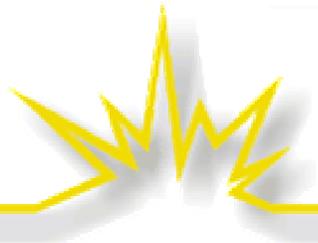


# Allocating to Power Resources: Economic and Environmental Options

RGGI Workshop on Allocations

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Richard Cowart



*The Regulatory Assistance Project*

*50 State Street, Suite 3  
Montpelier, Vermont USA 05602  
Tel: 802.223.8199  
Fax: 802.223.8172*

*177 Water St.  
Gardiner, Maine USA 04345  
Tel: 207.582.1135  
Fax: 207.582.1176*

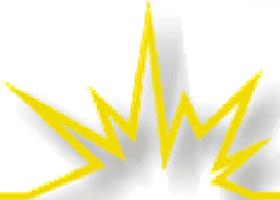
Website:  
<http://www.raponline.org>



# Factors to balance in allocating to generators

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- ❖ Program goals: lower cap, lower total social cost
- ❖ Political needs:
  - ◆ Eliminating windfall to generators as a class?
  - ◆ Softening the blow to even the worst losers?
- ❖ Consumer equity vs. generator windfalls
- ❖ Equity among affected generators
- ❖ Support for efficiency and renewables
- ❖ Big spread at issue: 10-20% to Gen up to 80-90%
- ❖ How much money is at stake?: 130 million tons x \$10/ton = \$1.3 Billion/year.



# Allocating to generation: on what basis?

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- (1) Historic emissions or fuel inputs
  - ❖ PRO: nobody badly hurt
  - ❖ CON: rewards past pollution; weaker incentives to improve
- (2) Historic power output:
  - ❖ PRO: rewards past producer efficiency, better heat rates, clean fossil generation (with updating, rewards future too)
  - ❖ CON: creates bigger winners and losers
- (3) Compromise: power output among like fuel users
  - ❖ Class averages for each fuel category
  - ❖ Coal v Coal – still promotes better heat rates
- Conclusion: Power output-based among fossil generators is better (unless political compromises are necessary). Updating has advantages.



# What about nuclear and large-scale hydro?

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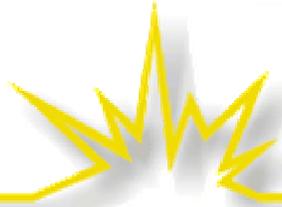
- PRO: non-emitters deserve equal treatment
- CON: No need to allocate to these resources
  - ❖ Why sweeten their enhanced value windfall?
  - ❖ No increased compliance costs
  - ❖ Heavily subsidized already
  - ❖ No desire to promote more
  - ❖ These resources raise other environmental concerns
- Conclusion: No need to grant allocations to nuclear and large-scale hydro



# Allocating to renewables

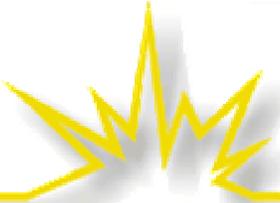
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- Key ideas:
  - ❖ Need to accelerate deployment of renewables (and other clean resources)
  - ❖ Allocations can lower the consumer cost penalty
  - ❖ Green products need to retire credits
- Option 1: Direct allocation to qualified renewable generators
- Option 2: Sale of allowances by public trust – funds for clean resources
- Option 3: Allocate to distribution utilities or LSEs that deliver renewables
- Option 4: Let each state decide



# Allocating to renewables

Option	PROs	CONs
<b>Sale by trust</b>	Transparent Flexible	Fiscal “honeypot” Program porkbarrell
<b>Direct allocation to generators</b>	Meshes with RPS and Green Pricing	Transaction costs; Distinguishing nuclear and hydro
<b>Allocation to distribution utilities or LSEs</b>	Portfolio incentive Works with RPS, GP Mitigates costs	Distinguishing nuclear and hydro Will rate reduction follow?
<b>State choice</b>	Local conditions vary	Flexibility may be a problem (e.g., WTE, biomass)



# Allocating to efficiency

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## ➤ Key ideas

- ❖ Efficiency is a system resource, meeting system and customer power needs
- ❖ Lowest-cost carbon reduction
- ❖ Market barriers to efficiency – requires focus on efficiency *programs*, not electricity *prices*

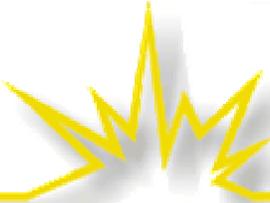
## ➤ Option 1: Sale by public trust, funds used for efficiency

## ➤ Option 2: Allocate directly to EE providers on an MWh output basis

## ➤ Option 3: Enroll EE providers in updating program

- ❖ -- no allocation to past efficiency, just incremental efficiency

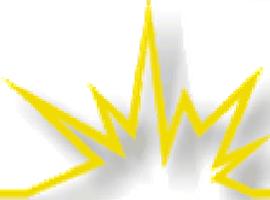
## ➤ Option 4: State flexibility



# Allocating to efficiency (2)

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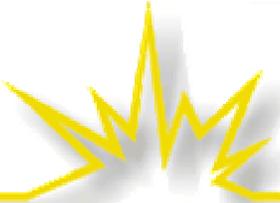
- EE side issues:
  - ❖ (a) Allocate to EE on a carbon-avoided basis, and retire or sell any excess; or (b) distribute the set-aside fully, regardless of negawatt production?
  - ❖ (b) Who is an EE provider? Distribution utilities, ESCOs, State SBC Funds ?
  - ❖ (c) M& V protocols needed. “A ton has to be a ton.”
- Conclusion: Strong support for EE needed in RGGI model rule, along with state flexibility.



# Topic for another day: allocating to imports

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- Generation outside the RGGI region, but selling into RGGI, can be treated the same as local generation:
  - ❖ Power output-based or Historic emissions
  - ❖ Renewables treatment can be the same
- If imports are included, the cap must be increased to account for them on the same basis as in-region resources.



# RAP's working conclusions...

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- In a system based on allocation to generators, RGGI should look closely at:
  - Allocation to emitters based on historic power output, updated over time
  - No allocation to nuclear and large hydro
  - Set aside those allowances that are not needed to compensate emitting generators
  - Allocate the set-aside for public interest resources – renewables/advanced technology and efficiency
  - Permit state options: (a) public trust sale of EE/RE credits; (b) direct allocation to EE/RE providers – either producers or distribution utilities and other purchasers.