



**Environment  
Northeast**

101 Whitney Avenue  
New Haven, CT 06510  
203-495-8224  
www.env-ne.org

November 9, 2007

Shari T. Wilson  
Secretary  
Maryland Department of the Environment  
1800 Washington Blvd  
Baltimore, MD 21230

Rockport, ME  
Portland, ME  
Boston, MA  
Providence, RI  
Hartford, CT

### **Environment Northeast's Comments on Maryland's Rule To Implement the Regional Greenhouse Gas Initiative**

Environment Northeast is a nonprofit research & advocacy organization focusing on the Northeastern U.S. and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the region's environmental and economic sustainability.

Environment Northeast (ENE) is part of the 24 member Stakeholder Group which was selected by the Regional Greenhouse Gas Initiative (RGGI) states to represent electric generator, environmental, consumer, and other affected interests in the Northeast and Mid-Atlantic regions. We are very supportive of RGGI and look forward to working with the State of Maryland as it moves forward with the RGGI rulemaking process. ENE believes that RGGI is an essential policy tool to get Maryland and the region on the proper greenhouse gas emissions trajectory. RGGI uses market forces to guide an orderly, phased transition away from dirty, inefficient electricity generation and achieves emission reductions in the most cost effective way possible. ENE commends the Governor, Legislature, and agencies for committing Maryland to participate in RGGI, as this will position the state's industry and consumers to succeed in an economy that increasingly places a price on carbon. RGGI must be rolled out in a manner that demonstrates how a successful cap and trade program for CO<sub>2</sub> can be designed and implemented, as you are creating a model for a national program.

Our comments will focus on several aspects of the Subtitle 26.09 Maryland CO<sub>2</sub> Budget Trading Program Draft that was issued by the Maryland Department of the Environment (MDE) on October 10, 2007 and we will provide additional comments about the RGGI process based on our involvement in other states.

1. Chapter 02.03: Distribution of CO<sub>2</sub> Allowances and Compliance
2. Chapter 02.05(C) CO<sub>2</sub> Early Reduction Allowances
3. Chapter 02.05 (E) Voluntary Renewable Energy Market Set-Aside Allocation.
4. Chapter 02.05 (F) Limited Industrial Set-aside Allocation
5. Chapter 02.07 (D) CO<sub>2</sub> Budget Units that Co-Fire Eligible Biomass and Chapter 01.02 (41): Definition of Eligible Biomass
6. Chapter 03.02 General Requirements for CO<sub>2</sub> Emission Offset Projects
7. Additional ENE comments regarding Auctions and the Use of Auction Proceeds

## 1. Chapter 02.03: Distribution of CO<sub>2</sub> Allowances and Compliance

ENE is concerned that the base budget for the Maryland CO<sub>2</sub> Budget Trading Program is defined in the regulations without any opportunity for adjustments over time. New information on energy use, preliminary emissions data, and industry news reports have led ENE to be concerned that the RGGI cap level has been set too high. Since the states have not compiled and released emissions data for the RGGI regulated facilities for 2005 or 2006, ENE is in the process of compiling emissions data for more recent years and our preliminary results indicate that the emissions trajectory was down significantly in 2006. ENE has compiled information from EPA where available and using EIA fuel use data for those facilities that do not report CO<sub>2</sub> emissions to EPA. As a part of that analysis, we also compiled data from scratch for the 10 RGGI states back to 1995. We will be sharing this information in detail with the RGGI Staff Working group, but feel it is important to flag our results at this time given the regulation timeline.

Based on our review, the regional RGGI cap is significantly above total regional emissions for the 1995 to 2005 time period. Emissions were highest in 2005 when the cap would have been ~3% higher than the regional emissions level. With the decline in emissions that occurred in 2006, the cap level is ~ 15% higher than emissions.

The potential impacts of having a starting cap that is so high above actual emissions in the early years of RGGI include:

- no market for RGGI allowances,
- no change in our power plant dispatch,
- delay of any shift in the way we make power away from dirtier, inefficient sources to cleaner, more efficient sources
- failure to position our regional economy to take advantage of expected carbon regulations from the federal government
- loss of \$50-130 million for new efficiency investments

There are several mechanisms which can be utilized to make sure that RGGI is successful including reducing the initial cap level and/or retiring CO<sub>2</sub> credits if a reservation price has not been met. Public commitments and modeling done for the RGGI process were designed to establish the cap at a level equivalent to current emissions. The states should review emissions data through 2006 and early 2007 and reassess as needed whether this goal has been achieved in light of any new data or corrections to older data. ENE believes that the states should incorporate 2005 and 2006 emissions data and ensure that the cap is set at a level consistent with recent emissions (such as the 2004 to 2006 average emissions level); this may require the states to reduce the regional cap level and thus state-by-state cap commitments. For this reason, we believe the MDE regulation should be changed to include an option for the Commissioner to reduce the cap level if average emissions are significantly lower than the regional cap level.

In addition to reviewing the cap level, the states should continue to move forward with the inclusion of a reserve price in any auction design, but should send a clear signal to the market by retiring allowances that are withheld and not holding them for future auctions (see further discussion below on the reserve price).

For this reason, we believe the Maryland CO<sub>2</sub> Budget Trading Program base budget Chapter 02.03 (a) should be amended to provide authority for the Commissioner to reduce the cap level consistent with:

- any future changes to the RGGI Memorandum of Understanding among the participating states, or
- subject to any regionally applied mechanism (such as a reserve price / retirement mechanism, described below) that indicates an adjustment to the emissions budget levels indicated in this section.

