

Implementing New York's Draft State Energy Plan is projected to improve air quality, resulting in public health benefits for all communities throughout the state, with the greatest benefits realized in disadvantaged communities.

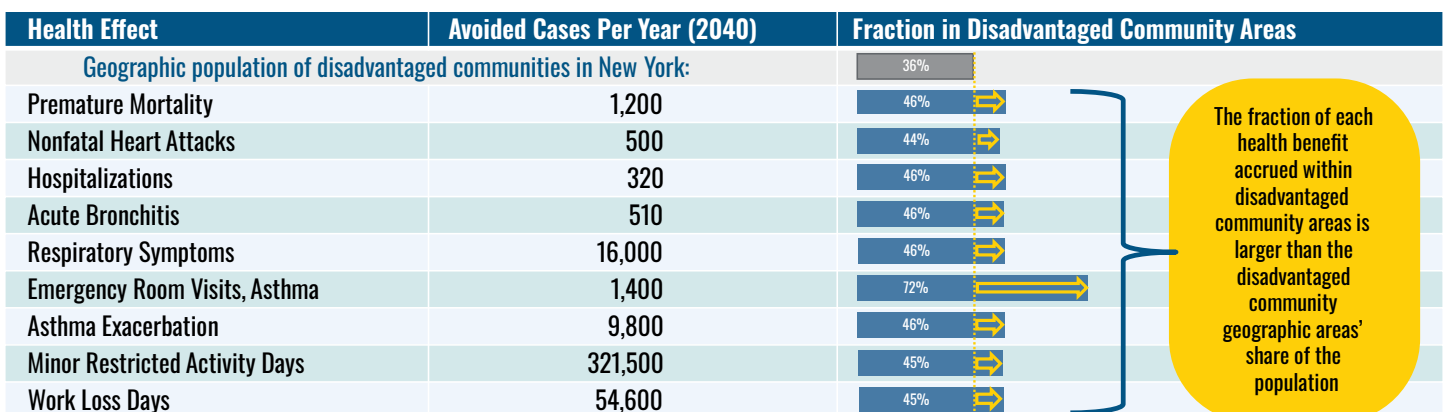
To evaluate air quality and public health impacts, the Draft Plan includes analysis of pollutant emissions by technology (e.g., vehicle types, heating systems), fuel type, and location by year, and how those air pollutants disperse and transform in the atmosphere. It estimates the impact of changes in the resulting pollutant concentrations on public health. The results of this analysis describe how recent, ongoing, future State energy policies could impact public health outcomes in communities throughout New York State.

The draft analysis shows that implementation of State energy policies would continue to provide substantial public health benefits throughout the State in all communities, with the greatest benefits realized in disadvantaged community areas (see Figure).

- **State energy policies are, and will continue to, reduce air pollutant emissions** by shifting vehicles, buildings, electricity generation, and other sources to clean energy and increasing efficiency. The emission reductions result in improved air quality statewide, and this trend is projected to continue.
- **Through 2040, improvements in air quality are projected to result in public health benefits, including thousands of avoided cases of premature mortality, thousands of avoided heart attacks, thousands of avoided hospitalizations, and thousands of avoided emergency room visits for asthma**, as well as many other benefits related to respiratory conditions, avoided work loss days, and more.
- The annual public health benefits are projected to increase over time as energy policy implementation increases and would continue to be realized for years, even after policies are fully implemented.

Implementation of additional actions to advance clean energy is projected to increase the public health benefits by approximately 30% beyond current policies. The Figure below shows annual benefits (in 2040) including additional actions, showing proportionally greater benefits in disadvantaged community areas.

Health Effect	Avoided Cases Per Year (2040)	Fraction in Disadvantaged Community Areas
Geographic population of disadvantaged communities in New York:		36%
Premature Mortality	1,200	46%
Nonfatal Heart Attacks	500	44%
Hospitalizations	320	46%
Acute Bronchitis	510	46%
Respiratory Symptoms	16,000	46%
Emergency Room Visits, Asthma	1,400	72%
Asthma Exacerbation	9,800	46%
Minor Restricted Activity Days	321,500	45%
Work Loss Days	54,600	45%



The fraction of each health benefit accrued within disadvantaged community areas is larger than the disadvantaged community geographic areas' share of the population

Most of the air quality improvements and resulting public health benefits are realized through reduced emissions from transportation (50%) and buildings (40%). A smaller fraction (5%) would be associated with reduced emissions from electricity generation, though benefits from electricity within disadvantaged community areas would be more than double per capita than in other areas.

The projected public health benefits provide substantial societal value. The analysis demonstrates that the societal value of the public health benefits has the potential to exceed the incremental cost of New York's energy policies.

The draft Public Health Impacts Analysis is available for public review and comment as part of the Draft State Energy Plan.



**New York State
Energy Plan**