

SONS OF KYOTO: GREENHOUSE GAS REGULATION IN THE STATES

January 2004



AMERICAN LEGISLATIVE EXCHANGE COUNCIL
ALEC

1129 20th Street N.W., Suite 500 ♦ Washington D.C., 20016 ♦ 202.466.3800 ♦ www.ALEC.org

Sons of Kyoto: Greenhouse Gas Regulations in the States
by Alexandra Liddy Bourne

This publication is a product of the policy project entitled: *Energy Sustainability in the 21st Century: The Case for Optimism*, under the supervision of the membership of the Energy, Environment, Natural Resources, and Agriculture Task Force and

Duane Parde
Executive Director, ALEC

Mike Flynn
Director of Policy & Legislation, ALEC

Alexandra Liddy Bourne
Director of EENRA Task Force, ALEC

Copyright © January, 2004 by the American Legislative Exchange Council
All Rights Reserved

American Legislative Exchange Council
1129 20th Street, N. W., Suite 500
Washington D.C., 20036
(202) 466 3800 ■ Fax (202) 466 3801
www.ALEC.org

Publications Order Code: 0402
Cost to non-members: \$15.00 (+S/H)
For ordering information, contact the ALEC Public Affairs Office.

Sons of Kyoto: Greenhouse Gas Regulations in the States has been published by the American Legislative Exchange Council (ALEC), as part of its mission to discuss, develop and disseminate public policies which expand free-markets, promote economic growth, limit government and preserve individual liberty. ALEC is the nation's largest non-partisan, voluntary membership organization of state legislators, with nearly 2,400 members across the nation. ALEC is governed by a 23-member Board of Directors of state legislators, which is advised by a 23-member Private Enterprise Board representing major corporate and foundation sponsors.

ALEC is classified by the Internal Revenue Service as a 501(c)(3) non-profit and public policy and educational organization. Individuals, philanthropic foundations, corporations, companies, or associations are eligible to support ALEC's work through tax-deductible gifts. Nothing contained herein should be construed as necessarily reflecting the view of the American Legislative Exchange Council, its Board of Directors, or its membership, or as an attempt to aid or hinder the passage of any bill before the U.S. Congress or in any state legislatures.

Sons of Kyoto: Greenhouse Gas Regulation in the States

By Alexandra Liddy Bourne

EENRA Task Force Director ALEC

Synopsis

Although the United Nations agreement, known as the Kyoto Protocol, was rejected by the U.S. Senate; greenhouse gas regulation has proliferated in the states at an alarming rate. In the 2001-2002 general sessions, 66 bills were introduced in 24 states. During the 2003 general session, over 90 bills were introduced in 27 states. Regardless of the scientific uncertainty and the economic costs, there is an orchestrated movement to force the American public to bear the costs of implementing Kyoto-like regulation and develop a cap and trade carbon emission system. Ultimately, this system will create a national energy tax in the short term and has implications that may significantly harm free trade in the future. The legacy that we may hand over to future generations is not one of individual choices in a free market system, but one of lost opportunities in a global market controlled by a carbon cartel.

Introduction

Climate change policy and global warming became the new mantra for environmentalists and non-governmental organizations in their quest to redistribute international and domestic wealth. Combine this dynamic with rent-seeking industries attempting to gain a short-sighted competitive edge in the emissions trading scheme, a recipe for economic disaster has been set up in the states: a carbon cap and trade system.

