

June 22, 2012

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812

**RE: COMMENTS OF THE CALIFORNIA ENERGY EFFICIENCY INDUSTRY COUNCIL
(EFFICIENCY COUNCIL) TO THE CALIFORNIA AIR RESOURCES BOARD ON THE
INVESTMENT OF CAP-AND-TRADE AUCTION PROCEEDS**

Dear Chairman Nichols:

The California Energy Efficiency Industry Council (Efficiency Council) respectfully submits these comments to the California Air Resources Board regarding the investment of AB 32 cap-and-trade auction proceeds.

The Efficiency Council urges California to direct significant investments of cap-and-trade auction proceeds into energy efficiency as efficiency will result in long-term and transformative benefits to California's public health and clean energy economy. An energy efficiency investment strategy for the use of GHG auction revenues is a jobs plan, a strategy that every California home and business can participate in, and an economic revitalization plan; as well as simply smart economics. Such efficiency investments will shift California's energy investments to investing in local economies and creating jobs – which can never be outsourced – to upgrade homes, offices and factories in the state. This shift also creates a virtuous cycle by lowering energy bills for businesses and consumers, freeing up even more money that can be invested in the local economy.

Consistent with the statutory goals of AB 32 and emphasized in the Scoping Plan, the Efficiency Council strongly recommends that cap-and-trade auction revenues should be invested in greenhouse gas (GHG) emissions mitigation solutions and energy efficiency should be primary among these mitigation strategy investments. Energy efficiency is the most cost-effective means of lowering GHG emissions, helping lower reduce to customers, and putting Californians back to work in a time of persistently high unemployment.

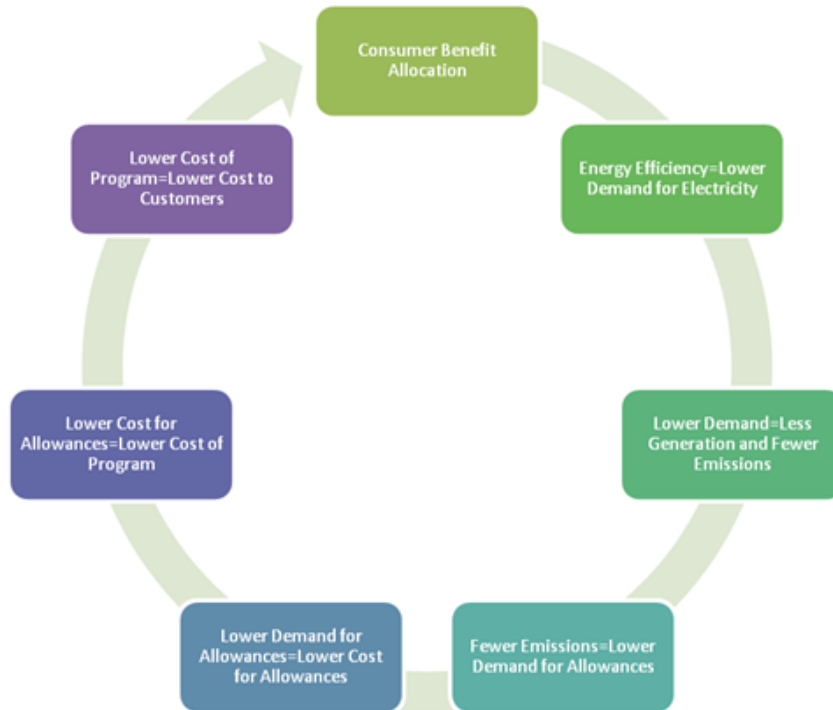
The Efficiency Council is a statewide trade association of non-utility companies that provide energy efficiency services and products in California, including products manufactured in the State. Our member businesses, now numbering over 70, employ over 4,000 Californians throughout the state. They include energy service companies, engineering and architecture firms, contractors, implementation and evaluation experts, financing experts, workforce training entities, and manufacturers of energy efficiency products and equipment. The Efficiency Council's mission is to support appropriate energy efficiency policies, programs, and technologies that create sustainable jobs and foster long-term economic growth, stable and reasonably priced energy infrastructures, and environmental improvement.