ENE is concerned with Chapter 02.03 (B) Option 1 which states that “the remaining 10 percent of each budget shall be allocated to a set-aside pool to be used for new sources, offset projects, early reductions and other purposes established by the Department.” While ENE supports the voluntary retirement of renewable energy credits, ENE does not believe that up to 3.7 million credits (10% of Maryland’s current 37.5 million ton budget) should be given away for free to new sources, offset projects, early reductions (see comment on Chapter 02.05(C)), and other purposes established by the Department. The “other purposes” could include generators with long-term contracts or others who feel they would benefit from being given allocations for free instead of having to purchase them at auction. The New York Department of Environmental Conservation wrote a paper in response to the IPPNY Concerns of NY going to 100% auction, where the NY DEC concluded,

Long-term contracts do not warrant special regulatory treatment. Certain generators have suggested that long-term contracts prevent them from passing on the cost of the allowances to the purchaser of the power under the contract.<sup>1</sup> After discussions with experts in the industry involved in the negotiation of such long-term contracts, the Department has learned that it is not uncommon for a supplier to negotiate for a “re-opener” or “change-in-law” provision in such contracts that would enable the supplier to renegotiate the price or pass on unforeseen costs incurred because of a change in law like RGGI. In cases where no such re-opener is included in the contract, it is likely that the supplier of the electricity under the contract has assumed the risk of any change in law that occurs during the term of the contract. Indeed, placement of risk between two parties is a central theme in any long-term power contract negotiation and change-in-law is a central risk in an industry like electric generation where the regulatory environment has always been a changing factor.<sup>2</sup>

Environment Northeast believes that 100% of allowances should be auctioned and used to reduce consumer costs (once the allocation for voluntary renewable credits has been set aside as is in Chapter 02.05 (E) Voluntary Renewable Energy Market Set-Aside Allocation). As a result, “Option 2: Gradually Phase-In the Auction Process” should not be considered by the MDE.

The rational and fair decision is to auction 100% of the allowances and use the allowance value to reduce the cost of the program on the region’s ratepayers. Other states such as New York and Vermont have committed to 100% auction in their rulemaking and this has paved the way for states such as Maine, Rhode Island and Massachusetts who have also decided that they will auction 100% of the allowances.

---

<sup>1</sup> Despite repeated requests, however, no generator has come forward with a long-term contract to give the Department an opportunity to determine whether the contracts in fact contains no provision that would allow the generator to pass on the cost of emissions allowances under new programs.

<sup>2</sup> New York Department on Environmental Conservation response to concerns from IPPNY 11-26-06.

In a letter describing their rationale, the New York Department of Environmental Conservation stated that there was widespread support for 100% allocations and “Large commercial and industrial consumers have likewise come out strongly in favor of a 100% auction, arguing that an allowance giveaway to generators would be grossly unfair and represent a poor public policy choice.”<sup>3</sup>

Some large industrial consumers and regional electric utilities are calling for 100% auction of RGGI allowances.

- A letter and white paper from National Grid supports 100% auction or allocation to consumers with the money used for rebates or expanded energy efficiency investments.<sup>4</sup>
- The Connecticut Industrial Energy Consumers state, “Energy prices in Connecticut currently are significantly higher than the national average. And, consumers have experienced dramatic increases in the past several years. Consistent with Connecticut’s goal of reducing the price of electricity, the State should mitigate the impact of RGGI on the price of electricity by auctioning all of the RGGI air emissions allowances, to the maximum extent possible, and utilizing all of the auction proceeds as a credit on retail electricity consumers’ bills on a kilowatt-hour basis.”<sup>5</sup>
- Large industrial groups like New York’s Multiple Intervenors are saying, “All RGGI Emissions Allowances Should Be Auctioned And The Proceeds Should Be Applied As A Per-kWh Credit To Retail Electric Distribution Rates.”<sup>6</sup>

No persuasive reason has been presented for why allowances should be allocated to electric generators for free. On the other hand, economic and fairness issues clearly support a complete or large and growing auction of allowances, with generators having to purchase them and the proceeds used to reduce the cost of the emissions programs on electric ratepayers.

The arguments for an auction and against free allocation of allowances are strong:

- Air quality and the world’s climate are a public good that polluters do not have a right to spoil – the purchase of allowances is consistent with the ‘polluter pays’ principle with payment for pollution rights being a cost of production.
- Previous cap and trade programs, created prior to electricity restructuring, did not face the same issues, as cost of service regulations allowed excess profits to be returned to ratepayers; the electric markets are very different today than when the SO<sub>2</sub> and NO<sub>x</sub> programs were first created.
- Most generators, and all economists we are aware of, agree that an allowance, whether allocated for free or purchased, has an opportunity cost as it can be used for compliance, banked, or sold to others.
- Allowances are assigned the market value (opportunity cost) by generators and that cost is built into their marginal costs or O&M costs that determine their bid prices in the marketplace.
- Because costs are built into bid prices, whether generators get an allowance free or have to pay for it, these costs are passed on to consumers – while making that expense to consumers larger than necessary.

---

<sup>3</sup> These commercial and industrial customers include the approximately 50 members of the Multiple Intervenors, as well as the New York Energy Consumers Council, National Grid (on behalf of its customers), the City of New York and Consumer Power Advocates, consisting of major institutional consumers of energy in and around New York City.

<sup>4</sup> National Grid comments submitted to the RGGI process: [http://www.rggi.org/docs/national\\_grid\\_whitepaper.pdf](http://www.rggi.org/docs/national_grid_whitepaper.pdf)

<sup>5</sup> Connecticut Industrial Energy Consumers comments submitted to the RGGI process: [http://www.rggi.org/docs/ciec\\_comments.pdf](http://www.rggi.org/docs/ciec_comments.pdf)

<sup>6</sup> Multiple Intervenors (New York) comments submitted to the RGGI process: <http://www.rggi.org/docs/mi.pdf>

- Because electric consumers will bear the very modest cost of the RGGI program, we see no reason for generators to profit at their expense.
- As a part of utility restructuring, part of the deal with moving to competitive markets was that generators took on regulatory risk in exchange for a significantly freer and less regulated market.
- This is consistent with the idea of competitive and free markets – let the markets work.
- In any case, New England consumers are already paying generators very significant amounts of money in the form of congestion payments and the forthcoming Forward Capacity Market payments – states should not add free allowances to this already very significant stream of payments.