Rallying around the concept of global warming during the 1992 UN Conference on Environment and Development in Rio de Janeiro, global environmentalists gained momentum to lay the foundation for international greenhouse gas reduction treaties. Subsequently, in 1997 an international agreement to limit “greenhouse gases” and effectively reduce hydrocarbon fuel consumption was conceived under the auspices of concern about increased temperatures due to global warming. This agreement, known as the Kyoto Protocol, did not have a scientific standing nor did it reflect economic realities. Instead, the agreement was driven by public advocacy and supported by foreign governments seeking a

competitive edge in the global market place. As one observer noted, “The driving force behind this movement is not any theoretical harm associated with carbon dioxide; it is the real economic value associated with carbon-containing fuels.”¹

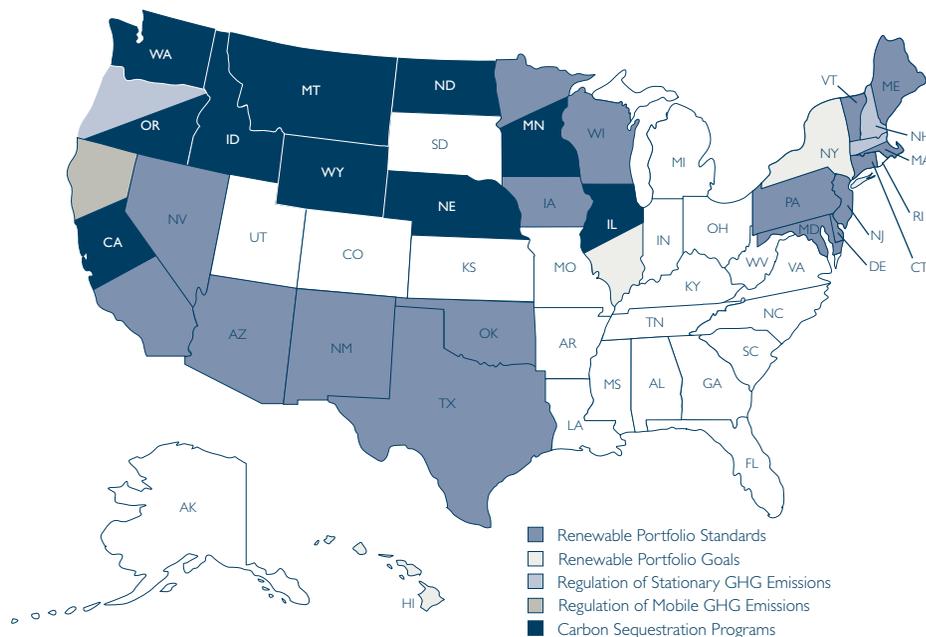
After the U. S. Senate rejected the Kyoto Protocol, an effort to implement the treaty through the back door of state governments was initiated. At first appearance, the regulatory actions were implemented in the states where the environmental movement is strong. Voluntary greenhouse gas registries were introduced as a compromise in states where industry and manufacturers provide economic stability or policymakers were inclined to view voluntary programs as a benign regulatory tool to improve the environment. Mobile and stationary sources of emissions were regulated along the east and west coasts of the nation. Carbon sequestration programs were implemented in

the rural states. Since 1997, there has been an orchestrated attempt to establish a carbon dioxide cap and trade program as a “market mechanism” to reduce greenhouse gases in the atmosphere (Figure 1).

Greenhouse Gas Action in the States

In 1997, Oregon was one of the first states to legislate greenhouse gas reductions. An emissions standard was established that required new or expanded power plants to decrease emissions of carbon dioxide. This legislation also required that if a plant could not meet the standard of its own accord, it could meet the reduction target by paying funds to a “qualified non-profit organization.” That non-profit was required to use the funds to finance projects that avoid, sequester, or displace excess carbon dioxide produced by the plant.

