USA - Regional Greenhouse Gas Initiative (RGGI)

General Information

Summary

Status: ETS in force

Jurisdictions: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, Vermont

RGGI is the first mandatory GHG ETS in the United States, based on a 2005 agreement by the governors of the original signatory states (Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont) and originally outlined in the RGGI Memorandum of Understanding (MoU). In August 2006, RGGI states published a model rule, which provided a regulatory framework for the development of individual state regulatory/statutory proposals. The system started operating in 2009 with 10 states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont), each having promulgated its own regulations covering CO2 emissions from the power sector. New Jersey withdrew from the program at the end of the first control period, December 2011.

As foreseen by the MoU, a RGGI program review was conducted in 2012. According to the program review, each of the states updated their regulations so that a tighter cap and other program changes went into force on 1 January 2014. RGGI concluded its second program review in 2017 and a new model rule has been prepared. According to the rule, between 2021 and 2030 the cap will reduce by 30% compared to 2020. Furthermore, an emissions containment reserve (ECR) will be established to achieve greater emission reductions if the cost is lower than anticipated.

Year in Review

After the finalization of the 2017 Model Rule, the proposed post-2020 cap-and-trade regulations must be adopted by each RGGI state according to its own regulatory processes. The majority of the RGGI states have adopted the 2017 Model Rule, while the remaining states are on track to do so within early 2019.

New Jersey is in the process of rejoining RGGI and is expected to have final legislation in place to officially reenter the RGGI program by the beginning of 2020 (see factsheet on New Jersey).

Also, Virginia is in the process of establishing an ETS and linking it to the RGGI program (see factsheet on Virginia). The state started regulatory processes in 2018 and will presumably start entering the RGGI allowance market by 2020.

Overall GHG emissions (excluding LULUCF) Emissions: 462.94 MtCO2e (2014)

Overall GHG emissions by sector

<table>
<thead>
<tr>
<th>Sector Name</th>
<th>MtCO2e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>397.5</td>
</tr>
<tr>
<td>Industrial Processes</td>
<td>25.6</td>
</tr>
<tr>
<td>Agriculture</td>
<td>9.8</td>
</tr>
<tr>
<td>Waste</td>
<td>30</td>
</tr>
</tbody>
</table>
**Overall GHG reduction target**

**BY 2020:** RGGI states have committed to a regional cap of more than 50% reduction of CO2 emissions from electricity generation from 2005 CO2 emissions

**BY 2030:** States propose to implement a reduction of 30% compared to the 2020 CO2 emissions cap, with a constant reduction of 2.275 million short tons/year between 2021 and 2030

Note: The participating states have their own emission targets; economy-wide targets are not defined at the level of RGGI

**Carbon Price**

*Current Allowance Price (per t/CO2e): USD 4.87 per tCO2e / USD 4.415 per short ton CO2e*  
(average auctioning price in 2018; updated prices available here)

**ETS Size**

<table>
<thead>
<tr>
<th>Emissions covered by the ETS</th>
<th>0.18</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG covered</td>
<td>CO2</td>
</tr>
<tr>
<td>Sectors covered and thresholds</td>
<td>Fossil Fuel Electric Generating Units</td>
</tr>
<tr>
<td>INCLUSION THRESHOLDS</td>
<td>Capacity equal to or greater than 25 MW.</td>
</tr>
<tr>
<td>Point of regulation</td>
<td>Downstream (at installation level)</td>
</tr>
<tr>
<td>Number of liable entities</td>
<td>165 entities (January 2019)</td>
</tr>
<tr>
<td></td>
<td>No information available yet.</td>
</tr>
</tbody>
</table>

**Cap**

The cap was initially set at 165 million short tons CO2 per year in the 2009-2014 period, with a 2.5% annual reduction factor from 2015 through 2018, totaling a 10% reduction between 2015 and 2018. However, by 2012, emissions under RGGI were more than 40% below the cap. The states thus tightened the cap to 91 million short tons in 2014. The revised regulations extended the 2.5% annual reduction factor through 2020, with a 2020 cap of approximately 78 million short tons.

Following the most recent program review, the proposed reduction factor between 2021 and 2030 is about 3% of the 2020 cap, resulting in a 2030 regional cap of about 55 million short tons.

**Phases & Allocation**

**Trading period**

RGGI is structured around “control” (or compliance) periods. A cap trajectory until 2030 has been set (see “Cap” above).

