

# RGGI and CO<sub>2</sub> Emissions Trading Under the Clean Power Plan

Paul J. Hibbard RGGI Workshop, New York City July 2016

# **Agenda**



- 1. Overview
- 2. Implications of broader trading for long run efficiencies and cost savings
- 3. Rationale for RGGI to address trading sooner rather than later
- 4. Technical/threshold issues RGGI must address for CPP compliance
- 5. First-tier considerations for facilitating broader trading under the CPP
- 6. Other considerations (e.g., cap level)

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#### **Overview**



#### Starting points:

- The CPP will move forward in largely the same form as set forth in October 2015
- The RGGI States are inclined to rely on RGGI as the foundation of their CPP plans.
- RGGI States are considering how to create an open architecture for expanding trading opportunities beyond RGGI states
- The RGGI States appreciate the attributes of the RGGI package as having created value and want to either protect that value proposition and/or support other value streams

### Paper: Exploring key questions that the RGGI States may want to address, with a focus on:

- The potential role RGGI states may play in CPP compliance, given their knowledge of and experience with allowance trading benefits
- Technical/threshold issues RGGI States may address to comply with the CPP
- Principles to guide states' consideration of RGGI program elements to facilitate trading with non-RGGI states
- Second tier issues, which may be of great importance and interest to the States and various stakeholders, but which don't intersect directly with issues relating to trading

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#### Point of view



## Reminder: broader CO<sub>2</sub> emission trading result in long-run efficiencies and cost savings

- Low-cost compliance pathways
- Savings for both sellers and buyers of allowances
- Appropriate signals for investment in and operation of power system infrastructure
- Economically efficient method for achieving social objectives
- ...the more sources (states) the better for RGGI (and other) states

### Important in the RGGI context: use the past as reference, not residence

- State-specific targets and differences in compliances choices may result in short-term cost and differences in benefits across states
- Broader trading will result in more liquid emissions allowance market with lowest aggregate compliance costs over time, and speed national progress to efficient control of carbon
- There will be tradeoffs and uncertainties; helpful to keep the ultimate, more certain goal in focus

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# Why it's useful to consider RGGI program changes in the context of the CPP



- Even during the stay of the Clean Power Plan, many states are actively considering CPP compliance options, weighing costs and benefits of mass- and rate-based approaches
- RGGI States are uniquely positioned to present a positive example of successful multi-state CO<sub>2</sub> allowance trading regime
  - What may seem old hat to RGGI states looks like uncharted territory to others
  - The term and depth of RGGI experience and analyses may not be widely understood (outside this room...)
- RGGI can be a sign post for other states through the early demonstration of an effective, open trading architecture, with which other states could align their own plans
- Now is the right time to actively engage on this issue
  - Letting several years pass may result in a lost opportunity



# So what can RGGI address? CPP compliance steps

#### States must address RGGI program threshold/technical issues in order to use RGGI for CPP compliance

- CPP requirements built according to Clean Air Act (CAA) structure
- RGGI based on voluntary and cooperative deliberation, not restricted by CAA and created in advance of the CPP
- Thus, RGGI program details not fully consistent with all CPP requirements

#### Key issues:

- Source definition and program budget(s): what generating units, what total emissions levels
- Term/life of the program
- Offsets and banking
- Emission allowance tracking system

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# Technical issues for RGGI to consider in order to comply with the CPP



Threshold Issue	Description	<b>Key Considerations</b>
Mass-Based Approach	RGGI states may elect to submit either a mass-based and/or state measures approach.	A state measures approach could be required to allow for continuation of key current RGGI design features (e.g., inclusion non-CPP sources, use of offsets).
Compliance Timing	RGGI sets program requirements for a few years at a time; the CPP requires that state plans identify compliance through 2030.	RGGI states must define compliance in plans through the CPP term (to 2030); RGGI framework will need to conform to these compliance terms, or state plans will need to separately address compliance beyond the current RGGI term.
Affected Sources	CPP does not cover combustion turbines; RGGI does. RGGI must determine whether and, if so, how to continue to include combustion turbines in CPP RGGI state plans.	RGGI state plans could retain coverage of CTs, by including them within the state budgets as a matter of state policy and within CPP budgets (which has the effect of lowering the amount useable by EGUs under federally enforceable limits), or by adopting a state measures approach.
New Units	CPP does not require inclusion of new units; RGGI does. New units may be included in CPP state plans through new source complement budget additions.	Unless new units continue to be included through the use of NSCs by RGGI states, state plans will have to demonstrate that "leakage" to new sources is addressed through an EPA-approved mechanism.
Offsets	RGGI allows the limited use of offsets, but offsets are not allowed under a state performance standard plan under the CPP.	RGGI states could abandon the use of offsets and use a performance standard approach. Alternatively, RGGI could retain the use of offsets through a state measures approach that ensures CPP EGU budget integrity.
Banking	RGGI and CPP allow banking, but RGGI may lead to the banking of allowances prior to the first CPP compliance year (2022).	RGGI states may want to identify soon how pre-CPP (i.e., pre-2022) banked allowances will be addressed to provide certainty for the regulated community and RGGI auction participants.
Emission/ Allowance Tracking System	CPP requires EPA approval of an emission/allowance tracking system, with guidance still under development.	EPA approval of the RGGI COATS or a similar tracking system would enable trading with other states that use an EPA-approved state plan and EPA-administered or approved tracking system.