Figure 1: Greenhouse Gas Regulation in the States 1997-2003



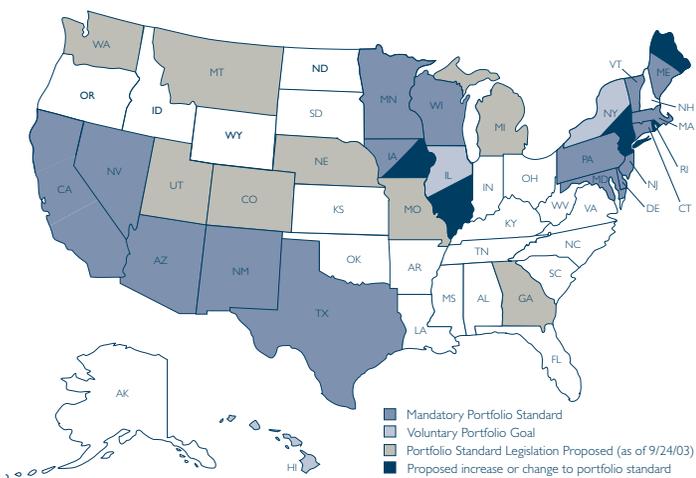
This is one of the first examples of legislated environmental coercion under the climate change agenda that seeks to remove monies from tax-paying, private sector profit centers, to finance a new industry that will not serve as a revenue source for the state general fund. A non-governmental organization, known as the Oregon Climate Trust was designated to oversee the projects. An interesting aspect of this law is that it does not produce an increase in energy efficiency as Oregon's renewable energy sources already provide 79% of its electricity primarily through hydroelectric dams.²

Subsequently, in 1998 New Jersey's governor imposed an initially voluntary program on utilities to reduce carbon dioxide emissions. To help reach New Jersey's emissions goals the state also passed egregious regulation to create one of the nation's first "societal benefits charges" on retail energy sales. The state collected approximately \$358 million for the first three years to fund energy efficiency and renewable energy programs to reduce carbon dioxide emissions. If the program succeeds in its goals, the states' taxpayers would have paid \$55/ton over three years for every ton of carbon emissions avoided.³ The voluntary reduction program

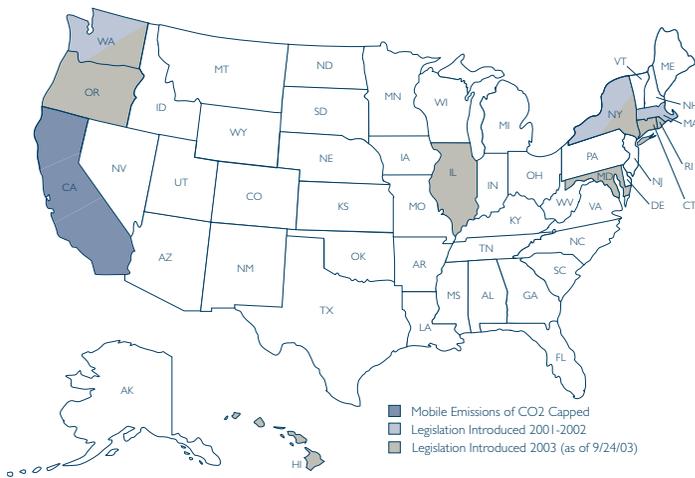
was discontinued in late 2002, because of accounting and verification problems. However, not before the state forced its largest utility, the Public Service Enterprise Group, to convert its voluntary pledge to a legally binding commitment under mitigation for other Clean Air Act violations in January of that year.

This is an excellent example of the evolution of well intentioned, voluntary initiatives undertaken by industry that are converted into mandatory requirements by coercion at a huge cost to consumers. Like Oregon, New Jersey will not achieve its carbon dioxide

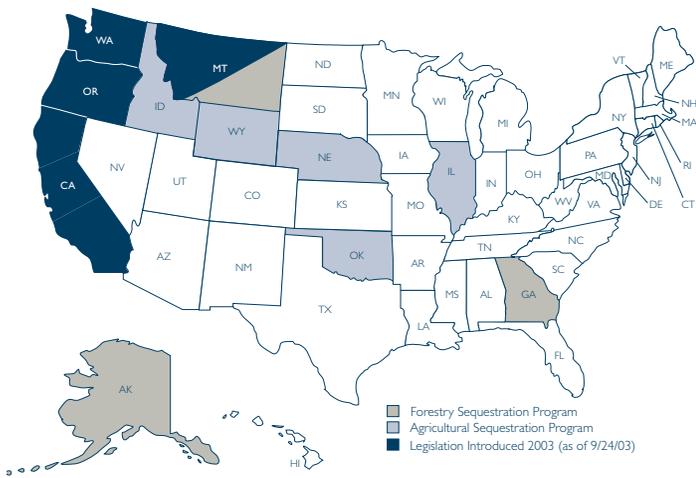
American Legislative Exchange Council Renewable Energy Portfolio Standards in the States



