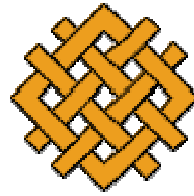




NICHOLAS INSTITUTE  
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## **Allowing States to Retire Allowances without Affecting National Allowance Prices: A Straw Proposal**

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Over the past decade, while federal policymakers were debating when and how to act to reduce greenhouse gas (GHG) emissions, states have played an early and important role in reducing greenhouse gas emissions responsible for climate change. As Congress and the Obama Administration consider proposals to address climate change on a national level, there is a growing appreciation for state leadership on the issue and the need to work in partnership with states going forward.<sup>1</sup> While calls for a federal-state partnership grow louder, specific ideas on how to structure such a partnership are needed.

If states are to continue to innovate in the area of climate policy, a key question is whether and how to preserve their ability to implement state-level policies that will yield real emissions reductions.<sup>2</sup> In particular, some stakeholders want to ensure that states may retire emission allowances if state policymakers determine that the pace and impacts of climate change require additional action. Other stakeholders are concerned about allowing individual states to affect the supply of federal allowances because of the potential that federal allowance prices will go up nationwide, thereby potentially impacting the national economy.

As with any major legislation, passage of a federal climate bill will require creative thinking and compromise. In an effort to move the debate forward, the World Resources Institute and the Nicholas Institute for Environmental Policy Solutions have been working together to explore options for addressing the state allowance retirement issue. This memo provides a general

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<sup>1</sup> For example, President Obama chose to make his first post-election pronouncements on climate change at a states climate change conference, and immediately upon taking office directed his Environmental Protection Agency to reconsider the denial of a waiver under the Clean Air Act that would allow states to implement their own vehicle emissions standards for greenhouse gas emissions. 152 Members of the House of Representatives signed a letter to House Speaker Nancy Pelosi in October 2008 outlining principles for climate change legislation, including the principle that “federal global warming requirements must be a floor, not a ceiling, on states’ ability to protect their citizens’ health and state resources.” In February of this year, Senator Barbara Boxer, chair of the Senate Environment and Public Works Committee, outlined her own principles for climate change legislation, including “ensur[ing] that state and local entities continue pioneering efforts to address global warming.”

<sup>2</sup> A federal emissions cap functions as both a ceiling on emissions from the sectors covered by the cap, and a floor, meaning that actions in one state to achieve additional reductions from covered emissions sources will not actually result in real emissions reductions unless the federal “floor” is lowered to account for these additional reductions in the state. See *Federalism in the Greenhouse: Defining a Role for States in a Federal Cap-and-Trade Program*, by Franz Litz and Kathryn Zyla, World Resources Institute (2008).

overview of a structure that we believe merits consideration, as it presents an option for a state to (1) achieve certain types of reductions and (2) retire federal allowances, provided the state demonstrates that the allowances represent emissions reductions at facilities regulated under the federal program, but that are caused by compliance with the state program.

### **Reducing Supply and Demand Simultaneously**

Federal legislation could create a mechanism allowing individual states to

- (1) implement programs to achieve reductions from entities covered by a federal emissions cap and
- (2) retire federal allowances provided the state demonstrates that the allowances represent emissions reductions that would not otherwise occur under the federal cap.

Linking a state's ability to retire allowances with the requirement that the retired allowance represent additional reductions in emissions will:

- (1) reduce the *supply of allowances* (and thus create a tighter national emissions cap) through the allowance retirement mechanism and
- (2) reduce the *demand for allowances* by creating an overall reduction in emissions through the more stringent requirements placed on regulated entities within a particular state.

Under this system, allowance prices should remain unaffected.

### **Benefits**

This approach provides at least four significant benefits.

First, the federal bill would provide state leaders with the flexibility to enact additional emissions reduction programs if they determine that the pace of climate change demands more aggressive action. In this scenario, the federal cap would not preclude additional reductions from the states, as called for in the October 2008 letter to Speaker Pelosi.