Economists, consultants, and government agencies that have looked the issue of allocation are increasingly in agreement that allowances should be auctioned to avoid windfall profits and avoid market distortions. This has been increasingly clear in the European Union where recent experience with its carbon dioxide cap and trade program has indicated that some companies are reaping very large windfalls because allowances were allocated to them for free (see references below).

In an April 25, 2007 Congressional Budget Office (CBO) Economic and Budget Issues Brief called *Trade-Offs in Allocating Allowances for CO<sub>2</sub>* the CBO stated that “...the cost of holding the allowances would generally be reflected in the prices that producers charged, regardless of whether those producers had to buy the allowances or were given them for free.” This means that producers would pass on the value of the allowances as a cost on to their consumers either way since they allowances have an opportunity cost. “That result was borne out in the cap-and-trade programs for sulfur dioxide in the United States and for CO<sub>2</sub> in Europe where consumer prices rose even though producers were given allowances for free.”<sup>7</sup>

While it may seem at first glance that generators will be forced to pay the full costs of compliance with RGGI; in reality the costs associated with purchasing allowances are passed on to electricity consumers. The good news is that since these costs will be distributed among millions of customers, the impact on individuals’ electric bills will be small while the benefits to public health and the environment will be large.

- The projected direct electricity cost impacts due to RGGI would be modest under the best estimate and range from 0.3% to 0.6% in 2015 resulting in a bill increase in the range of \$3-\$16 per average household annually in 2015.
- In addition, designing expanded energy efficiency programs into the RGGI framework or providing direct rebates to electricity consumers from the sale of emissions allowances would reduce consumer costs and lead to improved job and economic growth.
- Studies have shown that investments in end-use energy efficiency programs, as a result of, or in conjunction with RGGI are projected to be so effective in reducing total electricity usage by households, that they will mitigate any cost increase associated with RGGI.

In addition, while RGGI may have a very small impact on the regional economy (as measured by Gross Regional Product, Real Personal Income, and Private Sector Jobs), RGGI modeling has shown that the impact is projected to be a **positive** one (primarily due to the benefits of investment in energy efficiency technologies) – ranging from a one hundredth to two-hundredth of one percent change (0.01% - 0.02% positive change in economic growth).

---

<sup>7</sup> Trade-Offs in Allocating Allowances for CO<sub>2</sub> Emissions, April 25, 2007  
<http://www.cbo.gov/ftpdoc.cfm?index=8027&type=1>

For additional background on the issue of allocation of emissions allowances, please refer to the following documents:

- Åhman, et al, 2006-forthcoming, *A Ten-Year Rule to Guide the Allocation of EU Emission Allowances*. Accepted for publication in the Journal of Energy Policy, April 2006.
- Boemare, C., and P. Quiron, 2001. *Implementing Greenhouse Gas Trading in Europe: Lessons from Economic Theory and International Experience*. Report for the Interact project, DG Research of the EU Commission, Centre International de Recherche sur l'Environnement et le Développement. [www.centre-cired.fr](http://www.centre-cired.fr).
- Burtraw, et al, K. 2006. *CO2 Allowance Allocation in the Regional Greenhouse Gas Initiative and the Effect on Electricity Investors*, The Electricity Journal, 19 (2): 79-90 (March).
- Burtraw, D., 2001. *The Effect of Allowance Allocation on the Cost of Carbon Emission Trading*, Resources for the Future Discussion Paper 01-30 (August).
- Burtraw, D., and K. Palmer, 2003. *Economic Efficiency and Distributional Consequences of Different Approaches to NOx and SO2 Allowance Allocation*, Prepared for the U.S. Environmental Protection Agency. <http://www.epa.gov/air/clearskies/econ.html> (accessed June 8, 2005).
- Burtraw, et al, 2002. *The Effect on Asset Values of the Allocation of Carbon Dioxide Emission Allowances*, The Electricity Journal, June 2002, Vol. 15, No. 5, pp. 51-62.
- Burtraw, et al, 2001. *The Effect of Allowance Allocation on the Cost of Carbon Emission Trading*, Resources for the Future Discussion Paper 01-30 (August).
- The Carbon Trust, 2004, *The European Emissions Trading Scheme: Implications for Industrial Competitiveness*, CT/2004/04
- Carlson, et al, 2000. *SO2 Control by Electric Utilities: What are the Gains from Trade?* Journal of Political Economy, 108:6, 1292-1326.
- CEEP, 2005, *Evaluation of CO2 Emission Allocations as Part of the Regional Greenhouse Gas Initiative*, Center of Energy, Economic, and Environmental Policy, Rutgers University
- Congressional Budget Office, 2003, *Issues in the Design of a Cap-and-Trade Program for Carbon Emissions*, Economic and Budget Issue Brief, November 25, 2003
- Cramton, P., and S. Kerr, 2002. *Tradable carbon permit auctions: How and why to auction not grandfather*, Energy Policy, 30, 2002, pp. 333–345.
- Electrowatt-Ekono Oy, 2004, *Emissions Trading and European Electricity Markets: Conceptual Solution to Minimise the Impact of the EU Emissions Trading Scheme on Electricity Prices*, for The Alliance of Power Intensive Industries, 60K04817.01-Q060-001
- Hamal and Madian, 2005, *Allocation of Emission Allowances for the Regional Greenhouse Gas Initiative*, White Paper for National Grid
- IPA Energy Consulting, 2005, *Implications of the EU Emissions Trading Scheme for the UK Power Generation Sector*, to: Department of Trade and Industry (DTI)
- Standard & Poor's, 2006, *Gas And CO2 Prices Fuel Profits For Electric Utilities In Europe's Deregulated Markets*, Standard & Poor's Credit Ratings - Commentary & News, 6 April 2006
- Stavins, R., 1998. "What Can We Learn from the Grand Policy Experiment? Lessons from SO2 Allowance Trading," Journal of Economic Perspectives, 12:3 (summer), 69-88.
- Sijm, et al, 2006, *CO2 cost pass-through and windfall profits in the power sector*, Climate Policy, 6 (1): 49-72
- Sijm, et al, 2005, *CO2 price dynamics: the implications of EU emissions trading for the price of electricity*, Energy Research Center of the Netherlands, ECN-C--05-081
- Tietenberg, T., 2001. *The Tradable Permits Approach to Protecting the Commons: What have we Learned?* Nota di Lavoro 36.2002, Fondazione ENI Enrico Mattei (FEEM).
- UBS, 2005, *CO2 – The Windfall Has Arrived*, UBS Investment Research, ETS Update, 7 June 2005

