



**Federal Position Paper:
Voluntary Renewable Energy under Cap-and-Trade Legislation**

The Renewable Energy Marketers Association (REMA) is pleased to offer the following comments with respect to the treatment of the voluntary renewable energy market under federal Cap-and-trade legislation. These comments are consistent with those that REMA has previously submitted to a variety of regional Cap-and-trade regulatory authorities in 2008 and earlier.

REMA represents the collective interests of both for-profit and nonprofit organizations that sell or promote renewable energy products through voluntary markets, including renewable electricity, renewable energy certificates (RECs), and on-site solar PV to individuals, companies and institutions throughout North America.

The importance of the voluntary renewable energy market:

Today demand created by voluntary markets for renewable energy is equal to that created by various Renewable Portfolio Standards (RPS) This voluntary demand has reached 18 million megawatt hours (see below for more detail).

The risk to this market from cap-and-trade climate legislation:

Today the generation of renewable electricity reduces the greenhouse gas (GHG) emissions produced by the power sector, one of the largest contributors of this pollution. One of the primary reasons that individuals and businesses make voluntary purchases of renewable energy is to cause these reductions and earn credit for them under various reporting protocols. Cap-and-trade legislation could inadvertently undermine this voluntary market by failing to recognize the GHG reductions resulting from these renewable energy purchases.

The solution:

To protect the substantial environmental benefits provided by the voluntary market, cap-and-trade program design should provide a mechanism to ensure that voluntary renewable energy continue to reduce GHG emissions. **To accomplish this important objective, carbon allowances should be allocated and retired for voluntary purchasers, thus reducing the total number of allowances available and effectively reducing the overall carbon cap.**

REMA urges the Obama Administration and congressional leadership to state clearly in any policy position paper or draft legislation the desirability of ensuring that voluntary renewable energy purchases will reduce emissions under the cap-and-trade program.

If guidance is not provided in legislation, we believe there is great risk that the requested support for the voluntary renewable energy market will not be included in the subsequent rulemaking. REMA agrees that the precise mechanic for the allowance allocation to voluntary renewable energy sales should be left to the rulemaking process.

Federal legislation should support the ability of voluntary purchases of renewable energy to reduce greenhouse gas emissions

Our primary objective is to ensure that a cap-and-trade program supports the ability of voluntary renewable energy sales to reduce GHG emissions. To accomplish this, voluntary demand for renewable energy must result in either retirement of allowances or in lowering of the cap.

The common belief is that zero-emitting renewable energy resources are naturally winners under any GHG cap-and-trade program. That is not necessarily the case.

Today, prior to implementation of a federal GHG cap, the addition of renewable generation in an uncapped region almost always displaces fossil-fuel generation and the associated emissions of GHG. As a result, GHG emissions are lower than they would have been in the absence of the renewable generation delivered to the grid. For this same GHG reduction resulting from renewable generation to occur in the presence of a GHG cap-and-trade regime, either GHG allowances would need to be retired on behalf of the renewable generation, or the overall GHG cap would need to be reduced in proportion to increase of renewable generation in the regional electricity portfolio.

If under a GHG cap there is no provision in the regulations formally to recognize the zero-emissions benefits of renewable energy, the addition of new renewable generation to the grid does not reduce the cap, but rather reduces the overall carbon-intensity of the region's generating portfolio. As a result, under this policy, the addition of renewable generator would make it both easier and less costly for all generators to meet the cap. But if voluntary renewable energy purchases do not reduce emissions, the environmental objectives of customers who voluntarily purchase renewable energy will be undermined, and the robust market for renewable electricity, RECs and distributed renewable energy generation would be sharply curtailed. Such an outcome would reduce the overall effectiveness of a cap-and-trade program.

Failure to support the ability of voluntary renewable energy purchases to reduce emissions would undo a benefit that the market currently creates.