Second, states would have an incentive to pursue additional reductions within their borders that would not exist otherwise. If allowances were not retired to account for state reductions, then state actions would merely free up allowances for sale in another state, resulting in no net benefit to the atmosphere from state actions. In the parlance of climate policy, this is termed the "leakage" of emissions, and it would discourage the pursuit of state reduction.

Third, state actions resulting in a tighter national emissions cap should not affect national allowance price. If states retire allowances without achieving additional reductions, then allowance prices, and thus the cost of compliance for all regulated entities (i.e., sources both inside and outside the state taking action) would increase. Simultaneously reducing supply and

demand, on the other hand, should minimize impacts on allowance price. This interaction is depicted in the attached appendix.

Finally, the approach limits the ability of states to retire allowances by linking the ability to retire allowances directly to emission reductions that otherwise would not occur under a market-based cap-and-trade system. Lawmakers seeking to provide a further level of certainty could set an upper limit on the amount of allowances that states could retire in any year.

### **Where do retired allowances come from?**

*Retirement from state allowance pools.* Retirement could be accomplished by individual states out of the allowances granted to states under the federal cap-and-trade program. While this option would allow states to pursue the environmental goal of taking more aggressive action to mitigate climate change, it could also create a financial disincentive for taking such action. Allowances will have value, and retiring allowances directed to the states (whether it is through direct allocation to state government or to state entities) would reduce funds available to support other state programs, including programs to reduce GHG emissions.

*Retirement from federal allowance pools.* Alternatively, allowances could be retired from a federal set-aside<sup>3</sup> or by reducing the federal auction pool. This would remove the financial disincentive for states to pursue additional reductions. While this approach would reduce federal allowances available for other purposes, the magnitude of this cost impact could be constrained by establishing a maximum annual retirement limit.

### **Gauging whether State Emissions Limits Produce Additional Reductions**

Market-based programs function by encouraging low-cost emissions reductions throughout the system. It is likely, therefore, that there will be greater reductions in some states than others even in the absence of any state climate programs. Determining whether state programs reduce demand for allowances would require more than simply comparing in-state emissions reductions to the federal emissions cap. Before a state may retire allowances, it may be appropriate for either the states or the U.S. Environmental Protection Agency to certify that a state program will lead to emissions reductions beyond those that would otherwise occur under the federal cap-and-trade system. Such an examination could include an economic test, a market barriers test, or a *per se* additionality test. It also could include an examination of whether or not the emissions were actually reduced, or merely displaced.

#### **a. Economic Test**

A market-based approach to limit GHG emissions would allow covered entities to seek the lowest-cost abatement opportunities. Emitters would not invest in reductions that were more expensive on a dollar-per-ton basis than the price of allowances. Reductions achieved by state programs that cost more per ton than the federal allowance price would likely represent

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<sup>3</sup> If a set-aside is employed, than any un-retired allowances could be auctioned in the following control period, or placed in a cost-containment account for release when prices increase above an established threshold.

emissions reductions beyond those that would have been achieved in the absence of the state program.

### **b. Market Barriers Test**

States might not pursue these higher cost reductions first, however. As analyses by McKinsey and the Vattenfall Institute of Economic Research demonstrate, there are considerable opportunities to reduce GHG emissions at a negative cost even without carbon pricing.<sup>4,5</sup> State programs can be designed to target these “win-win” reductions. A more sophisticated test could evaluate whether the state action addressed a market barrier that would otherwise cause emitters to pass up the abatement opportunity. The market barriers test could be used exclusively or in combination with the economic test described above.

### **c. A *Per Se* Additionality Test**

Recognizing that case-by-case determinations can be fact intensive and administratively burdensome, the retirement mechanism could identify certain categories and types of actions that will be deemed *per se* additional and therefore qualified for the retirement of federal allowances. These categories of actions might include demand-side energy efficiency measures where market barriers have proved an obstacle to realizing cost-effective emissions reductions. Under a *per se* test, all reductions demonstrated through a particular category or type of activity would result in the retirement of federal allowances. Because the economics of emissions reductions are likely to change over the course of the federal cap-and-trade program, it may be appropriate to revise this list from time to time.