## **2. Chapter 02.05(C) CO2 Early Reduction Allowances**

ENE does not believe that MDE should adopt the early Reduction Allowance provisions of the model rule since this will allow allowances to be allocated directly to the generators for free. This is problematic since the early reduction allowances are in addition to the cap. Since there may be an over allocation of carbon credits, this provision will inflate the cap even more. Finally auctioning of allowances will also increase the incentive companies have to make plant improvements early.

## **3. Chapter 02.05 (E) Voluntary Renewable Energy Market Set-Aside Allocation.**

Environment Northeast supports the inclusion of the set-aside for voluntary renewable purchases in the state rulemaking process which are similar to the optional provision of the RGGI Model Rule (RGGI section XX-5.3(D)). ENE believes that retiring these credits to support the voluntary renewable market will ensure that the marketers can continue to claim a reduction in carbon emissions. However, we do not believe that there should be a cap set on the number of allowances that are permanently retired to support the purchase of qualified renewable energy. Unless voluntary renewable energy purchases and the emissions reductions they provide are accounted for, generators burning fossil fuels can just produce more electricity - even for sale outside the state/region negating the benefits of those voluntary purchases. Having a cap might hinder the expansion of the voluntary energy market and a large voluntary market will only help the region achieve its emissions reductions faster.

## **4. Chapter 02.05 (F) Limited Industrial Set-aside Allocation**

ENE does not support this set aside allocation and it does not appear consistent with the model rule.

## **5. Chapter 02.07 (D) CO2 Budget Units that Co-Fire Eligible Biomass and Chapter 01.02 (41): Definition of Eligible Biomass**

### **A. Eligible Biomass**

Eligible Biomass is defined in Subtitle 26.09 Maryland CO2 Budget Trading Program (Draft Rule) similarly to how it is defined in the regional Model Rule, which requires that eligible biomass be sustainably harvested and available on a renewable or recurring basis. We endorse this definition of biomass, as it allows certain generation plants co-firing biomass with fossil fuels to make CO2 deductions from their compliance obligation. Draft Rule, Section 03.D.2; Model Rule Subpart XX-6.5(b)(1) (providing that regulated units may deduct from their total CO2 allowance obligation “any CO2 emissions attributable to the burning of eligible biomass...”).

It is true that units burning biomass emit significant quantities of CO2 from their smokestacks. Nonetheless, CO2 deductions for Eligible Biomass are allowed on the premise that the amount of carbon emitted from the combustion of a quantity of biomass is essentially the same as the amount of carbon that will be taken out of the atmosphere in the future and stored, during the process of photosynthesis, in biomass that regrows on land where the old biomass was harvested. This premise holds true only so long as:

- the land on which the biomass was harvested is not converted to a use that prevents regrowth of a new generation of biomass, and
- the harvest methods ensure future regrowth of an equivalent amount of biomass in a reasonable time period and avoid significant depletion of carbon in the forest soils.

Examples of practices that would prevent sufficient regrowth on a given area of forest land include conversion of the land to development (such as a parking lot, a housing complex, or a road) or employing harvest practices that significantly inhibit future productivity, such as repeated high-grading, excessive soil compaction, or whole-tree harvesting without replenishing soil nutrients. Soil carbon can be depleted either through direct disturbance during harvesting, or indirectly in the long-term through excessive removal of harvest residues and other woody debris.

Consistent with the above reasoning, the Draft Rule provides that:

- (a) "Eligible biomass" means sustainably harvested woody and herbaceous fuel that is available on a renewable or recurring basis
- (b) "Eligible biomass" includes dedicated energy crops and trees, agricultural food and feed crop residues, aquatic plants, unadulterated wood and wood residues, animal wastes, other clean organic wastes not mixed with other solid wastes, biogas, and other neat liquid biofuels derived from the fuel sources.
- (c) "Eligible biomass" does not include old growth timber.

Subtitle 26.09 Maryland CO2 Budget Trading Program, Section .02.B(41)

This definition tracks the language of the RGGI Model Rule at Subpart XX-1.2(ag).

However, the Model Rule further proposes that “sustainably harvested” be determined by the appropriate state regulatory agency, while the Draft Rule does not say how it shall be defined. As there is not commonly accepted definition for what sustainably harvested means, and this is an essential component for ensuring carbon neutrality of biomass, ENE believes that this must be further defined.

### **Sustainable Harvesting**

For the sole purpose of implementing RGGI, “Eligible Biomass” could be handled in Maryland either by adding further specificity to the definition of the terms “Sustainably Harvested” and to the reporting requirements for units co-firing eligible biomass in the Draft Rule, or by providing some type of formal guidance in a companion document from the Department.

