



GLOBAL CARBON MARKETS - EMISSIONS TRADING

TRAINING PROGRAM

FOR ENVIRONMENTAL AND GHG SPECIALISTS

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ENVIRONMENTAL SPECIALIST CURRICULUM





THE REGIONAL GREENHOUSE GAS INITIATIVE

FOR ENVIRONMENTAL AND GHG PROFESSIONALS

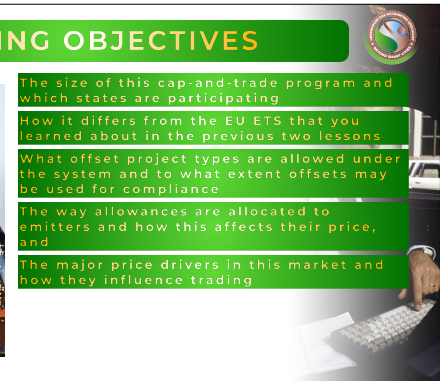
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LEARNING OBJECTIVES



The size of this cap-and-trade program and which states are participating

How it differs from the EU ETS that you learned about in the previous two lessons

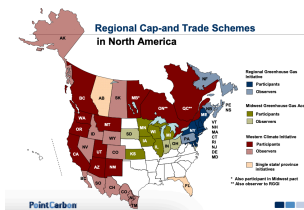
What offset project types are allowed under the system and to what extent offsets may be used for compliance

The way allowances are allocated to emitters and how this affects their price, and

The major price drivers in this market and how they influence trading

INTRODUCTION

The Regional Greenhouse Gas Initiative, or RGGI, is a cooperative effort by ten U.S. Northeastern and Mid-Atlantic states to limit greenhouse gas emissions. RGGI is the first mandatory market-based CO₂ emissions reduction program in the United States.



The states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont are signatory states to the RGGI agreement. According to the agreement, these ten states will cap CO₂ emissions from the electric power generation sector. Any electric power generating facility over 25 megawatts is covered. Pennsylvania is an observer to the RGGI process.

ELEMENTS OF RGGI

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia to cap and reduce power sector CO₂ emissions.

RGGI is composed of individual CO₂ Budget Trading Programs in each participating state. Through independent regulations, based on the RGGI Model Rule, each state's CO₂ Budget Trading Program limits emissions of CO₂ from electric power plants, issues CO₂ allowances and establishes participation in regional CO₂ allowance auctions.

RGGI is the first market-based, cap-and-invest regional initiative in the United States. Within the RGGI states, fossil-fuel-fired electric power generators with a capacity of 25 megawatts or greater ("regulated sources") are required to hold allowances equal to their CO₂ emissions over a three-year control period.

A CO₂ allowance represents a limited authorization to emit one short ton of CO₂ from a regulated source, as issued by a participating state. Regulated sources can use a CO₂ allowance issued by any participating state to demonstrate compliance in any state. They may acquire allowances by purchasing them at regional auctions, or through secondary markets.

RGGI EMISSIONS CAP AND ALLOCATIONS

The largest allocation – over 64 million short tons per year – goes to the State of New York, which has the largest population and economy in the region. The smallest allocation – just over 1.2 million short tons – goes to Vermont, a small state with one nuclear plant powering most of its area. This table shows the allowance allocations by state in million short tons.

State	allowance budget (cap 2009-2014)	Share total cap
CT	10,695,036	6%
DE	7,559,787	4%
MA	26,660,204	14%
MD	37,503,983	20%
ME	5,948,902	3%
NH	8,620,460	5%
NJ	22,892,730	12%
NY	64,310,805	34%
RI	2,659,239	1%
VT	1,225,830	1%

Each one of the RGGI States is obligated to pass rules or laws to implement the trading scheme. In order to ensure consistency of these rules across states and the fungibility of the RGGI allowances necessary to create a tradable market, a working group made up of state officials drafted the so-called "Draft Model Rule", a template legislation which now forms the core of each State's implementation.

DISTRIBUTION AND TRADING OF ALLOWANCES

The RGGI states distribute CO₂ allowances primarily through regional auctions. Companies bid on allowances that they will use to cover their emissions in the upcoming compliance year.

In this type of auction, the proceeds from the auction go to the governments of the member states and are to be used for energy efficiency programs, renewable energy, or other public benefit purposes. You will learn more about the specifics of the auction later in this lesson.

Besides auctions, another way for emitters to obtain allowances is through the so-called secondary market. The auction is considered 'primary' because it is where emitters buy the allowances directly from the source - the government. Power plants that get more allowances than they need - or that reduce their CO₂ emissions - can sell their excess allowances to those that need additional ones.

PRICE DRIVERS AND RGGI TRADING

The RGGI market is a relatively small cap-and-trade scheme, certainly when compared to the European market. As a consequence, it is particularly sensitive to changes in supply and demand. The fundamental drivers of emissions in the RGGI region are:

- ✓ Temperature, which influences the demand for electricity and in particular drives air conditioning demand in the summer;
- ✓ Rainfall and the availability of water for hydroelectric power generation in New York and the northern RGGI States.
- ✓ Macro-economic drivers such as changes in gross domestic product which influence the demand for electricity;
- ✓ Commodity prices, in particular the relative cost of natural gas and oil based generation, as well as the relative cost of natural gas and coal generation;

PRICE DRIVERS AND RGGI TRADING +

- ✓ The availability and construction of non-emitting power generation, in particular nuclear and wind power facilities;

- ✓ The shift of power generation outside of the RGGI zone to avoid bearing the costs of procuring carbon dioxide allowances, a problem referred to as emissions leakage. This problem could be compounded by the proposed construction of new electric transmission capacity in neighboring coal-heavy states that could supply the RGGI region.

RGGI CO₂ cap represents a regional budget for CO₂ emissions from the power sector. For 2022, the RGGI cap is 156,828,784 CO₂ allowances and the adjusted cap is 137,738,454 CO₂ allowances.