Issue Analysis[1]: Price Containment Reserve in California's Greenhouse Gas Emissions Cap-and-Trade Market

by

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September 20, 2012

The Emissions Market Assessment Committee (EMAC) was formed to provide independent analysis and advice to the California Air Resources Board (CARB) and staff on implementation of California's greenhouse gas (GHG) cap-and-trade (C&T) market. One issue that plays a strong influence on the overall performance of the market is the policy regarding the allowance price containment reserve.

The allowance price containment reserve was established to provide a safety valve to the allowance price and help to mitigate undue volatility in allowance prices. It is accompanied by an associated floor price that will be enforced in the allowance auctions. We strongly support the role of the price containment reserve and believe its role should be strengthened and clarified before market operations commence.

One important question about the reserve is potential ambiguity about the consequences of the reserve being exhausted. Left unchanged, the policy could in theory allow the allowance price to rise to any level. However, we believe that it is highly unlikely that the political and regulatory process would allow the market to continue to operate freely at unduly high allowance prices. Such a response was seen during the California electricity crisis in the RECLAIM emissions market in Southern California. Such an intervention, currently undefined, would almost certainly be more disruptive when taken under duress. It is far better to have a transparent and credible process for limiting allowance prices established in advance than relying upon ad hoc emergency measures during periods of stress.

A strong defense of the price containment reserve is crucial to enhancing the integrity of the market for several reasons. First, some negative shock to the market, such as severe drought or long-lasting power plant outages, could cause a short-run disruption to the market. If this shock happens late in the process, say 2019, there may not be time for the market to recover without a sharp increase in permit prices that otherwise could have been borrowed from a post-2020 reserve. The result would be allowance prices at levels that could negatively impact both the California economy and the integrity of the cap-and-trade program. Second, if allowance prices truly had no ceiling, speculative trading would likely account for these low-probability, high-price events, which would raise average prices overall. Third, the potential for extremely high allowance prices raises the rewards to any strategy to manipulate the market, and therefore

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raises the risk of manipulation. If allowance prices had a clear and transparent ceiling, many costly actions necessary to attempt to manipulate the market would likely not be worth trying in the first place. The price ceiling therefore plays an important role as a deterrent to detrimental trading behavior. Such deterrence is only effective if it is credibly and transparently established in advance.

While there may be some concern that the expansion of the allowance price containment reserve would harm the environmental integrity of the program, we believe that, by strengthening confidence in the allowance market, it will ultimately enhance the integrity of California's cap-and-trade system. A near-term expansion of the reserve could be accompanied by a mechanism that borrows those emissions from the post 2020 period, thereby preserving the overall level of emissions between the pre and post- 2020 periods. Finally, we note that one of the main goals of the program is to establish a practical and functional climate policy that could attract and expand to other jurisdictions. This goal is surely undermined if the allowance market is viewed to be overly volatile and too costly relative to its benefits.

For many of these same reasons, we also believe consideration should be given to an adjustment of the price levels at which the reserve is activated. If there are relatively few sources of truly price-responsive emissions reductions in California, then one consequence is that emissions prices are more likely to be volatile. Establishing a more narrow range on allowance prices would limit this volatility. To the extent that the environmental integrity of a lower reserve price is a major concern, a reduction in the price ceiling could be accompanied by an increase in the price floor.

In emissions markets, the allowance price containment reserve can play an important constructive role in balancing the goals of environmental gains and economic costs. To be effective, however, these prices must be credibly defended against speculation. The California electricity crisis demonstrated that a price-cap that is easily circumvented is both ineffective and ultimately counter-productive. Some relatively minor adjustments can greatly enhance the credibility and transparency of the price containment reserve and make a large contribution to the stability of the allowance market.