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TAX POLICY AND CALIFORNIA'S ENERGY CRISIS

The search for solutions to California's energy crisis has caused some to look toward California's tax code to provide incentives for energy conservation and production. While conservation is a universally shared goal, there are a number of questions as to how this goal can best be achieved. This paper examines some of the factors that affect the desirability of using the tax code to address the energy crisis.

HOW SHOULD COMPETING ENERGY CONSERVATION PROPOSALS BE EVALUATED?

There are a number of ways to provide incentives for energy conservation and/or assistance to families affected by the rising cost of energy: service programs (i.e., weatherization), direct expenditure programs (i.e., emergency energy assistance programs), discount and rebate programs, low cost loan programs, and tax incentives. Competing proposals should be evaluated against an objective framework that asks:

1. Is the proposed incentive the most cost-effective means of achieving the desired goal?
2. Can the incentive be implemented and begin producing measurable results within the desired period?
3. Who would (and would not) benefit from an incentive? How are the benefits of an incentive distributed among different groups of taxpayers?
4. How much will an incentive cost? Is the cost capped or open-ended?

HOW MUCH DO FAMILIES PAY FOR ELECTRICITY?

On average, utilities account for a relatively modest share of families' annual expenditures (2.7 percent). However, this figure masks significant disparities between households at varying income levels. Low-income families spend a greater share of their income on electricity than do higher income households. According to the Consumer Expenditure Survey conducted by the US Bureau of Labor Statistics, the poorest fifth of families spent nearly eight times as much of their income for electricity as did the wealthiest fifth of families. Natural gas costs follow a similar pattern, with families with the poorest fifth of families spending more than six times as large a share of their income on natural gas as families in the top quintile.

How Much Do Consumers Spend on Utilities (1999)

Income Group	Pre-Tax Income	Annual Expenditure on Electricity	Annual Expenditure on Natural Gas	Electricity as a Percent of Income	Natural Gas as a Percent of Income	Gas and Electricity as a Percent of Income
Lowest 20%	\$7,264	\$617	\$162	8.5%	2.2%	10.7%
Second 20%	\$18,033	\$771	\$227	4.3%	1.3%	5.5%
Middle 20%	\$31,876	\$869	\$234	2.7%	0.7%	3.5%
Fourth 20%	\$52,331	\$991	\$292	1.9%	0.6%	2.5%
Top 20%	\$110,105	\$1,193	\$394	1.1%	0.4%	1.4%
TOTAL	\$43,951	\$899	\$270	2.0%	0.6%	2.7%

Source: Bureau of Labor Statistics, Consumer Expenditure Survey

WHO WOULD (AND WOULD NOT) BENEFIT FROM TAX INCENTIVES FOR CONSERVATION?

Tax credits that are not refundable provide no benefit to families that have no tax liability.¹ California has very high tax thresholds (the income level at which a household becomes subject to tax). The tax threshold for a family of four is \$39,790. In contrast, California's median household income – the income of the household exactly at the middle of the income distribution – was \$43,744 in 1999. Consequently, tax incentives provide *no* benefit to a large number of California families.

California's Tax Thresholds are High

	Tax Threshold	Threshold as a Percent of Poverty
Single	\$12,290	147%
Married, no children	\$24,581	218%
Head of Household, one child	\$32,041	285%
Head of household, two children	\$37,916	268%
Married, one child	\$33,915	240%
Married, two children	\$39,790	233%

Note: Assumes families claim standard deduction and the renters' tax credit. Measured as a percent of 2000 poverty guidelines.

Seniors are another group that is likely to suffer from high electricity costs, but receive little benefit from tax incentives for conservation. The tax threshold for seniors is even higher than that for other households, since seniors receive an extra \$75 personal credit. Moreover, the state does not tax Social Security income. A married couple over the age of 65 must have \$2,175 per month in income in addition to Social Security before they would have a tax liability. A single senior must have \$1,087.50 per month in addition to Social Security before they owe state income taxes.