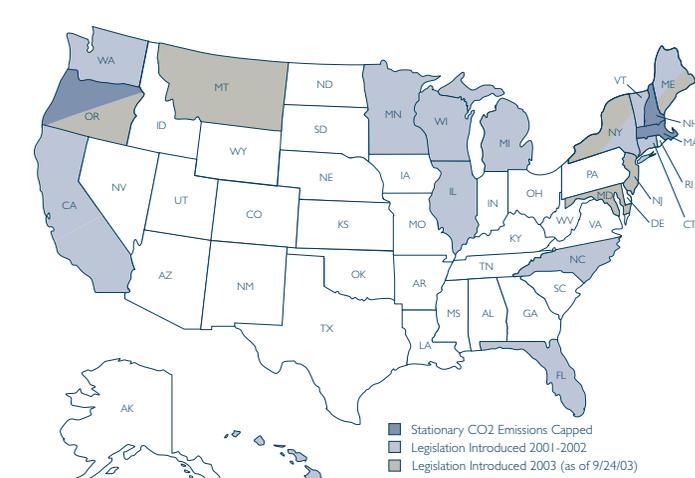
American Legislative Exchange Council State Activity Directly Targeting Mobile Emissions of CO2



American Legislative Exchange Council Carbon Sequestration Program in the States



American Legislative Exchange Council States Requiring Mandatory Reduction of Stationary CO2 Emissions



reductions because of the regulations, but by default because of its reliance upon nuclear energy, a non-carbon dioxide emitter.⁴

After the Bush Administration entered government in 2000, greenhouse gas legislation was introduced at the state level at a rapid pace. During the 2001-2002 general session, 66 bills were introduced in 24 states. In 2003, there were over 90 legislative bills introduced in 27 states. Carbon dioxide was the key term in the legislative language that has been skillfully inserted to target all fossil fuels used in energy production.

Carbon sequestration programs were targeted toward rural states or states with heavy agriculture and forestry services. Carbon dioxide emission reductions were targeted toward urban states with key national transportation routes or, as in the state of California, with a large market share of the national economy. An example of this strategy is demonstrated by the enactment of a mobile emissions (vehicles) reduction bill in California—which holds 1/8 of the national market share in automobile sales—in an effort to force manufacturers to retool factories and change vehicle choices for all consumers.

The maps below depict the variety of greenhouse gas regulatory programs and carbon dioxide emission and sequestrations programs introduced during the 2003 general sessions in the states.

Regional Regulation

New York's Governor Pataki announced a regional program to curb emissions of carbon dioxide from power plants. Eight of ten invited states have agreed to the plan (CT, VT, NH, DE, ME, NJ, MA, and RI). Maryland and Pennsylvania have not agreed to the concept. The group is to issue rules for a "flexible, market-based cap and trade program" by April 2005. California, Oregon, and Washington are considering a similar program.