**FIRST CONTROL PERIOD:** 2009-2011  
**SECOND CONTROL PERIOD:** 2012-2014  
**THIRD CONTROL PERIOD:** 2015-2017*  
**FOURTH CONTROL PERIOD:** 2018-2020*  

*RGGI introduced an interim control period with the 2014 revisions. An affected source must cover 50% of its emissions with allowances in each of the first two years of a control period. The affected source must cover 100% of the remaining emissions at the end of the three-year control period.

**Allocation**

**Auctioning:** CO2 allowances issued by each RGGI state are distributed through quarterly, regional CO2 allowance auctions using a “single-round, sealed-bid uniform-price” format.
Auctions are open to all parties with financial security, with a maximum bid of 25% of auctioned allowances per quarterly auction.

**Flexibility**

**Banking and borrowing**
Banking of allowances is allowed without restrictions, but regulations include adjustments to the cap to address the aggregate bank by reducing the amount of allowances available for auctions in future years by the amount of allowances not used for compliance in previous control periods. Borrowing is not allowed.

**Offsets and credits**

**QUANTITATIVE LIMIT:** 3.3% of an entity’s liability may be covered with offsets. This percentage share will remain equal between 2021 and 2030 according to the Model Rule.

**QUALITATIVE LIMIT:** Currently the program allows offset allowances from five offset types located in RGGI states:
(1) Landfill methane capture and destruction;
(2) Sequestration of carbon due to reforestation, improved forest management, or avoided conversion;
(3) Avoidance of methane emissions from agricultural manure management operations;
(4) Reduction or avoidance of CO2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency; and
(5) Reduction in SF6 emissions.

According to the model rule, offset Protocols 4 and 5 will be discontinued from 2021. Some states have discontinued other protocols, but all states accept offset allowances issued by any participating state. To date, only one offset project has been approved under RGGI.

**Market Stability Provisions**

**Auction Price Floor:** USD 2.20 per short ton in 2018, increasing by 2.5% per year (to reflect inflation).

**Reserves:** As of 2014, RGGI states created a cost containment reserve (CCR), where allowances are released to the market when certain trigger prices are reached. Trigger prices: USD 10 in 2017. Between 2018 and 2020, the CCR trigger price will increase annually by 2.5%.

In 2021, under the model rule, the trigger price will be set at USD 13 and will increase by 7% compared to the previous year thereafter.

In addition, the model rule envisages the establishment of an ECR by 2021: Allowances would be withheld from circulation (from auction) to secure emissions reductions if the emission reduction costs are lower than projected. In 2021, this trigger price will be set at USD 6, increasing by 7% compared to the previous year thereafter.

**Compliance**

**Compliance Period**
Three years (see “Phases and Allocation” above)

**Monitoring, Reporting, Verification (MRV)**

**REPORTING FREQUENCY:** Compliance is evaluated at the end of each three-year control period. The RGGI program is currently in its fourth three-year control period (2018-2020).

**FRAMEWORK:** Emissions data for emitters are recorded in the United States Environmental Protection Agency’s (US EPA) Clean Air Markets Division database in accordance with state CO2 Budget Trading Program regulations and US EPA regulations. Provisions are based on the US EPA monitoring provisions. Data are then automatically transferred to the electronic platform of the RGGI CO2 Allowance Tracking System, which is publicly available.

**Enforcement**

Penalties for non-compliance are set by each state; in case of excess emissions, compliance allowances for three times the amount of excess emissions have to be surrendered in future periods.
## Linking

| Links with other Systems | Virginia and New Jersey plan to join the RGGI allowance market by 2020. |

## Other Information

<table>
<thead>
<tr>
<th>Institutions involved</th>
<th>Each RGGI state has its own statutory and/or regulatory authority; RGGI Inc. (non-profit cooperative supporting RGGI's development and implementation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation / ETS review</td>
<td>The RGGI participating states periodically review the ETS program in order to consider program successes, impacts, and design elements. The first program review process (known as the 2012 Program Review) was completed in early 2013. A second review process was completed in 2017, resulting in the 2017 Model Rule. Program reviews were accompanied by stakeholder meetings to facilitate stakeholder engagement and the submission of comments from interested parties.</td>
</tr>
</tbody>
</table>
| Revenue               | **Since beginning of program:** USD 3.08 billion  
                          **Collected in 2018:** USD 239.36 million  
                          Revenues are collected from the quarterly auctions. They are returned to the RGGI states and have been primarily invested in consumer benefit programs: energy efficiency, renewable energy, direct energy bill assistance, and other greenhouse gas reduction programs. |
| Implementing Legislation | 2017 RGGI Model Rule  
                          2017 RGGI Model Rule Updates (Summary)  
                          RGGI States’ Statutes & Regulations  
                          RGGI Program design |
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