Energy and the Environment



No Leg to Stand On

Jonathan Lesser

n an article in the June issue of *Natural Gas* & *Electricity*, "Carbon and the Court," James Hoecker, former FERC chairman, wrote that the recent Supreme Court decision *Massachusetts* v. *Environmental Protection Agency*,¹ "creates an entirely new set of uncertainties and risks that businesses must prepare for, mitigate, and disclose." I agree, but it is not just businesses that will be harmed. By including carbon dioxide (CO₂) emissions with all of the other emissions regulated under the Clean Air Act, the Court has set into motion a mind-boggling economic morass that will affect us all.

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As I said in my previous column,² as an economist I cannot question the Court's legal reasoning. Besides, four dissenting justices did an admirable job of just that, revealing as absurd the

Jonathan Lesser, PhD, is a partner with Bates White, LLC, an economic and litigation consulting firm in Washington DC. He can be reached at (202) 747-5972, or via e-mail at jonathan.lesser@bateswhite.com. majority's determination that the state of Massachusetts has standing to sue the EPA because of a potential loss of its coastline many years from now. I may as well sue my neighbor today because, someday, a windstorm may blow his trash into my yard.

What of other states' standing? Suppose North Dakota determines that global warming will reduce its heating bills, extend the growing season, and reduce cattle losses in blizzards, all to the benefit of its citizens. Can the state sue now to prevent EPA from enacting regulations that reduce CO₂ emissions if those regulations will *prevent* North Dakotans from realizing those benefits?

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Although lawyers will sort through the legal mess, the economic implications are left unresolved. The majority decision was long-winded regarding the litany of catastrophes global warming may cause, but nowhere did the justices consider how their decision might affect the economic well-being of U.S. citizens—other than a select group who might possibly lose some of their shoreline property by the year 2100.

The Court's decision focused on the EPA's regulation of automobile mileage standards, but the economic consequences clearly extend far beyond that. First, as was recognized by Chief Justice Roberts in his dissent, imposing higher mileage standards would affect only new vehicles, not existing ones. Because the vehicle stock turns over slowly-cars, after all, have become more reliable-the net impact on CO₂ emissions, to say nothing of the effects on climate, will be small.³ Thus, the logical next step for states like Massachusetts to take, and which some states are already taking, will be to seek much larger and more rapid reductions in CO₂ emissions. The most economically straightforward way to do this is to impose a carbon tax. However, because the word "tax"-especially when placed next to the word "higher"—is something most politicians like to avoid when discussing impacts on "ordinary" folks, there will be increasing pressure to impose other, less transparent and less economically efficient policies that affect designated whipping boys.4

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THE HUNT FOR WHIPPING BOYS

Who will those whipping boys be? There is little doubt they will include King Car, Captain Coal, and Obermeister Oil. Prospects for new coal-fired generation will diminish, if not vanish, removing our most abundant fuel resource. Electric regulators are already concerned about overreliance on gas-fired generation and limited pipeline capacity; thus, even though natural gas is a lower-CO₂ option, prospects for far heavier reliance on it may not be realistic. As for the oil industry, in May the U.S. House passed the Federal Price Gouging Prevention Act. No doubt, this bill will encourage oil companies to build more refineries and increase their exploration and development efforts. As for new nuclear plants, some may be built, but I expect opponents to battle them fiercely.

State and federal regulators will continue to flog renewables technologies whose costs are im-

mune from the ups and downs of fossil-fuel markets, but which, for the most part, are economically viable today only because of various forms of subsidies and mandates, such as "green tags," feed-in tariffs, and portfolio standards. Moreover, although the costs of renewables may be fixed, their overall economic *value* is not, because value depends on costs *and* benefits. It is odd that regulators who have (rightly, in some cases) opposed long-term, fixed-price power contracts are eager to embrace those same contracts if the source of power is renewable.

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LITTLE BUT ECONOMIC HARM FORESEEN

Proponents of mandated CO₂ emissions reductions and emissions taxes point to a laundry list of horrors global warming will cause, and the Court majority has fallen in step, highlighting glacial retreat, reduced snow pack, "severe and irreversible changes to natural ecosystems," and the spread of disease.⁵ Some may point to costbenefit studies to demonstrate that the potential costs of climate change far exceed the economic costs stemming from CO₂ reductions. After all, what is several percent of worldwide GDP if it means saving the planet? However, as I pointed out in my April column, any climate-change policy that cannot address the inherent "free-rider" problem associated with climate-change regulations will fail. We will impose severe and lasting economic harm upon ourselves, while free riders will laugh all the way to the bank.⁶

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Some environmental activists are even touting the economic *benefits* of carbon taxes. For example, in a June 20, 2007, press release, the Green Party of Canada trumpeted, "Secret government

Exhibit 1. Effect on Canadian GDP of \$50 Carbon Tax

Year	Cumulative GDP Loss (Millions of 1995\$)	Change from Prior Period	Change/Year	GDP (1997\$)	Impact per Year as % of GDP
2010	4,773	-4,773	-1,193	1,326,000	-0.090%
2015	4,889	-116	-23	1,464,011	-0.002%
2020	4,551	+338	+68	1,616,387	+0.004%
2030	3,829	+722	+72	1,970,366	+0.004%

study backs \$50 carbon tax."⁷ It added that after the year 2015, such a tax will *increase* GDP. If one actually reads the report, which is not secret, it is easy to spot the Greens' mistake. The press release contains the table in **Exhibit 1**.