Consistent with the criteria regarding land conversion and harvest methods noted above, and without comment on the standards that should apply to non-woody biomass, we recommend incorporating the following elements for a new definition of “sustainably harvested”:

Section .02.B(41)(d) (NEW) “Sustainably Harvested Woody Biomass” means woody biomass that the CO2 budget source demonstrates has come from forested land that is not being converted to a non-forest land use and is not otherwise harvested in a manner incompatible with the capacity of that forest to regrow at a rate that is not less than the rate of carbon accumulation prior to the harvest, as determined in accordance with Section 07.D.(1). of this Rule.

To adequately regulate implementation of this defined term, it is important to add further definition and guidance in the reporting requirements of Section 07, specifically:

Section 07.D.(1) ...

- (xx) for each shipment of woody biomass received and claimed to be eligible biomass, the following information shall be tracked and entered into a database:
  - (i) name of driver and shipping company
  - (ii) quantity of woody biomass being claimed as eligible biomass in this shipment;
  - (iii) location of the timberland or industrial source of all woody biomass being claimed as eligible biomass;
  - (iv) name of the business or person that owns the timberland or industrial source of the shipment
  - (v) method claimed for demonstrating that eligible biomass was sustainably harvested as provided in subsection 07.D.(5).
  - (vi) whether the harvest was part of a land clearing option subject to the Forest Conservation Act.
- (yy) the name and business address of all timberland owners or industrial sources from which shipments were received during the quarter, the total quantity of sustainably harvested woody biomass from each owner or source;
- (zz) evidence of certification, including certification number, or evidence of tax status and proof of master logger company status for any timberland or logging company that was the source of sustainably harvested woody biomass during the year

(NEW) Section 07.D.(5). Woody biomass will be deemed sustainably harvested for the purposes of calculating compliance obligation deductions under Section 03.D.2<sup>8</sup> [Model Rule Section XX-6.5(b)] if the CO<sub>2</sub> budget unit claiming to have co-fired eligible biomass provides complete, timely reports for subdivisions 07.D.(1)(xx) and (yy) of this subsection and an annual report to the Department indicating the total eligible biomass fuel input (tons) from each timberland or industrial source, by location, with the proper documentation, referred to in subdivisions 07.D.(1)(zz) sufficient to demonstrate the following:

(a) wood chips, trees, cord wood, tree limbs, woody debris, or tree tops delivered to the CO<sub>2</sub> budget unit came from timber harvest activities not related to land clearing (requiring an application for a subdivision, grading permit or sediment control permit on areas 40,000 square feet or greater, such that it would trigger review under [Natural Resources Article 5-1601 - 1613](#), Forest Conservation Act); and

- (i) certified, prior to the harvest, in the Forest Stewardship Council (FSC), Sustainable Forestry Institute (SFI), American Tree Farm System (ATFS) group certification program; or
- (ii) for harvests within the state of Maryland, if the landowner owns less than 500 acres, compliance may be alternately satisfied with enrollment in the Forest Conservation & Management Program Property Tax Act (FCMA) prior to the harvest, if harvesting is conducted by a company with Master Logger Status under Maryland's Master Logger Program.

---

<sup>8</sup> Note that this section is not listed in the Draft Rule Table of Contents.

(b) wood residues are unadulterated and have been shipped to the CO<sub>2</sub> budget unit from industrial operations, including lumber or paper mills, provided that

(i) if mills have chain-of-custody certification from FSC or SFI, residue that results from the production of 100% certified material (SFI Certified Sourcing Label, FSC Pure) will receive 100% deduction and residue that results from the production of mixed certified and non-certified product (SFI Percent Content Claim, FSC Mixed) will receive a percent deduction based on the percent certified material produced by the mill;

(ii) if the mill does not have chain-of-custody certification, a default percentage deduction will apply to each ton of biomass CO<sub>2</sub> emissions to reflect the approximate percentage of forestlands under certification in the state of Maryland, which percentage shall be adjusted each year as determined by the Maryland Department of Natural Resources;

(iii) construction and demolition waste shall not be considered unadulterated wood and shall not be eligible biomass.

(See also Model Rule XX-8.7)

### **Old Growth**

Under the Draft Rule, old growth is not considered an eligible biomass fuel. ENE concurs that harvesting late-successional forests for biomass should not be eligible for CO<sub>2</sub> deductions, since it could take many decades for the forest to recapture the lost carbon. However, the Department needs to provide more detail on what old growth means, since there is no commonly accepted definition for the region.

## **6. Chapter 03.02 General Requirements for CO<sub>2</sub> Emission Offset Projects**

ENE suggests that MDE consider separating their RGGI regulations and make the offset section a stand-alone regulation similar to CT's proposed regulations. In Connecticut's draft regulations, the Connecticut Department of Environmental Protection (CT DEP) separated their draft regulations into two components, one for general RGGI rules and one relating to offsets. This way if the category of eligible offsets is expanded, CT DEP will not have to reopen all of their RGGI regulations, only the section that pertains to offsets.

## **7. Additional ENE comments regarding Auctions and the Use of Auction Proceeds**

### **Auction Process and Design:**

ENE is concerned that there is no mention of the auction process and the use of proceeds in the draft regulations. ENE supports the use of regular, quarterly auctions and hope that the MDE and other agencies use the final auction report of Holt, Shobe, Burtraw, Palmer and Goeree to help guide auction decisions.

We encourage MD to participate in a regional auction. There are likely many reasons to do so, including reduced transaction costs, a higher level of consistency among states, transparency, market stability, and the ability of a market monitor to focus on one major trading platform or event.

