

Offsets Summary

The Regional Greenhouse Gas Initiative

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**Environment
Northeast**

The Regional Greenhouse Gas Initiative (RGGI, pronounced “Reggie”) is a market-based cap and trade program designed to reduce emissions of carbon dioxide (CO₂)—a greenhouse gas that causes global warming—from electric power plants in the northeastern and mid-Atlantic states. Offsets are alternative compliance options, which allow regulated plants to emit additional pollution in direct proportion to emissions reductions delivered by the offset project. Offsets are off-system emissions reductions that, in this case, must be outside the electric sector.

Offsets

Offset use is initially limited to 3.3% of a source’s total compliance obligation, ensuring that the cap will drive changes within the regulated sector while allowing for flexibility in meeting emission reduction targets. Additional cost-controlling flexibility is incorporated through price triggers, which allow for greater use of offsets when allowance prices surpass predetermined market prices. The trigger levels are set such that offset use rises to 5 percent when prices exceed \$7 and to 10 percent when prices exceed \$10. On surpassing the \$10 trigger offset eligibility is expanded to credits from international systems with specific limits on GHG emissions (such as the Clean Development Mechanism). Triggers utilize 12-month rolling averages to account for market volatility, and prices are based on 2005 dollars, adjusted annually for inflation.

Eligibility

The validity of emissions reductions generated by offset projects is verified using the “five-point test.” This five-point test evaluation was built into the performance standard for each offset type. Emission reductions delivered by offsets must be:

1. **Real:** Offset projects must be able to quantify an actual and measurable reduction in emissions;
2. **Surplus (additional):** Offset projects must be additional to reductions in emissions that would have occurred under business as usual activities. Therefore, to be eligible an offset project’s development must be driven *exclusively* by expectation of revenue to be earned through sale of offset credits;
3. **Verifiable:** The offset project must have sufficient measurement and documentation to allow independent assessment and confirmation of project eligibility and performance;

4. **Permanent:** Offset project emissions reductions must be permanent, ensuring that a reduction in emissions is not reversed in the future; and
5. **Enforceable:** States must be able to enforce compliance or return of offset credits if regulations are not met.

Project Types

Offsets are initially limited to five types of projects. For each project type, a specific set of performance standards has been established that attempts to address the five-point test and provide clarity for developers and a simplified review process for regulators.

- 1) **Landfill methane capture and destruction** – projects will generate offset credits for the quantity of methane captured from decomposing waste in landfills and subsequently combusted. Methane has a global warming potential (GWP) 23 times that of CO₂, so each combusted ton of methane generates 22 ton-equivalents of CO₂ emission reduction credits (one ton of CO₂ results from each ton of methane combusted). Projects are ineligible if landfills are subject to New Source Performance Standards for municipal solid waste landfills under the Federal Clean Air Act.
- 2) **Sulfur hexafluoride (SF₆) capture/recycling** – from equipment within the electric transmission and distribution system. SF₆ is the favored insulating agent in high voltage electric power system equipment, and eligible offset projects will generate credits through capture and storage, recycling, or destruction of SF₆. SF₆ has a global warming impact 22,200 times that of CO₂, so each ton of avoided SF₆ emissions generates 22,200 tons of emission reduction credits. SF₆ offset quantities are determined by comparison of entity-wide inventory of SF₆ with inventory of the preceding baseline year.

- 3) **Sequestration of carbon from afforestation** (tree planting) – will generate credits for CO₂ sequestered by a forest, including above- and below-ground biomass and soil carbon. Projects will be managed in accordance with widely accepted environmentally sustainable forestry practices and designed to promote the restoration of native forests by using mainly native species. Eligible projects must be sited on land that has been in a non-forested state for at least ten years and afforested land must be placed under a legally binding permanent conservation easement that requires the land to be maintained in a forested state in perpetuity.
- 4) **Natural gas, propane, and heating oil energy efficiency** – that leads to a reduction or avoidance of CO₂ emissions (commercial and residential). Projects will generate offset credits for avoidance of emissions associated with energy consumption of buildings and space- and water-heating systems. Credits may also be generated through fuel switching to less carbon-intensive fuel. Projects must meet best practice performance standards consistent with advanced building and equipment standards.
- 5) **Avoided methane emissions from animal waste management systems** – projects will generate offset credits for the capture and combustion of methane generated by anaerobic decomposition of manure or organic food waste. Projects will utilize anaerobic digesters to contain wastes and capture methane. Animal waste must comprise at least 50 percent of anaerobic digester feedstock on an annual basis.

Restrictions

Offset allowances shall not be awarded to projects that are required by law, that are awarded credits under any other greenhouse gas program, or that receive external financing from a system benefit fund or revenue provided through the sale/auction of CO₂ allowances.

Afforestation projects have a maximum allocation period of 60 years (three 20-year periods) and other offset types have a maximum allocation period of 20 years (two 10-year periods).

Offset projects may not claim credit for emissions avoided through generation of renewable energy, as this would be within the capped electric sector. This provision ensures that emissions reductions are additional to business-as-usual and not merely generated as by-products of renewable energy projects. Thus project sponsors must relinquish legal rights to all renewable energy attribute credits (such as offsets or renewable portfolio credits) to ensure that project development is driven exclusively by expected offset revenue.

Exceptions to the renewable energy prohibition are allowed for two categories of agricultural methane projects: those located on farms with 4,000 or fewer dairy cattle (or equivalent animal units); and projects located in states where anaerobic digesters have not reached 5% market penetration. Farms with 4,000 or fewer cattle are excepted to avoid disadvantaging small farmers with higher transaction costs, and projects in states with low rates of market penetration are excepted in order to provide incentives for early actors to prove the viability of agricultural methane projects.

Additional RGGI Offsets Guidance

The RGGI states are in the process of developing more detailed guidance documents for offsets developers. This information should be available shortly from the RGGI states and RGGI, Inc.

Additional Offset Types

Over time, the RGGI states may choose to add additional offset types. The process for adding new types of offsets is still being developed. ENE is working with other partners and stakeholders to develop a straw proposal for forest management offsets, but any additional offset type will have to be vetted by the RGGI states and approved by all the states before it becomes eligible in the RGGI market.



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