The ability first to cause and then claim real emissions reductions is essential to REMA and to our many customers. It was established years ago that the primary motivation for businesses in purchasing renewable energy is to support organizational values, specifically a strong commitment to public health and the environment.¹ In the intervening years, addressing climate change has come to dominate many organizations' environmental goals, with high-profile companies citing reduced emissions as the goal of their renewable energy purchases, as illustrated in the following corporate statements.²

IBM: "The purchase of RECs demonstrates IBM's continued commitment to taking action on climate change and support for the development of renewable energy. IBM recognizes that global climate change is an important environmental and

¹ E. Holt, R. Wiser, M. Fowlie, R. Mayer and S. Innes. *Understanding Non-Residential Demand for Green Power*. Prepared for the American Wind Energy Association and the National Wind Coordinating Committee. 2000. <http://www.nationalwind.org>.

² The following excerpts, among others, are quoted in L. Bird, E. Holt and G. Carroll, *Implications of Carbon Regulation for Green Power Markets*. Golden, Colo: National Renewable Energy Laboratory, 2007. <http://apps3.eere.energy.gov/greenpower/resources/pdfs/41076.pdf>.

business issue. The company has taken voluntary actions to conserve its energy use and to reduce the emissions of greenhouse gases associated with its energy use and operations.” http://www.ibm.com/ibm/environment/news/rec_2005.shtml (accessed December 13, 2006)

Staples: “We are committed to reducing the effects of our energy use on climate through an integrated approach including conservation, the adoption of renewable energy technologies where financially viable and the purchase of certified renewable-energy certificates... Through the purchase of certified RECs from landfill gas and wind energy projects, we offset the environmental impacts of more than 53 megawatt-hours of conventional electricity with renewably generated electricity, resulting in a savings more than 46,000 metric tons of carbon dioxide equivalents (mtCO₂e) in 2005. Since 2001, we have decreased our net GHG emissions per square foot across all properties by more than 22%.” http://www.staples.com/sbd/img/content/soul/pdf/staples_2005_corporate_responsibility_report.pdf (accessed December 13, 2006) see p. 39

Johnson & Johnson: “As indicated in our Next Generation Goals, adopted in 2000, it is the responsibility of each Company/Business Unit to meet our greenhouse gas reduction goal of 4% reduction by 2005 and a 7% reduction by 2010, in absolute terms with 1990 as a base year. The pathways for a climate friendly energy policy include five elements: energy efficiency improvements in all of our operations; cogeneration; on-site renewable energy that produces no CO₂ emissions; renewable electricity purchases; and carbon trading and sequestration.” http://www.jnj.com/community/environment/policies/climate_friendly.htm (accessed December 13, 2006)

Many cap-and-trade experts acknowledge that the adoption of a cap-and-trade program could have a negative effect on the voluntary market for renewable energy: “Once pollutants in the electricity sector are subject to a cap, purchases of voluntary renewables do not contribute to further reductions because the cap determines the allowable levels of emissions. Once a cap is instituted, new renewables would not reduce emissions; instead, the replacement of fossil-based generation by renewables would free up allowances to be used elsewhere in the capped sectors.”³

REMA is urging the Administration and Congress to address this potential policy aberration. Without an explicit provision for allowance allocation recognizing the GHG reduction benefits from renewable energy purchases under a federal cap-and-trade program, this country’s voluntary renewable energy market may cease to exist because the leading market driver – the ability to make a difference in reducing GHG emissions through consumer choice – will be eliminated.

Allowances should be retired by the cap-and-trade administrator on behalf of voluntary market demand for renewable energy

This proposal suggests an approach that is similar to that taken by the RGGI states. If allowances are allocated only to emitting generators, the allocation design could include explicit provision to retire allowances for voluntary renewable energy demand *before* the remainder is distributed. This approach works with either an auction of allowances or the free distribution of allowances.

³ CPUC, Rulemaking 06-04-009, Final Opinion on Greenhouse Gas Regulatory Strategies, Proposed Decision of Commissioner Peevey, September 12, 2008.

