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Impact of CO₂ Restrictions on Employment and Income: Green Jobs or Gone Jobs?

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The clear political failure of the Lieberman–Warner bill last spring shows that support for global-warming legislation wanes considerably when the extraordinary costs are compared to the almost insignificant benefits.¹ In response, those pushing restrictions on carbon dioxide (CO₂) have tried to repackage global-warming legislation as jobs bills.

As appealing as the repackaging seems on the surface (lots of high-paid, high-tech workers in lab coats), the support for these claims collapses once it is examined. A little thought experiment helps give perspective.

Fuzzy Math. Suppose Jones used 1,000 kilowatt-hours (kW-h) when the price of electricity was \$0.10 per kW-h. He spent \$100 on electricity (1,000 kW-h x \$0.10 = \$100). Now suppose the price rises to \$0.15 per kW-h. Responding to the higher price, Jones cuts his electricity consumption to 700 kW-h. How much better off is Jones with the higher price? Most would say, since he is now spending \$105 for less electricity (700 kW-h x \$0.15 = \$105), he is worse off.

However, those promoting restrictions on CO₂ turn economics, logic, and math upside down. In their world, the answer is: Jones consumes 300 kW-h less and, at \$0.15 per kW-h, he saves \$45 (300 kW-h x \$0.15 = \$45). Then he spends this “extra” money and creates jobs.

Everybody else correctly thinks that since Jones now spends \$105 for 30 percent less electricity, he is \$5 poorer and has to get by with less energy. He has less to spend, not more. Thus there will be less

employment, not more. This is especially true since one of the ways Jones cuts energy consumption is to use more expensive energy-conserving products, making his loss greater than \$5.

Phantom Job Creation. The topsy-turvy, we-save-with-higher-prices way of thinking undergirds a recent well-publicized University of California study that claims restricting access to energy creates more income and more employment.² The study notes that per capita electricity use in California is 40 percent less than the national average and attributes this reduction to efficiencies brought on by state policies.

But Californians pay 36 percent more for their electricity, have watched manufacturing’s share of state output drop by 15 percent since 1980, need less electricity for heating and cooling than the rest of the nation, live in smaller houses than the national average, and pay billions of dollars to generate electricity using inefficient alternatives.³

The 40 percent cut in per capita energy use is not free “efficiency,” but it is treated as such. And it is projected to get 1 percent more “efficient” every year without cost. The job creation in this study is as fallacious as the reasoning on which it is based. But the silliness does not end there.

This paper, in its entirety, can be found at:
www.heritage.org/Research/Economy/wm2122.cfm

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Another much-publicized study, done for the Center for American Progress, makes an even more fundamental error.⁴ The authors of this study fall prey to the classic “broken windows” fallacy whereby spending money creates jobs as the expenditure multiplies throughout the economy. The fallacy comes from ignoring the equally large destruction of jobs (actually larger because of something called “deadweight loss”) from taxing the \$100 billion, which eliminates a similar cascade of job creation elsewhere.

A third, less-well-publicized study from the University of Tennessee is also based on the broken-windows fallacy.⁵ Here the authors calculate the jobs created by forcing renewable energy to 25 percent of total energy nationwide. But they neglect to account for the cost (and lost jobs) of the taxes needed so the government could subsidize all that inefficient energy.

In a recent study of the economic impacts of restricting CO₂ emissions, researchers at the Center for Data Analysis at The Heritage Foundation did not find an increase in employment; to the contrary, such restrictions resulted in rather significant job losses.⁶ In some years, employment losses from the Lieberman–Warner restrictions would be 900,000 jobs. These job losses are net of any “green” jobs that are created.

“Green Collar” Jobs. When energy prices rise (whether due to changes in market conditions or regulation and taxes), markets will adjust in many ways. Consumers reduce consumption and buy more energy-efficient products. Producers econo-

mize on the use of energy by cutting production and purchasing more energy-efficient machinery.

Of course, some producers will see an increase in sales when energy prices rise. For example, manufacturers of heating and cooling equipment may increase sales as firms and households replace older air conditioners and furnaces with newer more efficient ones. This will increase the demand for labor, material, and capital used by the heating and cooling manufacturers. Those changes will induce yet other changes elsewhere in the economy as suppliers to the heating and cooling industry adjust their production. These sorts of responses have happened in the past and have been estimated using real data and are incorporated into the hundreds of equations built into the macroeconomic model used by the Center for Data Analysis.

Broken Ideas. Energy is a valuable input to the modern economy. Cutting CO₂ makes less energy available, and when the impacts are traced through the economy, some jobs are created but more are lost. Counting only the jobs that are created distorts the analysis and invalidates the conclusions.

When all is said and done, restricting CO₂ cuts energy, income, and jobs. Pretending that breaking windows creates employment may make choosing among alternatives easier, but it leads to bad policy.

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1. For an estimate of the costs, see William W. Beach *et al.*, “The Economic Costs of the Lieberman–Warner Climate Change Legislation,” Heritage Foundation *Center for Data Analysis Report* No. 08-02, May 12, 2008, at <http://www.heritage.org/Research/EnergyandEnvironment/cda08-02.cfm>.
2. David Rolan-Holst, “Energy Efficiency, Innovation, and Job Creation in California,” Center for Energy, Resources, and Economic Sustainability, University of California, Berkeley, October, 2008, at http://are.berkeley.edu/~dwrh/CERES_Web/Docs/UCB%20Energy%20Innovation%20and%20Job%20Creation%2010-20-08.pdf (October 22, 2008).
3. For relative electricity prices, see the Energy Information Administration’s website, especially <http://www.eia.doe.gov/emeu/aer/txt/stb0810.xls> and http://www.eia.doe.gov/cneaf/electricity/page/sales_revenue.xls (October 22, 2008); Thomas Tanton, “California’s Energy Policy: A Cautionary Tale for the Nation,” Competitive Enterprise Institute, April, 2008, at http://cei.org/cei_files/fm/active/0/Tanton_California%20Energy%20Policy.pdf (October 22, 2008).
4. Robert Pollin *et al.*, “Green Recovery: A Program to Create Good Jobs and Start Building a Low-Carbon Economy,” Center for American Progress and the Political Economy Research Institute at the University of Massachusetts, Amherst, September, 2008, at http://www.americanprogress.org/issues/2008/09/pdf/green_recovery.pdf (October 22, 2008).
5. Burton C. English *et al.*, “25% Renewable Energy by 2025: Agricultural and Economic Impacts,” Department of Agricultural Economics, University of Tennessee, November, 2006, at <http://www.agpolicy.org/ppap/REPORT%2025x25.pdf> (October 22, 2008).
6. Beach *et al.*, “The Economic Costs of the Lieberman–Warner Climate-Change Legislation.”