

CARBON TAX

Description

A carbon tax is a fee placed on pollution resulting from the burning of fossil fuels. Due to difficulty in measuring individual carbon emissions, fuel consumption can be used as a proxy. In Texas, this tax would be operationalized as an addition to the fuel tax rate.

How Will This Help?

Provide additional funds for transportation – Implementing a carbon tax would provide funds to help reduce traffic congestion and maintain the safety and quality of Texas roads and bridges.

Reduce external costs from transportation –

Society currently bares the cost of carbon emissions from motor fuel use in the form of air pollution and global warming. A tax on carbon provides a disincentive to purchase fuels that emit carbon by charging drivers for the impact burning those fuels has on other individuals.

Highly efficient tax – The carbon tax is a user fee; a fee that allows consumers the choice to pay given their evaluation of the new costs and benefits of consumption. This element adds in the cost of carbon when consumers chose their optimal level of fuel consumption.

Reduce need for excessive borrowing – Texas has increasingly turned to bonds as a means of financing transportation improvements as the fuel tax has lost purchasing power. Texas could help slow a growing trend of using the credit card to pay for roadway projects by increasing the state motor fuels tax through inclusion of a carbon tax.

What's the Downside?

- **General opposition to tax increases –** The Legislature and the public have recently been opposed to tax or fee increases.
- **Fuel tax revenues are eroded by increased fuel efficiency –** Fuel tax revenues will likely decrease over time (see Exhibit 1). The expected growth in future population means more people traveling on the roadways and consuming more fuel. However, today's more fuel efficient cars and trucks pay lower fuel tax per mile than when the tax rates were last set 20 years ago. As vehicles become more fuel efficient and alternative fuel vehicles become more common, the number of gallons needed to go the same distance will decrease. While benefits such as a smaller carbon footprint and the ability to travel further per gallon are gained, the resulting decrease in fuel consumption means less gas and diesel tax revenue raised to tackle the rising transportation needs.



Who: State

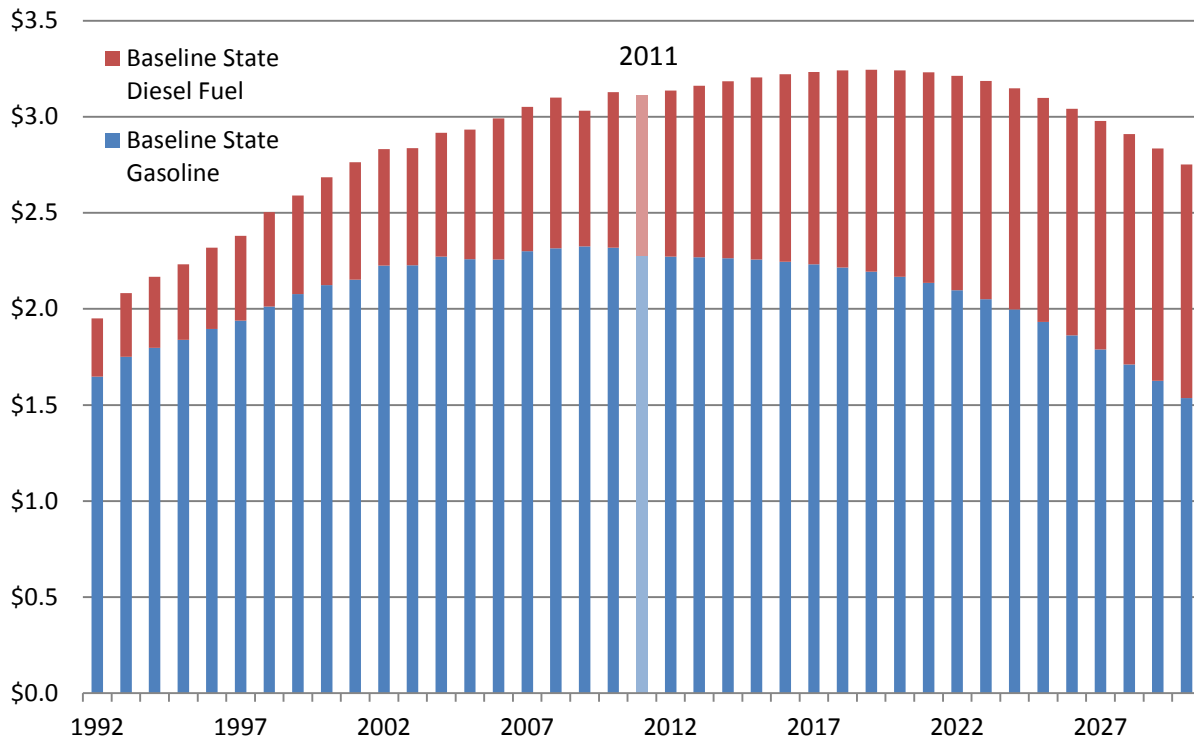
Cost to Collect: Low

Sustainability: ●●●○○

Reliability: ●●●●○

Implementation: Easy

Exhibit 1: Motor Fuel Revenue (Billions of \$2010)



Estimated Funding Yield

- **10 cents/gallon of motor fuel:** \$6.5 billion for transportation from 2014 to 2017.
- **20 cents/gallon of motor fuel:** \$13.1 billion for transportation from 2014 to 2017.

Implementation Issues

- Very low cost to implement, no new technology or increased costs of compliance to users.
- Legislative action is required to implement this funding change.
- Voters/users would need to be educated regarding the costs and benefits.

Around the World

British Columbia currently levies a carbon tax on fuel of 27.5 cents per gallon of gasoline.

Finland and Denmark both received tax revenue of nearly 0.3 percent GDP from carbon taxes in 2007.

Sweden raised 0.8 percent of its GDP in tax revenue using carbon taxes in 2007.

Norway and Sweden both dedicate revenues from carbon taxes to their general revenue funds; allowing them flexibility in budgeting.