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By examining the third column of data, specifically the highlighted value of "+338," the Green Party concludes that the \$50 carbon tax will increase GDP starting in the year 2015. It apparently ignores the second column heading, "Cumulative GDP Loss."⁸ Thus, the Green Party has trumpeted a basic economic result: Consumers can adjust their behavior over the long run and thus reduce overall welfare losses. For example, suppose the government raises the gasoline tax tomorrow by \$5. The short-run economic loss will be large because the vehicle stock cannot change overnight. After 20 years, however, the

Exhibit 2. GDP Loss from Carbon Tax—United States

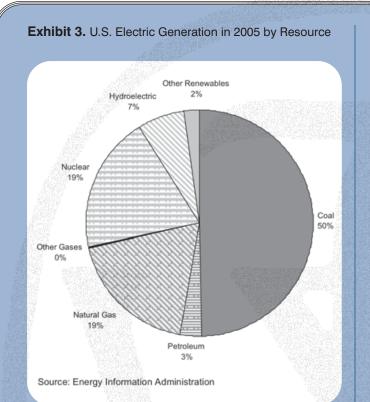
vehicle stock will have changed, thus reducing the overall economic impact from its overnight value. That does not mean imposing the \$5 tax improves consumer welfare and GDP.

The Greens also ignore the effects on consumer welfare. Higher taxes mean consumers will be able to purchase fewer goods and services. When these economic losses are factored in, the economic "benefits" to Canada of a \$50 carbon tax look rather less rosy.

That does not mean imposing the \$5 tax improves consumer welfare and GDP.

These GDP impacts on Canada may seem relatively small. However, the assumptions made in the Jaccard Report point to larger-percentage economic impacts in the United States (**Exhibit 2**). For one, Canada is assumed to obtain the majority of its electricity from hydropower, which provides less than 7 percent of generation in the United States. Instead, the United States obtains half of its electricity from coal, as shown in **Exhibit 3**.

Year	Cumulative GDP Loss (Millions of 1995\$)	Impact per Year as % of GDP
2010	11,999	0.9%
2015	18,354	1.3%
2020	22,016	1.4%
2030	25,188	1.3%
Source: Jaccard Rep	ort, Table 7 .	



With almost three-fourths of electric generation based on fossil fuels, imposition of a carbon tax will have a much larger impact on the price of electricity in the United States than in Canada. Those higher prices will, in turn, "ripple" through the U.S. economy, affecting energy-intensive manufacturing industries. As a consequence, states whose economies are heavily energy-dependent, such as "rust belt" states like Ohio, Illinois, and Michigan, will be affected most. For example, a 2006 report from the Ohio University Consortium for Energy, Economics, and the Environment, said the following:

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Increases in energy prices not only are putting many families at risk but also are threatening the competitive position of numerous businesses. Many of Ohio's industries are energy-intensive. The success of the state's glass, casting, automotive and steel companies is highly dependent on energy prices, and these industries represent a substantial employment base in Ohio.⁹

Could the U.S. economy adjust to carbon taxes? Of course it could.¹⁰ Over time, the economic structure would change, with the most energy-intensive industries moving themselves to countries eager to take advantage of a U.S. selfimposed economic hobbling. Will there also be economic "winners" from a carbon tax? Absolutely, and this is no doubt why many companies are lobbying for dramatic "action" to combat climate change. However, the biggest losers will be consumers, whose standard of living would inexorably decline. Perhaps the Supreme Court will eventually realize that the economic losers it created with its decision in *Massachusetts* v. *EPA* should have standing, too.

NOTES

- 1. No. 05-1120, 549 U.S.___ (2007).
- 2. Lesser, J. A. (2007, July). Goldilocks chills out. Natural Gas & Electricity, p. 26.
- 3. The majority, while perhaps recognizing this fact, nevertheless adopted a "think globally, act locally" viewpoint.
- 4. An "efficient policy" is not necessarily one that improves wellbeing. A particular objective may be foolish, but if policymakers are hell-bent on achieving it, then one might as well achieve it at the lowest possible cost.
- 5. Massachusetts v. EPA, No. 05-1120, slip op., at 3.
- Lesser, J. A. (2007, April). Goldilocks and the three climates. Natural Gas & Electricity, p. 22.
- 7. Available at http://www.greenparty.ca/en/releases/20.06.2007. There is also a link to the full report, prepared by MK Jaccard and Associates, Inc. (2007, January 16). Cost curves for greenhouse gas emission reduction in Canada: The Kyoto period and beyond, *Final Analysis Report*. ("Jaccard Report"). Retrieved June 27, 2007, from http://www.greenparty.ca/files/ JaccardFullReport.pdf.
- 8. The values in the rightmost column are also wrong, as they divide the marginal change in GDP loss (column 3) by total GDP (column 5). They also fail to recognize that the marginal change in GDP loss is reported in US\$(1995), while their total GDP values are in US\$(1997).
- Consortium for Energy, Economics, and the Environment, Ohio: Securing America's energy future, p. 22. Retrieved June 27, 2007, from http://www.ce3.ohio.edu/page/pdfs/Energy_Summit_Report.pdf.
- 10. Critics may point out that the overall economic impacts would be much lower if carbon taxes were "recycled" by reducing other tax rates. While that is true, given the government's propensity for spending, this columnist is skeptical that Congress would be willing to part with its newfound riches.