### **d. Other Considerations**

If state programs result in significant emissions increases elsewhere in the United States, then they will not reduce total demand for allowances. For example, refusing to site a coal plant in State A may result in the development of a new coal plant in State B rather than the development of in-state low-carbon energy unless it is accompanied by additional policies such as demand reduction or additional renewable development.

## **Conclusion**

States have been leaders in addressing climate change. If we are to tap into these laboratories of democracy in the future, then a reasonable path forward must be devised to encourage continued policy innovation. Retiring federal allowances to account for additional state reductions is one such option. However, to minimize the impact that such reductions have outside of those

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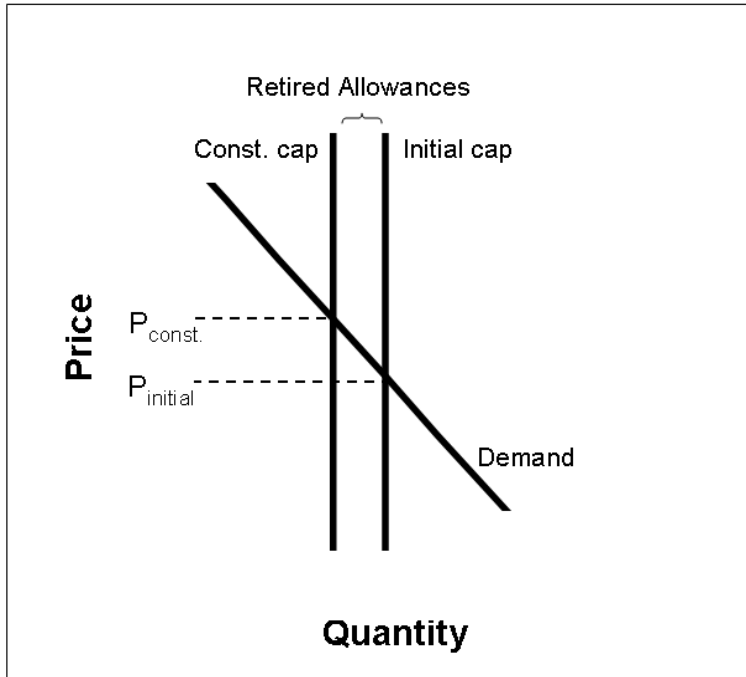
<sup>4</sup> The Carbon Productivity Challenge: Curbing Climate Change and Sustaining Economic Growth. McKinsey & Company. June 2008.

<sup>5</sup> Regional cap-and-trade programs are pursuing some of these low cost emissions reduction opportunities that appear insensitive to market forces. In these instances, such reductions are not always accompanied by a reduction in the cap, but instead are pursued because they have the ability to significantly moderate the cost of compliance with the cap-and-trade program. States may wish to reserve the right to pursue these types of cost reduction activities in the future. Reducing compliance costs is beneficial in its' own right, but it is also worth noting that so doing may also allow for more aggressive targets to be pursued.

leadership states, it may be appropriate to impose some limitations on the types of activities that are acknowledged, and for which allowances may be retired. A market-barriers/additionality type screen coupled with a retirement limit may serve that purpose.

APPENDIX

**Figure 1. Depiction of why allowance price increases when the cap is reduced without obtaining additional emissions reductions.** Supply (a.k.a. the cap) is fixed, and does not change in response to price changes. Therefore it is represented by a vertical line. Demand is indicated by a declining line as higher allowance prices will cause regulated entities to abate more, and purchase fewer allowances.



**Figure 2. Depiction of why allowance retirement does not increase allowance price if it is accompanied by additional emissions reductions.**

