

CAP AND TRADE

This white paper provides a brief description of the federal cap and trade (C&T) proposals contained in H.R. 2464 and S. 1733 and their potential impact upon the trucking industry. The C&T provisions of these bills focus on upstream producers of transportation fuels, meaning that they do not impose a direct cap upon mobile source carbon emissions and instead regulate these emissions by requiring refineries and fuel importers to account for the carbon emissions that result from the combustion of the transportation fuels they sell.

Under the proposed C&T systems, the government would establish an economy wide cap on the amount of carbon that may be emitted. The government would then issue carbon allowances that represent the right to emit a certain amount of carbon each year. The total amount of allowances issued cannot exceed the cap and the amounts of available allowances are reduced over time. Companies that need to increase their carbon emissions beyond the allowances they hold must purchase additional allowances in the marketplace. The transfer of allowances is referred to as a trade, and these transfers often occur on a carbon exchange similar to the commodities markets. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions by more than the required amount. Thus, in theory, those who can reduce emissions most cheaply will do so, achieving the pollution reduction at the lowest possible cost to society.

The primary disadvantage of the C&T proposal is its impact upon the price of diesel fuel. The amount of allowances that petroleum refineries would receive is far less than the amount of carbon that results from the combustion of the transportation fuels they refine. As such, refineries would have to purchase a significant amount of allowances, which will be passed on to trucking companies in the form of a significant increase in the price of diesel fuel.^{1 2} As the amount of available allowances is reduced over time, the price of diesel fuel will continue to escalate.

¹ EPA's analysis of the C&T provisions predicts carbon prices of \$13 - \$24 per ton in 2015. Since one carbon allowance is equivalent to a metric ton, refineries will need to purchase one carbon allowance for every 81 gallons of diesel they sell (2,205 pounds in a metric ton, divided by 27.1 pounds of carbon per gallon of diesel). As such the C&T program would increase the price of a gallon of diesel by 16 to 30 cents per gallon in 2015.

² There is a genuine concern that refineries will increase the price of diesel by more than the actual carbon allowance costs, so that they can avoid increasing the price of gasoline. Since there are numerous alternatives for passenger cars that run on gasoline (i.e., purchase smaller vehicles, purchase hybrid vehicles, avoid discretionary trips, increase carpooling, and increase the use of buses and subways), refineries will try to limit the gasoline price increase to avoid losing customers. Since trucking consumes diesel on a non-discretionary basis and does not currently have viable alternatives to diesel, refineries may allocate more of the carbon allowance expense to diesel fuel and effectively subsidize the price of gasoline.

The price of oil already is volatile. Adding a fluctuating carbon price to the cost of refining diesel will likely increase the volatility of diesel prices, making it increasingly difficult to pass on fuel costs to shippers.

While the current versions of C&T being considered in Congress pose significant problems for the trucking industry, it may be possible to design an alternative C&T system that is more acceptable to the trucking industry. Two of these alternatives are discussed below:

Alternative 1 – Distinguish Discretionary and Non-discretionary Mobile Sources. Proponents of the C&T system acknowledge that the bill will increase fuel costs, which will provide an economic incentive to use less fuel or find lower carbon alternatives. The current C&T bill does not draw a distinction between gasoline and diesel, or passenger cars and trucks and therefore does not distinguish between mobile sources that burn fuel on a discretionary basis and those that must burn fuel regardless of its increased price. One way to modify the C&T system to recognize this distinction is to issue carbon allowances directly to the non-discretionary users, such as trucking companies. These end-users could then sell the carbon allowances and presumably the revenue derived from these sales would offset the increase in the price of diesel fuel. From a political standpoint railroads, airlines, farmers and other consumers would all try to claim that they use diesel on a non-discretionary basis and seek to have allowances issued to cover their consumption. This likely would be opposed by environmentalists who are in favor of capping all carbon sources.

Alternative 2 -- Removing Mobile Sources from the Cap. C&T may be an acceptable means of controlling carbon emissions from stationary sources; while mobile sources could be regulated outside of the cap and controlled through fuel economy standards, specific vehicle requirements, or fuel specifications. Of course, each of these mobile source alternatives would have a separate set of advantages and disadvantages. To modify the existing C&T proposals to exclude mobile sources, the cap on refineries would have to be limited to refinery emissions only and the carbon emissions stemming from the combustion of the refined products would no longer be attributable to the refinery.