There is a serious flaw to this approach. It does not take into consideration the differences in electric generation profiles. New York and the other New England states rely heavily on nuclear, hydropower, and natural gas generation. Pennsylvania, Maryland, and Delaware rely primarily upon coal for electricity generation. The Mid-Atlantic states would have to fuel switch to natural gas or other forms of renewable

energy with a significant increase in utility rates.⁵ Electricity generated from coal generation prices is approximately \$1.27 per million BTU in the first half of 2003, as opposed to natural gas prices of \$5.81 per million BTU.⁶

The New York proposal is a bit disingenuous; if New York sets the carbon dioxide emission rate to match its emissions in a credit trading program, the state stands to gain economically from the mid-Atlantic states in the region. Pennsylvania alone would lose 50,000 jobs in this regulatory scheme.⁷

State Revenue Impact

Energy taxes bring in large amounts of revenue for state governments. For all states, state motor fuel taxes have increased 3.1% from 1991-2001 to bring in \$32.1 billion in revenue. State public utilities taxes have increased 1.8% in that same period to bring in \$9.9 billion in state revenues. Motor fuel taxes make up 5.6% of total revenues generated by state taxes. Public utilities taxes make up 1.7% of total revenues.⁸

General sales tax is the largest proportion of total state revenues. Seven states charge sales tax on gasoline in addition to other fuel taxes.⁹ Almost all states charge some form of sales tax in addition to utility taxes on energy sales. However, the formula differs by states. Some states charge industrial users, but exempt residences. Others charge sales tax on only a portion of the bill (e.g., on the transmission charge). Corporate income taxes imposed upon energy providers also have a variety of mechanisms to provide revenue to the states. To put these numbers into perspective, corporate income taxes provide approximately \$30 billion in revenue, while utility taxes bring in \$86 billion in revenue to the states.¹⁰

Bast, et al., estimate in their study of the Kyoto Protocol impacts upon 37 states, that consumers would pay a minimum of \$104 billion per year for greenhouse gas emission reductions in these states. To put this number in perspective, this is an average of 25% of the total legislative budget for each state. State implementation of this type of greenhouse reduction policy could cost each household as much as \$10,000 per year.¹¹

Increasing regulation or increasing taxes has a detrimental effect on the daily cost of living for state residents, and causes businesses to

flee to a more palatable economic climate. Collectively, state legislatures recognizing the high risk of increased regulation upon the state revenues—at a time when 47 states were in budget deficit—and passed only 8 of the 96 greenhouse gas bills introduced in the 2003 general session. Of those eight bills, four were resolutions, one created voluntary reduction goals, two added onto programs already in existence, and the last created a mandatory renewable portfolio standard for electricity generation.

A back of the envelope approach to this state tax dynamic is to compare the states with the highest and lowest electricity prices to the states with the highest and lowest level per capita tax collection (see Tables I-4). States are heavily reliant upon energy taxes as a revenue source. In states with the highest tax burdens, consumers pay more for energy. Implementing a carbon based cap and trade system founded on the principles of the Kyoto Protocol will plunge our sputtering economy into a tailspin.

Figure 1: Top Ten Highest State Electricity Prices

State	Cents/Kilowatt-hour
Hawaii	14.05
California	11.78
New York	11.63
Massachusetts	11.51
New Hampshire	10.95
Vermont	10.80
Rhode Island	10.79
Maine	10.73
Alaska	10.53
Connecticut	9.62

Source: Energy Information Administration, 2001 Electric Power Annual.

Figure 2: Top Ten Lowest State Electricity Prices

State	Cents/Kilowatt-hour
Kentucky	4.24
Wyoming	4.46
Idaho	4.92
West Virginia	5.07
Utah	5.21
Washington	5.26
Indiana	5.30
Nebraska	5.39
Oregon	5.44
North Dakota	5.48

Source: Energy Information Administration, 2001 Electric Power Annual.

