State Policy Series: Impacting Industrial Energy Efficiency

State Energy Efficiency Tax Incentives for Industry

Offering tax incentives is one way to utilize policy and regulation to encourage the industrial sector to improve its energy efficiency. The most effective way to directly impact industrial energy efficiency through tax incentives is with an energy efficiency targeted incentive. Additionally, energy efficiency tax incentives that are offered by states are of significant value to industry, since states are likely to have a greater understanding of the local needs of industry.

There are three primary types of tax incentives available to industry that can be used for energy-related projects. The first two, renewable-energy tax incentives and energy efficiency tax incentives, specifically focus on energy. The third is an economic-development tax incentive.

Currently, renewable-energy tax incentives are more widely available than energy efficiency tax incentives, for industry as well as other sectors in the economy. However, the number of available energy efficiency tax incentives is growing. Energy efficiency tax incentives for industry are often underutilized by state governments as a means for meeting environmental- and energy-related goals. Most available state-level energy efficiency tax incentives are focused on residential or commercial energy, even though the industrial sector often consumes more energy. States looking to reduce carbon emissions and improve overall energy

efficiency could have greater success in achieving these goals by refining their efforts to include more industrial energy efficiency tax incentives. Improving industrial energy efficiency is an excellent way for states to lower their energy consumption in order to bolster the competitiveness of local industry and spur economic development and job creation.

State Energy Efficiency Tax Incentives

At the time of this report's publication, 11 states were offering industry a total of 15 state-level energy efficiency tax incentives. This means that less than 25% of the 50 states offer tax incentives specifically aimed at improving industrial energy efficiency. Oregon was the established leader, offering four of the 15 incentives. Exhibit 1 displays the 15 energy efficiency tax incentives.

Exhibit 1: State Energy Efficiency Tax Incentives for Industry

Kansas	Waste Heat Utilization System
Kentucky	Kentucky Environmental Stewardship Act
Maryland	Property Tax Exemption for High Performance Buildings
Massachusetts	Alternative Energy and Energy Conservation Patent Deduction
Montana	Energy Conservation Investment
New Mexico	Sustainable Building Tax Credit
New York	Green Building Tax Credit
Oregon	Energy Efficiency Tax Credit
Oregon	New Construction Tax Credit Program
Oregon	High Efficiency Combined Heat and Power Tax Incentive
Oregon	Sustainable Building Tax Credit
South Carolina	Commercial Tax Incentive
South Carolina	Credit for Energy Conservation and Renewable Energy
Virginia	Energy Efficient Buildings Tax Exemption
Washington	Energy Efficient Commercial Equipment Tax Credit

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Exhibit 2 shows the states according to their industrial energy consumption rank. Those states offering industrial energy efficiency tax incentives are also identified in the map with highlighted green borders. Of particular note is that neither the states among the lowest nor highest levels of industrial energy consumption offer industrial energy efficiency tax incentives. These states, therefore, could still realize gains through programs such as industrial energy efficiency tax incentives. The majority of states offering industrial energy efficiency tax incentives are found in the middle 50% in terms of industrial energy consumption.

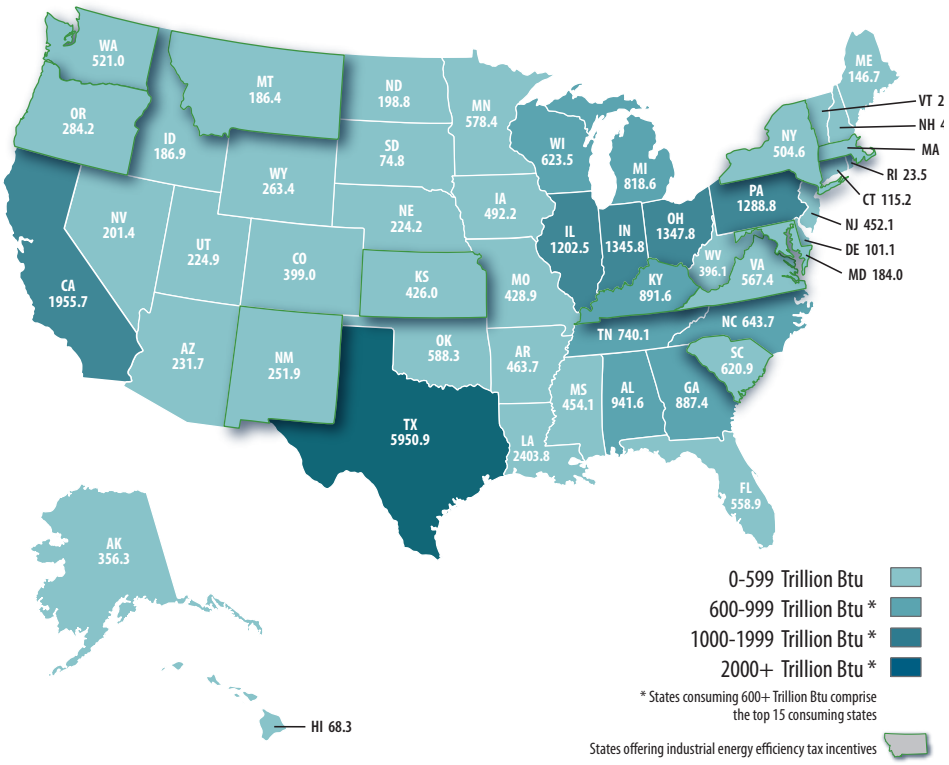
In particular, this trend indicates an opportunity among the states with the largest industrial energy consumption, considering that they are more likely to have a large potential for energy savings through energy efficiency measures.

Only two of the top 15 states in terms of industrial energy consumption, Kentucky and South Carolina, offer an industrial energy efficiency tax incentive. Eight of the top 15 states are located in the Southern region of the United States, as defined by the U.S. Census Bureau, and Kentucky and South Carolina are the only two of these eight Southern states that offer energy efficiency tax incentives for industry. This is significant, as the South has been identified as the region with the largest potential for energy efficiency improvement among the four U.S. Census regions.

Impact of Tax Incentives and Energy Efficiency for Industry

Improving energy efficiency has a number of benefits for the industrial customer. Tax incentives are beneficial in supporting industrial energy efficiency programs, primarily through encouraging larger capital investments that might not have otherwise been pursued. These

Exhibit 2: Industrial Energy Efficiency Tax Incentives and Estimated 2007 Industrial Energy Consumption by State



capital investments can become manifest through retrofitting projects or through the development of new technologies. Replacing equipment that still works with more advanced, energy-efficient equipment requires a careful cost-benefit analysis of the gains from future energy savings against the immediate cost of purchasing and implementing the retrofit, as well as the lost sunk costs of discarding working equipment before it fails. An industrial energy efficiency tax incentive, therefore, would help quicken the rate at which retrofits are being undertaken compared to the rate of occurrence during the natural refit cycle.

Industrial Energy Efficiency Impacts for States

As industrial energy consumption constitutes over 30% of the national total, improved energy efficiency within industry would account for significant savings for the manufacturer, translating into economic growth for the state. Industrial energy efficiency programs can also be beneficial in assisting states in achieving greenhouse gas (GHG) emission reduction targets and in fulfilling any energy efficiency resource standard (EERS). A final benefit stemming from improving industrial energy efficiency would be a reduction in the potential impacts of any energy price volatility and price spikes. Improving efficiency would reduce overall energy consumption, meaning fewer operational costs of a manufacturer are directly tied up in energy. As a smaller portion of the manufacturer's overall operating costs are affected by price spikes, the more stabile the company and industrial sector will become. Improvements in business stability can also lead to further economic growth.