We believe that all states should have a reservation price and that it should be a regional price. While we support the use of a reserve price in the auction, we believe that it should be combined with allowance retirement, especially in the first compliance period if the cap level has been set higher than current emissions.

The reserve price in the first compliance period should be utilized along with allowance retirement and not just allowance banking. Only retirement will lead to environmental benefits if the cap has been set too high. We would suggest a process such as the following for the reserve price in the first compliance period, and potentially subsequent periods:

- The states should agree to this process through an amendment to the MOU;
- The states should agree to a reserve price (potentially at an undisclosed level as recommended in the draft Auction report), but we believe this should be at least \$2-3 per ton CO<sub>2</sub>;
- If the reserve price is not met, the auction design should facilitate the retirement of allowances until the minimum price is achieved;
- Allowances retired should be done so proportionally by each state based on their relative cap level;
- It should be clear to market participants that allowances retired in the first compliance period will be permanently retired, as uncertainty about future availability will add some risk to the market.

#### **Use of Auction Proceeds:**

We are concerned that the proposed regulations do not address what Maryland intends to do with the auction proceeds. As we have mentioned in previous comments, we believe that the value of RGGI allowances should only be spent on activities or programs that meet the following criteria:

- 1) Reduce the costs of the RGGI program to the state's electricity ratepayers
- 2) Provide additional benefits for activities or projects that would not have occurred anyway and not replace existing programs or investments; and
- 3) Support programs and activities that do not pose a significant risk to human health and the environment.


We believe the state should make an explicit policy statement, such as the one above, in the regulations that will guide all future investments of RGGI allowance value.

The criteria noted above would mean that programs and investments would be limited to the electric sector and those activities that most reduce consumer costs or maximize cost-effective investments would be targeted. In the near term, we believe the primary investment should be in additional electric sector energy efficiency programs. However, over time, other non-emitting electric sector technology investments could be considered such as renewables or carbon capture and sequestration.

Energy efficiency investments provide four major benefits to the state's electricity ratepayers:

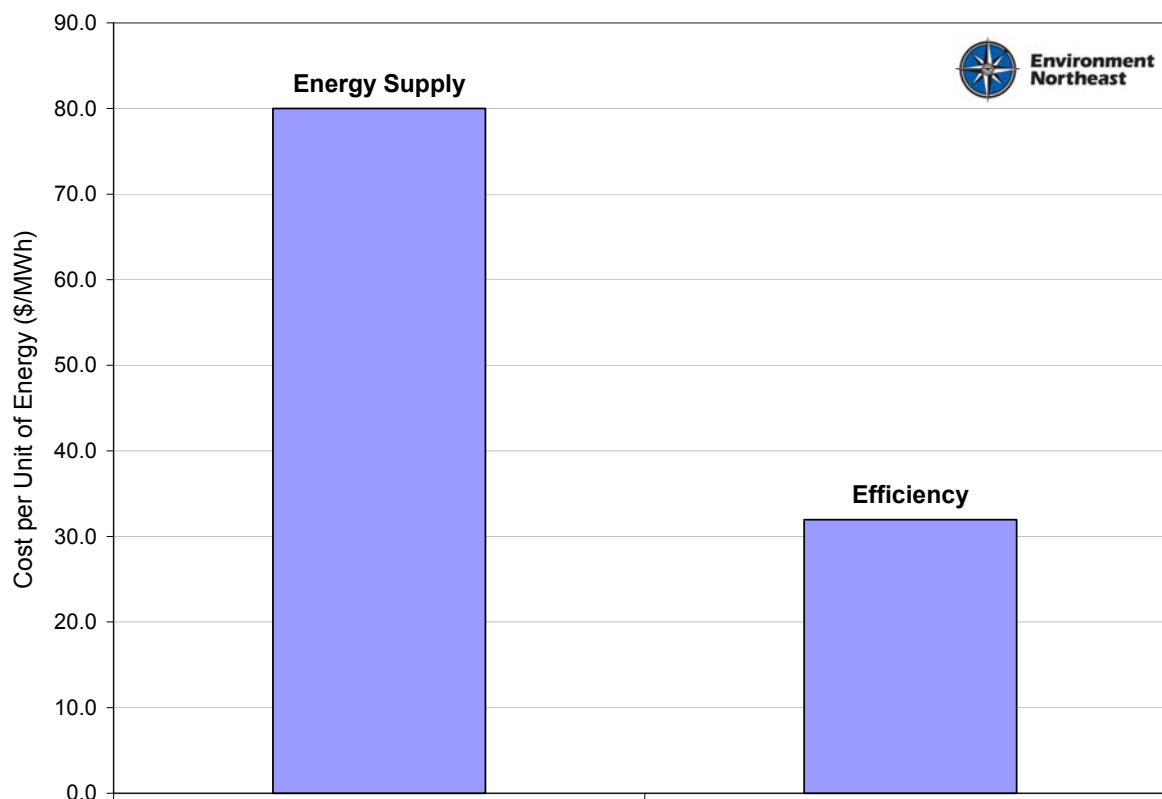
- Consumer's electric bills are reduced through reductions in their energy consumption;
- Investments in efficiency substitute for payments for fossil fuels and keep energy dollars in-state leading to economic and job growth;
- Through reduced energy demand, the RGGI cap is easier to achieve and the program as a whole is cheaper leading to lower wholesale electric prices for everyone; and
- Reduced demand avoids the need to build expensive new transmission and distribution infrastructure as well as new power plants.