It is essential that a significant portion of GHG auction revenues be invested in energy efficiency for the following reasons:ⁱ

- The goal of a cap-and-trade program is to reduce emissions at least cost and thus it is important that the entire program be designed to accelerate low-cost reductions. The revenue side of the cap-and-trade system and how that revenue is distributed is an important part of the program and an essential part of the program design. Investing GHG auction revenue in efficiency is the cheapest, fastest, and most direct way to reduce emissions at a low cost.
- In a very real sense *carbon revenues* are more important than *carbon prices*. Carbon prices at the levels that are acceptable politically in the U.S. are insufficient to drive a transformation on the demand side, or for that matter on the supply side. Calculations completed by the Regulatory Assistance Project (and others) show that the public will benefit from seven to nine times more carbon reduction per consumer dollar in electricity rates via direct efficiency programs than they would via the conservation effect of simply raising rates.
- Consumers are better off if the revenue is invested in efficiency rather than returned directly to consumers. This is true for four reasons:
 1. Efficiency programs deliver more than \$1 in benefits for each \$1 delivered, so consumers receive greater value through efficiency investments than through a direct rebate;
 2. Lowering demand for electricity lowers clearing prices for GHG allowances, so ALL consumers – both those participating in EE programs and those not participating – benefit from lower power prices, and lower transfer payments paid to generators;
 3. Lower demand for electricity means lower carbon prices, which lowers costs on any service or product that will be affected by carbon prices, both within and outside of the electricity sector; and
 4. Lower demand for electricity delivers additional non-price benefits to all consumers – lower stress on transmission/distribution systems, thus greater reliability and less need for expensive new lines, lower emissions of conventional pollutants, improved health benefits, less money leaving California to import natural gas, etc.

Thus, as the diagram below shows, a focus on allocating GHG revenues for consumer benefit, with investments targeted for energy efficiency, will help California's cap-and-trade program effectively lower GHG emissions at lower cost than a program that relies only on allowance prices to drive changes in energy practices. Energy efficiency investment lowers all of the following: demand for electricity, associated emissions, demand for allowances, cost of allowances, program costs, and thus overall cost to consumers (especially important to low-income consumers).

Consumer Benefit & Strategic Investment in Energy Efficiencyⁱⁱ



Furthermore, recent reports confirm that investments in efficiency are one of the most economically beneficial and legally acceptable uses of allowance value, as summarized in the Next10 report, “Using the Allowance Value from California’s Carbon Trading System: Legal Risk Factors, Impacts to Ratepayers and the Economy:”ⁱⁱⁱ

- “The modeled spending options that subsidize efficiency programs and renewables for households generate more GDP and employment growth, directly and indirectly, than doing so in the public or private enterprise sectors. This is because household efficiency measures are more distributed and therefore more job intensive, and when households save money on energy, their spending on alternative goods and services is about 16 times more job intensive than the energy fuel supply chain.” (p. 6)
- “The most pro-growth options invest auction revenue in expanded household-level energy efficiency and renewable technology diffusion, and these generate additional new state revenue.... Again, household efficiency promotion is the most employment-intensive allocation strategy.” (p. 6)
- “Overall, it is not possible to estimate the co-benefits from alternative uses of allowance revenues without more specific information about how and to whom the revenues will be distributed. What is clear is that there are substantial co-benefits from measures that improve energy efficiency...” (p. 15)

The Next10 report also rates spending auction revenue on increased energy efficiency as a low legal risk under Prop 26 and the *Sinclair Paint* case (p. 13), noting the following legal constraints:

- “In order to prevent successful legal challenges to AB 32, the authors believe the most conservative legal approach to spending dollars generated by the cap-and-trade program would be to use the auction proceeds in a way that is consistent with the legal precedent set by the *Sinclair Paint* case.” (p. 11)
- “Both UCLA and the LAO concluded that under the law, the auction proceeds generated by the cap and trade program would be considered a “regulatory fee” (and a “tax”) by the courts. Both also concluded

that, under the law, the proceeds would likely need to be spent on programs that reduce or mitigate greenhouse gas emissions.” (p. 12)

Lessons Learned from the Regional Greenhouse Gas Initiative Experience


A primary basis for our recommendations to use a significant portion of auction revenues for energy efficiency investments is the experience of the Regional Greenhouse Gas Initiative (RGGI). In 2008, ten Northeastern and Mid-Atlantic states began RGGI as the country’s first market-based program to reduce emissions of carbon dioxide (CO₂) from power plants. Under RGGI, states are investing approximately three-quarters of auction revenues to reduce GHG emissions and save consumers money. Success stories abound of how RGGI’s clean energy investments, particularly in energy efficiency, benefit all consumers and businesses.^{iv}

The RGGI experience in 2009 demonstrates the benefits of “revenue recycling” in energy efficiency investments as smart economics for consumers:^v

- About 90% of allowances were auctioned, and about 60% (\$295 million) of the revenues generated were used for efficiency investments;
- Energy efficiency-based CO₂ reductions cost an average of -\$73 per ton, compared with supply-only fuel substitution in electric generation at costs of approximately \$50/ton;
- Each \$1 of energy efficiency investments lowered electricity costs by a range of \$2.17 to \$3.76;
- Efficiency programs have saved the region \$1.6 billion from actions taken thus far and have added 16,000 jobs to the economy.