CREDITS VERSUS DEDUCTIONS

Tax credits reduce the amount of taxes that would otherwise be owed on a dollar for dollar basis. Deductions reduce the amount of income that is subject to tax. While credits are worth the same to taxpayers at all income levels – as long as they have sufficient income to have a tax liability –

¹ Refundable tax credits provide cash back to taxpayers to the extent the amount of the credit exceeds the taxpayer's liability. California currently has only one refundable credit, the child care credit enacted as part of last year's budget negotiations.

deductions are worth more to high-income taxpayers. The value of a deduction increases with the marginal rate of a taxpayer. A deduction is worth three times more to a family subject to the state's 6 percent tax rate than it is to a family at the 2 percent rate.

To the extent the committee considers incentives, credits provide the same benefit to all taxpayers with sufficient incomes to claim the incentive. Refundable credits provide assistance to families with incomes too low to claim traditional credits. However, many of these families do not have a filing requirement (and thus are unlikely to learn about the availability of a credit). Moreover, gap between the time an expenditure is made and a credit is claimed and received may limit the effectiveness of credits as an incentive for low-income households.

Rewarding Taxpayers for Doing What They Would Otherwise Do

An incentive only works as an incentive if it encourages behavior that would not otherwise have occurred. Most of the research suggests that most tax credits have minimal, if any, influence on taxpayers' behavior. In his recent confirmation hearing, US Treasury Secretary Paul O'Neill testified that, "As a businessman, I never made an investment decision based on the tax code. If you give money away, I will take it, but good business people don't do things because of inducements."²

If higher electricity rates alone would encourage a taxpayer to buy energy-efficient appliances, there is no need for an incentive. To the extent benefits go to reward actions that would have taken place in the absence of the incentive, costs increase relative to the net benefit to society. It is very difficult to limit the availability of a tax credit to those circumstances where it would make the difference between the desired behavior occurring and not occurring.

The "Leakage Factor": The Deductibility of State Taxes

Taxpayers can deduct state income taxes if they itemize deductions on their federal income taxes. Incentives that reduce state income taxes result in higher federal tax bills for taxpayers who itemize their deductions. This is called leakage because a portion of the benefits "leak" out of the state in the form of higher federal income taxes. As much as a quarter of the benefits of state tax incentives are lost in the form of higher federal tax payments.

How Do Tax Incentives Measure Up?

1. *Are tax incentives the most cost-effective means of energy conservation?* The cost of tax incentives relative to their benefits is relatively high due to leakage and the fact that persons who would have done the same thing in the absence of the incentive often claim tax credits.
2. *Can the incentive be implemented and begin producing measurable results within the desired period?* Good question. The benefits of rebate and discount programs are available immediately, whereas the benefits of tax incentives are not realized until a taxpayer files their tax return in the following year.
3. *How are the benefits distributed among various groups of taxpayers?* Tax incentives are of little or no use to lower income families, including many seniors, who have no California income tax liability (unless they are refundable). These same families are suffering the greatest burdens from rising energy prices. Direct rebate, service, and discount programs, on the other hand, can be

²Joseph Kahn, "Treasury Choice Varies From Bush on Tax Outlook," *New York Times* (January 18, 2001).

targeted to those most in need of assistance.

4. *How much will the program cost? Is the cost fixed or open-ended?* Most tax incentives are available to anyone who engages in the activity that is incentivized. Consequently, costs are open-ended and unpredictable. Direct expenditure programs, including rebate and assistance programs, can be capped resulting in costs that are predictable and controllable.

RECOMMENDATIONS

1. The Legislature should act cautiously. The state's history in using tax incentives as a tool for encouraging conservation and/or alternative power generation has not been particularly positive. If incentives are to be used, they should have sunset dates and provisions for evaluating their cost effectiveness and impact on conservation and/or production.
2. The state has an existing infrastructure of energy conservation and assistance programs. These programs are well positioned to move quickly to implement new and/or expanded programs. Specifically, the state could augment:
 - The Low Income Home Energy Assistance Program's (LIHEAP) Energy Crisis Intervention and Home Energy Assistance Programs to provide immediate relief to families unable to pay higher energy bills, both electric and natural gas.
 - Existing weatherization programs targeted at lower income households and/or expand these programs to include other conservation measures (i.e., assistance toward the purchase of low wattage light bulbs or energy-efficient appliances).
 - Conservation programs currently offered through utility companies.

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