Electric energy efficiency programs in RGGI states are active and strong which are run by the electric distribution companies. These programs save consumers three to four dollars for every dollar invested and studies of the achievable potential for energy efficiency indicate that there is a vast resource that is still untapped. Doubling or even tripling efficiency investments would be required to come close to achieving all that is cost-effective. The table and figure below illustrate the benefits of existing programs and the cost of efficiency investments that save a unit of energy versus electric supply purchases that deliver an additional unit of energy to the grid. For example, the current Massachusetts energy efficiency programs administered by the utilities deliver the following benefits:

<b>Total &amp; Projected Massachusetts Electric Efficiency Program Costs &amp; Benefits</b>		 <b>Environment Northeast</b>	
Based on 2005 Programs for All Companies			
<b>One Year Costs and Benefits (2005)</b>			
Utility Cost	\$124	Million	
Total Resource Costs	\$164	Million	
Total Resource Benefits	\$506	Million	
Net Total Resource Benefit	\$343	Million	
Electric System Only Benefits	\$410	Million	
Total Resource Benefit Cost Ratio	3.1	(Benefit/Cost)	
Electric System Benefit Cost Ratio	3.3	(Benefit/Cost)	
Peak (Summer) Demand Reduction	58.5	MW	
Annual Energy Savings	458,325	MWh	
Lifetime Energy Savings	5,123,738	MWh	
Total Resource Summer Demand Cost	2,800,376	\$/MW	
Total Resource Energy Cost	32.0	\$/Lifetime-MWh	
Approx. Avoided Energy Cost (ISO-NE 2005 Avg. LMP)	80.0	\$/MWh	
Equivalent Lifetime Emissions Avoided			
SO <sub>2</sub>	5,201	Tons	
NO <sub>x</sub>	1,383	Tons	
CO <sub>2</sub>	2,823,180	Tons	
<b>Projected Costs and Benefits over Ten Years</b>			
Utility Cost	\$1,242	Million	
Total Resource Costs	\$1,637	Million	
Total Resource Benefits	\$5,064	Million	
Net Total Resource Benefit	\$3,426	Million	
Electric System Only Benefits	\$4,096	Million	
Peak (Summer) Demand Reduction	585	MW	
Annual Energy Savings	4,583,250	MWh	
Lifetime Energy Savings	51,237,380	MWh	
Equivalent Lifetime Emissions Avoided			
SO <sub>2</sub>	52,006	Tons	
NO <sub>x</sub>	13,834	Tons	
CO <sub>2</sub>	28,231,796	Tons	
Sources:	All program costs and benefits are compiled from MA DOER spreadsheets based on <i>2005 Energy Efficiency Annual Reports</i> filed by each company with MA DOER and DTE		
	Emissions based on: ISO New England, May 2006, <i>2004 New England Marginal Emission Rate Analysis</i> , from annual average (all hours) and lifetime energy savings		

The figure below compares the cost to save consumers a unit of energy versus to cost to supply an additional unit of energy; Massachusetts spends over \$4.6 Billion dollars on supply of electric energy while investing only about \$125 Million in energy efficiency; we are not investing in the cheapest resource.

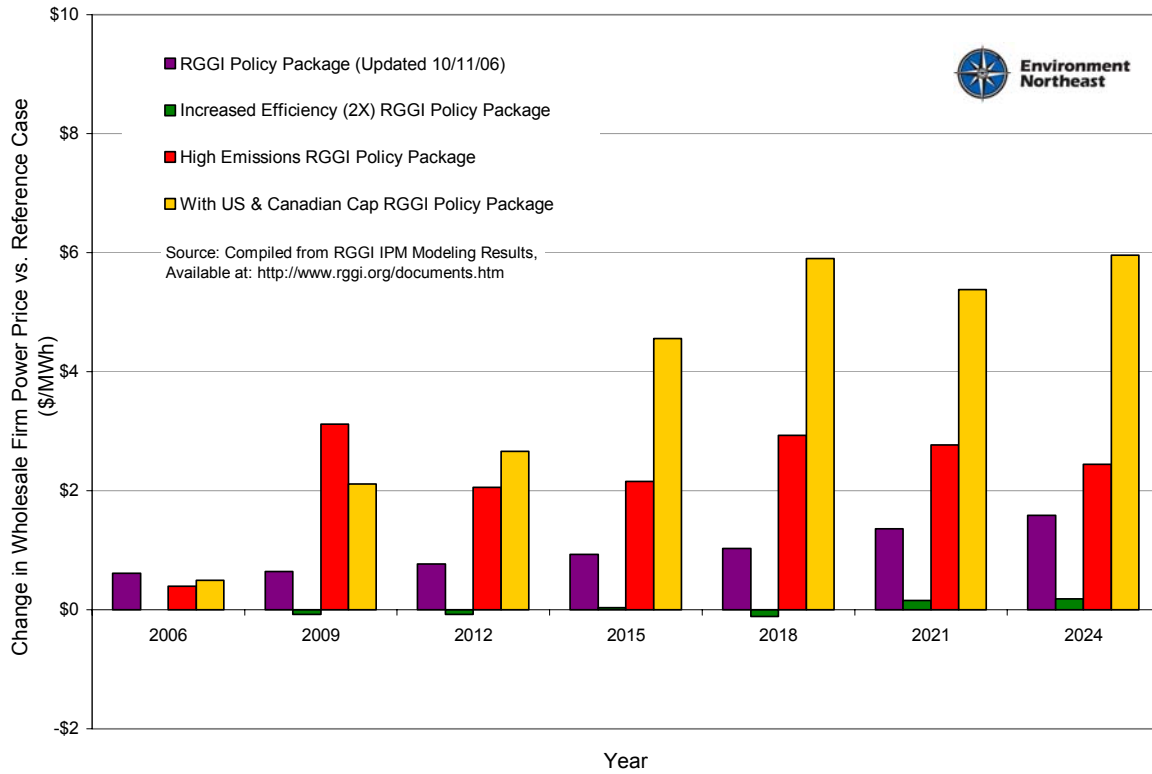
## Electric Generation vs. Energy Efficiency Costs