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# What are first-tier considerations for facilitating broader trading under the CPP?



- States should consider what program changes are needed to facilitate expanded emissions trading under CPP
  - Considering trading issues now will send signals to non-RGGI states that hope to align with RGGI for trading benefits
  - Ask, "Would this element (or condition) facilitate emission-trading between generators inside and outside of RGGI?"
  - Weigh whether benefits associated with new element/condition worth potential drawbacks from perspective of RGGI states

#### Key issues:

- Allowance distribution
- Auction revenues to RGGI states
- Market monitoring

# First-tier considerations for facilitating broader trading under the CPP



Issue	Description	Key Considerations
Trading Perspective	There are likely a number of design issues that the RGGI states will face in the coming years, many of which may create opportunities for or barriers to broader trading. It will help to establish a framework for considering such tradeoffs.	Increasing the number of compliance entities included in a trading program will tend to lower overall compliance costs, enabling more cost-effective and/or deeper $CO_2$ emission reductions over time. This must be weighed against the impacts of a broader trading region on potential individual state objectives (e.g., for use of RGGI auction proceeds, and/or in-state emissions).
Minimum Allowance Price	The RGGI program includes a minimum allowance price applied in initial allowance auctions; the CPP does not include or require minimum prices.	RGGI's minimum initial auction allowance price provides certainty around state allowance revenues. Yet requiring that potential trading partners include a minimum allowance price may erect a barrier to trading, particularly in states that allocate rather than auction allowances. Retaining the minimum auction price but not requiring it of other states may reduce participation in RGGI auctions when allowances are available in other states at prices below the RGGI minimum price.
Allowance Distribution	Neither RGGI nor the CPP dictate how allowances are initially distributed, though RGGI recommends that states reserve at least a portion of allowances for public purposes. In practice, nearly all RGGI allowances are distributed initially through a central auction.	Initial disbursement of allowances does not affect the value or "opportunity cost" of allowances in the market, and thus does not affect the aggregate cost of compliance or the price of electricity generation. Thus, there is little reason to condition trading on the distribution of allowances. Allowance distribution does, however, affect the distribution of initial allowance value, which can lead to various economic outcomes (e.g., "windfall" to affected sources allocated allowances, electricity bill reductions where allocations are used by utilities to offset electricity costs, etc.).
Market Monitoring	RGGI requires careful monitoring of the allowance market to guard against hoarding or other forms of market manipulation; the CPP contains no market monitoring requirements.	RGGI's market monitoring has not been challenging or disruptive from administrative or market activity perspectives, yet it has provided a great deal of comfort to states in the program. Such oversight of market activities is arguably more important with broader trading regions and more market participants. RGGI may want to consider linking trading to some market oversight assurance mechanism in partner states.

#### Other considerations



- There are a number of other, "second tier" policy issues that are of interest to the States and/or stakeholders, but which do not directly affect the operational issues associated with a broad trading platform
  - Some of these might affect allowance prices and auction revenues
  - They may be important to States for one or another environmental, economic, or other objective – with different States might value (weight) differently
- A key example = the level of the RGGI cap
  - Current RGGI cap anticipates arriving in 2020 with collective annual cap below CPP targets for RGGI states
  - To pursue a deep CO<sub>2</sub> emissions-reduction target than now in the CPP, RGGI States may collectively or individually adopt more stringent cap for RGGI states
  - Varying cap levels in RGGI states could impact price/value of allowances, depending on how associated allowances are disbursed, set aside, or retired by RGGI states
  - If the RGGI States put in place a more stringent cap and retire the allowances, then decisions about whether to broaden the geography of trading will affect who pays for the tighter cap:
    - A broader trading platform would spread compliance costs among consumers in the broader region
    - A restricted trading platform will leave RGGI consumers with the higher costs



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