



Strategic Reserve Coupons A New Idea for Cost Containment

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As the need to tackle global warming and strengthen U.S. energy security become increasingly evident, political momentum has increased for a transformation of America's energy sector. The Obama administration has declared that the transition to a low-carbon economy is a top White House priority, and integral to America's long-term economic prosperity. In June, the House of Representatives passed legislation (H.R. 2454, America's Climate and Energy Security Act of 2009) to cap emissions of the greenhouse gases that cause global warming. The Senate is now considering legislation of its own.

These political debates are taking place in an uneasy economic climate, however, as the recession has intensified concerns over the costs of emissions reductions. In this debate, concerns about "cost" serve as an umbrella for a number of distinct issues, such as the overall effect of climate policy on the nation's gross domestic product, on the competitiveness of sensitive industrial sectors, and on the lower-income brackets of the U.S. population. In all of these iterations, concerns about cost present a significant hurdle to the passage of legislation in the United States. This remains true despite a consensus among the most credible macroeconomic models that the impact of proposed legislation on the U.S. economy and on American families will be small. In part this reflects uncertainty about the future: while the expected costs of legislation are low (as the models project), the impacts could be higher under certain "worst-case" scenarios.

Struggling with the substance and the politics of this issue, policymakers have explored a number of "cost containment" devices designed to guard against the possibility that program costs will be significantly higher than expected. In recent legislative proposals (including last year's Lieberman-Warner climate legislation in the Senate, the legislation passed by the House earlier this year, and the draft legislation recently

proposed in the Senate Environment and Public Works Committee), Congress has attempted to address cost concerns by creating a "strategic reserve" of allowances.¹ This approach would create a pool of reserve allowances that would be released into the carbon market if allowance prices rose above some threshold. As envisioned in the House-passed legislation, reserve allowances would be sold at regular auctions, with the threshold "trigger price" serving as the minimum bid price.²

An advantage of the strategic reserve concept is that it preserves the integrity of the cumulative cap: since the reserve pool is created using allowances taken from under the cap, total allowable emissions are not increased. A potential drawback of the auction mechanism, however, is that it may not provide sufficient certainty about the price at which allowances will be available. Even if the trigger price (minimum bid price) for the auction is known in advance, the market-clearing price could be higher if the demand for reserve allowances is greater than the amount of allowances available at auction.³ Such concerns are particularly salient for firms that are particularly vulnerable to high carbon prices, such as those in heavy manufacturing or dependent on energy from coal.

An Alternative: Strategic Reserve Coupons

To address these concerns, we propose an alternative mechanism to release allowances from the reserve. Rather than release reserve allowances through an auction, the government could distribute "strategic

1 See H.R. 2454. http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2454pcs.txt.pdf.

2 See Murray, B.C., R.G. Newell, and W.A. Pizer, "Balancing Cost and Emissions Certainty: An Allowance Reserve for Cap-and-Trade," *Review of Environmental Economics and Policy* 3, no. 1 (2009): 84–103.

3 See National Commission on Energy Policy, "Forging the Climate Consensus: Managing Economic Risk," Washington, D.C.: Bipartisan Policy Center. http://bipartisanpolicy.org/sites/default/files/ncep_man%20econ%20risks.pdf.

reserve coupons” to covered entities, each of which would entitle the holder to purchase an allowance from the reserve at a preset price. Coupons would be distributed in advance of the program, with each coupon conferring the right to buy one allowance from the strategic reserve at a fixed price for a 5-to-10-year period. Every coupon issued would be backed up by an allowance in the reserve, so that the number of available coupons could never exceed the size of the reserve. These coupons could be freely bought and sold among covered entities.⁴

Because these coupons would operate within the framework of the strategic reserve, they would preserve the attributes of that approach that have made it attractive to policymakers, including:

- **Environmental integrity.** The quantity of allowances released by submitted coupons will be limited by the size of the reserve, ensuring that emissions under the program do not exceed the cumulative cap.
- **Assurance against excessive allowance prices.** The coupon price will be set above the expected initial market price, thereby ensuring that additional allowances are only “sold” by the government if prices rise above that level prior to expiration of the coupon.
- **Effective cost containment.** Release of reserve allowances through coupons should still retain the same mitigating economic impact as a reserve auction, as the program will still increase the supply of allowances across the economy by a set amount.

A coupon approach, however, may have several potential advantages relative to a strategic reserve auction:

- **Rather than spreading valuable cost containment across all market participants, as a reserve auction and price cap would, coupons can target those who need it the most.** The coupon approach would allow Congress to direct additional, guaranteed cost containment to firms that are particularly vulnerable to carbon price spikes, including carbon-intensive firms and small, less-sophisticated businesses.
- **The coupon approach would provide greater price certainty for firms, as they can plan for their ability**

to exchange the coupons at the set exercise price, rather than an uncertain auction reserve price.

Firms concerned about long-term volatility in the market also will be able to secure long-term positions from the government that can “hedge” their risk of price spikes. In fact, coupons will serve as alternative to over-the-counter derivatives—a product many politicians have expressed concerns about—for long-dated carbon price hedging.

- **Firms would be able to gain price certainty for their reserve allowances on their own schedule rather than waiting for a quarterly auction.**

To implement a coupon program, the architecture of the reserve could be retained, but the strategic reserve coupon approach could either replace, or be added to, the strategic reserve auction. In doing so, we would initially propose a few basic structural approaches:

- **Who gets them?** Rather than re-fight prior fights over the allocation of allowances, we propose that the coupons be distributed on the same formulas. In fact, the pro rata share of coupons could be “stapled” to each allowance freely allocated.
- **How long are they good for?** In order to provide some flexibility and predictability for emitting firms, we propose that the years in which a coupon might be used could be staggered, with perhaps 5 vintage years issued at the outset, maturing in years 6 through 10 of the program. Under more dire scenarios, years 6 through 10 may be the “pressure point” for some key industrial sectors, coming after easy greenhouse gas reductions have been undertaken.
- **At what price should a coupon entitle a firm to purchase an allowance?** Policymakers in the past have clearly determined that cost containment policy should be intended to intervene only if the program does not perform as expected and results in higher-than-forecast prices. If policymakers want to stay consistent with this principle, then the trigger price for the coupons could be set at a higher-than-forecast level.

Cost containment in climate policy is a bit like the search for the holy grail. Approaches have been critiqued as either too sharp (price caps) or too dull (small, price-floored, strategic reserve auctions). In our continuing search for the proper balance, the concept of strategic reserve coupons holds promise as a more precise, and more targeted, policy solution.

⁴ Congress might wish to impose some additional limits on holdings of these coupons. For example, individual entities could be prevented from holding reserve coupons in excess of some percentage of their annual compliance obligation.