from Cornell University.

#### **Articles and Short Publications**

"A Clean Air Regulation Hazardous to Health"

"The American Lung Association's Fear Campaign"

"Future Air Pollution Levels and Climate Change: A Step toward Realism"

#### **Books**

No Way Back

