The ongoing efforts by Congress to craft real, effective and sensible climate change legislation are long awaited and highly anticipated. Global warming is now widely recognized as the environmental challenge of the 21st century. The policy response to this challenge will require a comprehensive, integrated and complementary series of laws.

One likely policy response is the development of a mandatory federal greenhouse gas emissions trading program. Cap-and-trade programs have now emerged as the internationally favored response due to their implicit advantages over command and control policies. Allowing markets to drive economic efficiency and innovation while achieving environmental and social objectives offers the best hope for solving the daunting climate change challenge.

There are risks, however, that such a law could perversely result in reducing certain incentives for funding renewable energy projects. The design details of the future U.S. carbon cap-and-trade program will have a direct impact on the degree to which certain types of renewable energy projects – currently being financed in part by the sale of Renewable Energy Certificates or “RECs” – will continue to find markets for such RECs. We encourage policy makers to expressly address the intersection between RECs and allocated carbon units in future carbon legislation.
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CURRENT STATUS

As of March 2008, twenty-four states and the District of Columbia had enacted Renewable Portfolio Standards (“RPS”), which obligate retail suppliers of electricity to meet a specific percentage of their energy supply needs with renewable energy. While each state law is different (e.g., the definition of qualifying renewable energy sources is not consistently defined), many of the laws allow the affected sources to meet their renewable generation requirements through purchasing RECs. This approach allows retail suppliers the option of owning the renewable generation outright or merely purchasing the RECs from renewable energy generators. This new asset, created by state law, can then be traded within the limitations imposed by each state.

In theory, the trading of RECs creates a market and price signal that attracts greater investment in renewable energy projects from the capital markets and provides a source of ancillary financing for renewable energy developers. In practice, the fragmented nature of the market due to the differences and market barriers imposed by the various state laws has limited the efficacy of the REC markets.

Separate from the compliance-based REC markets described above (e.g., tied to specific RPS requirements), a voluntary REC market also has emerged. This market has created a nascent national platform for the trading of RECs because it is not limited by the compliance criteria of any single state. Rather, major corporations, universities, and municipalities have made commitments to either buy “green power” or offset their carbon emissions through the voluntary purchase of RECs.

It is noteworthy that these “voluntary RECs” have been traded in most cases as a surrogate for reductions of carbon dioxide (CO₂) emissions. The underlying premise

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of such purchases is that electricity generated by a renewable energy source displaces carbon dioxide emissions from traditional fossil fuel-fired electric generation, thereby reducing CO₂ emissions. Where utilities are not already obligated to purchase RECs under an RPS and have not claimed them in their Power Purchase Agreements with the renewable energy generator, RECs have been sold to the willing buyers described above. This voluntary REC market activity has meaningfully contributed to the promotion of new renewable energy generation in the United States.

Once a mandatory federal carbon cap-and-trade program is enacted, it could eliminate the market for voluntary RECs and thus dry up a current source of funding for new renewable energy projects. Because voluntary RECs are being used today largely as a surrogate for CO₂ emission reductions, consumers will lose a strong motivation to purchase RECs.

POLICY OPTIONS

There are several options that have been proposed to coordinate the voluntary REC market with a federal mandatory carbon cap-and-trade program. Each of these approaches has advantages and disadvantages.

Option 1: Enact a federal RPS and promote separation between RECs and CO₂ emissions trading.

This policy option would track the situation currently in effect in Europe, where the national renewable energy directives are not integrated with the greenhouse gas emissions trading program. Under this approach, Congress would enact a federal RPS that allows national trading of RECs under a separate program from the CO₂ emission trading program. With a national RPS, renewable energy generators will have new, more robust markets to sell into.

RECs would be defined as a separate product distinguishable from CO₂ emission allowances, and two parallel markets would emerge. In this scenario, RECs would not be defined as including the environmental attribute of CO₂ emission reduction. A key to this approach would be to adopt it in conjunction with the CO₂ cap-and-trade legislation so the timing of both legal regimes would work to promote continued investments in renewable energy.