Figure 3: Top 10 Highest Per Capita State Tax Collections

State	Per Capita State Tax Collections
Connecticut	\$3,091.99
Hawaii	\$2,864.89
Delaware	\$2,731.14
Minnesota	\$2,722.00
Massachusetts	\$2,700.18
California	\$2,621.76
Vermont	\$2,532.64
New York	\$2,359.41
Wyoming	\$2,273.96
New Jersey	\$2,269.25

Source: Census Bureau, 2001 State Taxes

Figure 4: Top Ten Lowest Per Capita State Tax Collections

State	Per Capita State Tax Collections
South Dakota	\$1,291.92
Tennessee	\$1,362.71
Texas	\$1,379.74
New Hampshire	\$1,410.29
Alabama	\$1,426.42
South Carolina	\$1,513.06
Florida	\$1,520.98
Missouri	\$1,569.74
Arizona	\$1,593.41
Louisiana	\$1,611.04

Source: Census Bureau, 2001 State Taxes

Maine: A Case Study

In looking at the fuel sources for electricity production in Maine, the biggest source for energy is petroleum. Sixty-seven percent of Maine's electric summer generating capacity (summer generating capacity is a common measurement used by energy economists) is fossil fuel based.¹² Renewables make up about 33 percent, although it is important to note the more than half of the renewable generation - 17 percent - is hydropower. The remaining 16 percent is biomass incineration.¹³ Maine's remarkable utilization of renewable energy sources is among the highest in the country.

But there is a catch.

Maine's renewable portfolio standard requires that 30 percent of generation sold in the state be generated from renewable resources. The portfolio requirement was enacted as part of Maine's restructuring law. Maine's Public Utilities Commission 2000 restructuring report estimates that approximately half of the portfolio requirement was met by out-of-state

generation. This means that Maine's RPS standard, though the highest in the country, is unlikely to spur the development of new renewables. Furthermore, the higher price of renewable energy means that the extra cost will pass from Maine residents to out-of-state renewable energy providers.

Maine presents an interesting picture. According to the Energy Information Administration, Maine residents have the lowest electricity consumption rate in the entire United States. They use almost half as much as the national average. However, Maine residents pay the eighth highest electricity prices. An average household's monthly bill is 52 percent higher than the average U.S. household.¹⁴

Placing further regulatory requirements upon the energy marketplace in Maine will only serve to increase the cost of electricity with little impact upon improving the environment. Because Maine is already so energy efficient, residents will be unable to decrease energy consumption sufficiently to compensate for the higher prices.

Maine's transportation sector would also be hard hit by efforts to cap mobile greenhouse gas emissions. Residents currently enjoy gasoline pump prices only slightly above the national average. However, gasoline taxes already contribute to 24% to the state's pump price. Gasoline prices, which have increased during the winter of 2003 to the second highest level on record, would increase even more in the face of additional energy taxes.

Impact of Greenhouse Gas Reduction Policy at the National Level

The Heartland Institute found that a national program to reduce greenhouse gas emissions 7% below the 1990 levels by 2010 would increase gasoline prices at least 65 cents/gallon, double the price of electricity, eliminate 2.4 million jobs, and cause the average household income to fall approximately \$3,372 annually.¹⁵ An Energy Information Administration analysis of the Kyoto Protocol in 1998 estimated that the national Gross Domestic Product would be reduced by almost \$400 billion in 2010.¹⁶

Analysis of multi-pollutant legislation by the Energy Information Administration reveals that the cost of capping carbon dioxide is almost 13 times as expensive as regulating

nitrogen oxides and sulfur dioxides. The effort will cost tens of billions in direct costs and many urban centers will still be in violation of national ambient air quality standards.¹⁷

According to economic models noted by Margo Thorning of the American Council for Capital Formation, when carbon emissions are capped or constrained, economic growth slows due to lost output as new energy taxes are imposed and prices rise for carbon intensive goods. Thorning recommends avoiding caps on carbon dioxide emissions as such a "policy will have a negative impact on the willingness of industry to invest (in the U.S.) in the new technologies because of the concern that "voluntary" emissions cuts will become mandatory."¹⁸

There is significant debate amongst scientific and economic scholars about the merit of the Kyoto Protocol and the effect it would have on global climate change. State legislators should remain skeptical about policies that provide a "market mechanism" for carbon dioxide emissions reduction.