Another study of the RGGI investments in efficiency indicated the following macroeconomic benefits, wherein the RGGI states have experienced dollar savings, job growth, and economic growth from energy efficiency:^{vi}

Table 1: Macroeconomic Benefits of RGGI Efficiency Funding To-Date

 ENE <small>Environment Northeast</small>	Revenue (\$ millions)	EE Funding (\$ millions)	Savings (\$ millions)	Jobs Multiplier (Job Years/\$1m EE Funding)	Jobs (Job Years)	GSP Multiplier (GSP increase/ \$1 in EE)	GSP Growth (\$ millions)
Connecticut	\$51.7	\$36.0	\$129.4	41.2	1,481	5.7	\$204.9
Delaware	\$22.5	\$9.5	\$25.9	45.5	434	5.9	\$56.3
Maine	\$27.2	\$25.4	\$119.4	58.1	1,476	4.9	\$124.5
Maryland	\$169.6	\$39.5	\$109.4	45.5	1,796	5.9	\$232.9
Massachusetts	\$142.5	\$126.1	\$390.8	43.4	5,472	6.4	\$806.9
New Hampshire	\$32.9	\$29.0	\$99.3	52.7	1,531	5.9	\$171.4
New Jersey	\$118.3	\$39.2	\$98.5	45.5	1,785	5.9	\$231.4
New York	\$326.7	\$146.5	\$145.1	45.5	6,667	5.9	\$864.5
Rhode Island	\$14.3	\$8.2	\$26.1	48.7	399	5.4	\$44.3
Vermont	\$6.6	\$6.5	\$24.0	49.6	321	4.3	\$27.8
Total	\$912.3	\$465.9	\$1,167.9	45.8	21,361	5.9	\$2,764.8

Furthermore, the following excerpts from The Analysis Group’s report, “The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States”^{vii} further illustrate the benefits of investment of GHG auction revenues in energy efficiency:

“Understanding the program’s performance and outcomes is important given that RGGI states account for one-sixth of the population in the US and one-fifth of the nation’s gross domestic product. . . . Insights and observations gleaned from an analysis of RGGI’s performance are valuable in evaluating past policy decisions and future policy recommendations. . . . The rights to emit CO₂ have been auctioned off. Power plant owners have spent roughly \$912 million to buy CO₂ allowances. Consumers now pay regional electricity rates that reflect a price on CO₂ emissions. These emissions have gone down, affected by both RGGI and larger economic conditions. States have received, programmed, and

disbursed virtually all the \$912 million in allowance proceeds back into the economy in myriad ways – on energy efficiency measures, community-based renewable power projects, assistance to low income customers to help pay their electricity bills, education and job training programs...” (p. 1)

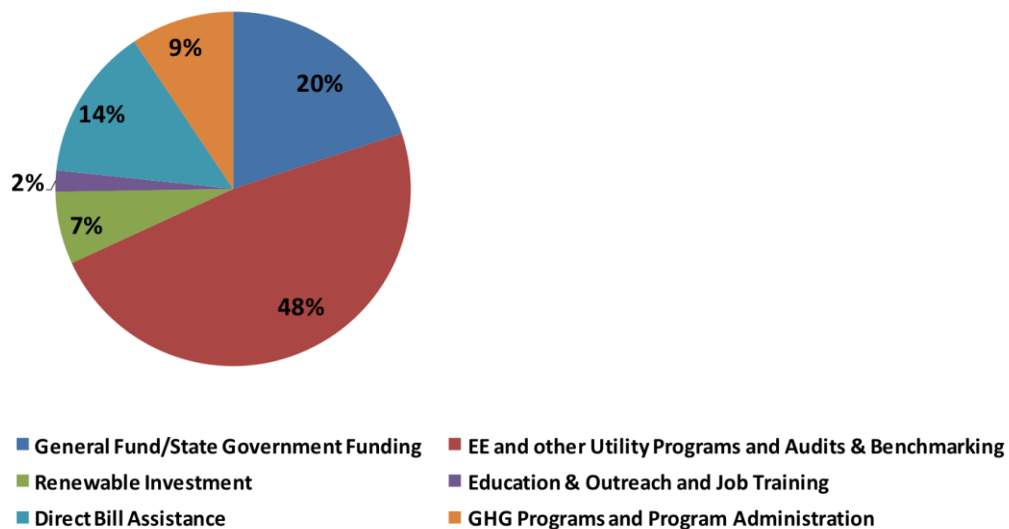
“A significant percentage of RGGI allowance proceeds went to funding investments in energy efficiency programs across the RGGI states. Programs included auditing and benchmarking efforts, investments in retrofit measures for existing homes (e.g., window and door treatments, insulation); residential lighting and appliance change-out (replacing refrigerators, washers, dryers or air conditioners with more efficient ones); commercial building shell, lighting, and equipment replacement; and new building measures (e.g., funding for more efficient materials and appliances at the time of new construction).” (p. 30)

