



## Cricket Valley | Air Quality

**Cricket Valley Energy Center (CVEC), a fully permitted facility now under construction in Dover, NY, will be among the most efficient and lowest emitting power plants of its kind ever constructed, producing power for nearly one million homes and economic benefits for the community.**

**Q: Will CVEC have an adverse impact on air quality and health?**

A: No. The project will not have an adverse impact on air quality and health in the Valley or elsewhere. A rigorous review by the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) of CVEC's air quality impact analysis found this project will comply with National Ambient Air Quality Standards (NAAQS) at levels determined to be protective of the health of the most sensitive members of the public, including children, the elderly, and those with respiratory illness, such as chronic asthma and emphysema.

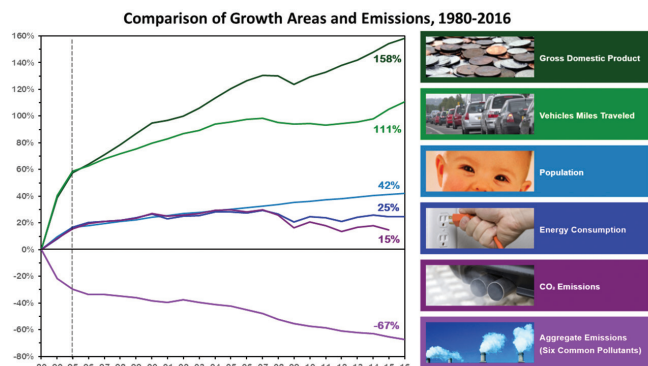
In fact, the project's air emissions do not include any unique contaminants not already present in ambient air. Project emissions are essentially the same products of combustion generated by existing combustion sources, such as natural gas-fired residential furnaces or stoves.

**Q: Even though CVEC meets health-based air quality standards, won't the project still degrade air quality?**

A: No. As part of the permitting process, CVEC was required to demonstrate that it will not appreciably degrade existing air quality levels through the conduct of a USEPA Prevention of Significant Deterioration (PSD) review. The PSD review is an important part of the required demonstration of compliance with the health-based NAAQS.

Although the project's air quality modeling does not take any credit for it, operation of the CVEC will displace (reduce) the operation of older, higher emitting power plants, all of which contribute to air quality throughout the region. This project will help continue the trend of improved air quality

that has been observed since the 1980s, which has been greatly aided by the development of new state-of-the-art facilities like CVEC, which continue to reduce our reliance on less environmentally friendly power plants.



Source: <https://www.epa.gov/air-trends/air-quality-national-summary>

**Q: Will CVEC have impacts on vegetation, crops and/or organic farms in the region?**

A: CVEC will have no impact on vegetation/food crops or organic farming in the area. As part of the permitting process, the USEPA required CVEC to demonstrate that even the most sensitive soils or vegetation—including crops—will not be adversely effected by its project. USEPA and NYSDEC concurred with these findings.

**Q: If the project's air quality impacts are so low, why did it need to buy emissions offsets? Wasn't that just to avoid putting on expensive emissions controls?**

A: Emissions offsets cannot be used to avoid expensive

emissions control systems. CVEC is using the Best Available Control Technologies (BACT) and a Lowest Achievable Emissions Rate (LAER) to meet all federal and State air quality standards. Dover is located within an area designated as not in attainment of the National Ambient Air Quality Standard for ozone (smog). It is subject to Nonattainment New Source Review (NNSR) and must obtain emissions offsets for nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) at a specified ratio.

The offset requirement does not relax any of the other control technology or dispersion modeling requirements for the project. It is intended to result in additional benefits to regional air quality.

**Q: I've heard that emissions offsets are meaningless.**

A: Emissions offsets must meet NYSDEC and USEPA requirements that:

1. They are certified emission reduction credits (ERCs) that represent real reductions in actual emissions;
2. They are permanent reductions that are enforceable, such as the surrender of the donor source's air permit;
3. They are emissions reductions that were not otherwise required to occur; and
4. The emissions reductions that occur contribute to ozone formation at the location of the proposed new source.

The project has obtained certified ERCs equal to 115% of the project's maximum potential emissions of NO<sub>x</sub> and VOC, from sources determined by NYSDEC to contribute to ozone nonattainment in the Dover area, as required.

**Q: Aren't some VOC emissions carcinogenic? Since there is no NAAQS for VOC, how can we be sure there won't be adverse health impacts from VOCs that are toxic?**

A: NYSDEC has established, and periodically updates, annual and short-term screening concentrations for toxins to protect the public from adverse effects of exposure to air contaminants. Maximum predicted impacts from the project are well below all NYSDEC guideline concentrations, which indicates that impacts from these contaminants is negligible.

**Q: Won't the project's carbon dioxide (CO<sub>2</sub>) emissions contribute to climate change?**

A: New York participates in the Regional Greenhouse Gas Initiative (RGGI), which is a region-wide CO<sub>2</sub> cap-and-trade program that incentivizes the use of more efficient energy sources like CVEC in terms of greenhouse gas. The region-wide CO<sub>2</sub> cap declines over time, thus ensuring that CO<sub>2</sub> emissions from the power sector will also continue to

decline. The project is a participant in the program, and must hold RGGI CO<sub>2</sub> allowances equal to its annual emissions to operate.

The project's Environmental Impact Statement (EIS) included an economic dispatch analysis to examine the net effect of the project to the electric generation portfolio in New York State. The New York Independent System Operator (NYISO) dispatches (turns on and off) power plants to meet demand roughly in the order of their fuel and operation cost. Because of the project's superior efficiency, it will be dispatched ahead of older units that need to burn more fuel to make the same amount of electricity. The dispatch analysis concluded that adding the project to the generation portfolio in New York State would result in a net decrease in more than 650,000 tons per year of CO<sub>2</sub> emissions, compared to the grid without the addition of the project.

**Q: Why build this project now when we have so many wind and solar projects coming online?**

A: Wind and solar projects, while an integral part of our energy mix, are intermittent resources. In addition to wind and solar, the grid needs low-cost, low-emission baseload power plants. As wind and solar projects have no fuel cost, they will almost always be dispatched ahead of CVEC when they are available. Therefore, CVEC would not preclude any additional CO<sub>2</sub> savings that could be derived from increased development of renewable energy projects in New York State.

**Q: Will the project use "fracked" natural gas?**

A: The project will receive natural gas via the existing Iroquois natural gas pipeline that is currently located adjacent to the site. CVEC is a recipient, not a producer, of natural gas, and has no control over the source of natural gas that runs in the pipeline. The natural gas received by CVEC will be the same natural gas used by homes, businesses, and other industrial users in the area.

**Q: Won't the life-cycle impacts of methane leakage associated with the production, processing, and transmission of natural gas negate any CO<sub>2</sub> savings from displacing older facilities?**

A: Because the older facilities that the project will displace also have indirect life-cycle CO<sub>2</sub> emissions, operation of the CVEC will result in a net decrease in greenhouse gas emissions, even accounting for all life-cycle emissions. As a consumer, but not producer, of natural gas, CVEC does not control natural gas extraction and delivery, however, it does advance a program of best practices, which includes the conduct of routine monitoring of onsite natural gas piping and related components.