A major disadvantage of this first approach is that the voluntary REC marketers will not be able to claim that their product contributes to a reduction in emissions of...
CO₂ below the level of the emissions cap. There is evidence to suggest that this approach will discourage corporations, municipalities and other consumers from purchasing RECs by eliminating a major current motivation for such purchases.

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In addition, one of the problems of relying on separate RPS and downstream cap-and-trade programs is that both of these programs rely largely on the decisions of electric utilities/load-serving entities in the marketplace. In recent years, however, we have seen major market drivers at the grass-roots level for renewable energy as leading corporations, municipal governments, and others vote with their pocketbooks to encourage greater use of renewable energy.

It is helpful to involve more players in making market decisions that contribute to the reduction of greenhouse gas emissions and the carbon cap. Given the huge hurdles present in meeting GHG targets, it is useful to allow the marketplace to function so that utilities are not the only players that can contribute to carbon reductions. The voluntary REC market has been a valuable asset in the marketplace to keep pressure on utilities and to move the market, and this first option could greatly limit – if not eliminate – this market driver.

**Option 2: Provide for the allocation of CO₂ allowances to renewable energy or other recognition of renewable energy in establishing the carbon cap, but do not enact a federal RPS.**

Some have suggested that the best way to handle the integration of voluntary RECs into CO₂ emissions trading is to provide for the allocation of CO₂ allowances to renewable energy projects in lieu of a national RPS with national REC trading. Under this approach, Congress would allocate a portion of the CO₂ allowances under the federal carbon trading program to renewable energy projects or otherwise provide recognition of the value of renewable energy in establishing the emissions cap. In order to make CO₂ reduction claims, the voluntary marketer or government agency would need to assure that such allowances were retired from future use.

In this scenario, the current mandatory state REC markets would continue unaffected, and the voluntary REC market would benefit from the ability to sell CO₂ allowances into the carbon market. Section 5.3(d) of the Model Rule for the Regional Greenhouse Gas Initiative of the Northeast states adopts a variation of this approach.
by allowing member states to create a “voluntary renewable energy set-aside” in which allowances are retired on behalf of consumers who make voluntary purchases of renewable energy.\(^2\)

In contrast to the first option, this second scenario would allow marketers of these “REC plus CO\(_2\) allowance” products to legitimately claim CO\(_2\) emission reductions as a result of their sales and for consumers to take direct action to contribute to CO\(_2\) reductions.

The major disadvantage of this option is that it fails to capture important benefits that a national RPS would offer. These benefits go far beyond the benefits of combating climate change, and they include improved energy security, economic development, job creation, long-term fuel price stability, and reductions in emissions of conventional pollutants.

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Option 3: Enact a federal RPS and provide specific recognition to renewable energy in establishing the carbon cap or in allowance allocation.

The third option is a hybrid of the first two. It involves enacting a national RPS allowing national trading of RECs. In addition, it would provide specific recognition to renewable energy in establishing the carbon cap or in allowance allocation.

The increased flexibility of this approach would facilitate greater economic efficiencies in the promotion of the dual policy objectives of reducing carbon emissions and promoting renewable energy development. Generators and marketers of renewable energy would be able to sell their REC plus CO\(_2\) allowance products into the market that provided the greatest price. This option would normalize both the market prices for renewable energy and carbon to reach an optimal allocation of capital into both markets. For example, if the RPS mandate is 20 percent renewable energy generation by 2020 and renewable energy is not recognized in establishing the carbon cap or in allocating allowances, the price for RECs would dramatically decline for any renewable energy generation beyond 20 percent.

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See http://www.rggi.org/mod-erule.htm
This result would, in turn, limit further renewable energy generation. If renewable energy could also be used to satisfy the carbon mandates, further renewable energy generation could be promoted beyond the RPS mandate, depending on the demand for allowances under the carbon trading regime. This option would enable greater renewable energy generation and provide additional supply for the carbon market, resulting in overall carbon price mitigation.