Conclusion

Regardless of the scientific uncertainty and the economic costs, there is an orchestrated movement to force the federal government and the American public to implement Kyoto-like regulation and develop a cap and trade carbon emission system. Ultimately, this system will create a national energy tax in the short term and has implications that may significantly harm free trade in the future. The legacy that we may hand over to future generations is not one of individual choices in a free market system, but one of lost opportunities in a global market controlled by a carbon cartel.

Endnotes

1. Mannix, Brian. Climate Change Policy Could create the Mother of All Cartels. Heartland Institute, Environment and Climate News, June 2001
2. Energy Information Administration, Renewable Energy Annual 2001, Nov. 2002, Table C15.
3. 2002 Annual Report. New Jersey Board of Public Utilities. Available online: <http://www.bpu.state.nj.us/reports/NJCEP2002AnnualReport-9-22.pdf>. Last Accessed 11/14/03. And Bast, Taylor, Lehr. *State Greenhouse Gas Programs: An Economic and Scientific Analysis*. Heartland Institute, Feb. 2003 p.7. The state of New Jersey designated \$358 million in revenues for 2001-2003 to fund its program. The Bast, et al. report says that it cost the state \$55/ton per year for every ton of carbon avoided. This should read \$55/ton for the first three years of the program.
4. *ibid.* p.8

5. Trisko, Eugene; New York's Proposal for a Regional CO2 Control Plan, American Legislative Exchange Council; July 2003.
6. Annual Energy Report. *Table 4.1 Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2001 through June 2003*. Energy Information Administration. Available online: http://www.eia.doe.gov/cneaf/electricity/epm/table4_1.html#_ftnref4. Last Accessed 11/14/03.
7. Rose, PhD; Adam; Economic Impacts of Coal Utilization in the Continental United States., Pennsylvania State University, 2001.
8. "State Government Tax Collections by Type of Tax Fiscal Years 1991– 2001." *Facts and Figures on Government Finance, 36th Edition*. Tax Foundation. Available online: <http://www.taxfoundation.org/collectionsbytype10years.html>. Last accessed 11/14/03.
9. (API. "Nationwide and State-by-State Motor Fuel Taxes" July 2002).
10. "State Government Tax Collections by Type of Tax Fiscal Years 1991– 2001." *Facts and Figures on Government Finance, 36th Edition*. Tax Foundation. Available online: <http://www.taxfoundation.org/collectionsbytype10years.html>. Last accessed 11/14/03.
11. Bast, Taylor, Lehr. *State Greenhouse Gas Programs: An Economic and Scientific Analysis*. Heartland Institute, Feb. 2003. Pg., 33-35. Estimates have been adjusted to reflect current New Jersey figures of \$18.4/ton of avoided carbon per year.
12. *Existing Capacity by State 1990-2001*. Energy Information Administration. Available online: http://www.eia.doe.gov/cneaf/electricity/epa/existing_capacity_state.xls. Last accessed 11/14/03.
13. *Table 8.2a Electricity Net Generation: Total (All Sectors), 1949-2002*. Energy Information Administration. Available online: <http://www.eia.doe.gov/emeu/aer/txt/ptb0802a.html>. Last accessed 11/14/03.
14. Electric Sales and Revenue 2001 Spreadsheets (Data Tables). *Table 1. US. Average Monthly Bill By Sector, Census Division and State, 2001*. Energy Information Administration. Available online: http://www.eia.doe.gov/cneaf/electricity/esr/esr_tabs.html. Last accessed 11/14/03.
15. Bast, Taylor, Lehr. *State Greenhouse Gas Programs: An Economic and Scientific Analysis*. Heartland Institute, Feb. 2003.
16. Energy Information Administration. *Impact of the Kyoto Protocol on U.S. Energy Markets and Economic Activity, 1998*.
17. Bast, Taylor, Lehr. *State Greenhouse Gas Programs: An Economic and Scientific Analysis*. Heartland Institute, Feb. 2003.
18. Thorning, M., New Directions of U.S. Climate Change Policy and Energy Security, June 2001