

## Cost Containment and Offset Use in the American Clean Energy And Security Act (Waxman-Markey)

The U.S. House of Representatives passed the American Clean Energy and Security (ACES) Act, sponsored by Representatives Waxman and Markey, on June 26, 2009. The ACES Act includes a market-based regulatory program—cap and trade—to limit greenhouse gas (GHG) emissions. Specified sources emitting GHGs must hold allowances (permits) in order to continue emitting these gases. Although cap and trade is generally considered a more cost-effective approach than traditional regulation, some are concerned about high compliance costs for regulated firms and related high energy prices for consumers in the early years of the program. In addition, concerns have been raised about the possibility of significant volatility in the price of emission allowances. This memo outlines some of the policy options that can address these cost concerns and provides an overview of the measures included in the ACES Act.

### Options for Containing Costs in a Cap-and-Trade Program

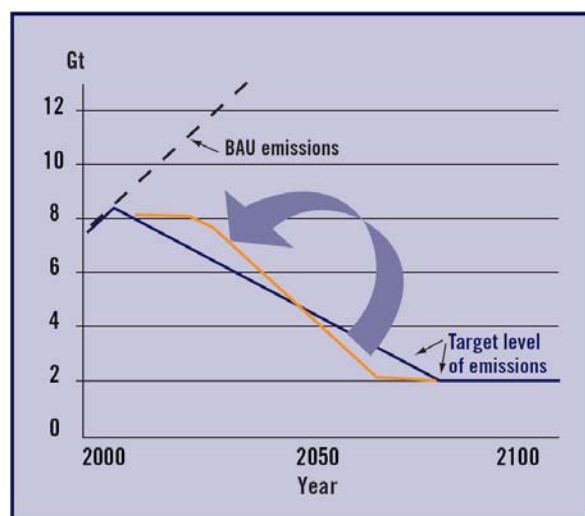
**“Where and When” Compliance Flexibility.** The goal of cap and trade is to reduce a specified amount of GHG emissions from covered emitters by a targeted date. Adding a degree of flexibility regarding the specific location (where) and the exact timing (when) of the reductions can help minimize excessive prices for those with a compliance obligation while maintaining the environmental goals of the program.

Banking, borrowing, and multi-year compliance periods are mechanisms often utilized to help reduce short term price volatility by increasing flexibility in the timing of compliance. Banking allows covered sources to bank—or hold for future use—emission allowances. Firms will often choose to bank allowances when they believe that the cost of reducing emissions, and therefore the price of allowances, is currently low compared to future periods. Banking also motivates early action by encouraging sources to make larger reductions in the near term because they are then able to reap the full environmental benefits of their investments over time.

Flexibility in the timing of compliance is also increased by allowing firms or the program administrator to borrow allowances from the future. Figure 1 provides an example of system-wide borrowing by the program’s administrator, often referred to as a strategic reserve, in which allowances are pulled from future compliance periods for use in the current period if allowance prices become too high. As long as there is a provision requiring that these allowances be repaid, the environmental goals of the program can still be met. However, borrowing can increase the difficulty of meeting future targets.

Offsets are reductions in GHG emissions from sources not covered by the cap-and-trade program and can be a significant cost containment mechanism if these reductions are less costly than those made by sources inside the cap. For example, in the early stages of the program, it may be cheaper for a small farmer not included in the cap to reduce farm-related GHG emissions than it would be for the owner of a coal-fired power plant to reduce emissions. In order to preserve the environmental integrity of the program, all offsets must be real, measurable, and permanent emission reductions that occur in addition to what is required by law or existing industry standards.

Figure 1: *Strategic Reserve*



**Increased Price Certainty.** Cap and trade directly limits the total quantity of GHGs that can be emitted by sources covered by the program and requires businesses to hold an allowance to cover any emissions. Although the approach provides considerable environmental certainty, the market sets the allowance price. One way to provide additional price certainty beyond the use of offsets, a strategic reserve, or other cost containment options is to place a ceiling on allowance prices. When a certain market price is reached, the government would either sell additional allowances at this price or firms could pay into a fund without having to actually hold an allowance. This approach, often called a price ceiling or safety valve, would ensure that allowance prices do not exceed a certain level but would allow emissions to exceed the capped amount.

To provide additional price certainty and minimize volatility, a floor can be added to the price of allowances. For example, if a portion of allowances are to be distributed via government auction, a minimum reserve price could be included below which allowances would not be sold. A price floor can be useful in helping to ensure that investments in clean technology are not undermined if allowance prices are very low. Combining both a price ceiling and a price floor is often referred to as a “price collar”.

## **Use of Cost Containment Provisions in Waxman-Markey**

The ACES Act utilizes a number of cost containment options to address concerns about allowance price volatility, as well as excessively high or low allowance prices. (The Act also provides compensation to consumers and industries to further protect these groups from excessive cost increases).

**Frequent Auctions with a Reserve Price.** A portion of the allowances available each year will be distributed via government auction. These auctions will be held every three months and there will be a minimum, or reserve price, for allowances in an effort to avoid excessively low allowance prices.

**Banking and Borrowing.** The Waxman-Markey proposal allows covered entities to bank emission allowances indefinitely for future compliance use. In addition, the bill includes a two-year compliance period as well as unlimited next-year borrowing of allowances with no interest. Borrowing of up to 15 percent of an entities’ compliance obligation from a few years into the future is also allowed, but at an effective interest rate of 8 percent.

**Strategic Reserve.** The bill includes a strategic reserve auction, a version of system-wide borrowing, which allows covered entities to purchase allowances from a special auction in the event that allowance prices reach a specified level. The allowances used in the strategic reserve auction would be taken from those that would be available in future years so that the overall emission cap would not be exceeded and from offsets created through government programs.

**Domestic and International Offsets.** The bill would allow 2 billion offsets to be used annually for compliance in the cap-and-trade program. One half of these could come from domestic sources and the other half from international sources. The Environmental Protection Agency and the Department of Agriculture would determine which U.S. sources would be eligible to participate in the program. The bill also provides some flexibility for adjustments in the limits on the use of offsets.

## **Conclusions**

A market based system such as cap and trade can be designed to minimize compliance costs by allowing for the use of offsets and by permitting banking and borrowing of allowances. In addition, a strategic reserve or other mechanism can be used to provide additional safeguards so that allowance prices will not become excessively high. The ACES Act makes use of several of these mechanisms to contain costs.