DJC DAILY JOURNAL OF COMMERCE
Portland, Oregon

Carbon and the Pacific Northwest, effective emissions control

Posted: 04:00 AM PST Tuesday, November 13, 2007

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Growing concerns over the level of greenhouse gases, especially carbon dioxide, has led to calls for Pacific Northwest governments to consider some form of emissions reductions. In California, this concern has manifested itself as Assembly Bill 32, which requires various government agencies to take "early action" to reduce greenhouse gas emissions and to promote further reductions amongst California industry. In Oregon and Washington, this pressure has led to the establishment of so-called "Renewable Portfolio Standards" (RPS), which require power producers to obtain a certain percentage of their power from renewable sources such as wind, hydroelectric or solar.

Unfortunately, renewable standards and other actions will not result in the overall reductions of green house gases required to meet aggressive targets in Oregon (10 percent below 1990 emission levels in 2020), or throughout the member states of the Western Climate Initiative (15 percent below 2005 levels by 2020). Over 80 percent of U.S. greenhouse gas emissions is carbon dioxide from the combustion of fossil fuels, which has led to demands for control of carbon emissions to meet reduction targets.

Control can be achieved in three ways: command and control (direct regulation of sources), tradable permits ("cap and trade"), or carbon taxes.

Carbon taxes

In general, command and control regulation has been discredited as ineffective in the U.S., and is left out of any discussions of future regulation of carbon dioxide emissions.

Each of the remaining options has pros and cons and is favored by certain sectors of the economy:

Cap and Trade

Cap and trade systems would establish a permitted limit for existing sources of carbon dioxide and would require that all sources reduce their overall emissions. This is currently the system the U.S. uses for the control of acid rain pollutants. Such systems are favored by utilities with a high percentage of coal-burning generation and by entrepreneurs who are interested in projects that can reduce greenhouse gases from other sectors (such as so-called "carbon sequestration.") Cap and trade systems are meant to provide innovative solutions to the carbon dioxide emissions issue and are favored by those who believe in a technological solution to global warming. On the other hand, a cap and trade system will require additional permitting resources, resulting in an increase in state government and will place an additional burden on businesses operating in the Pacific Northwest.

Carbon Tax

On the other hand is the carbon tax, which would place a charge on the carbon emissions generated by any fossil fuel (e.g. coal, natural gas, oil products). Carbon taxes are favored by utilities with a majority of renewable, natural gas, or nuclear resources in their portfolios.

Many conservative economists have also embraced the carbon tax as a potential replacement for some personal and corporate income taxes. Economists estimate that a tax of $10 per metric ton of carbon dioxide emissions (the common measure) could yield more than $50 billion per year to the treasury, assuming some reductions from a 2005 baseline.

As with cap and trade, a carbon tax has its pros and cons. As an economic policy, a carbon tax would be simple to implement at the national level. It would largely affect utilities and oil producers, who would simply pass it through to their customers. Estimates of the effect of a $10 per Megaton carbon dioxide tax are an increase of $0.024 cents per gallon of gas and $0.0017 per kilowatt-hour of electricity, less than a 2 percent increase. As a tax, however, it would affect the poor and small business disproportionately, as they

pay a greater part of their income for oil and electricity.

Lastly, a carbon tax is only truly effective if it is instituted as a national policy. Carbon taxes at the local level would be difficult to enforce (especially since power is not entirely locally generated) and would result in business moving out of the state or region.

Meeting the aggressive requirements of Oregon's greenhouse gas reduction program will be difficult for Oregon's utilities and large businesses using fossil fuels, regardless of which system is adopted to promote reductions. A national policy leading to a carbon tax would spread the cost more widely to consumers.

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