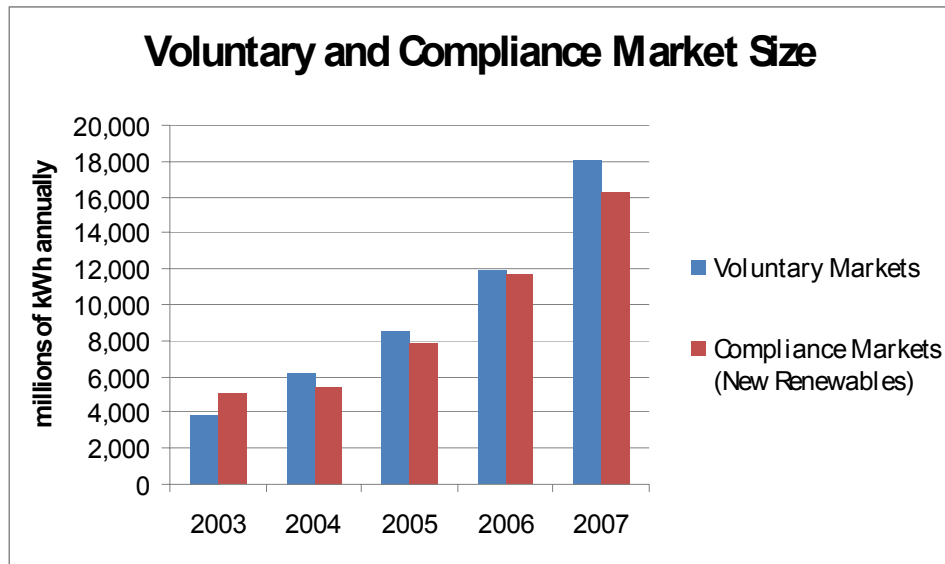
REMA would be happy to discuss the mechanics of the allocation being recommended here. They are neither complex nor cumbersome.

The voluntary market for renewable energy is significant

According to the National Renewable Energy Laboratory (NREL), there are some 55 marketers actively selling to small and large customers, and a dozen environmental brokers that facilitate REC transactions between buyers and sellers across the U.S. These providers are in addition to utilities that sell renewable electricity differentiated from standard electricity. Further, there are also thousands of photovoltaic (PV) providers in the U.S. who sell PV systems and associated RECs directly to end-use customers.

The market for green power (renewable electricity and RECs sold independently of electricity) is strong and growing. The voluntary market grew by 62% in 2004, 37% in 2005, 41% in 2006, and 53% in 2007.⁴ In 2007, U.S. consumers made voluntary purchases of renewable energy totaling about 18.1 million MWh. Currently, the voluntary demand for new renewable energy is greater than RPS demand for new renewables on an MWh-basis, as shown in Figure 1.⁵ If the voluntary market continues to grow at an annual rate of 40% (based on recent experience), it will reach nearly 50 million MWh by 2010. Those 50 million MWh of renewable generation would result in a reduction of 39 million metric tons of CO₂.⁶ These data demonstrate that the voluntary market for renewable energy is larger than most people recognize.

Figure 1.



Source: Lori Bird, NREL

REMA is grateful for this opportunity to lay out what it believes is an important, but little-understood issue that ripens with climate legislation. Our members would welcome the chance to speak to any and all who would like more information or have questions about this matter.

⁴ Bird, Lori, Claire Kreyck and Barry Friedman. Green Power Marketing in the United States: A Status Report (11th Edition). Golden, CO: National Renewable Energy Lab, October 2008.

⁵ Bird, Lori. Presentation at National Renewable Energy Marketing Conference, Denver, October 27, 2008.

⁶ Based on EPA's e-GRID data for the national average CO₂ emissions resulting from electric generation (0.78 metric tons/MWh). See <http://epa.gov/cleanenergy/energy-resources/egrid/index.html>.