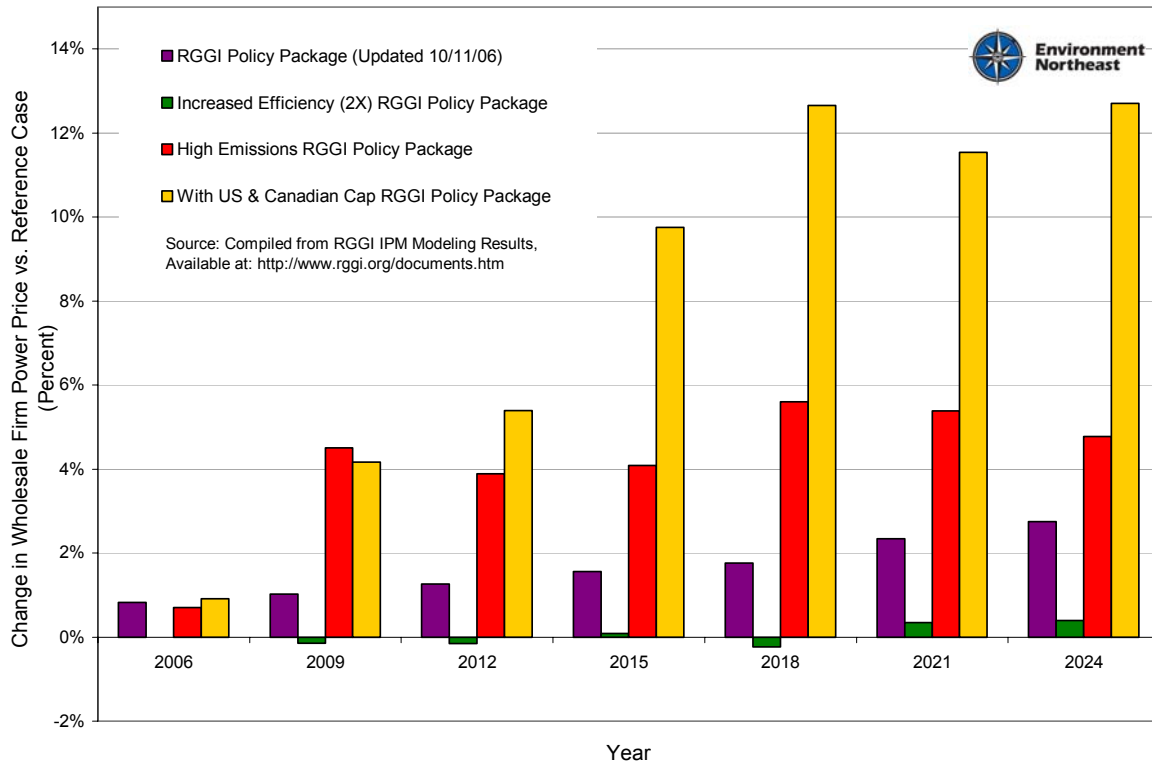
These efficiency programs put real dollars back in ratepayer's pockets that they can then spend on other parts of the state's economy. The state spends billions of dollars every year on fossil fuels from other parts of the country and the world. Avoided electric consumption translates into avoided payments for natural gas and oil (plants using these fuels are primarily on the margin), reducing the state's trade imbalance. In contrast efficiency programs fund energy service companies with local employees to install new more efficient equipment that is more likely to have been manufactured in the state or region. Investments in energy efficiency boost the state's economy and lead to job growth both in the energy service sector and in the economy as a whole due to transfers of payments from the electric sector to other parts of the economy.

Energy efficiency programs have significant system-wide benefits. In particular, reduced demand depresses the wholesale electric energy price, and because peak is lower, the capacity price is also reduced. These benefits are significant today, but under RGGI, the system benefits are even larger. If electric consumption is growing and the RGGI program requires a decline in emissions, the goals are harder to achieve and more expensive than if electric consumption is held steady or even declines through investments in efficiency. The RGGI modeling results bear this out. The following figure illustrates the change in wholesale electric prices between the equivalent RGGI reference case and the policy case.

### Forecasts of Changes in Wholesale Electric Power Price Increases Due to RGGI



### Forecasts of Changes in Wholesale Electric Power Percent Increases Due to RGGI



As the figures above indicate, the wholesale electric price is actually reduced in some years if RGGI is implemented along with a doubling of efficiency investments. Efficiency investments along with RGGI will deliver these savings to all consumers in the RGGI region.

Note that wholesale power prices are over half of delivered retail prices with wholesale prices in the range of \$60 to 100 per MWh and transmission and distribution costing about \$30 to 50 per MWh.

We appreciate the opportunity to comment on the development of RGGI in Maryland. This program is a critical part of the state and region's plan to reduce greenhouse gas emissions.

Please let us know if you have any questions based on our comments. We look forward to working with the states to implement the RGGI rule in all the Northeastern states.

Sincerely,



---

Derek Murrow, Director of Policy Analysis  
dmurrow@env-ne.org



---

Alice E. Liddell, Policy Analyst  
aliddell@env-ne.org



101 Whitney Avenue, New Haven CT 06510  
203-495-8224 / [www.env-ne.org](http://www.env-ne.org)  
Rockport, ME / Portland, ME / Providence, RI  
Hartford, CT / New Haven, CT

Derek Murrow, Director Policy Analysis, 203-285-1946, [dmurrow@env-ne.org](mailto:dmurrow@env-ne.org)  
Alice Liddell, Policy Analyst, 203-495-8224, [aliddell@env-ne.org](mailto:aliddell@env-ne.org)  
Ellen Hawes, Policy Analyst – Forestry, 207-761-4566, [ehawes@env-ne.org](mailto:ehawes@env-ne.org)

Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.