“RGGI produced \$1.6 billion in net present value (NPV) economic value added to the ten-state region. The region’s economy – and each state’s as well – benefits from the RGGI program expenditures. When spread across the region’s population, these economic impacts amount to nearly \$33 per capita in the region.” (p. 2)

“RGGI has also produced changes in consumers’ overall expenditures on electricity. Although GHG allowances tend to increase electricity prices in the near term, there is also a lowering of prices over time because the states invested a substantial amount of the allowance proceeds on energy efficiency programs that reduce electricity consumption. After the early impacts of small electricity price increases, consumers gain because their overall electricity bills go down as a result of this investment in energy efficiency. All told, electricity consumers overall – households, businesses, government users, and others – enjoy a net gain of nearly \$1.1 billion, as their overall electric bills drop over time. This reflects average savings of \$25 for residential consumers, \$181 for commercial consumers, and \$2,493 for industrial consumers over the study period. Consumers of natural gas and heating oil saved another \$174 million.” (pp. 3-4)

The following figure shows where RGGI allowance revenue was invested.^{viii}

**Summary of RGGI Proceed Spending
All RGGI States**



Source: Individual state reports and interviews.

Note: Certain grant programs may include multiple components, and are categorized in the figure above based on the largest share of spending.

For further information on the RGGI experience, beyond the references already cited within these comments, we suggest review of the following documents:

- RGGI, Inc., “Why Energy Efficiency?”: http://rggi.org/rggi_benefits/why_efficiency;
- Example of auction press release and emphasis on EE, and a list of examples of state investments: http://www.rrgi.org/docs/Auction_11_Release_Report.pdf;
- Article on RGGI and EE investment: <http://neep.org/news/newsletters/neep-notes/notes-features/features-Jul11#rggi>;
- Environment Northeast’s auction tracker: http://www.env-ne.org/public/resources/pdf/ENE_Auction_Tracker_110915.pdf.

The Efficiency Council appreciates the opportunity to provide these comments and looks forward to working with the Air Resources Board and other stakeholders to ensure that a significant portion of revenues from auctioning of GHG emission allowances are appropriately invested in energy efficiency that will help lower GHG emissions, save consumers money, and put Californians back to work.

Thank you for your time and consideration.

Sincerely,



Steven R. Schiller, P.E.
Chairman of the Board



Audrey Chang
Executive Director

ⁱ With assistance from Richard Cowart, Regulatory Assistance Project.

ⁱⁱ Regulatory Assistance Project, “Climate Policy and Affordability: Advocacy Opportunities in the Northeast,” September 18, 2009, page 8. <http://raponline.org/document/download/id/74>.

ⁱⁱⁱ Next10, “Using the Allowance Value from California’s Carbon Trading System: Legal Risk Factors, Impacts to Ratepayers and the Economy,” May 2012. http://next10.org/sites/next10.huang.radicaldesigns.org/files/12-NXT-008_Cap-Trade_r2.pdf.

^{iv} See RGGI’s compilation of success stories (http://www.rrgi.org/rggi_benefits/success_stories), as well as its report on “Investment of Proceeds from RGGI CO2 Allowances,” February 2011 (http://www.rrgi.org/docs/Investment_of_RGGI_Allowance_Proceeds.pdf).

^v Synapse Energy Economics. “Electricity Energy Efficiency Benefits of RGGI Proceeds: An Initial Analysis.” October 2011. <http://www.synapse-energy.com/Downloads/SynapseReport.2010-10.RAP.EE-Benefits-of-RGGI-Proceeds.10-027.pdf>. Report currently being updated.

^{vi} Environment Northeast. “Economy-wide Benefits of RGGI: Economic Growth through Energy Efficiency.” September 2011. http://www.env-ne.org/public/resources/pdf/ENE_RGGI_Macroeconomic_Benefits_110915.pdf.

^{vii} The Analysis Group, Paul J. Hibbard, Susan F. Tierney, Andrea M. Okie, Pavel G. Darling. “The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States: Review of the Use of RGGI Auction Proceeds from the First Three-Year Compliance Period.” November 15, 2011. http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic_Impact_RGGI_Report.pdf.

^{viii} Id, p. 20.