Limiting Carbon Dioxide Pollution by Power Plants

By DANIEL F. BECKER and JAMES GERSTENZANG  FEB. 26, 2013
WASHINGTON

ELECTRIC power plants spew about 40 percent of the carbon dioxide pollution in the United States, but, amazingly, there are no federal limits on utility emissions of this potent greenhouse gas. The Obama administration plans to remedy this situation by drafting rules that would curtail these discharges from existing plants. The president should make sure they are tough. Nothing he can do will cut greenhouse gases more.

By accomplishing this under the executive authority Congress granted him in the Clean Air Act, the president will be stepping in where recent Congresses have refused to go. He did the same thing last August, when he toughened auto emissions standards that will result in a new car fleet that averages 54.5 miles per gallon by 2025, and again last spring, when he proposed rules, restricting carbon dioxide emissions, that will effectively prevent the building of new coal-burning power plants.

Now President Obama should require existing power plants to reduce their emissions by at least one-quarter by 2020. These plants emitted 2.2 billion tons of carbon dioxide in 2011, according to the Environmental Protection Agency, so a 25 percent cut would result in a reduction of more than 500 million tons. This would reduce lung-related illness and premature deaths, slow the accumulation of climate-changing gases in the atmosphere and demonstrate to the rest of the world that the
United States was serious about taking on global warming.

To achieve these reductions, the rules should favor making homes, buildings and power plants more energy efficient over the more costly conversion of coal-fired plants to natural gas. (Gas-fired power plants emit half as much carbon dioxide as coal-fired plants. But expanding energy efficiency will reduce electricity demand and eliminate the need for the coal plants. Closing them is better than converting them to gas.) The American Council for an Energy-Efficient Economy says the technology exists now to cut electricity use by one-quarter by 2020 through efficiency alone. Based on the average electricity production of the nation’s large coal-fired power plants, this would allow for the closing of close to 60 such plants across the nation.

Certainly, the coal and utility industries won’t take this lying down. Some coal mines may be closed, and the electric industry will be reconfigured. A study by the Natural Resources Defense Council estimated recently that reducing emissions by at least one-quarter over the next seven years would cost $4 billion in compliance expenses in 2020. But the reduced hospitalizations and fewer days of work lost to illness, and other health and environmental benefits would save $25 billion to $60 billion, the study said. The approach would also stimulate investments of more than $90 billion in energy efficiency and renewable energy technologies, according to the analysis for the N.R.D.C. by the consulting firm ICF International.

The progression to using less coal will create new jobs to build the highly efficient appliances, wind turbines, solar farms and other technologies that capture renewable energy. In addition, jobs will be created as some states and utilities choose to comply by building natural gas power plants, which should be done only if they won’t cause environmental havoc.

The auto industry is beginning to show how strong emissions standards and the technological advances they stimulate can benefit employment. When the new rules were announced last summer, Bob King, president of the United Auto Workers, predicted that they would require “more engineers and more factory workers, expanding employment in the industry.” And Ford, which had already doubled its team working on fuel-saving engineering, said it planned to redouble the unit in 2015. Indeed, last week, Ford announced that it was adding 450 jobs at its Brook
Park, Ohio, plant to produce its EcoBoost engine.

Not everyone will benefit immediately, of course. As demand for coal drops, some miners will lose their jobs. The nation owes them economic support, job training and sustainable jobs. There is a precedent for this: the government established a fund to help workers at nuclear weapons plants move to new jobs as the cold war ended.

But even as we reduce power plant pollution, we will need to do more to protect the atmosphere. We should also reduce emissions of such short-lived contributors to global warming as methane by tightening up leaky natural gas systems, and hydrofluorocarbons, which are used in air-conditioning.

Ultimately, we must meet our energy needs largely without coal, oil or gas. We must use energy more efficiently to lower demand to the point that ramped-up clean, renewable energy supplies most of what we require.

By ordering the new auto emissions standards, Mr. Obama took an enormous step in the fight against global warming. In a similarly bold move, he can reduce our reliance on coal, a dirty fuel that is the greatest contributor to the nation’s greenhouse gas pollution. By setting stringent power plant standards, he will slow global warming at a fraction of the cost of ignoring it.

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